A number of the objectives contained in recently adopted master plans propose a closer relationship between the physical or economic characteristics inherent in the various land areas and the type of development which should be placed on that land. The need for development to be compact rather than scattered in order to minimize the costs of facilities and services is also stressed.

Recommendations for Updating the General Plan: The Planning Board recommends the following general land use policies for approval, in order to expand the usefulness of the General Plan. More specific policies on such limited aspects of land use as living areas, employment areas, community facilities, and rural areas are given separately under the respective sub-headings.

### **GOAL**

- ► ACHIEVE A BALANCE AMONG THE VARIOUS LAND USES INSOFAR AS THE PROPER AMOUNT, TYPES, AND DISTRIBUTION OF EACH RESULTS IN AN ENVIRONMENT AND DIVERSITY OF LIFE-STYLES THAT FULFILLS THE REQUIREMENTS OF THE COUNTY RESIDENTS.
- Objective A. Encourage the assembly of land into large tracts at suitable locations to be developed with an appropriate mixture of residential densities Guideline and land uses.
- 1. Encourage variety in design of all urban structures and areas to provide an environment which is aesthetically satisfying.
- Objective B. Preserve natural beauty by providing the proper relationship between population density and Guidelines open areas.
- 1. Treat land as a resource, using efficiently what is needed for accommodating expected urban growth and conserving the rest for the future.
- 2. Relate the size, location and function of individual urban elements to the region.

### Objective C. Secure optimum utilization of land. Guidelines

- 1. Provide realistically for the quantity of land for each type of urban development needed to meet the demands of urban growth.
- 2. Expand the urban core areas as the intensity of development of the urban core reaches its established limits or direct the economic activity to another or new core.
- 3. Locate land uses advantageously to maximize the functional purpose and profits of employment centers and to provide environmental amenities.

### Objective D. Obtain a balanced relationship between resi-Guidelines dential growth and economic opportunities.

- 1. Provide flexibility and diversity of development.
- 2. Mix land uses to maximize the functional purpose and profits of employment centers and to provide environmental amenities.
- 3. Secure bold increases in floor area ratios with mixed uses in activity centers and in the vicinity of proposed transit stations where high density is consistent with County policy.

Living Areas: The General Plan contains a number of objectives dealing specifically with residential land use. They can be summarized as follows:

- ▶ Provision should be made for the varied living environments required by different segments of the population.
- ➤ New Towns in the corridor areas should be used to provide this range of environments efficiently and economically.
- ► Each community should have an identity, which can be created by imaginative design.
- ▶ The urban pattern should be an efficient and pleasant one.
- ► Contrast and interest should be created by variations in types of development.

Land for future corridor cities should be reserved by the use of a rural zone.

Together these objectives can be characterized as a policy of good design variety in housing types and efficiency in development patterns through the use of new towns development. Objectives and guidelines embodied in area master plans adopted since the General Plan tend to repeat this theme, further stressing the need for variety, including a range of housing types and of types of living areas, with additional reference to clustering and similar techniques.

Recommendations for Updating the General Plan: The following policies are proposed for approval:

Provide land for, and secure development of, Objective E. all types and densities of residential development including an appropriate mixture of residential types where the environment would be enhanced.

#### Guidelines

- 1. Encourage variety in design and cost of housing type to provide for all segments of the population, including the work force needed to provide the community services and to staff businesses.
- 2. Design for a high quality living environment for all segments of the population.
- 3. Encourage a mixture of dwelling types to provide "Life-cycle neighborhoods."
- 4. Use average dwelling unit density rather than minimum lot size as a major quantitative control.
- Encourage contrast and interest to the region Objective F. through the creation of distinctive variations in the character of residential development.

#### Guidelines

- 1. Require a high quality living environment which is visually satisfying and establishes a clear sense of neighborhood and community identity.
- 2. Locate high density residential development to facilitate access to major thoroughfares, bus service and rapid rail service where available.

- Exclude all but compatible low intensity development on lands having existing or potentially severe erosion characteristics.
- 4. Prohibit residential development in unsafe areas such as wetlands, floodplains, steep slopes, and unstable soils.

Employment Areas: Beginning with the objective that "the growth of employment centers should closely parallel the growth of population"8 the General Plan proceeds to enunciate a number of guidelines concerning the desirable nature of the corridor city centers, stressing compactness, variety and mixture of uses, and amenity of design.

Recommendations for Updating the General Plan: The following policies are proposed for approval:

Objective G. Provide land for all types of employment areas that are compatible with the environment of the county.

- 1. Provide the opportunity for the horizontal and vertical expansion of employment areas to assist in keeping the facilities in scale with demand.
- 2. Provide land for development and expansion of regional activity centers which will serve the area most efficiently.
- 3. Provide industry with a variety of desirable locations adequate for present use and for future expansion.
- 4. Provide locations for many kinds of revenue-producing industries.
- 5. Provide industrial sites at desirable locations adjacent to high volume highway facilities which are in demand for their "visibility" potential.
- 6. Provide for industrial park development while providing locations for those industries which economically require more densely developed land.
- 7. Provide a range of industrial site sizes.

<sup>8 &</sup>quot;On Wedges and Corridors," p. 28.

## Objective H. Ensure that employment areas are provided with adequate access to all modes of transportation.

- 1. Prohibit the development of an employment area to a size or intensity that would exceed the capacity of the planned transportation network and thereby cause congestion.
- 2. Provide access to employment areas in such a manner as to avoid introducing large volumes of traffic onto residential streets.
- 3. Stimulate design innovations that will improve on-site functioning, alleviate traffic problems and control types of land uses in planned highway-commercial areas.
- 4. Locate regional activity centers to facilitate access to major transportation routes, bus service, and rapid rail service where available.
- 5. Locate industrial areas with direct access over major thoroughfares to interchange connections with connecting free-ways or trunklines.
- 6. Locate industrial sites within easy commuting time of residential areas and accessible to public transportation.
- 7. Locate industrial areas readily accessible to railroad service and/or with proximity to airports that offer commercial air service.

### Objective I. Provide an environment capable of attracting Guidelines new employment to the region.

- 1. Concentrate more of the employment in regional activity centers and industrial areas.
- 2. Require an environment in existing or proposed employment areas that is compatible with the character of the surrounding area.
- 3. Provide, through creation of new job opportunities, a balanced development that reduces the tax burden upon the residents of the community.

- 4. Provide for the inclusion of public and semi-public uses and spaces as integral functions of regional activity centers.
- 5. Create new regional activity centers and encourage revitalization of older urban cores.
- 6. Stimulate design innovation and land use associations for the regional activity centers which result in a more pleasant living environment and a more efficient use of the land.
- 7. Promote the location of a large variety of industrial uses so as to attract diverse industries into the region while continuing to be selective.
- 8. Provide for a variety in the design and cost of housing types for all segments of the industrial work force.
- 9. Require ready and economical access to the necessary utilities water, gas, sewerage, power and telephone for all industrial sites.
- 10. Develop industrial park sites in the county in accordance with an overall development plan relating to site size, building coverage, provision of utilities and internal circulation facilities and the provision of permanent open space, without injuring residential uses.

Community Facilities: The General Plan includes two objectives in connection with community facilities: that all the necessary community facilities should be planned and located within the urban pattern, of the necessary size and location to best serve the needs of the residents; and that compact urban development, properly staged is the most efficient way to accomplish this. The Plan suggests guidelines for the implementation of these objectives, emphasizing the need for adherence to the corridor-wedge pattern, improved capital budgeting and other procedures for the proper timing of the facilities, the acceptance of fees in lieu of dedication of public lands as a means of acquisition, and the requirement for public agencies and utilities to adhere to the same good planning principles as the private developer.

For the most part the many objectives and guidelines adopted since the General Plan in various area master plans

reiterate these policies. However they also point out the need for a full range of facilities including those provided by public agencies and also such private facilities as shopping areas.

Recommendations for Updating the General Plan: The following policies are proposed for approval:

Objective J. Make public investments in community facilities in the most efficient manner to insure compact, orderly urban development and maximum service.

#### General Guidelines

- 1. Combine public facilities where possible to economize on public expenditures and maximize public convenience.
- 2. Concentrate major community facilities in regional activity centers to help guide growth as well as respond to needs generated by growth.
- 3. Locate new facilities in such a manner as to protect the integrity of residential areas.
- 4. Acquire or reserve sites for community facilities before private development takes place.
- Objective K. Reserve space for all community facilities within the urban pattern near their intended users, insuring that their sizes, locations, and functions conform to the needs of the community and its residents.

#### General Guidelines

- 1. Phase public facility development to meet population growth rates and needs.
- 2. Provide the necessary community facilities needed by residents of all age groups in scale with population densities and composition.
- 3. Insure optimum cultural, social, educational and recreational opportunities by supplementing public facilities with private.

Objective L. Coordinate the location of schools, libraries, fire stations, hospitals, health clinics, and other public facilities to insure a balanced system of community facilities and services sufficient to meet economic, social and cultural needs.

#### Specific Guidelines For Schools

1. Locate schools after careful consideration of the factors of accessibility and environment:

#### **ACCESSIBILITY**

- Travel distances
- Undesirable travel conditions
  - A. Traffic flow
  - B. Numbers of pupils crossing dangerous intersections
- Availability of public transportation

#### **ENVIRONMENT**

- Type of neighborhood
- Possible future development
- Daylight obstruction
- · Sources, degree, and type of noise
- Ecological and scenic quality
- Proximity to other public facilities
- 2. Design schools to function as neighborhood and community multi-use centers, serving the community's social, cultural, vocational and recreational as well as educational needs.
- 3. Encourage year-round and evening use of school buildings.
- 4. Keep existing and proposed school sites relatively free from such external disturbing factors as heavy traffic, excessive noise, and incompatible land use.
- 5. Locate, centrally, schools in relation to population with safe access by foot or vehicle and adjacent to parks, playfields, libraries, and cultural facilities.

### **Specific Guidelines For Libraries**

- 1. Locate and construct libraries in response to community needs.
- 2. Space libraries efficiently to assure service to all residents, minimize duplication of service, and reduce costs.
- 3. Locate library sites in or adjacent to activity centers:
  - To provide service to the greatest number
  - To share parking facilities
  - To take advantage of access
  - To provide convenient facilities for meetings, forums, lectures and other similar cultural activities.
- 4. Provide mobile unit library service to low density areas and as an interim measure until population growth is sufficient to warrant construction of permanent facilities in areas of future urban or suburban development.

### Specific Guidelines For Fire And Rescue Stations

- 1. Base the location of fire and rescue stations on a regional system in which individual sites are mutually supporting.
- 2. Integrate fire and rescue stations with non-residential activities such as neighborhood and community activity centers or industrial areas.
- 3. Locate fire and rescue stations as close as possible to high value and high density development.
- 4. Locate fire and rescue stations with unobstructed access to all primary points within the service area.

### **Specific Guidelines For Hospitals**

- 1. Confine medical facilities to as few installations as possible convenient to and consistent with indicated need.
- 2. Expand existing hospitals wherever possible to meet community needs rather than establishing new general hospitals.
- 3. Discourage establishment of professionally specialized hospitals unless they are developed as units attached to a general hospital.

- 4. Locate medical facilities close to areas of population concentration where competent medical and surgical consultation is readily available and where employees can be easily recruited and retained.
- 5. Locate hospitals in areas easily accessible to major thoroughfares, freeways, and interchanges, and well serviced by public transportation facilities.
- 6. Locate hospitals away from commercial, industrial or other land uses that produce excessive noise or cause air pollution.

### Specific Guidelines For Community Service Centers

- 1. Place community service centers in close proximity to their most frequent users (for example, concentrations of low income people and senior citizens).
- 2. Combine community service centers with other social service centers whenever possible.

Agriculture, Open Space, Parks, and Recreation: The General Plan sets forth a number of objectives concerning open space and recreation. The principal points made by these statements are (1) that large amounts of open space, uninterrupted by scattered urban development, are needed; (2) that open space land should be in both public and private ownership; (3) that parks of various kinds, greenbelts, and private uses of a rural type should all be included; and (4) that a rural zoning category should be employed on most of the land in the open space wedges between the urban corridors.

The General Plan also contains a number of specific statements favoring the continuation of agriculture as a profitable activity in the rural wedges and proposing the retention of the most suitable soils for agriculture and related activities.

The Plan lists a series of guidelines for the effectuation of these objectives, emphasizing the need for the use of a combination of methods. These methods include the use of land tax policy in conjunction with zoning, the acquisition of additional parkland, the acquisition of scenic and recreation easements on

private property, and the use of subdivision powers. The Plan emphasizes that public acquisition of all of the open space wedges is neither possible nor desirable and that rural zoning must therefore be used to restrict such land to rural uses.

Many additional guidelines have been adopted in the various master plans subsequent to 1964 on the subject of open space, most of which substantially repeat the points already summarized above. However, several new points are included: (1) open space is to be used for the protection of natural resources in addition to the other purposes already mentioned; (2) land that is poorly qualified for building, unsuitable for agriculture, or within airport approach zones should be considered for open space reservation; and (3) clustering techniques should be used as another method of open space preservation.

**Recommendations For Updating the General Plan:** The following policies are recommended for approval:

Objective M. Avoid the intrusion of a mixture of conflicting land uses into agricultural areas, while permitting a wide selection of compatible activ-

#### Guidelines

- 1. Preserve where possible the use of the best soils for agricultural purposes.
- 2. Limit assistance to agricultural uses to areas outside areas of urbanization as indicated on the general plan and to areas having good agricultural lands.
- 3. Maintain a rural atmosphere in open space areas by limiting development to very low intensity.
- 4. Encourage compatible, low-intensity non-agricultural uses.

### Objective N. Ensure that agriculture in the region becomes Guidelines or continues as a viable land use.

- 1. Protect agricultural lands to preserve their value as farmland as long as the pressures of urbanization permit.
- 2. Promote the development of profitable agricultural endeavors.

### Objective O. Maintain large amounts of open space.

- 1. Use open space techniques to preserve the identity of individual neighborhoods, cluster developments, new towns, and existing communities.
- 2. Provide and protect large open spaces for the "change of pace" and recreational opportunities needed by present and future generations.
- 3. Give priority consideration to unique natural areas in parkland and open space acquisition programs. These areas include the following:
  - a. Scenic vistas;
  - b. Areas which should remain in a natural agricultural or undeveloped state due to soil conditions, flooding, etc.;
  - c. Areas possessing unique natural features in topography, woodland and rock outcroppings;
  - d. Significant surface water areas, floodplains, wetlands, and aquifer recharge areas;
  - e. Cultural and historical buildings and sites.
- 4. Provide a framework upon which public and private open spaces may be connected.
- 5. Integrate county open space planning with federal, state, and local programs for rural development, conservation and open space acquisition.
- 6. Take positive action to prevent destruction, large-scale clearing and grading of land.
- 7. Acquire open space areas where they may serve multipurpose functions.
- 8. Utilize open space as a means of creating a more pleasing environment, at both the area-wide and individual site levels.

- Objective P. Provide a favorable rural environment in which farming, mineral extraction, hunting, fishing and other natural resource activities can be carried on without disruption.
- 1. Maintain a rural atmosphere in open space areas by permitting only low intensity development.
- 2. Reserve large tracts of land for future open space development which would guide a desirable regional development pattern.
- 3. Insure permanent natural amenities that break the otherwise continuous suburban development.
- Objective Q. Provide recreational facilities of sufficient diversity to effectively serve the needs and interests of the various segments of the community.
- 1. Provide the necessary golf courses, ball fields, play apparatus and other outdoor recreational facilities required to meet the recreational needs of the citizens.
- 2. Encourage the private use of public park land in the public interest.
- 3. Provide the necessary community recreation centers that fulfill the need for year-round, indoor recreational facilities.
- 4. Create and maintain a balanced system of active and passive recreational areas.
- 5. Provide local recreational opportunities for all developing areas.
- 6. Provide a variety of recreational facilities serving all age and interest groups and create varied opportunities for land and water oriented activities in local and regional parks through public, private and commercial interests.
- 7. Require on-site recreation space in new developments when adequate public space is not available.

- 8. Utilize to the maximum extent possible both public and private lands in the regional district for outdoor recreation.
- Objective R. Provide adequate parks, consistent with ac-Guidelines cepted standards, to serve the community.
- 1. Acquire park land and develop it in pace with population growth.
- 2. Acquire park land at critical points to separate urban from rural areas.
- 3. Manage the park system on the basis of sound conservation principles and practices, recognizing the ecological interdependencies of people, flora and fauna, soils and waters.
- 4. Plan, design, and construct in suitable areas of the parks a system of access roads, recreation facilities and public utilities that will be harmonious with the natural beauty and park land physiography and will reflect full concern for humane and aesthetic values of the environment.
- 5. Integrate, where appropriate, park and recreational facilities with school and other cultural activities of the community.
- 6. Develop neighborhood parks to reflect the recreational desires and needs of their major users.
- 7. Locate sites for neighborhood and community parks, parkschools, and youth centers in areas easily accessible to the intended users.
- 8. Establish a system of parks, recreation, and open space facilities integrated with the urbanized portions of the county.
- 9. Acquire stream valley parks designed for watershed protection and providing limited and compatible recreation facilities.
- 10. Expand major stream valley park areas along smaller tributaries and other paths to give the population direct access to major stream valley parks via greenways.
- 11. Provide for pedestrian plazas and sitting areas free from all vehicular traffic in parks located within urbanized areas.

### **B.** Circulation

The goal of the General Plan and area master plans for circulation is an efficient transportation system, consistent with the pattern of land use and including rapid transit as well as streets and highways.

The objectives and guidelines which are proposed for bringing about this goal call for the fitting of the master plan of highways to the corridor pattern of development and for the cooperation of the County in the establishment of the rapid transit system. These policies also (1) require transportation recommendations to be shown in detailed master plans, (2) ask for good accessibility to intercity travel terminals, and (3) propose rural and airport zoning to keep residential development away from airports.

Recommendations for Updating the General Plan: The following policies are proposed for approval:

#### GOAL

PROVIDE A BALANCED CIRCULATION SYSTEM WHICH MOST EFFICIENTLY SERVES THE ECO-NOMIC, SOCIAL, AND ENVIRONMENTAL STRUC-TURE OF THE AREA.

Transportation routes and facilities should be Objective A. used not merely to accommodate travel demand, but more importantly, to facilitate the orderly growth of urban areas within the context of general plan goals.

- Require the timing of new highway projects to coincide with the timing of other public facilities intended to implement development goals.
- Require the service provided by highway and transit routes to be consistent with the economic and social goals of the region.
- 3. Locate transportation arteries with consideration given to environmental and conservation factors.
- Plan circulation systems so as to keep out heavy industrial traffic from residential areas while providing for industry's needs.
- In locating major transportation routes in built-up areas, minimize the disruption of local business and the demolition of sound residential structures.

Objective B. Provide for a coordinated rail-bus transit system that is as capable of shaping desirable growth patterns as it is in serving present population and employment centers, and provide for convenient ease of transfer between transit and other modes.

#### Guidelines

- 1. Locate transit stations on sites conducive to high density, multi-use development within walking distance to the stations.
- 2. Provide feeder service to rail transit stations.
- 3. Explore the feasibility of exclusive bus-ways where rail transit service cannot economically be extended because of low projected passenger volumes.
- 4. Utilize air-rights over surface rail transit lines and stations for community facilities, housing, and other similar land uses.
- 5. Encourage intermediate length ridership on below capacity transit routes through appropriate fare structures.
- 6. Provide sufficient kiss 'n ride and all-day parking areas at rapid rail and bus transit terminals.
- 7. Provide shuttle service between major core areas and rail transit stations where desirable.
- 8. Integrate terminal facilities for various modes at a few strategically located "transportation centers" serving existing and proposed urban cores and provide heliports at such centers.

# Objective C. Improve transportation efficiency so as to minimize costs to users and to reduce transportation as a cost element in the production of goods and services.

#### Guidelines

- 1. Encourage development of a rapid rail system coordinated with employment concentrations consistent with local development policy.
- 2. Foster a pattern of land development which reduces auto trip length.
- 3. Consider experimentation with new transportation modes in special cases where they would enhance use goals by providing the most efficient service.
- 4. Locate major traffic generators and high-density residential development close to major arteries.
- 5. Locate office employment and health and welfare facilities convenient to rail transit stations.

### Objective D. Provide highway systems to carry the required volume of vehicular traffic safely.

- 1. Utilize traffic engineering techniques to improve vehicular and pedestrian safety on existing streets.
- 2. Restrict the number and location of access points along major arteries from high-volume traffic generators.
- 3. Limit at-grade rail crossings to low-volume streets and low-volume rail lines, with all other rail crossings eliminated either by grade separations or street closings.

- 4. Locate major industrial and commercial areas close to major arteries in order to reduce commuter traffic on streets designed for short trips.
- 5. Reduce vehicle-pedestrian hazards by locating schools and recreation facilities such that children do not have to cross major streets to reach them.

## Objective E. While providing adequate capacity through built-up urban areas, retain the livability and amenities of such areas.

- 1. Encourage the use of mass transit rather than the use of the automobile for travel through built-up areas.
- 2. Explore and utilize all known traffic engineering techniques before resorting to construction of major relief highways through such areas.
- 3. Design transfer areas, such as bus terminals and fringe parking facilities, so as to reduce the localized effect of noise and air pollution on adjacent properties.

# Objective F. Recognize the need for non-motorized transportation forms to support health and recreation objectives and to provide visual contrast to vehicular movement.

- 1. Encourage the use of non-motorized ways leading to schools, shopping areas, parks, libraries and other community facilities.
- 2. Provide and maintain pedestrian walks, hiking trails, bicycle paths, and bridle paths.

- 3. Along streets and commercial areas, provide street furniture for visual interest to make walking a pleasant experience.
- 4. Where topographically feasible, provide pedestrian separations over or under new and expanded arteries.

## Objective G. Provide facilities to satisfy the needs of general aviation and to improve access to major air terminals.

- 1. Identify required runway and approach zone extensions and location of new airports in order to forestall conflicts between flight operations and future residential areas.
- 2. Cooperate with other local jurisdictions to improve ground access to Dulles, National and Friendship Airports.
- 3. Provide sites near existing and proposed airports for industries which rely on air travel for shipments and personnel mobility.
- 4. Develop a major general aviation facility for Montgomery County with supportive road access networks.
- 5. Provide all-weather navigational aids at general aviation airports.

### Objective H. Preserve the capacity of inter-city rail facilities for more intensive future use.

- 1. Reserve sufficient land areas adjacent to railroad lines to attract rail-using industries and distribution centers.
- 2. Eliminate at-grade road crossings on main line railroads.

### C. Conservation

The conservation goal stated in the General Plan calls for the protection of natural resources and the encouragement of their development. The Plan includes a number of objectives aimed at the accomplishment of this goal, expanding upon it by naming some of the resources to be protected, such as gravel, stone, soil and water. It also emphasizes that rural areas provide a favorable environment for the protection of natural resources. A number of specific measures are also proposed for the prevention of erosion and siltation in the floodplains and steep slopes of the stream valleys.

Recommendations for Updating the General Plan: The following policies are proposed for approval:

### GOAL

➤ CONSERVE VALUABLE NATURAL AND HISTORIC AREAS FOR THE BENEFIT OF PRESENT AND FUTURE GENERATIONS.

## Objective A. Protect stream valley corridors to reduce flooding, pollution, and sedimentation and to preserve ecological features.

- 1. Retain stream valleys in their natural state by constructing only on the more buildable portions.
- 2. Require open space dedications of stream valley property included within developing subdivisions.
- 3. Provide the opportunity for open space easements in stream valleys.
- 4. Continue parkland acquisition in key stream valleys to achieve the multiple purposes of conservation, recreation, preservation of natural beauty and open space.
- 5. Connect stream valley corridors to form a unified open space-conservation system.
- 6. Prohibit construction and filling in the natural floodplain areas adjacent to water courses.
- 7. Where feasible, establish a system of impoundments in major drainage basins.

### Objective B. Preserve unique and representative ecological areas and other natural features.

1. Promote a program for the identification and preservation of important natural areas.

### Objective C. Preserve points of historic and scenic significance.

- 1. Identify and preserve, wherever possible, significant historic sites that are:
  - Representative of a period of style
  - Architecturally important
  - Sites of important events or activities
  - Sites associated with important personages
  - Sites of historic cultural value
  - Archeological sites
- 2. Encourage private protection of historic sites on a permanent basis.
- 3. Continue and expand public protection of historic properties.
- 4. Preserve exceptional scenic areas in Montgomery County.

### Objective D. Provide for the wise use of mineral resources in Montgomery County.

1. Provide staged removal and efficient utilization of the mineral resources.

2. Require the restoration of extraction sites.

### Objective E. Reduce flooding and excessive runoff.

#### Guidelines

- 1. Alleviate storm water runoff and resultant flooding by decreasing the amount of impervious ground cover.
- 2. Replenish ground water supplies through innovative water retention techniques.

### Objective F. Protect conservation resources from destructive sedimentation and erosion.

- 1. Utilize sediment and erosion control practices during construction.
- 2. Limit construction on soils not suited for urban development.

## Objective G. Provide for development in urban and suburban areas that retains ecological features and is compatible with good conservation practices.

- 1. In developing areas, encourage retention of trees, streams, and other ecological features, educating developers to capitalize upon these natural areas at small- as well as large-scales.
- 2. Incorporate natural features into existing urban areas to provide the urban dweller with a sense of nature and diversity.
- 3. Utilize conservation to maintain a high quality living environment through increased health, space diversity, and beauty.

### D. Environmental

The General Plan states as a goal "Facilitate the orderly and efficient arrangement of public utilities and services" and proceeds to state a number of more specific objectives. These objectives and the guidelines that accompany them are concerned with planning for the most economical and efficient location of water and sewer lines, including the proper phasing of construction and concentration of development, so as to maximize the benefit of expenditures for sewerage and water systems.

Emphasis is placed on the need to use capital improvement programming in order to coordinate sewer construction with urban development, avoiding extensions of trunk lines into areas planned for rural use and concentrating them in areas proposed for urbanization. The use of limited access sewers is proposed in order to help bring about this coordination of sewer service with development patterns. The temporary use of oxidation ponds for sewage disposal until trunk sewers can be constructed is also proposed.

There is also a guideline concerning airport noise, proposing special airport zoning and the purchase of "noise easements" in the airport vicinity in order to protect both the airport and the surrounding development. **Recommendations for Updating the General Plan:** The following policies are proposed for approval:

### **GOAL**

- ▶ PROVIDE AN AESTHETIC AND HEALTHFUL ENVI-RONMENT FOR PRESENT AND FUTURE GENERA-TIONS.
- Objective A. Provide for the optimum use of public funds by timely scheduling of water and sewerage systems.
- 1. Discourage development requiring major water and sewer service, where such services cannot be efficiently provided.
- 2. Provide water and sewerage service in areas where development is desirable.
- 3. Require those who benefit from water and sewerage service extensions to a new area to pay the proportionate share of both the capital and operating costs.
- 4. Encourage planned clustered development so as to provide water and sewer service at the least possible cost.
- 5. Extend community sewer service to areas to be urbanized in the desired sequence of growth.

<sup>&</sup>lt;sup>9</sup> "On Wedges and Corridors," p. 18.

### Objective B. Provide adequate water and sewerage service. Guidelines

- 1. Provide water or sewer service wherever necessary in direct relation to the planned population distribution.
- 2. Use the general plan land use development policy as the major criterion for providing water and sewer service.
- 3. Designate water and sewer mains as controlled or limited access for service to select areas.
- 4. With the exception of existing health problems, provide water service only to those areas currently served with community sewers or proposed to be served within 10 years.
- 5. Use local community water systems in outlying areas where extension of the existing community water system would constitute an economic, planning, or engineering obstacle.
- 6. Use local community or package treatment facilities in outlying areas where extension of the existing community sewerage system would constitute an economic, planning, or engineering obstacle and where discharge effluents comply with Department of Water Resources standards.
- 7. Require separate systems for sanitary sewage and storm water in all development.
- 8. Provide an adequate supply of high quality water favorable to industrial and community growth.
- 9. Insure a sufficient emergency supply of water for disaster or emergency situations.
- 10. Utilize ground water to the maximum extent possible for providing water supply.

- 11. Establish dam sites in the Potomac River basin to assure an adequate supply of water.
- 12. Insure that the Patuxent River in Montgomery County is of sufficient quality to support: a public or municipal water supply, water contact recreation, the propagation of fish and aquatic life, and agricultural water supply.

## Objective C. Provide water and sewerage systems that embody the highest technological and aesthetic standards.

#### iuidelines sianaara

- 1. Protect sources of water supply from pollution.
- 2. Acquire sufficient land for sewage treatment facilities to provide for future expansion including tertiary treatment facilities, to provide for buffer plantings and to provide for sludge disposition.
- 3. Locate booster pumping stations in small attractively designed buildings.
- 4. Use exceptional design standards for elevated tanks, standpipes and other water appurtenances visible to the public.

### Objective D. Minimize the adverse effects of necessary electrical, gas, and communication systems upon Guidelines the aesthetic environment.

- 1. Maximize the use of common rights-of-way for utility and transportation systems wherever feasible.
- 2. Require maximum undergrounding of all new utilities systems.
- 3. Convert overhead distribution lines to common underground trenches in the older, established areas.

#### Objective E. Monitor continuously and maintain at a high level the waters of Montgomery County to assure, for the present and future, a healthy and aesthetic supply of clean water.

#### **Guidelines**

- 1. Do not permit stream water quality to fall below the minimum standards set by the Maryland water resource commission and the Maryland Department of water resources.
- 2. Keep the waters of the Potomac River free of substances attributable to municipal, industrial, or other waste discharges in concentrations or amounts sufficient to be inimical or harmful for water recreation uses or human, animal, plant or aquatic life.
- 3. Require coordination between public agencies concerned with storm drainage and runoff management to control flood hazards and flood damage and to reduce water pollution from erosion and debris.
- 4. Control debris either floating or anchored which constitute a hazard to navigation and the free flow of water in streams or river channels.
- 5. Prevent thermal pollution that causes harmful effects upon aquatic life and the general ecology of estuary areas.
- 6. Require adequate sewage treatment capacity be available for new subdivision development.

#### Objective F. Protect water resources by requiring sound land use management. Guidelines

1. Protect the aquifer recharge area along the fall line between the Piedmont Plateau and the coastal plain near the Montgomery-Prince George's County boundary.

- 2. Recharge groundwater aquifers with storm water runoff and processed waste water from sewage treatment plants where it complies with the Department of water resources water quality standards.
- 3. Protect the natural drainage basin of the Patuxent River above the Triadelphia and T. Howard Duckett water reservoirs.
- 4. Control land use in the Potomac River basin above the raw water intakes for water supply to prevent discharge of any material that would endanger that supply.
- 5. Acquire or regulate properties abutting on county streams and rivers.

#### Objective G. Protect water resources from polluting runoff.

- 1. Design and maintain storm sewers in such a manner as to preclude water pollution.
- 2. Maintain the natural character of drainage areas in the immediate vicinity of a watercourse.
- 3. Require grass channels in lieu of pipes which completely enclose watercourses.
- 4. Clean paved areas to prevent animal wastes, chemicals, dust, dirt and litter from entering watercourses.
- 5. Require roof drain discharge onto or into pervious ground areas or temporary impoundments.
- 6. Require sediment and erosion prevention plans prior to development.

### Objective H. Protect water resources from concentrated Guidelines sources of pollution.

- 1. Require the use of advanced waste treatment methods in sewage treatment plants.
- 2. Maintain the higher natural standard in waters where the natural water quality exceeds the state standards.
- 3. Use individual, package or central sewage treatment facilities only where such systems do not cause ground water or surface water pollution.

## Objective I. Assure that the quality of air in Montgomery County will enhance the enjoyment of life and property.

- 1. Eliminate from the atmosphere the presence of odors, solids, vapors, liquids, or gases in concentrations considered to be injurious to human, plant or animal life or to property.
- 2. Control the adverse effects of air pollution.
- Objective J. Assure the residents of Montgomery County the right to the reasonable enjoyment of life and property without interference from loud, undesirable and annoying noise.

### Guidelines

- 1. Avoid the creation or continuance of loud, unnecessary, unwanted or unusual noise.
- 2. Control the adverse effects of noise pollution.
- Objective K. Provide an adequate system for the collection and disposal of solid wastes to insure the protection of public health, the reduction of fire hazards, the elimination of water and air pollution, the conservation of land and materials, and the improvement of community appearance.

#### Guidelines

- 1. Provide solid waste disposal services to all residents and commercial and industrial establishments on a continuous and adequate basis.
- 2. Provide for the operation of incinerators, shredding equipment, salvage and reclamation processes, reduction processes and sanitary landfills in a manner that will not pollute air, land or water resources.
- 3. Provide suitable land for present and future disposal needs including lands that may ultimately be used for recreation purposes or other re-use.
- 4. Encourage a regional system for handling solid wastes in the Washington metropolitan area.

### Objective L. Promote an orderly and attractive urban growth for Montgomery County.

- 1. Promote urban design planning for the region, sub-region, and local areas.
- 2. Incorporate urban design considerations into all aspects of the planning and development process.

### Objective M. Encourage community participation to promote good design.

- 1. Encourage the creation of citizens committees to improve community appearance and spur good public and private design.
- 2. Promote a participation program for citizens groups, clubs, and business associations.

### Objective N. Create a pleasing streetscape image for the Guidelines

- 1. Improve the motorist's view by using such devices as land-scaping, buffer strips, innovative design and varied setbacks.
- 2. Locate and design highways and adjacent land uses to enhance rather than destroy an area's best attributes.

### Objective O. Remove unattractive elements from roadside Guidelines developments.

- 1. Develop temporary and long-range controls for improving visual "eyesores."
- 2. Avoid haphazard conversion of older residential areas to roadside commercial and industrial land uses.

### Objective P. Align roadways to be compatible with urban design objectives.

- 1. Design roadways to instill a sense of identity, location, direction, and destination.
- 2. Develop roads to take visual cognizance of existing focal points, special activity districts, or topography.
- 3. Design attractive off-street parking areas to be visually identifiable and easily accessible to the motorist.

### Objective Q. Provide separation of pedestrian walks and Guidelines vehicular roadways.

- 1. Create attractive separations between sidewalks and roadways through landscaping, raised planting strips, and other means.
- 2. Utilize horizontal and vertical level differentials to achieve maximum visual and physical separation.
- 3. Require safe, attractive pedestrian crosswalks.

### Objective R. Encourage imaginative design of pedestrian Guidelines environments.

- 1. Utilize a variety of paving materials and curvilinear sidewalks.
- 2. Channel pedestrian paths through plantings, benches, fountains, and art works to develop a sense of movement and maximize a pleasing view.
- 3. Utilize innovative design to improve the appearance of utilitarian "street furniture" such as mail boxes, telephone booths, bus stops, and traffic signs.

### Objective S. Design activity centers for the pleasure and Guidelines convenience of the pedestrian.

- 1. Develop core areas so that all downtown functions are centralized, easily accessible and attractive.
- 2. Design transit stations to be visually attractive, functional, and convenient activity points.
- 3. Promote plazas, malls, small parks, and sidewalk cafes to provide pedestrian focal points.
- 4. Encourage innovative architecture, window display, landscaping and civic art (such as fountains, sculpture, and murals) to provide highlights in downtown areas.

## Objective T. Promote the development of compatible, yet variable and identifiable residential neighborhoods.

- 1. Promote varied site plan designs that create spaciousness, interest, and beauty.
- 2. Provide a safe, logical and imaginative street pattern with appealing street furniture and landscaping.
- 3. Design community facilities and neighborhood shopping centers to be conveniently located, architecturally integrated and visually appealing.
- 4. Integrate residential structures with an open space network to provide pleasing vistas and recreational areas.
- 5. Control appearance of commercial and industrial service areas where visible from residential structures.
- 6. Design activity centers in corridor cities to integrate residential areas with commercial, cultural, and employment facilities as well as transit stations and urban parks.

### Objective U. Provide safe, attractive and pleasant places of Guidelines employment.

- 1. Design employment centers to provide adequate and attractive parking, and leisure facilities.
- 2. Utilize landscaped open space for visual relief and employee relaxation.

### E. Housing

There are few policy statements in the General Plan that are concerned specifically with housing, as distinguished from residential land use. The Plan proposes greater variety in types of living environment, stressing physical design (the avoidance of monotonous and unimaginative layouts) and the use of new town and clustering types of development as a means of producing this diversity. The prevention and elimination of urban blight by means of an urban renewal program is also proposed.

**Recommendations for Updating the General Plan:** The following policies are recommended for approval:

### GOAL

STRESS THE PRESENT QUALITY AND PRESTIGIOUS IMAGE OF RESIDENTIAL DEVELOPMENT IN MONT-GOMERY COUNTY BY FURTHER PROVIDING FOR A FULL RANGE OF HOUSING CHOICES, CONVENIENTLY LOCATED IN A SUITABLE LIVING ENVIRONMENT FOR ALL INCOMES, AGES AND LIFE STYLES.

### Objective A. Provide for quality, variety and choice in residuidelines dential development.

- 1. Permit greater flexibility in residential development to meet a broad range of needs.
- 2. Encourage a high quality of livability for all housing units.
- 3. Encourage excellence in design of interior and exterior living space to assure that such space needs are determined by and related to family size, the functions of day-to-day living, and the normal possessions of families.
- 4. Encourage the provision of both indoor and outdoor recreational and community facilities, as appropriate in multi-family and single-family residential development.
- 5. Encourage ownership provisions for all types of housing and community facilities.
- 6. Encourage the use of new and innovative housing systems constructed on or off site to increase the supply and variety of housing types.

7. Increase the speed of development through more efficient procedures for local governments' decisions affecting development.

## Objective B. Integrate housing with employment and transportation centers and community services and facilities.

#### Guidelines

- 1. Assure the availability of housing near industrial, commercial and transportation centers.
- 2. Promote an economic balance of housing costs related to employment opportunities.
- 3. Assure the economic feasibility of providing housing for all income levels.

### Objective C. Insure an adequate supply of housing for lowand moderate-income households.

- 1. Provide for low-and moderate-income housing to meet existing county needs and anticipated future employment needs.
- 2. Distribute public housing on a county-wide basis with emphasis on accessibility to employment centers, shopping and recreational facilities and with emphasis away from areas which are economically impacted.
- 3. Assure the provision of low-and moderate-income housing as part of large-scale development and as an option in smaller scale development.
- 4. Utilize existing government land which meets good housing site criteria to increase the number of available sites for meeting housing needs.
- 5. Assist households in locating and financing housing and in maintenance.

### Objective D. Preserve and enhance the quality of housing and environment in established neighborhoods.

- 1. Coordinate the infusion of substantial public funds with county code enforcement programs.
- 2. Discourage negligence among owners and renters through code enforcement and other appropriate techniques.
- 3. Employ positive programs in achieving community improvement.