Chesapeake
VIRGINIA

BASIC POLICIES FOR THE COMPREHENSIVE PLAN OF CHESAPEAKE, VIRGINIA

Approved by the City Council

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CONTENTS

Introduction 1

Definition of the Comprehensive Plan 2

Growth and Change 6

Environment 9

Utilities 11

Transportation 14

Land Use 18

Community Facilities 23

Historic Preservation and Urban Renewal 27

Planning Units 28

Implementation 31

INTRODUCTION

During the decades of the 1980s and 1990s, the City of Chesapeake will be experiencing unprecedented pressure for change, very likely at an increasing rate. Contrary to most municipalities which can be characterized as urban, suburban, or rural, Chesapeake is all three. Its size and diversity (350 square miles and 140,000 residents) complicate the external forces of change, and present a very real challenge to a system of local governance established as recently as 1963.

The City Council and Planning Commission of Chesapeake are committed to the wise and equitable management of natural, economic, and human resources for which they are stewards, and to the judicious growth and maturation of the broad community of interests which they represent. This responsibility is given direction by the City's Comprehensive Plan, a legal document required of every municipal governing body in the Commonwealth by Article 4, Section 15.1-446.1 of the Code of Virginia.

The existing Comprehensive Plan of Chesapeake, currently composed of numerous elements adopted by reference, is currently undergoing review and scrutiny by the Council, Commission, and staff as a prerequisite to its amendment. Pursuant to an established planning process involving several public workshops and hearings during 1986-1987, this report sets forth certain fundamental planning policies of the City of Chesapeake as an interim guide to be utilized by the Council, Commission and staff until the remaining elements of the Comprehensive Plan can be completed, or revised, and adopted.

DEFINITION OF THE COMPREHENSIVE PLAN

First and foremost, the Comprehensive Plan is a statement of policy – a formal declaration of intent on behalf of the municipality regarding its future. Although most of its elements do not have the full force and effect of law, they are the basis of laws which in turn must be written and administered in a manner consistent with (or at least not inconsistent with) the Comprehensive Plan itself.

Statutory Framework

The Code of Virginia states:

> § 15.1-446.1. Comprehensive plan to be prepared and adopted; scope and purpose. – The local commission shall prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction.
>
> Every governing body in this State shall adopt a comprehensive plan for the territory under its jurisdiction by July one, nineteen hundred eighty.
>
> In the preparation of a comprehensive plan the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.
>
> The comprehensive plan shall be general in nature, in that it shall designate the general or approximate location, character, and extent of each feature shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned, or changed in use as the case may be.
>
> Such plan, with the accompanying maps, plats, charts, and descriptive matter, shall show the commission's long-range recommendations for the general development of the territory covered by the plan. It may include, but need not be limited to:
>
> 1. The designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, conservation, recreation, public service, flood plain and drainage, and other areas;
>
> 2. The designation of a system of transportation facilities such as streets, roads, highways, parkways, railways, bridges, viaducts, waterways, airports, ports, terminals, and other like facilities;

3. The designation of a system of community service facilities such as parks, forests, schools, playgrounds, public buildings and institutions, hospitals, community centers, waterworks, sewage disposal or waste disposal areas, and the like;

4. The designation of historical areas and areas for urban renewal or other treatment; and

5. An official map, a capital improvements program, a subdivision ordinance, and a zoning ordinance and zoning district maps. (1975, c. 641; 1976, c. 650; 1977, c. 228.)

§ 15.1-447. Surveys and studies to be made in preparation of plan; implementation of plan. – (1) In the preparation of a comprehensive plan, the local commission shall survey and study such matters as the following:

(a) Use of land, preservation of agricultural and forestal land, production of food and fiber, characteristics and conditions of existing development, trends of growth or changes, natural resources, population factors, employment and economic factors, existing public facilities, drainage, flood control and flood damage prevention measures, transportation facilities, the need for housing, and any other matters relating to the subject matter and general purposes of the comprehensive plan.

(b) Probable future economic and population growth of the territory and requirements therefor.

(2) The comprehensive plan shall recommend methods of implementation. Unless otherwise required by this chapter these may include but need not be limited to:

(a) An official map;

(b) A capital improvements program;

(c) A subdivision ordinance; and

(d) A zoning ordinance and zoning district maps.

(e) [Repealed.]

To summarize the key features of the Code, the Comprehensive Plan shall:

1. Deal with physical development of the territory;
2. Be general in nature;
3. Have a long-range perspective;
4. Be based on certain surveys and studies;
5. Recommend methods of implementation.

The Comprehensive Plan may be prepared and adopted in its entirety at one time, or in parts dealing with geographical divisions of the City or separate functional matters. It or its parts shall be reviewed by the commission at least once every five years to determine whether it is advisable to mend the plan.

Content And Format

In the past, the City of Chesapeake has referred to a list of 57 planning studies as constituting the City's Comprehensive Plan. Hereafter, it is recommended that the Comprehensive Plan be composed of two primary parts:

1. The General Plan
2. Specific Plans

The General Plan shall be the statement of municipal policies as they relate to functional matters with broad application throughout the City or major portions thereof. The General Plan may, when necessary and appropriate, incorporate by reference the policies of plans prepared by other units of government, such as a regional transportation plan. However, as soon as possible the specific policies from those plans which relate to Chesapeake should be incorporated into the general plan by amendments to text and graphics. When adopting any plan by reference, a clear statement should be included, indicating which policies have precedence should there be any conflict.

Specific Plans shall be those which apply to defined geographic areas (or planning units) within the City of Chesapeake. These plans are of greater detail than the General Plan, but shall be consistent with the General Plan. When they are in conflict with the General Plan, a clear statement shall be made regarding a legitimate purpose of the conflict, which plan shall prevail, and/or the General Plan itself should be amended accordingly.

This report is the predecessor of the complete General Plan.

Terminology

The planning process is based on a continuum of personal and collective decision-making, beginning with values and culminating with policies. The following definitions apply to terms used in this report.

Value	–	*something perceived to be intrinsically desirable by an individual or group; often evidenced by feelings and actions rather than words.*
Goal	–	*the stated end toward which effort is to be directed; the expression of values.*
Objective	–	*a specific target established, by which to achieve a goal.*
Principle	–	*a fundamental law, doctrine, or assumption; a rule or code of conduct.*

Standard – *minimum condition or regulation which is required to satisfy a given need.*

Policy – *a definite course of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions.*

The Comprehensive Plan is a declaration of intent. When the Plan is formally adopted by the City Council, all goals, objectives, principles, and standards therein become policy.

GROWTH AND CHANGE

The population of Chesapeake has increased from 78,153 in 1963 to over 140,000 in 1987, or approximately 3% per year. At this rate, the City will be home to approximately 185,000 persons by the year 2000. On the surface, such a rate of population growth is not extraordinary for a large sector of a major metropolitan area. Yet, this is only one dimension of growth and change, a topic that is fundamental to any municipality.

Goal

A largely self-sufficient, affordable municipality of residential communities supported by compatible commercial, industrial and institutional development providing jobs, tax base, goods and services, and cultural opportunities for its varied residences, and respecting its natural resources and sense of place.

Objectives re: Magnitude

1. The ultimate scale of the City is restricted only by its existing geographic boundaries, by the capacity of its natural resources and man-made support systems, and by the character desired by its citizens.

2. A population of approximately 185,000 to 200,000 is to be anticipated in the foreseeable future.

3. Approximately 55,000 to 60,000 jobs are to be anticipated commensurate with the above population, although the mix of jobs and labor force may reflect mobility throughout the metropolitan area.

Objectives: Rate

1. The rate of development should be maintained at a level consistent with the capability of local government to serve it reasonably and equitably, and the capability of local government should be maintained or expanded to accommodate reasonable rates of development.

2. An average population increase of approximately 3% annually is considered reasonable.

3. Jobs should be increased at an average rate of 5% to 6% annually for the foreseeable future.

4. Rezoning of land, approval of new subdivisions, and land consumption should not outpace the reasonable anticipated market demand and foregoing rates of growth.

5. Rates of growth should not be inconsistent with those anticipated by the Southeastern Virginia Regional Planning Commission for this area.

6. The rate of growth in any sector of the City should not unreasonably or adversely affect that sector.

Objectives: Form

1. Growth and change should be generally consistent with the level of accessibility provided by major transportation facilities and the historic pattern of urban development corridors in the City.

2. Conceptually, the basic city form should include a major activity center in the vicinity of I-64, major industrial areas along the Southern Branch of the Elizabeth River and along the Norfolk & Southern Railroad, mature urban communities between I-64 and the City of Norfolk, developing urban communities parallel to I-64, countryside communities south of the Chesapeake & Albemarle Canal in the vicinity of Great Bridge, rural or environmentally-sensitive areas in the southern and western sectors of the City, all linked by transition areas.

3. The major activity center should be planned and encouraged to relieve pressure for development in other parts of the City, and to support the revitalization of mature communities.

Objectives: Quality

1. The quality of development throughout the City should reflect sound principles and performance standards generally accepted in the planning, design, and development professions.

2. The character of specific projects and improvements should be harmonious with and sensitive to the ambient environment, natural and man-made, in which they are located.

3. The functional and visual design excellence of public improvements throughout the City should set good examples for private development to emulate.

4. Pursuit of design excellence should be balanced with the pursuit of affordable development, but affordability need not be an excuse for lack of good taste or sensitivity to the environment.

5. To support and attract desired residential, commercial, and industrial development, emphasis should be placed on enhancing and accelerating the range and quality of educational and cultural opportunities, activities, and facilities in the City.

Objectives: Cost to the Public

1. The cost of growth and change, financial or otherwise, should not be borne unreasonably or inequitably by any particular group or generation of citizens.

2. The municipality has a responsibility to influence growth and change in a manner such that it is in concert with the municipality's current and anticipated financial and institutional resources.

Objectives: City Posture

1. The City of Chesapeake should assume the roles and responsibilities of "leadership" in pursuit of its goals and objectives and "stewardship" in the management of its resources.

ENVIRONMENT

Fundamental to all life is our environment – the land, water, vegetation, and air under, around, and above us. This intricate ecological system is linked in so many critical, intimate ways that to modify one element sets off a chain of events in other elements. For example, the elimination of vegetation reduces nature's capability to purify air and water.

Public and private policy cannot take the environment of Chesapeake and the Hampton Roads area for granted. In fact, public and private policy must lead the way to guarantee a healthy and satisfying environment not just for this generation, but for all generations to come.

Goal

A balanced and healthful relationship between people and nature's life support systems.

Objectives: Land

1. Land should be treated as a finite, irreplaceable resource with both public and private value.

2. Urban and rural development alike should respect the natural topography, soils, and geology of the site and area.

3. Agricultural and construction practices should mitigate soil erosion, and should be subject to land disturbing permits.

4. The removal or displacement of topsoil from land should be permitted only in conformance with guidelines adopted by the City.

Objectives: Water

1. The chemical, biological and aesthetic quality of Elizabeth River tributaries, the Northwest River, all canals and other open water areas in the City should be protected and enhanced.

2. All wetlands and hardwood swamps defined by the Chesapeake Wetlands Ordinance, the Virginia State Wetlands Act, and the U.S. Corps of Engineers should be mapped and protected from inappropriate change or destruction, and from the adverse impacts of nearby development. Wetlands and hardwood swamps that are modified or eliminated by development for valid reasons should be replaced acre-for-acre in accordance with generally accepted management practices.

3. Adverse groundwater mining and contamination by man-made sources should be avoided.

4. The City should coordinate its policies with the U.S. Corps of Engineers and the Section 404 Permit Program, with the U.S. Environmental Protection Agency Office of Wetlands and Water, and with the Virginia Marine Resources Commission and Institute of Marine Science.

5. Shorelines of rivers, lakes, and streams should be protected and modified only in conformance with guidelines established by the City to prohibit erosion, sedimentation, and adverse visual impacts.

Policies: Vegetation

1. Forests and woodlands throughout the City should be mapped and preserved to the extent possible commensurate with their natural and visual quality, and should be modified or eliminated only in conformance with sound forestation practices.

2. A City-wide forestation program, including street trees, should be established and coordinated with the Virginia Department of Conservation and Historic Resources.

3. Existing and suitable groundcover of all types should be preserved or enhanced to control erosion, minimize stormwater runoff, replenish the soil, provide wildlife habitats, and maintain the open-space character of the community.

4. To the extent permitted under state law, property owners and developers should be encouraged or, under prescribed circumstances, required to preserve existing trees and vegetation, and provide appropriate landscape improvements to their property.

Policies: Air

1. The quality of air in Chesapeake should meet or exceed all air quality standards adopted by the Commonwealth of Virginia and the U.S. Environmental Protection Agency.

Policies: Noise

1. The City should maintain working relationships with representatives of the U.S. Naval Airfield Fentress Station, Chesapeake Municipal Airport, and Hampton Roads Airport to mitigate the noise generated by air traffic and to update, if appropriate, and enforce land use controls within agreed-upon AICUZ zones.

2. The off-site impact of noise associated with the use of land and with transportation facilities should be minimized.

UTILITIES

Although most utilities are underground and out of sight, they are the principal determinant, other than natural resources, of whether a particular area or site is suitable for most urban and suburban types of development. Throughout the nation, wastewater collection and treatment systems, stormwater systems and water supply systems are traditionally the responsibility of local government. Solid waste disposal is often the responsibility of government, sometimes the responsibility of private scavengers, and frequently a combination of both. On the other hand, telephone service, electrical power and natural gas are traditionally provided by private corporations.

In rural areas, it is more common for utility services of all types to be provided by private businesses, the property owner, or the tenant.

In all cases it is wise practice for all utilities, public and private, and standards for utility service to be coordinated through the Comprehensive Plan.

Goal

A safe, efficient, and dependable system of public and private utilities serving the basic health, sanitation, and communication needs of property owners and tenants.

Objectives: Water Supply

1. The City of Chesapeake should become more self-sufficient in its ability to supply fresh, potable water to its residents, business and industry; greater reliance should be placed on the Northwest River as a source.

2. A program of water conservation techniques should be established and implemented to varying degrees as circumstances require, beginning with standard practices suggested by good stewardship to more substantial practices required during times of stress, and in a manner that minimizes adverse impact on economic activity and existing residences.

3. Water distribution systems and new hookups should be provided only in areas that can be served cost-effectively by a complete range of urban services, or in those areas where private groundwater supplies to existing residents are a threat to public health.

4. Private water treatment and distribution systems should be discouraged, except on individual lots in countryside and rural areas where groundwater supplies meet health standards.

5. Continued study should be given to all feasible long-term water supply alternatives until the most cost-effective system or combination of systems for Chesapeake is determined.

Objectives: Wastewater Collection and Treatment

1. The treatment of wastewater should remain the responsibility of the Hampton Roads Sanitation District Commission.

2. The growth of Chesapeake should be consistent with its share of the capacity of the district treatment facility.

3. Sewer collection systems should be maintained and provided to all existing developed, developing, or underutilized urban/suburban areas for which on-site septic systems are unsuitable; however, extension of such systems to presently underdeveloped areas should be limited only to those minor contiguous areas which meet comprehensive planning criteria, and can be served cost-effectively. These areas are generally within one mile of an existing sewer intercepter.

4. Private wastewater collection and treatment systems should be discouraged, except on individual lots in countryside and rural areas where soil and groundwater conditions are suitable.

5. The City of Chesapeake Health Department and Department of Planning should review existing on-site standards with the U.S. Soil and Water Conservation Service and the U.S. Environmental Protection Agency to determine whether or not such standards and procedures should be amended in the future.

Objectives: Stormwater Systems

1. The first line of defense against adverse stormwater impact is to protect 100-year floodplains below 5 feet above Mean Sea Level in the Northwest River drainage basin, and below 8.5 feet above Mean Sea Level in all other parts of the City; woodlands, grasslands and other permeable areas; and the capacity of natural waterways, drainage channels, and swales.

2. All land development projects should provide for on-site stormwater detention or retention such that runoff after development is at no greater rate than runoff prior to development.

3. Construction within the 100-year floodplain should either be prohibited, should provide for compensatory storage, or should be constructed in such a manner with the first floor at least one foot above the 100-year elevation so as not to interfere with the floodplain capacity.

4. In urban areas, separate stormwater sewer or drainage systems should be provided.

Objectives: Solid Waste Disposal

1. The City of Chesapeake should continue to cooperate with the Southeastern Public Service Authority on a regional solid waste disposal facility outside the City, and shall continue to provide a collection system and a transfer point on Greenbrier Parkway or at another suitable location.

2. The City should continue to study long-term solutions to solid waste disposal in order to avoid future problems of service, capacity, environmental impact or cost.

Objectives: Private Utilities

1. The City should continue to rely on the Virginia Electric and Power Company for the supply of electricity, Commonwealth Gas Services, Inc. and the Virginia Natural Gas Company for the supply of natural gas, and the Continental Telephone Company of Virginia, and the Chesapeake and Potomac Telephone Company for telecommunications service.

2. The City should continue to work with these companies to minimize adverse environmental impacts from their facilities, including the burial of gas, electrical telephone, and cable TV lines, unless a variance is granted.

TRANSPORTATION

The City's transportation system and level of accessibility has a major influence on economic development and on the basic function and form of the City in its metropolitan context. It also has the potential to generate adverse impacts on the community if not carefully integrated into its fabric.

The system is composed of major roadways, public transit, waterways, railroads, trucking, and airports. Each mode of transportation and all elements within each mode perform a specific role in the system, and should be appropriately coordinated to provide various levels of accessibility to areas and sites within the City. In turn, the arrangement of land uses and densities should be consistent with the role, level of accessibility, and capacity of each transportation facility. This critical, but fragile, relationship is fundamental to the overall performance of all urban areas.

Goal

A cost-effective, well coordinated, safe, and environmentally-sensitive system for moving people and goods to and from, through, and within the City.

Objectives: Roadways

1. The roadway system should continue to reflect its three historically distinct forms and functions:

    - a system of radial routes linking urban areas of Chesapeake with the Norfolk central business district, and becoming generally discontinuous south of I-64.

    - a system of circumferential routes linking growth areas of Chesapeake with growth areas of other secondary cities in the Hampton Roads region.

    - a network of meandering roads serving countryside and rural areas of the City.

2. The roadway system should be classified in accordance with sound transportation planning principles, each classification of road located and designed to serve particular functions as follows:

Freeways	*controlled, grade-separated roadways to serve high volumes of traffic, including truck traffic, traveling medium to long distances at substantial speed.*	
	Radial Freeway:	to serve traffic destined to and from downtown Norfolk Example: I-464
	Circumferential Freeway:	to serve intercity traffic passing through the Hampton Roads area and traffic between secondary cities in the area. Examples: I-64 Future Southeast Expressway Future Belleville Connector
Arterials	*at grade, major streets and highways to serve large volumes of traffic traveling short to medium distances at moderate speed, and providing access to major non-residential areas and residential communities.*	
	Radial Arterials:	to serve traffic destined to and from downtown Norfolk, or to and from out-lying areas of the City and inner-areas of the City or the City of Portsmouth. Examples: Battlefield Boulevard Campostelle Road Bainbridge Boulevard Washington Highway Airline Boulevard Portsmouth Boulevard Western Branch Boulevard
Circumferential Arterials	*to serve traffic moving laterally within the City or between Chesapeake and adjacent cities.* Example: Military Highway	
Collector/ Distributor Roads	*at grade streets and rural roads which carry traffic between origins or destinations and arterials in moderate volumes at limited speed.*	

3. Interchanges and interchange areas of various types of roadways should be spaced and designed commensurate with their function and level of accessibility provided.

4. Freeways and arterials should be routed around, rather than through, residential communities, and traffic through residential areas should be minimized.

5. Access to major activity centers and major employment centers should be enhanced.

6. The function, capacity, and safety of major roads should be respected by control of intersecting roads, abutting land uses, and access thereto.

7. Roadways should be located and designed in a manner that will minimize noise, visual impact, air pollution, runoff and other impacts in harmony with the character of surrounding land uses and natural resources.

8. The principles of effective traffic management should be implemented to the extent possible before major physical improvements or new facilities are constructed.

9. Roadway rights of way should be attractively landscaped to enhance the overall quality of the City.

10. The City shall continue to cooperate with the Southeastern Virginia Regional District Planning Commission to update and refine the regional transportation plan, as it applies to Chesapeake.

Objectives: Transit Service

1. Public transit service should be provided throughout built-up portions of the City to serve special target groups, and to reduce automobile usage.

2. Express bus service should be provided for commuters from the Greenbrier, Great Bridge, Deep Creek, and Western Branch areas to downtown Norfolk.

3. Normal bus service should be provided from residential areas to major activity centers within Chesapeake.

4. Special transit service should be available for the elderly and handicapped.

5. Regular bus or limousine service should be provided to Norfolk International Airport.

6. Developers, real estate managers, and major employers should be encouraged to provide privately-sponsored para-transit service, van-pools, car sharing and other alternatives to individual automobiles.

Objectives: Waterways

1. The City should cooperate with the U.S. Corps of Engineers and other appropriate public agencies to maintain the Southern Branch of the Elizabeth River, the Chesapeake and Albemarle Canal, and the George Washington Canal for waterborne commerce and/or recreational boating.

2. The City should encourage the provision of harbor, marine, port, maintenance, and storage facilities associated with waterborne commerce and recreational boating.

Objectives: Railroads

1. Chesapeake should remain the mid-Atlantic terminus for the Norfolk & Southern, Seaboard Coast Line, and Chessie System railroads.

2. Railroad service should be maintained and enhanced where appropriate in conjunction with major industrial parks and intermodal transfer points.

3. The City should encourage appropriate maintenance of railroad rights-of-way, yards, buildings, bridges, and crossings for purposes of safety and appearance, and where appropriate, should encourage the vacation of unneeded rail facilities, and their conversion to public open space or trails, or to compatible private development.

Objectives: Trucking

1. The City should encourage and assist the trucking industry to establish and maintain modern and attractive facilities at appropriate locations in the City in close proximity to freeways or major arterials and, if necessary, railroads or ports.

2. The City should regulate the use of certain roadways by trucks in order to improve safety, preserve capacity, or protect their condition.

Objectives: Airports

1. The City should cooperate with regional agencies to enhance air transportation services and facilities at the Norfolk International Airport.

2. The Chesapeake Municipal Airport should be expanded and improved over time to become a "Basic Transport" airport by the year 1990; planning, land use regulation, and infrastructure design should all be carried out in a manner that would permit improvement to "General Transport" status for general aviation and cargo flights in the future, should the City choose this alternative.

3. The privately-owned Hampton Roads Airport should be encouraged to remain in operation as long as possible, and may be integrated into an "air industrial park."

4. Programs and regulations should be established, refined and implemented immediately to minimize noise and safety hazards generated by the above airports and the U.S. Naval Airfield Fentress Station, and the use of surrounding land should be appropriately controlled to avoid the encroachment of incompatible development in the existing and future impact areas.

LAND USE

The use of land is the most visible expression of economic vitality, market demand, and personal choice, tempered by environmental factors, accessibility, and the availability of utilities and services. Clearly, it is the focal point, not only of the Comprehensive Plan, but of community interest and concern.

It is recognized that management of land use involves the judicious balance between public benefit and private rights in real estate. Experience has indicated that difficult as this process may be at times, it is one which can produce a better physical environment, a strong public-private partnership and sense of community, and a satisfying quality of life for business, as well as for residents.

When referring to land use, emphasis is placed on the type of use, its intensity, and its character. The major categories include commerce, industry, residences, institutions, open space and agriculture. Governmental and public uses are covered under the chapter, Community Facilities.

Goal

The orderly arrangement of appropriate land uses in compatible relationship to one another, so as to establish desirable living, working and leisure environments.

Objectives: General

1. Each land use should be located only on an appropriate site in terms of access, environmental conditions, community facilities, and compatibility with its neighbors.

2. Desired land uses should be accommodated generally in accordance with anticipated market demands for each use; undesirable and incompatible land uses, or speculative development in excess of anticipated market demand should be prohibited or discouraged.

3. Development patterns and trends should exhibit an orderly transition from urban uses in the northern part of the city to rural land uses in the southern part of the city along planned public sewer system corridors.

4. Consideration of rezonings will be limited, especially after the anticipated comprehensive zoning ordinance and map are adopted. The City will consider zoning for commercial, office, or multi-family use, only those areas which are located within one-half mile of an established community center (a list of these is to be prepared by the Planning Department) or of the intersection of two freeways or arterials.

Objectives: Commerce

1. The City of Chesapeake should become more self-sufficient in terms of business employment, retail shopping, personal and business services, and entertainment to support its residents.

2. Commercial land uses should be organized according to their economic and environmental compatibility in planned centers, clusters, or districts, rather than as freestanding activities. Most uses will be accommodated in the following types of areas:

   - A major mixed-use activity center of regional significance
   - Regional shopping centers
   - Office and business parks of various scales
   - Community shopping centers or districts
   - Planned highway-oriented business districts
   - Neighborhood or convenience business centers or districts
   - Special, one-of-a-kind uses, e.g., an entertainment center.

3. The largest, highest density, mixed-use activity center in Chesapeake should be planned and developed as a coordinated district in the vicinity of I-64 and Military Highway from the Greenbrier Business Park and Shopping Mall on the east to Bainbridge Boulevard on the west.

4. Another regional shopping center is to be developed by 1990 at the intersection of Portsmouth Boulevard and Taylor Road in Western Branch. This center and nearby properties should be planned as a mixed-use "town center" serving Western Branch.

5. Community level centers and districts should be enhanced in the South Norfolk, Deep Creek, and Great Bridge areas.

6. Commercial corridors to be enhanced include Western Branch Boulevard, Military Highway west of the Elizabeth River, Bainbridge Boulevard north of Military Highway, and Battlefield Road north of Great Bridge.

7. Commercial development in the vicinity of interchanges with the future Belleville Connector and the future Southeast Freeway should be encouraged.

8. Convenience business districts or centers should be permitted in a limited number of locations throughout the City.

9. Commercial strip development should be strongly discouraged.

10. Tourism should be encouraged.

Objectives: Industry

1. Special attention should be given to the reservation and improvement of industrial areas and sites having deep water potential, and the recruitment of compatible industries should be encouraged.

2. Adverse environmental impacts of certain existing waterfront industries should be eliminated or mitigated.

3. Land owners should be encouraged to redevelop abandoned or underutilized industrial sites for more suitable land uses.

4. New industries not requiring waterfront property should be located in planned industrial parks, such as the Greenbrier Commerce Park and the Cavalier Boulevard Industrial Park.

5. Every reasonable effort should be made to reutilize the former Volvo manufacturing plant facility for high quality, employee-intensive light industry or office use. Warehousing should be discouraged. Retail or hotel uses may be considered. However, the planned, landscaped character of the Park should be retained, and it should evolve into a mixed use complex of regional importance.

6. Industrial land uses should be required to meet environmental performance standards appropriate to Chesapeake and the specific location, including the buffering of such uses from adjacent residential, commercial, institutional, or public uses.

7. A City-sponsored air/industrial park should be considered in the vicinity of the Municipal Airport. A similar privately sponsored air/industrial park should be encouraged in the vicinity of the Hampton Roads Airport.

Objectives: Residences

1. Housing units of all types should be structurally sound, provide basic utilities and facilities required for healthful living, and exhibit appropriate levels of maintenance.

2. Discrimination in housing based on color, race, religion, sex or national origin should be prohibited, and unfair disparities in housing conditions and supportive services should be eliminated.

3. A variety of housing types should be provided at affordable prices throughout the city to meet the needs of the present citizens of Chesapeake and the new families which will be attracted to live in the City.

4. It shall be a policy of the City of Chesapeake to promote the inclusion of affordable housing for all socio-economoic groups. This shall be a cross-sectional policy to provide affordable housing opportunities in all areas of the City. As a strategy to affect a policy of affordable housing in Chesapeake, it is recommended that an extensive study be undertaken to assess needs and consideration of the affordable housing policy.

5. A suggested percentage distribution for a balance of housing types in the City as a whole is:

Single family detached	65%
Single family attached (townhouses, etc.)	20%
Apartments	15%

6. Housing units should be arranged in efficient and attractive manners, and should be provided with supporting services and amenities, so as to provide a variety of desirable residential environments, from urban to rural.

7. A desirable range of gross residential densities (units per total acres of residential land area) should be:

Rural	One unit per 3 or more acres
Countryside	One unit per acre to one unit per ten acres
Suburban SF	One unit per acre to something less than four units per acre
Urban SF	Four units per acre to something less than seven units per acre
Low Density MF.	Six units per acre to something less than ten units per acre
High Density MF.	Ten units per acre to something less than sixteen units per acre

8. Ownership of residential units is to be encouraged for those who prefer this form of tenure.

9. Publicly-assisted housing should be provided in appropriate locations.

10. Aging, but appropriately located, residential areas should be preserved, rehabilitated, and provided remedial treatment in order to establish and maintain desirable living conditions.

11. Desirable design innovations to accommodate a variety of housing types and densities in a planned environment should be seriously considered.

Objectives: Open Space

1. Public and private open space should be integrated into the fabric of the City at all scales, in order to provide for leisure and recreation, preserve natural resources, and provide a healthy and attractive environment.

2. Where possible, open spaces should be arranged or connected in a linear form, in order to provide a network or system that can be traversed by foot, bicycle, automobiles, or watercraft, as is appropriate.

3. The preservation of open spaces should emphasize and encourage public access to waterways, wetlands, and forested areas.

4. Land within the rights-of-way of certain roadways should be treated as an open space corridor, and maintained or improved as parkways.

5. The City should review and update its policy and guidelines for accepting open space land or facilities when offered to the City by developers or other agencies.

Objectives: Agriculture

1. Agriculture is a basic social, economic and environmental asset, and the City should encourage its survival.

2. Prime agricultural lands should be mapped and conserved as long as agriculture is a financially feasible use.

3. The functional and visual integrity of rural and agricultural areas should be maintained.

4. Residential development in rural areas should be limited in accordance with well thought out guidelines which balance the productivity of land, the financial needs of landowners, the future needs of homeowners, and the integrity of the area.

5. Residential lots of less than 3 acres should be discouraged; residential lots of 3 to 10 acres may be accommodated, but should be distributed, arranged and designed in a manner that blends in with the rural landscape, and does not result in major subdivisions of land and concentrations of buildings.

6. No major residential subdivisions should be permitted in A-1 zoning districts until the land can be rezoned to the proper designation.

COMMUNITY FACILITIES

Community facilities are provided by the City, other local governmental agencies, institutions and non-profit organizations, and in certain cases, profit-making organizations and real estate developers. They include municipal buildings, educational facilities, libraries, parks, and recreational facilities, cultural arts facilities, public safety, hospitals, and certain other facilities which strongly influence the health, education, and welfare of the community and its residents.

Goal

An array of public and quasi-public services and facilities which provide for the health, well-being, and personal development of residents at all ages.

Objects: Municipal Buildings

1. The Civic Center in Great Bridge shall be the focal point and campus for the legislative, administrative and judicial functions of municipal government.

2. Consideration should be given to the distribution and location of certain administrative activities elsewhere in the City for the convenience of its citizens. To the extent possible, these activities should be coordinated in leased or publicly-owned community centers.

Objectives: Education

1. Existing and new public schools should be provided in attractive and safe locations readily accessible by students on foot wherever possible, and in a manner that is consistent with the rate and pattern of residential development.

2. The environment of public schools, especially elementary schools, should be protected from the adverse impacts of non-residential uses and heavy traffic.

3. School sites should be identified, reserved and acquired as early as possible to guarantee appropriate locations as reasonable price.

4. School sites should be planned to enhance the public educational program, provide opportunities for recreation, preserve desired open spaces, enrich the beauty of the building and grounds, and where appropriate, encourage the joint use and funding of capital improvements.

5. Schools should be located near or in conjunction with parks, libraries, and community centers consistent with the primary functions of each.

6. Schools should be located to minimize serious distractions from study and classroom activity.

7. Schools should be located on ground which is relatively level but well drained, and which has the capability to support the necessary structures.

8. Chesapeake Public Schools guidelines for minimum site size are:

   a. Elementary site - 15 acres
   b. Junior high site - 40 acres
   c. Senior high site - 50 acres
   d. Elementary/junior high campus - 45 acres
   e. Primary/intermediate campus - 30 acres
   f. Junior high/senior high campus - 85 acres
   g. Elementary/senior high campus - 65 acres
   h. Elementary/junior high/ senior high campus - 110-115 acres

9. Educational facilities and services for the handicapped and other special groups should be appropriately provided.

10. The Tidewater Community College should be encouraged to prosper and grow at its Bells Mill campus, and to provide classes at other convenient locations when appropriate.

11. The attraction of other public or private college and universities, or extensions thereof, should be strongly encouraged and aggressively pursued.

Objectives: Libraries

1. Library services and facilities should be expanded to serve the needs of a growing population and business community. The following standards for Virginia Public Libraries are recommended: (a) 0.6 sq. ft. of building space per capita in each service area; (b) 1.5 sq. ft. of parking space per capita in each service area; and (c) 1.0 handicapped space per 25 parking spaces.

2. The Headquarters Library should be expanded to provide adequate space for movies, exhibits and other programs that are part of the library's service.

3. Branch libraries should be conveniently and centrally located in the areas they are intended to serve, including a new Greenbrier Branch Library and expansion of, or a new facility for, the Russell Memorial Library in Western Branch.

Objectives: Parks and Recreation

1. The City should provide a parks and recreation system that will serve all segments of its population with a variety of facilities and programs necessary to meet expressed needs.

2. The location of local parks to serve residents, especially children, should be consistent with sound neighborhood planning principles; e.g., adjacent to elementary schools.

3. The City should develop a set of recreational standards more representative of Chesapeake than those prepared by the National Park and Recreational Association.

4. The City should consider the provision of a municipal golf course and one or more municipal swimming pools.

5. A site suitable for mass participation events, such as the Chesapeake Jubilee, should be provided and improved.

6. Northwest River Park should be maintained as a multi-purpose park and should be expanded or supplemented by other city parks along the Northwest River.

7. Community parks should serve 20,000 to 25,000 persons each; examples are Western Branch Park, Deep Creek Park, Great Bridge Locks Park, and Indian River Park.

8. The City's policies and guidelines for accepting parkland and recreational facilities from developers or other agencies should be updated.

9. The City's system of pathways, bikeways, and equestrian trails should be substantially expanded, including the following long distance trails:

   - Centerville Corridor Bikeway
   - Southeastern Expressway Bikeway
   - Rural Access Bikeway
   - Dismal Swamp Access Trail
   - Indian Creek Rural Access Bikeway
   - Indian Creek Science Bikeway
   - Shillelagh Road Bikeway
   - Tyre Neck/Bruce Road Bikeway

   and the following neighborhood trails:

   - Cooper's Ditch Hiking Trail
   - Greenbrier Bikeway System
   - Mt. Pleasant Bikeway
   - South Norfolk Loop Bikeway
   - Providence Connector Bikeway
   - Jolliff Bikeway
   - Indian River Hiking Trail

10. Recreational boating facilities should be expanded and improved along the South Branch of the Elizabeth River, along the Chesapeake and Albemarle Canal, and the North Landing River; and a system of scenic canoe or rafting trails should be established along small waterways.

Objectives: Cultural Arts

1. Programs and facilities should be established and provided to encourage public and private arts activities, including design arts and performing arts.

2. A program of art in public places should be established.

3. A program of business and the arts should be encouraged.

4. Consideration should be given to incorporating a cultural center serving the entire city into the regional mixed use complex recommended on the former Volvo Industrial Center in Greenbrier.

Objectives: Public Safety

1. The Public Safety Building in the Civic Center shall remain the headquarters for police and fire protection, and should be improved as needed, or a new police headquarters should be constructed more centrally located to major population concentrations.

2. The Second Precinct building in South Norfolk should be expanded and rehabilitated.

3. Two new precincts should be established, one in the Deep Creek area and one in the Washington area, for combination police and fire facilities.

4. The existing Greenbrier Fire Station should include additional space for a police precinct facility.

5. Fire Stations 3, 5 and 11 should be replaced at more centralized sites; Fire Stations 9 and 10 should be consolidated and relocated on Military Highway near Cavalier Boulevard.

Objectives: Health Facilities

1. Chesapeake Health Department clinics at the Department's headquarters building and on 20th Street should be expanded as needed.

2. The Chesapeake General Hospital should be expanded to meet the need of area residents, and should be protected from adverse impacts of future nearby development.

3. Public or private outpatient and rehabilitation service facilities should be located to provide effective service and minimize impacts on the neighborhood.

4. A new nursing-care home should be encouraged in the immediate vicinity of the general hospital.

HISTORIC PRESERVATION AND URBAN RENEWAL

The legacy of Chesapeake's history and the potentials of its mature areas are also valuable resources for the future. They are the common denominators that bind together past and future generations of residents.

Goal

The preservation, conservation, and rehabilitation of Chesapeake's historic landmarks and mature areas.

Objectives: Historic Preservation

1. The City should prepare and maintain a comprehensive inventory of historic buildings, sites, and districts.

2. The City should organize and implement a program of historic preservation.

3. The Great Bridge Battlefield Park should be preserved and improved as a visitor attraction.

4. The George Washington Canal should be preserved.

Objectives: Urban Renewal

1. Obsolete, aging, deteriorating, and underutilized mature areas should be mapped and inventoried.

2. A continuing program of conservation and rehabilitation should be maintained for assistance to such areas.

3. Compatible development or redevelopment of vacant and underutilized sites should be encouraged as an alternative to development of rural land and as a catalyst for reinvestment in mature areas.

PLANNING UNITS

Planning units are sectors of the city that exhibit unique characteristics and contribute to the city's quality of life in a special way. Planning units form the basis for "specific planning." At least seven such areas can be identified:

- I-64/Battlefield Road activity center
- South Norfolk/Indian River
- Greenbrier/Crestwood
- Camelot/Deep Creek
- Western Branch
- Great Bridge
- Southern Chesapeake

Goal

A variety of living and working areas, each having a sense of place,that together make up the City of Chesapeake.

Objectives: I-64/Battlefield Road Activity Center

1. The function of this area is to be the primary employment, business and shopping area of Chesapeake, including activities of regional significance.

2. The character of the area is to be a relatively high density, mixed use complex of individual developments.

3. Land uses should be located and designed in close relationship to the transportation systems and facilities which serve them.

4. Although not a "downtown" in the traditional sense, the area should be linked together over time by an internal circulation system and by common design elements.

Objectives: South Norfolk/Indian River

1. The function of this area is twofold: (a) to provide a range of housing and living environments for those residents who prefer mature areas close to Downtown Norfolk and the Elizabeth River; and (b) to provide for economic development requiring access to a deepdraft coastal waterway and major railroad lines.

2. The character of this area is to be heterogeneous, and is to take advantage of its historic, architectural, and cultural diversity.

3. Revitalization and rehabilitation efforts should eliminate or reduce land use conflicts and enhance the organization and environment of residential neighborhoods and local business districts.

Objectives: Greenbrier/Butts Station/Crestwood

1. The primary function of this area is to provide a wide range of contemporary residential living environments supported by local businesses and community facilities.

2. The character of the area should reflect sound standards of suburban land planning and contemporary design, featuring higher densities near I-64 and lower densities further away from I-64, interspersed with public and private open spaces.

3. Special attention should be given to the design and appearance of Battlefield Boulevard as the spine of the area.

4. Waterfronts and wetlands north of the Chesapeake and Albemarle Canal should be preserved and enhanced.

Objectives: Sunray/Camelot/Deep Creek

1. The functions of this area are twofold: (a) to provide for a wide variety of industrial and commercial development in proximity to the Elizabeth River, Military Highway, the Norfolk and Western Railroads, and the Norfolk and Southern Railroad; and (b) to maintain and enhance a variety of housing types and residential environments in the George Washington Highway corridor.

2. Open lands and historic landmarks should be preserved and enhanced along Deep Creek and near the Deep Creek locks.

3. Land use conflicts should be reduced, and appearance should be improved in the Military Highway Corridor.

4. Wetlands and hardwood swamps between the Dismal Swamp and the Norfolk & Western Railroad should be preserved.

Objectives: Western Branch

1. The function of this area is to provide a variety of suburban and countryside living environments supported by appropriate retail, business and community services.

2. The character of this area should continue to reflect the natural amenities of waterfronts and woodlands with higher densities in the eastern part of the area and near Western Branch Boulevard, and lower densities west of the future Belleville Connector.

3. Existing and new development in the vicinity of Portsmouth Boulevard and Taylor Road should be planned as a mixed use "town center;" strip commercial development should be strongly discouraged.

Objectives: Great Bridge

1. The function of this area is twofold: (a) to be the governmental center of Chesapeake; and (b) to provide a range of residential environments linked together as a countryside village or town, supported by limited retail, business, and community services.

2. The character of this area is to remain of lower density, and should reflect the historic fabric of the area and its synergy with natural resources and nearby rural areas.

3. Relationships to the Chesapeake and Albemarle Canal should be enhanced, including improvement of the Great Bridge Battlefield Historic Site.

Objectives: Southern Chesapeake

1. The primary function of this area is threefold: (a) to sustain agriculture and protect open space; (b) to provide for rural residential environments; and (c) to provide remote compatible sites for the U.S. Naval Airfield and the Chesapeake Municipal Airport.

2. The character of this area is to remain low density, rural, and natural – a complimentary contrast to the remainder of the City.

3. Generally, this area should not be served by public sewer and water systems.

4. Country roads are to be preserved, traffic volumes minimized, and roadsides enhanced with natural vegetation.

5. Wetlands and hardwood swamps outside the Dismal Swamp should be preserved, and the water quality of the Northwest River should be protected from wastewater, and from siltation caused by stormwater runoff and erosion.

IMPLEMENTATION

Comprehensive plans are seldom self-fulfilling prophesies, no matter how closely they parallel market demands and/or citizens' desires. They require a coordination of public and private resources and actions directed toward their implementation, carried out in the spirit of community consistent with state statutes and municipal charters.

Like other municipalities throughout the United States and Virginia, Chesapeake must continually review and evaluate its capability to achieve its adopted goals, objectives, and plans and, when appropriate, modify or improve its implementation resources and procedures. In communities experiencing substantial or accelerating growth this can be a demanding exercise. Nevertheless, it is the municipality's responsibility to provide for the health, safety, and general welfare of its citizens. It is also the municipality's responsibility to carry out its obligations effectively and equitably.

Goal

A coordinated "Growth Management System," effectively utilizing the resources and creativity of the public and private sectors in pursuit of common goals consistent with the Comprehensive Plan.

Objectives: General

1. The growth management system should include a variety of elements:
    - state and local legislation
    - general and specific planning
    - regulations and incentives
    - administrative techniques
    - fiscal management
    - education
    - communication networks
    - land acquisition
2. The growth management system should provide for appropriate means of public participation.
3. The City of Chesapeake should expand, strengthen, and coordinate its professional and administrative resources to efficiently and sensitively implement city policies related to growth and change.
4. The City should public annually a report on the growth of Chesapeake, the status of the Comprehensive Plan, and the effectiveness of the growth management system.

5. The City's growth management system should be networked with other public and private agencies, such as the Southeastern Virginia Planning District Commission.

6. The City should sponsor, with other public and private agencies when appropriate, an education program dealing with growth issues in general and in particular with the Comprehensive Plan and the growth management system.

Objectives: Comprehensive Plan

1. A new Comprehensive General Plan should be completed and ready for review by the Planning Commission and City Council in 1988.

2. The Comprehensive General Plan should be reviewed, and amended if appropriate, no less than annually.

3. A program of "specific planning" should be undertaken to supplement the General Plan; one high priority area for specific planning is the I-64/Military Highway activity center from Greenbrier to I-464.

Objectives: Zoning

1. A comprehensive revision to the Chesapeake Zoning Ordinance should be completed in 1988.

2. The revised zoning ordinance and map should be consistent with the Comprehensive Plan.

3. Consideration should be given to the consolidation of existing residential zoning districts.

4. Consideration should be given to the use of overlay districts for floodplains, airport noise and hazard impact areas, historic districts, critical highway corridors, etc.

5. Consideration should be given to the application of "conditional use" zoning techniques.

6. Consideration should be given to the rationale for phasing zoning map changes.

7. Consideration should be given to lands which, because of changed circumstances, should be rezoned.

8. Lands which have been zoned for development, but remain unimproved after a period of five (5) years, should be reviewed.

9. General policies related to the control of signs and billboards should be reviewed.

Objectives: Subdivision

1. The Subdivision Ordinance should be reviewed and amended to bring it into harmony with the Comprehensive Plan and the new Zoning Ordinance.

Objectives: Land Acquisition

1. In order to achieve open space objectives and the conservation of critical natural resources, the City should formulate a program for the purchase, lease, dedication or other means of acquiring development rights in key parcels.

Objectives: Mid-Range Budget

1. The City should prepare and update annually a mid-range budget for a period of 3 to 5 years, including a projection of fiscal trends and a Capital Improvements Program.

2. The Capital Improvements Program should be coordinated with implementation strategies of the Comprehensive Plan and growth management system.

Objectives: City Charter

1. The City Council should consider amendments to the City Charter that would enhance the city's legal authority and capability to manage future growth and change.

Objectives: Private Sector

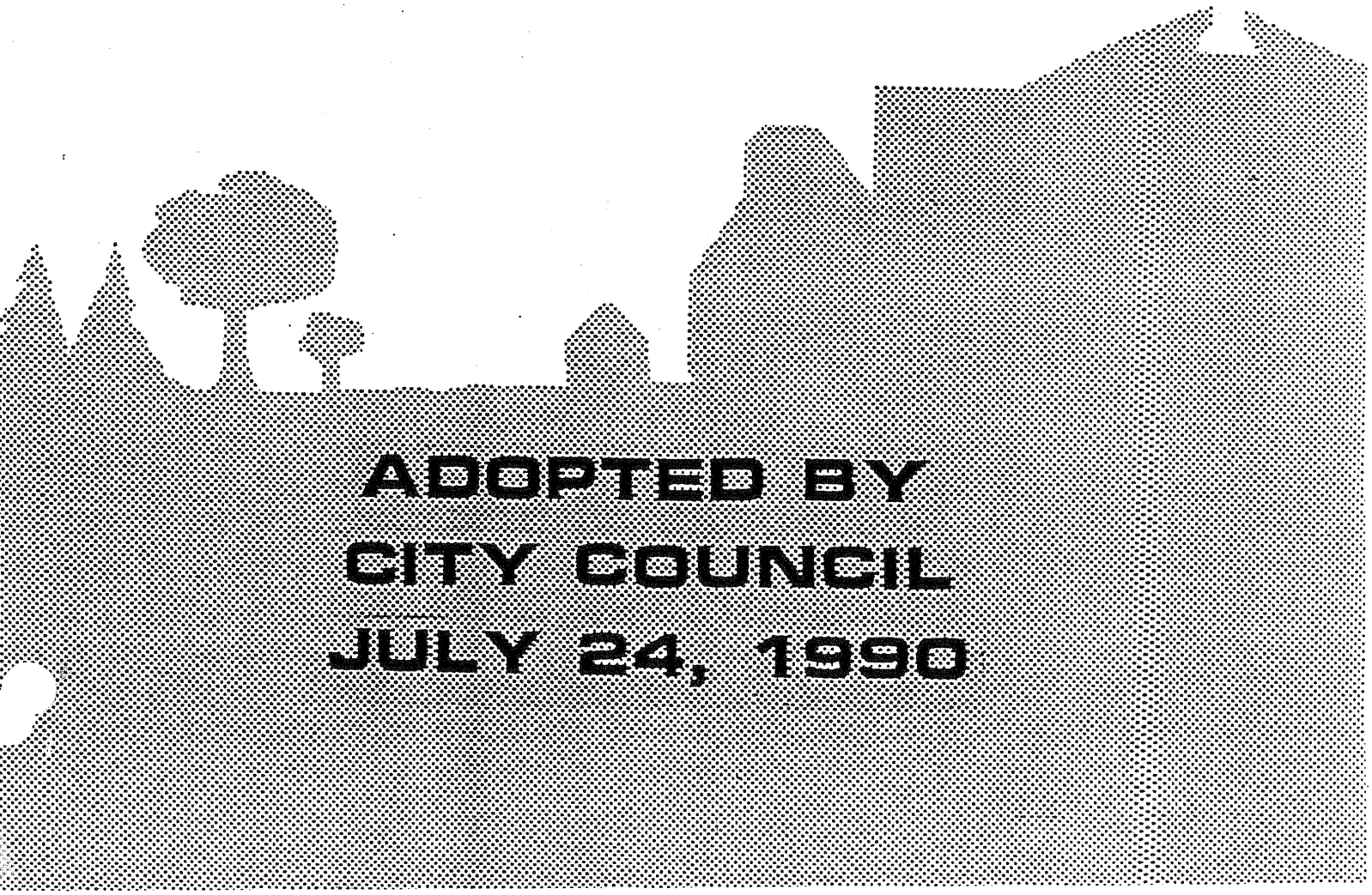
1. The City should encourage private sector organizations to take an active role in sharing responsibilities for implementing the Comprehensive Plan.

2. The City should encourage private sector organizations, specifically those related to the real estate development industry, to sponsor events directed toward the "pursuit of excellence" in building and serving the City of Chesapeake consistent with the City's Comprehensive Plan.

A COMPREHENSIVE PLAN

FOR THE CITY OF

Chesapeake
VIRGINIA



ADOPTED BY
CITY COUNCIL
JULY 24, 1990

ACKNOWLEDGEMENTS

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CONTENTS

Introduction..... 1

Definition of the Comprehensive Plan..... 2

History..... 7

Growth and Change..... 11

Environment..... 20

Utilities..... 38

Transportation..... 46

Land Use..... 65

Community Facilities..... 97

Historic Preservation and Urban Renewal..... 139

Planning Units..... 145

Implementation..... 149

INTRODUCTION

During the decades of the 1980's and 1990's, the City of Chesapeake will be experiencing unprecedented pressure for change, very likely at an increasing rate. Contrary to most municipalities which can be characterized as urban, suburban, or rural, Chesapeake is all three. Its size and diversity (353 square miles and 147,037 residents as of January 1, 1988) complicate the external forces of change, and present a very real challenge to a system of local governance established as recently as 1963.

The City Council and Planning Commission of Chesapeake are committed to the wise and equitable management of natural, economic, and human resources for which they are stewards, and to the judicious growth and maturation of the broad community of interests which they represent. This responsibility is given direction by the City's Comprehensive Plan, a legal document required of every municipal governing body in the Commonwealth by Article 4, Section 15.1-446.1 of the Code of Virginia.

On March 18, 1988, the City Council adopted the Basic Policies Plan for the Comprehensive Plan for Chesapeake. The Comprehensive Plan presented is based firmly on these basic policies.

DEFINITION OF THE COMPREHENSIVE PLAN

First and foremost, the Comprehensive Plan is a statement of policy - a formal declaration of intent on behalf of the municipality regarding its future. Although most of its elements do not have the full force and effect of law, they are the basis of laws which in turn must be written and administered in a manner consistent with (or at least not inconsistent with) the Comprehensive Plan itself. Land use decisions and City Codes should follow the guidelines established by the Comprehensive Plan. Decisions of the Planning Commission or the City Council regarding individual rezoning requests, development proposals, or other actions regarding land use in the City, should be based upon, and, where appropriate, should cite, the applicable values, goals, objectives, principles or standards which are set out in this plan to guide land use decision making. When a particular application or proposal is identified as being inconsistent with one or more of the applicable provisions of this plan, approval of the application or proposal normally would not be expected unless: (a) it is specifically found to be consistent with other, overriding provisions of this plan, (b) its approval is found to be required by applicable law, or (c) the City Council specifically amends the plan to remove the inconsistency, upon a finding, following notice and hearing on the matter, that changes in the City's development warrant the amendment.

STATUTORY FRAMEWORK

The Code of Virginia states:

15.1-446.1. Comprehensive plan to be prepared adopted; scope and purpose. - The local commission shall prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction.

Every governing body in this State shall adopt a comprehensive plan for the territory under its jurisdiction by July one, nineteen eighty.

In the preparation of a comprehensive plan the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in

accordance with present and probable future needs and resources best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.

The comprehensive plan shall be general in nature, in that it shall designate the general or approximate location, character, and extent of each feature shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed abandoned, or changed in use as the case may be.

Such plan with the accompanying maps, plats, charts, and descriptive matter, shall show the commission's long-range recommendations for the general development of the territory covered by the plan. It may include, but need not be limited to:

1. The designation of areas for various types of public and private development and use, such as different kinds of residential, business, agricultural, industrial, conservation, recreation, public service, flood plain and drainage, and other areas;

2. The designation of a system of transportation facilities such as streets, roads, highways, parkways, railways, bridges, viaducts, waterways, airports, ports, terminals, and other like facilities;

3. The designation of a system of community service facilities such as parks, forests, schools, playgrounds, public buildings and institutions, hospitals, community centers, waterworks, sewage disposal or waste disposal area, and the like;

4. The designation of historical areas and areas for urban renewal or other treatment; and

5. An official map, a capital improvements program, a subdivision ordinance, and a zoning ordinance and zoning district maps. (1975, c. 641; 1976 c. 650; 1977, c. 228.)

15.1-447 Surveys and studies to be made in preparation of plan; implementation of plan. - (1) In the preparation of a comprehensive plan, the local commission shall survey and study such matters as the following:

(a) Use of land, preservation of agricultural and forestal land, production of food and fiber, characteristics and conditions of existing development, trends of growth or changes, natural resources,

population factors, employment and economic factors, existing public facilities, drainage, flood control and flood damage prevention measures, transportation facilities, the needs for housing, and any other matters relating to the subject matter and general purposes of the comprehensive plan.

(b) Probable future economic and population growth of the territory and requirements therefore.

2. The comprehensive plan shall recommend methods of implementation. Unless otherwise required by this chapter these may include but need not be limited to:

(a) An official map;

(b) A capital improvements program;

(c) A subdivision ordinance; and

(d) A zoning ordinance and zoning district maps.

(e) (Repealed)

To summarize the key features of the Code, the Comprehensive Plan shall:

1. Deal with physical development of the territory;

2. Be general in nature;

3. Have a long-range perspective;

4. Be based on certain surveys and studies;

5. Recommend methods of implementation.

The Comprehensive Plan may be prepared and adopted in its entirety at one time, or in parts dealing with geographical divisions of the City or separate functional matters. It or its parts shall be reviewed by the commission at least once every five years to determine whether it is advisable to amend the plan.

According to Section 15.1-456 of the Virginia Code, the Comprehensive Plan is to be the basis upon which development decisions are made. According to this code, "Whenever the local commission shall have recommended a comprehensive plan or part thereof for the county or municipality and such plan shall have been approved and adopted by the governing body, it shall control the general or approximate location, character

and extent of each feature shown on the plan. Thereafter, unless such feature is already shown on the adopted master plan or part thereof is deemed so under" Sections 15.1-475 (subdivision plans) or 15.1-491 (development plans), "no street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than railroad facility, whether publicly or privately owned, shall be constructed, established or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the local commission as being substantially in accord with the adopted comprehensive plan or part thereof".

CONTENT AND FORMAT

In the past, the City of Chesapeake has referred to a list of 57 planning studies as constituting the City's Comprehensive Plan. Hereafter, it is recommended that the Comprehensive Plan be composed of two primary parts:

1. The General Plan

2. Specific Plans

The General Plan shall be the statement of municipal policies as they relate to functional matters with broad application throughout the City or major portions thereof. The General Plan may, when necessary and appropriate, incorporate by reference the policies of plans prepared by other units of government, such as a regional transportation plan. However, as soon as possible the specific policies from those plans which relate to Chesapeake should be incorporated into the general plan by amendments to text and graphics. When adopting any plan by reference, a clear statement should be included, indicating which policies have precedence should there be any conflict.

Specific Plans shall be those which apply to defined geographic areas (or planning units) within the City of Chesapeake. These plans are of greater detail than the General Plan, but shall be consistent with the General Plan. When they are in conflict with the General Plan, a clear statement shall be made regarding a legitimate purpose of the conflict, which plan shall prevail, and/or the General Plan itself should be amended accordingly.

This report is the predecessor of the complete General Plan.

TERMINOLOGY

The planning process is based on a continuum of personal and collective decision-making, beginning with values and culminating with policies. The following definitions apply to terms used in this report.

Value - something perceived to be intrinsically desirable by an individual or group; often evidenced by feelings and actions rather than words.

Goal - the stated end toward which effort is to be directed; the expression of values.

Objective - A specific target established, by which to achieve a goal.

Principle - a fundamental law, doctrine, or assumption; a rule or code of conduct.

Standard - minimum condition or regulation which is required to satisfy a given need.

Policy - A definite course of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions.

The Comprehensive Plan is a declaration of intent. When the Plan is formally adopted by the City Council, all goals, objectives, principles, and standards therein become policy.

HISTORY

Chesapeake was created in 1963 by the merger of Norfolk County and South Norfolk. The present City Limit lines were established in 1969 when the northern part of Western Branch was awarded to Portsmouth as a result of an annexation suit. Beginning in 1902, six annexations by Norfolk and five by Portsmouth indicate the strong outward growth of these two communities. In 1963, Chesapeake was still primarily a bedroom community for Norfolk and Portsmouth; the majority of the new City's population was adjacent to these municipalities. The remainder of the City was primarily agricultural with small community centers such as Great Bridge and Deep Creek. The only urban development in the new city was that found in South Norfolk.

The present City consists of 353 miles of land with topography that is relatively level. The City is located in southeastern Virginia with access to the shipping lanes of Hampton Roads, and is at the southern end of an extensively developed area extending south from Boston and referred to as Megalopolis.

In 1963, Chesapeake's population was 78,153 persons. There were no major commercial areas in the City and industry was primarily of the heavy type and was located along the Southern Branch of the Elizabeth River.

Chesapeake has changed dramatically since 1963, and the primary instrument of change has been the construction or improvement of major highway corridors, which have provided quick and easy access between key areas of the City and important commercial, industrial, transportation and employment centers throughout Hampton Roads. The three major road developments which have sparked the City's growth in recent years are:

(1) The completion of I-64; this reinforced the relationship of Chesapeake's more populous northern section with the urban area of Norfolk and Virginia Beach. While this relationship had already been established by Military Highway, Interstate 64 set the corridor that has been so vital to the City's land use. The opening of the Interstate also facilitated the development of communities such as Great Bridge and Deep Creek.

(2) The I-64 interchange at Greenbrier - Not a part of the original I-64, the construction of this interchange provided the opportunity for the development of a major mixed use development in Greenbrier. The central location of Greenbrier in South Hampton Roads, and the resulting ease of access from that area to key industrial, commercial and residential developments throughout the region, made this area an excellent location for regional commercial and light industrial development. As a result, much of the area originally slated for residential development was re-designated for light industrial and commercial development, and such development has been rapid and successful. That success has increased the demand for residential development in neighboring areas of the City.

(3) The construction of Battlefield Boulevard provided a direct link between Great Bridge and Southern Chesapeake and the urban development to the north. The emergence of Great Bridge as one of the City's major growth areas can be traced in part to this development.

A fourth major road development is now becoming a key part of this pattern of growth sparked by the regional highway linkages. The imminent completion of I-664 and the Bowers Hill Connector will make the Western Branch area easily accessible from major commercial, industrial, and residential centers throughout Hampton Roads. A major regional mall is about to open to serve the regional market created by this road connection, and a major park for light industry development is expected and should be encouraged.

While the construction and improvement of these major roadways have been a primary instrument for the growth and prosperity which the City has enjoyed, the lack of funding to build the additional connecting roadways to accommodate this growth has been the source of the growing congestion the City is experiencing. An exhaustive transportation study has shown that the major roadways described above, which connected the City with the rest of the region, are now overcrowded and need widening, as well as alternative road corridors, to prevent extreme traffic congestion caused by the growing regional population and accelerating business activity they have helped to generate. In addition, many of the internal connecting roads needed to link these major growth areas within the City have not yet been built. The City's Master Road Plan, which targets the City's most pressing road needs, estimates that the cost of the road improvements needed to adequately serve the City at its point of ultimate build-out (predicted to

require an additional thirty years) exceeds four billion dollars.

Just as the infrastructure for roads should be in place and able to support the projected vehicle demand before approval of a project, other infrastructure facilities such as schools, parks, City water and sewer lines and other public needs should either be in place and able to accommodate the increasing demand without overcrowding, or at least be provided for in a development's plans (rezoning, use permit, site plans, landscaping, etc.). A good example of the negative effects of growth involves the Northwest River, the major source of the municipal water supply. Combined with the drought of 1985, and its natural consequences, Chesapeake's increasing withdrawals from the Northwest River led to the production of extremely salty water.

Further examples of current infrastructure shortage involves available parkland and educational facilities. It is estimated that Chesapeake is at least 1,254 acres short of the necessary parkland to meet its citizens' needs. While the City is required to meet State mandates regarding education, ill-advised growth can result in fiscal stress as the City strives to meet the various educational mandates.

Since the City 's inception in 1963, the population has increased from 78,153 to 147,037 in 1988, a gain of 68,000 persons. The majority of the City's new citizens moved into new homes in the City's growth areas. Deep Creek, Greenbrier East, Western Branch, and Great Bridge have all shown substantial population increases. Historically, the City's preferred housing type has been single-family detached structures on a fairly large lot.

In 1963, Downtown Norfolk was still a strong retail center. Chesapeake, with very few retail opportunities, was tied commercially, to downtown Norfolk and Portsmouth and to the malls and large shopping centers developing in these cities and in Virginia Beach. Since that time, malls and shopping centers have followed the population to the suburbs. Chesapeake has one regional mall completed and one under construction. In addition to these facilities, there are adequate numbers of community and neighborhood facilities. As Chesapeake commercial facilities have developed, so has the quality of aesthetics associated with these facilities. The City's new facilities are generally well designed and compatible with other uses.

We can expect the Greenbrier area to be the most intensely developed office commercial area in the City with other major

commercial magnets at Western Branch, Great Bridge, and Deep Creek. The old downtown area of South Norfolk is still viable and every effort should be made to maintain this area since it is the only urban type downtown in Chesapeake.

In 1963, most of the City's industry was located in the South Norfolk Borough long the Southern Branch of the Elizabeth River and was characterized by a predominance of heavy industrial types. Today, Chesapeake is fast becoming the industrial focus of the region. High tech industrial uses are replacing the heavy industry of the past. The new industrial development has occurred primarily in the Greenbrier Industrial Park and the Cavalier Industrial Park. Our Land Use Plan calls for intense industrial development in the Bowers Hill area. Other strong potential for industrial development is in the vicinity of Fentress Air Field and around the City's Municipal Airport. The City's deep water access industrial sites are located on the Southern Branch of the Elizabeth River. These sites will require two specific courses of action in the future, rehabilitation of some existing uses and strict zoning regulations that will reserve sites for these industries can best maximize the location.

The City's history of development since 1963 has been one we can be proud of, however, with careful planning, we can look forward to an even brighter future.

GROWTH AND CHANGE

The population of Chesapeake has increased from 78,153 in 1963 to over 147,000 in 1988, or approximately 3% per year. At this rate, the City will be home to approximately 185,000 persons by the year 2000. On the surface, such a rate of population growth is not extraordinary for a large sector of a major metropolitan area. Yet, this is only one dimension of growth and change, a topic that is fundamental to any municipality.

GOALS

A largely self-sufficient, affordable municipality of residential communities supported by compatible commercial, industrial and institutional development, and integrated with a continuing strong agricultural sector, providing jobs, tax base, and goods and services in a manner which respects and preserves natural resources and a sense of place, and offering varied cultural opportunities and leisure activities for its residents.

Objectives: Magnitude

1. The ultimate scale of the City is restricted only by its existing geographic boundaries, by the capacity of its natural resources and man-made support systems, and by the character desired by its citizens.

2. A population of approximately 185,000 to 200,000 is to be anticipated in the foreseeable future.

3. Approximately 55,000 to 60,000 jobs are to be anticipated commensurate with the above population, although the mix of jobs and labor force may reflect mobility through the metropolitan area.

IMPLEMENTATION TECHNIQUES:

Since its inception, the City of Chesapeake has grown from a largely rural city of 78,153 into a municipality of 147,037 persons characterized by urban, suburban and rural components. The documented 1987 population increase of 6,059 persons calculates into an approximately 4.3% per year growth rate. It is predicted that the City will maintain an averaged growth rate of 2.85% per year, or 201,211 persons by the year 2002. Since this growth will be distributed unequally among the growth areas, population standings among the various areas will change. As of January 1, 1988, population standings among the following areas were: 1) South Norfolk - 26,114, 2) Great Bridge - 22,715, 3) Western Branch - 21,519, 4) Indian River - 19,215, 5) Southern Chesapeake - 14,129 6) Deep Creek 12,424, 7) Greenbrier East - 12,193, 8) Camelot - 7,850, 9) Crestwood 5,853 and 10) Greenbrier West - 5,025. By the year 2002, it is estimated that Great Bridge will be first in population with 35,769 persons followed by 2) Western Branch - 31,643, 3) South Norfolk - 26,483, 4) Southern Chesapeake - 24,389, %) 5) Greenbrier East 23,511, 6) Indian River - 19,814, 7) Deep Creek - 13,883, 8) Crestwood - 11,488, 9) Camelot - 8,064 and 10) Greenbrier West - 6,167.

Other demographic changes such as family size, median age, median household income, etc. are predicted to occur as the population continues to grow. Yet, while population growth is only one dimension of growth and change, it is fundamental to any municipality.

While population is essential to the life of any city, it must be managed in order that it brings the greatest number of benefits to the greatest number of people. Management of growth will involve regulating its magnitude, rate, form, quality, along with constant exhibition of "leadership" and "stewardship" by the City in attaining its goals. The goal of growth and change should be the production of a largely self-sufficient, affordable municipality of residential communities supported by compatible commercial, industrial and institutional development providing jobs, tax base, goods and services, and cultural opportunities for its varied residences, and respecting its natural resources and sense of place.

Magnitude is the first objective in managing the City's finite resources. In a city such as Chesapeake with 353 square miles of land containing approximately 20,000 acres of wetlands and 144,256 acres of undeveloped land, the magnitude of possible development is limited only by the City's existing geographic boundaries, man-made support systems, and by the character desired by its citizens. The capacity of natural resources and man-made support systems includes a variety of elements such as the City's ability to produce potable water, the expansion of roads, water, sewer, and adequate schools along with the limitations imposed by its topography (wetlands). Probably even more important is the character of the community as desired by the residents. In a city like Chesapeake encompassing urban, suburban and rural components, residential and business development will vary extensively depending on the location of the site. Where a subdivision of homes on 15,000 square foot lots might be recommended in suburban Western Branch, that development would not conform to targeted land use development in the largely rural and agricultural sector of southern Chesapeake. Moreover, suburban development, consisting of homes on relatively large single tracts of land, would be out of character in the highly urban South Norfolk Growth Area.

In deciding upon the magnitude of growth and change, population estimates based upon prior residential growth patterns and projected future development are required. As stated before, the City expects approximately 201,211 persons

to be residing within its boundaries by the year 2002. All growth areas, even the urban core of South Norfolk are expected to share in this growth. Listed below is a comparison of growth area population in 1988 and 2002.

Growth Area	1988 Population	2002 Population
Camelot	7,850	8,064
Crestwood	5,853	11,488
Deep Creek	12,424	13,883
Greenbrier East	12,193	23,511
Greenbrier West	5,025	6,167
Indian River	19,215	19,814
South Norfolk	26,114	26,483
Southern Chesapeake	14,129	24,389
Western Branch	21,519	31,643
Great Bridge	22,715	35,769
TOTALS	147,037	201,211

Commensurate with the population increase, 43,273 new jobs are to be created within the City by the year 2010. While overall employment opportunities are expected to increase at a 5.2% yearly rate, individual growth area rates will range from a low of 2% to 24.89% annually. By the year 2010, the Great Bridge Growth Area will have progressed from second to first place in the job ranking followed by 2) South Norfolk, 3) Greenbrier East, 4) Indian River and 5) Western Branch. In 1980, those growth areas having the greatest number of jobs were 1) South Norfolk followed by 2) Great Bridge, 3) Indian River, 4) Deep Creek, and 5) Western Branch. It is anticipated that the mix of jobs and labor force will reflect mobility within the metropolitan area.

Objectives: Rate

1. The rate of development should be maintained at a level consistent with the capability of local government to serve it reasonably and equitably, and the capability of local government should be maintained or expanded to accommodate reasonable rates of development.

2. An average population increase of approximately 3% annually is considered reasonable.

3. Jobs should be increased at an average rate of 5% to 6% annually for the foreseeable future.

4. Rezoning of land, approval of new subdivisions, and land consumption should not outpace the reasonable anticipated market demand and foregoing rates of growth.

5. The rate of growth in any sector of the City should not unreasonably or adversely affect that sector.

IMPLEMENTATION TECHNIQUES:

Control of the rate of growth is the second aspect of managing growth and change. Since studies by both the City and Southeastern Virginia Planning District indicate a future population growth rate of 3.2% annually and an yearly employment growth rate of 5.2%, the rate of development should not exceed those projections. Future rezoning, use permits and subdivision site approvals should be evaluated based upon compliance with the City's development standards, as expressed in the City's Comprehensive Plan and Land Use Plan. As a result, rezoning and use permit applications for more intense uses should be closely scrutinized to determine whether they would tend to accelerate growth beyond the rate that is projected to be normal and appropriate. Even where such applications would allow uses that are consistent with the ultimate uses projected for the properties involved, those applications may well be premature, and therefore not yet appropriate for approval, because of their effect of accelerating growth patterns and stretching City services and infrastructure beyond their capacity to adequately serve the resulting demands.

As the City strives to manage growth, the City should also strive to maintain its ability to adequately accommodate the projected rates of development without placing an undue burden on its citizens. This can be done by a number of measures, some of the most important being the following: (1) requiring that rezoning and use permit applications which would bring more intense uses to properties either demonstrate that existing services and infrastructure would not be adversely affected by the new uses, or proffer improvements that would directly satisfy the service and infrastructure demands which the new uses would create; (2) supporting developments and improvements which strengthen and fill out the major economic activity centers identified in this Plan, and focusing public capital improvements in those centers, including the residential communities which support them, so that they remain viable and prosperous; (3) discouraging untimely

developments in outlying areas which tend to create a "leapfrogging" effect, an effect that strains both public infrastructure and services, and makes it more expensive to provide the new services and infrastructure which are inevitably required; (4) evaluating and acting upon rezoning and use permit applications on the basis of their timeliness - that is, whether the uses proposed are compatible with the surrounding community as it now exists, even if the proposed uses are projected by the Plan as an ultimate development, and whether introduction of the new uses at a particular time would cause a deterioration of the surrounding community instead of strengthening the community in its transition to its ultimate projected character.

Objectives: Form

1. Growth and change should be generally consistent with the level of accessibility provided by major transportation facilities and the historic pattern of urban development corridors in the City.

2. Conceptually, the basic city form should include a major activity center in the vicinity of I-64, major industrial areas along the Southern Branch of the Elizabeth River and along the Norfolk and Southern Railroad, mature urban communities between I-64 and the City of Norfolk, developing urban communities parallel to I-64, countryside communities south of the Chesapeake & Albemarle Canal in the vicinity of Great Bridge, rural or environmentally sensitive areas in the southern and western sectors of the City, all linked by transition areas.

3. The major activity center should be planned and encouraged to relieve pressure for development in other parts of the City, and to support the revitalization of mature communities.

IMPLEMENTATION TECHNIQUES:

The third objective of growth management involves form. Form is typically concerned with placement of development types according to their transportation needs while considering the transportation modes as existing and planned in a municipality. In Chesapeake, growth and change should be generally consistent with the level of accessibility provided by major transportation facilities and the historic pattern of urban development corridors in the City. Therefore, a major activity center (such as the Regional Mixed Uses Center located in the Greenbrier East Growth Area) should be located

in the vicinity of I-64 with major industrial areas located along the Southern Branch of the Elizabeth River and along the Norfolk and Southern Railroad, mature urban communities between I-64 and the City of Norfolk, developing urban communities parallel to I-64, countryside communities south of the Chesapeake and Albemarle Canal in the vicinity of Great Bridge, and rural areas in the southern sectors of the City, all linked by transition systems.

The major activity center, to be located in the Greenbrier East Growth Area, should be planned and encouraged as a area for activities and for higher density development not common to the rest of Chesapeake. Actually, this center should be developed as to reflect Chesapeake's downtown of the future. The activity center, would contain a range of different but compatible activities with considerably higher densities than found in the rest of City.

Other major activity centers such as the area around Chesapeake Square Mall in Western Branch and the City Government complex in Great Bridge should be encouraged to develop as community centers with their own uniqueness and importance to the City's total development. The development of these centers should revitalize and support established communities within the City. Other major activity centers may emerge as the City develops.

Objectives: Quality

1. The quality of development throughout the City should reflect sound principles and performance standards generally accepted in the planning, design, and development professions.

2. The character of specific projects and improvements should be harmonious with and sensitive to the ambient environment, natural and man-made, in which they are located.

3. The functional and visual design excellence of public improvements throughout the City should set good examples for private development to emulate.

4. Pursuit of design excellence should be balanced with the pursuit of affordable development, but affordability need not be an excuse for lack of good taste or sensitivity to the environment.

5. To support and attract desired residential, commercial, and industrial development, emphasis should be placed on enhancing and accelerating the

range and quality of educational and cultural opportunities, activities, and facilities in the City.

IMPLEMENTATION TECHNIQUES:

The fourth principle necessary to effective management of growth and change is the City's insistence upon quality development. Throughout the City, the quality of development should reflect sound principles and performance standards generally accepted in the planning, design, and development professions. Moreover, the character of specific projects should be harmonious with the environment, man-made and natural, in which they are located. With its implementation tools such as subdivision regulations, zoning laws, and use permits, the City should seek to maximize the quality of development from engineering of the project to the way buildings are to be located on the site to the regulation of how a project relates to the immediate environment. However, such insistence upon quality should not be used as a means for excluding from the City the affordable housing which is required to meet the needs of all our citizens and to support the continuing diversity of our population - a diversity which strengthens the City's social, cultural and economic character.

In order to attract quality development, the City should place emphasis on enhancing and accelerating the range and quality of educational and cultural opportunities, activities, and facilities within its boundaries. Current plans for expansion of City-supported cultural and educational activities range from the construction of new buildings for schools, library facilities, and park and recreational activities to the building of bicycle trails, swimming pools, a new community facility, and acquisition of 418,500 new books by the year 2002 for the Library System.

Objectives: Cost to the Public

1. The cost of growth and change, financial or otherwise, should not be borne unreasonably or inequitably by any particular group or generation of citizens.

2. The municipality has a responsibility to influence growth and change in a manner such that it is in concert with the municipality's current and anticipated financial and institutional resources.

IMPLEMENTATION TECHNIQUES:

An implicit principle of growth management is the control of

cost to the public - the citizens of Chesapeake. While growth is beneficial and contributes to the City's growing collection of revenues, it also increases the City's service and therefore, fiscal responsibilities. Approval of new commercial or residential projects should not be borne unreasonably or inequitably by any particular group or generation of citizens.

Equitable growth management will involve influencing or encouraging certain types of development. In order that the City's financial resources may accommodate growth more easily, the pace of business growth should exceed residential growth rates, though the placement of business growth should support, and not unduly intrude upon, residential life.

The expense of new development should be borne, to the extent permitted under the law, by those who cause it and/or benefit by it. The City should strive to ensure, to the extent that legal tools allow, that new developments provide the improvements and revenues necessary to satisfy the new service and infrastructure demands which they create.

Objectives City Posture

1. The City of Chesapeake should assume the roles and responsibilities of "leadership" in pursuit of its goals and objectives and "stewardship" in the management of its resources.

IMPLEMENTATION TECHNIQUES

In managing its growth, the City must assume a leadership role in pursuit of its goals and objectives and stewardship in the management of its resources. The City must show that the Comprehensive Plan is the "shining light" in the determination of development type adequacy per site.

Exhibiting stewardship of its fiscal resources will require that: 1) the City set its Capital Improvements Budget as approved by the Planning Commission and City Council, and 2) that the City avoid overextending its infrastructure. The extension of water and sewer lines should be coordinated with, and limited by, the City's capacity to expand or extend other infrastructure and services which are critical to the support of any new community within the City. Without such coordination, demand for services and for new or expanded infrastructure will continue to outstrip supply, and the pressure for continued tax increases to finance new services will be inevitable. Growth should be maintained within the City's capacity to accommodate it and serve it, and such growth should not be allowed to proceed at a pace or in a manner that will erode the quality of life in this community.

CP-91-1 **A RESOLUTION APPROVING AND RECOMMENDING TO THE CHESAPEAKE CITY COUNCIL AN AMENDMENT TO THE COMPREHENSIVE PLAN FOR THE CITY OF CHESAPEAKE INCORPORATING THE WATER QUALITY OBJECTIVES OF THE CHESAPEAKE BAY PRESERVATION ACT.**
(Approved October 22, 1991)

ENVIRONMENT

Fundamental to all life is our environment - the land, water, vegetation, and air under, around, and above us. This intricate ecological system is linked in so many critical, intimate ways that to modify one element sets off a chain of events in other elements. For example, the elimination of vegetation reduces nature's capability to purify air and water.

Public and private policy cannot take the environment of Chesapeake and the Hampton Roads area for granted. In fact, public and private policy must lead the way to guarantee a healthy and satisfying environment not just for this generation, but for all generations to come.

(Supplement)

GOALS AND OBJECTIVES

A balanced and healthful relationship between people and nature's life support systems.

Objectives: Land

1. Land should be treated as a finite, irreplaceable resource with both public and private value.

2. Urban and rural development alike should respect the natural topography, soils, and geology of the site and area.

3. The removal or displacement of topsoil from land should be permitted only in conformance with guidelines adopted by the City.

IMPLEMENTATION TECHNIQUES:

Land

Land is a part of the intricate ecological system we call the environment.

Treatment of the land as a precious and finite resource involves the term "attitude adjustment". Both public and private organizations must realize that land is a precious and finite resource. If this resource is abused, other ecological problems usually are the result. These problems range from air pollution to noise pollution, from water pollution to a significant reduction in vegetation and wildlife. When abused, this intricately linked ecological system has negative effects on young, middle-age, and older segments of the population. It must also be remembered, that treating land as a finite resource is often less expensive than trying to correct ecological imbalances brought upon by land uses in ill-conceived locations. Such significant costs are borne by both the public and private sectors.

Land management requires that urban and rural development respect the natural topography, soils, and geology of the area. The City should require that before any development activity, including land clearing, may commence, a site analysis must first be submitted to the City Arborist for approval. Once the site analysis is approved, other environmental and land use decisions can be made respecting the natural topography, geology, and soil composition of the site and area.

Although the Chesapeake Bay Preservation Act (the Act) is concerned with preserving the State's waters, the Act furthers development sensitive to the total environment by requiring consideration of soil content, topography, and other site considerations in

determining a particular land use's detrimental environmental impacts and how they can be avoided or mitigated given the Act's requirements.

One objective of land management should be the removal or displacement of topsoil, which should be permitted only in conformance with City adopted guidelines. While the City's Erosion and Sedimentation Program governs soil erosion and sedimentation occurring as a result of land disturbance activities, it does not regulate how the topsoil is utilized. Regulation of topsoil usage would be promoted through the establishment of topsoil guidelines for areas not being utilized for parking lots or building coverage. Where there is open natural area, the amount of topsoil after development should be at least equivalent to pre-development topsoil depth. Such a guideline should be established within the City's Landscape Ordinance.

Objectives: Water

1. The chemical, biological and aesthetic quality of Elizabeth River tributaries, the Northwest River, all canals, and other open water areas in the City should be protected and enhanced.

2. All wetlands and hardwood swamps defined by the Chesapeake Wetlands Ordinance, the Virginia State Wetlands Act, and the U.S. Corps of Engineers should be mapped and protected from inappropriate change or destruction, and from the adverse impacts of nearby development. Wetlands and hardwood swamps that are modified or eliminated by development for valid reasons should be replaced acre-for-acre in accordance with generally accepted management practices.

3. Adverse groundwater mining and contamination by man-made sources should be avoided.

4. The City should coordinate its policies with the U.S. Corps of Engineers and the Section 404 Permit Program, with the U.S. Environmental Protection Agency Office of Wetlands and Water, and with the Virginia Marine Resources Commission and Institute of Marine Science.

5. Shorelines of rivers, lakes, and streams should be protected and modified only in conformance with guidelines established by the City to prohibit erosion, sedimentation, and adverse impacts.

6. As part of Tidewater, Virginia, the City has a legal obligation to protect water quality under the Chesapeake Preservation Act and Regulations. Therefore, the City adopts the following water quality objectives:

a. A net increase in nonpoint source pollution from new development in Chesapeake Bay Preservation Areas should be prevented.

b. A 10% reduction in nonpoint source pollution from redevelopment in Chesapeake Bay Preservation Areas should be achieved.

c. A 40% reduction in nonpoint source pollution from agriculture and silviculture uses in Chesapeake Bay Preservation Areas should be achieved. (CP-91-1)

IMPLEMENTATION TECHNIQUES:

Water

In order for Chesapeake to balance the demands of growth in an environmentally pleasing manner, management of its waters is a necessity.

Management of the various waters in Chesapeake will vary according to a particular waterway's existing environmental conditions, and the City of Chesapeake's economic and recreational plans for that waterway. In the case of the Elizabeth River, the Comprehensive Elizabeth River Water Quality Management Plan (1986) found varying water conditions. In fact, some acres of the Elizabeth River were in relatively good condition and others were in poor condition. Such varying conditions are due to the various land uses found along the Elizabeth River. From the heavily industrialized land uses lying along the Southern Branch of the Elizabeth River in the South Norfolk Planning Unit, to the predominantly recreational and residential land uses along the Western Branch of the Elizabeth River and Southern part of the Southern Branch, the City's goals for the Elizabeth River involve a mixture of mostly residential, industrial, and recreational shoreline uses.

Monitoring the chemical, biological and aesthetic quality of the Elizabeth River should focus on three issue areas generalized as follows:

1. Toxic pollutant impact determination, source identification, and receiving water/discharger standards development.

2. Enhancement of existing nonpoint source control programs and suggestions for new initiatives.

3. Habitat protection programs concentrating on areas of the system which remain viable and productive living areas.

Major processes designed to accomplish the above initiatives are as follows:

1. Increased impact of elevated metals and organics, as listed in the Comprehensive Elizabeth River Water Quality Management Plan, must be assessed. Moreover, the percentage distribution of nonpoint versus point sources of pollution must be determined; thereby, providing for NPDES permit discharge limitations for pollutants from point source discharges.

2. The adoption of water quality protection and/or management as a land use goal by the Cities of Norfolk, Portsmouth, Virginia Beach and Chesapeake.

3. Required usage of Best Management Practices (BMPs) by all new development within the waterway which must meet requirements already established by an erosion and sediment plan. Initial BMP usage should be required for activities involving transitional parcels and on development involving the use of hazardous materials and wastes.

4. Rigorous enforcement of the Wetlands, Sand Dunes and Subaqueous Land Guidelines developed by the Virginia Marine Resources Commission (VMRC) and the Virginia Institute of Marine Science (VIMS). These guidelines should be strictly enforced by local wetlands boards, as well as the VMRC and VIMS.

While all good water management eventually relates to the accompanying land use, management of the Northwest River is directly tied to allowable land uses on its shoreline. Due to its importance as the City's source of drinking water, control over the type of activities possibly occurring near the Northwest River is imperative. Water control of the Northwest River involves four principles:

1. Promotion of the Northwest River's special characteristics and the need for water quality management.

2. Exclusion of activities which threaten the water supply from the basin, or at least the portion of the basin near the intake.

3. Constant monitoring of the river to ascertain water quality conditions.

4. Control and monitoring of land use activities, the institution of good land management practices.

Control of the biological, aesthetic and chemical compositions of Chesapeake's other waters is dependent upon the City's targeted land use activities. Wherein Chesapeake's other waters are

targeted mainly for recreational and educational employment, industrial and commercial development is generally discouraged. Depending on the ecological characteristics of the waterway and the area's existing development, limited residential development should be allowed. At the present time, controlling the sources of nonpoint pollution is the key to managing the Northwest River and the various other canals and open water areas used mainly for recreational, educational and residential purposes.

Proper management of Chesapeake's waters includes all wetlands and hardwood swamps within the City limits. The Federal Government, through the U.S. Fish and Wildlife Service, defines a "wetlands" as an area where water is normally found to be at or on the surface of the land. This definition includes both tidal and nontidal wetlands. The more stringent State and local definitions define wetlands to encompass both vegetated and nonvegetated wetlands. Under Virginia law, Wetlands Act of 1972 (Title 62.1 of the Code of Virginia), vegetated wetland is "all land lying between and contiguous to mean low water and an elevation above mean low water equal to the factor 1.5 times the mean tide range at the site of the proposed project in the county, city or town in question"; and on which are growing one or more of the thirty-seven species of wetland vegetation. Nonvegetated wetlands encompass all land lying between mean low and mean high water. The Virginia definitions are not inclusive of nontidal wetlands and may not include all wetlands as defined by the Federal Government.

Wetlands, known also as swamps, bogs, pocosins, salt marshes, marshes, and tidal marshes are very prevalent in Chesapeake. They are found wherever the tide regularly floods the surface, such as on land located adjacent to tidal creeks and rivers and adjacent to islands in larger bays. Wetlands also are located along freshwater streams, in flood plains and areas characterized by poor drainage. They may be found in low lying areas where groundwater intersects the surface. Wetlands may also be found in the shallow fringes of ponds and lakes. They may be vegetated or, especially in tidal areas, may be nonvegetated mudflats.

The wetlands and hardwood swamps are a very important part of the local ecological system. Such areas are nature's method of providing flood conveyance and storage, coastal hazard protection, sediment control, and pollution control.

These areas also serve as a source of habitat and food production, recreation, timber production and groundwater application. Wetlands are valuable sites for education and research of the environment, contain many historic and archaeological sites, provide open space in developing urban areas, and may buffer incompatible land uses.

Consequently, haphazard destruction of wetlands results in severe environmental damage and costly clean-up efforts. In its 1972

Wetlands Act, the State of Virginia recognized that "continued destruction...will greatly contribute to the pollution of the Commonwealth's rivers, bays and estuaries; diminish the abundance of Virginia's marine and inland animals and waterfowl, finfish, shellfish and flora as sources of food, employment and recreation...; will increase costs and hazards associated with floods and tidal storms; and will accelerate erosion and the loss of lands productive to the economy and the well-being of our citizens."

The health of the wetlands and hardwood swamps is threatened by man's activities. As with the nation, State and Tidewater Region, wetlands in Chesapeake are lost through drainage for crop and timber production, mosquito control, dredging and stream channelization, irrigation and flood control, construction of dikes, dams, leaves, seawalls and bulkheads, and filling for development. Wetlands destruction is also advanced through use of wetlands for landfills, groundwater and surface water withdrawals, mineral extraction which disturbs wetland soils composition, and natural causes such as erosion, storm drainage and subsidence.

The method by which wetlands are threatened varies according to their location. Inland vegetated wetlands are most threatened by agriculture (45%), other development (27%), construction of lakes and ponds (25%), and various other urban activities (3%). Coastal wetlands losses are promoted accordingly by the following land uses:

1. Urbanization - 43%
2. Coastal Waters - 36%
3. Other factors - 11%
4. Agriculture - 5%
5. Construction of Ponds - 5%

Therefore, the greatest threat to coastal wetlands is urbanization, while inland wetlands are most threatened by modern agricultural techniques.

The Council approved Basic Policies Plan recommends that the location of wetlands and hardwood swamps be mapped and protected from inappropriate destruction or change, and the adverse impacts of nearby development. Moreover, wetlands and hardwood swamps modified or eliminated by development for valid reasons should be replaced acre-for-acre in accordance with generally accepted management practices. The mapping of tidal wetlands is currently being done by the Virginia Institute of Marine Science, and should be completed by the end of 1989. A general mapping of non-tidal wetlands has been done by the U.S. Fish and Wildlife Service -

Atlas of National Wetlands Inventory Maps of Chesapeake Bay. In an effort to meet the requirements of the State's regulations, adopted pursuant to the Chesapeake Bay Preservation Act, the City has mapped tidal and nontidal wetlands in the portion of the City that drains in the Chesapeake Bay.
(CP-91-1).

Protection of the wetlands and hardwood swamps is closely related to permitted land use activities. From agricultural activities to urban uses such as shopping centers and residential subdivisions, modern land use activities significantly contribute to the degradation of the wetlands and hardwood swamps. Protection of the wetlands from the adverse impacts of nearby development will involve the City's major land use controls: 1. Zoning Code, 2. Subdivision Ordinance, and 3. the Use Permit Process. Modification of these land use controls by the following programs may be considered:

1. Use of appropriate zoning to protect and manage wetland areas.

2. Addition of performance zoning/performance controls to the Zoning Ordinance.

3. Institution of Best Management Practices into the City's development process (Subdivision Ordinance, Zoning Code, Use Permit Process, Building Permit Application, Land Disturbance Application, etc.).

4. Once the criteria for the Chesapeake Bay Preservation Area is enacted, the City should immediately begin to modify its development process to reflect The Chesapeake Bay Preservation Act's requirements. Although the Act requires adoption of the program's criteria within 24 months by localities, work to modify the City's development processes should begin immediately after adoption of the Chesapeake Bay Preservation Area's criteria.

5. Institution of incentive programs for the control of nonpoint sources of pollution.

While protecting the wetlands, the City and various regulatory agencies should require at least acre-for-acre replacement of lost wetlands due to a particular project(s). Such areas might then be considered for conservation zoning (C-1).

One of the Comprehensive Plan's objectives is the avoidance of adverse groundwater mining and contamination from man-made sources. Groundwater is water located beneath the surface that is drawn from wells and flows from springs.

1. Subdivision Ordinance;

2. Zoning Ordinance;

3. Capital Improvements Program;

4. Use of agricultural products on Government land, and the location of government facilities;

5. Erosion Control Techniques;

6. Greater use of voluntary easements;

7. Industrial Development Location;

8. Enhancement of local well inspection and construction regulations.

The Council approved Basic Policies Plan encourages the coordination of City environmental policies with the U.S. Corps of Engineers and the Section 404 Permit Program, with the U.S. Environmental Protection Agency Office of Wetlands and Water, and with the Virginia Marine Resources Commission and Institute of Marine Science. The City's goal should be to ensure that development in all wetland areas, whether nontidal or tidal in nature, is scrutinized by the proper regulatory agency for that development's possible impact on the wetlands. Local government should strive to protect the maximum wetlands and hardwood swamp areas as possible.

In managing its water, the Land Use Plan lists as an objective the protection and modification of shorelines of rivers, lakes and streams only in conformance with City guidelines designed to prohibit or manage erosion, sedimentation, and other water-related environmental adverse impacts. In order to advance this objective, the City should consider the development of specific performance standards in its zoning and subdivision ordinances for shoreline and related properties to ensure that developments in these areas, regardless of their type or intensity, do not adversely affect these environmentally sensitive properties. Provision should be made to allow for thorough site analysis before development is allowed.

It has been a long recognized and supported purpose of zoning to ensure appropriate spatial openness in developments, and to preserve, where possible, a harmonious relationship between man-made construction and the natural environment in which it occurs. This purpose is especially important along waterfront properties, which are recognized as having special aesthetic, environmental, and economic importance. As a result, particular attention should be directed to developing zoning and development standards which encourage or require the maintenance of the natural character of

the shoreline, and which ensure that the waterfront is highlighted and made a visually accessible part of the community.

The City will begin to implement the water quality objectives pursuant to the Chesapeake Bay Preservation Act upon the adoption of its local Chesapeake Bay Preservation Act program. This program involves the identification and designation of certain lands - Chesapeake Bay Preservation Areas - which if improperly used or developed, may result in substantial damage to the water quality of the Chesapeake Bay and its tributaries. The program also involves the implementation of regulations and standards for land use and development in Chesapeake Bay Preservation Areas through the Zoning Ordinance, Subdivision Ordinance, Erosion and Sedimentation Control Ordinance, and the Comprehensive Plan. (CP-91-1)

The City has a responsibility to its citizens to guide land use and development in a fashion which recognizes that water quality and economic development are compatible and integrally related objectives. Pursuant to the Chesapeake Bay Preservation Act and Regulations, the City will study the issues listed below and consider any appropriate policies and implementation techniques that would enhance the City's Chesapeake Bay Preservation Act program through a work plan and schedule approved by the Chesapeake Bay Local Assistance Board. The scope of such study is to examine the relationship of the types of land uses relative to the goals and objectives of the Chesapeake Bay Preservation Act and Regulations and the City's Chesapeake Bay Preservation Act program.

The issues to be studied are as follows:

1. Physical constraints to development, including soil limitations, and soil suitability for septic tank use.

2. Protection of potable water supply, including groundwater resources.

3. Relationship of land use to commercial and recreational fisheries.

4. Appropriate density for docks and piers.

5. Public and private access to waterfront areas and effect on water quality.

6. Existing pollution sources.

7. Potential water quality improvement through the redevelopment of intensely developed areas. (CP-91-1)

Assuring adequate visual access is vitally important in Chesapeake, due to its flat topography which limits opportunities to enjoy scenic vistas. Such scenic plateau points may be either urban or rural in nature. Many people enjoy Towne Point Park in Norfolk and the Seawall in Portsmouth because of their urban viewpoints. Other people enjoy the Northwest River Park in southern Chesapeake for its many opportunities to observe and study natural vegetation and wildlife.

Since a great amount of waterfront land is privately owned, preservation of visual access to the waterfront should be controlled through the Zoning Ordinance, Subdivision Ordinance, and Site Plan approval processes. The Zoning Code establishes a range of uses that are permitted within a particular zone. Where residential land use is concerned, regulations pertaining to how waterfront parcels may be subdivided should account for the public's right to see and have access to the water. Whereas businesses are concerned, regulation of waterfront visual access may be ensured through the site plan process. The site plan process allows the City to demand reasonable changes that render a project compatible with its surrounding neighborhood. If the neighborhood involves waterfront property, then a condition of the site plan process will be how a particular project effects the public's visual assess to the waterfront. Whether it is the Zoning Ordinance, Subdivision Ordinance, or Site Plan approval process, the Comprehensive Plan should be the basis from which our ordinances and decisions are derived.

Policies: Vegetation

1. Forest and woodlands throughout the City should be mapped and preserved to the extent possible commensurate with their natural and visual quality, and should be modified or eliminated only in conformance with sound forestation practices.

2. A City-wide forestation program, including street trees, should be established and coordinated with the Virginia Department of Conservation and Historic Resources.

3. Existing and suitable ground cover of all types should be preserved or enhanced to control erosion, minimize stormwater runoff, replenish the soil, provide wildlife habitats, and maintain the open-space character of the community.

4. To the extent permitted under state law, property owners and developers should be encouraged or, under prescribed circumstances, required to preserve existing trees and vegetation, and provide appropriate landscape improvements to their property.

IMPLEMENTATION TECHNIQUES:

Vegetation

The City's Comprehensive Land Use Plan seeks to assure that

development does not unnecessarily destroy the City's various forms of vegetation. In order to accomplish this, the Land Use Plan specifies the following principles:

1. Forests and woodlands throughout the City should be mapped and preserved to the extent possible commensurate with their natural and visual quality, and should be modified or eliminated only in conformance with sound forestation practices.

2. A City-wide forestation program, including street trees, should be established and coordinated with the Virginia Department of Conservation and Historic Resources.

3. Existing and suitable groundcover of all types should be preserved or enhanced to control erosion, minimize stormwater runoff, replenish the soil, provide wildlife habitats, and maintain the open-space character of the community.

4. To the extent permitted under State law, property owners and developers should be encouraged or, under prescribed circumstances, required to preserve existing trees and vegetation, and provide appropriate landscape improvements to their property.

A large portion of the City of Chesapeake is covered with forests that are essential to the environment in a variety of ways. The wooded areas of the City should be mapped using professional consultants and frequently updated infrared aerial photography. The detailed mapping should designate certain wooded areas to be environmentally critical for water quality in the City and the Chesapeake Bay. Some examples of these sensitive wooded areas are those that impact water quality in the Dismal Swamp, the Northwest River, the Chesapeake and Albemarle Canal and their tributaries. The vegetation in the areas that are designated as "critical" should be protected to the fullest extent allowable by the Virginia Law. No reduction in the overall area of this designation should take place. Any tree in this critically designated area that is lost will help to destroy the quality of life in Chesapeake and should be replaced one to one.

Other wooded areas in the City that should be mapped are essential to air quality, groundwater quality, erosion control, pollution control, and maintaining the quality of life and aesthetics of Chesapeake. This essential area is characterized as wooded land, farm land and very low density

rural development. One example of this type of area is what is known as "Southern Chesapeake". The essential wooded areas should be preserved by encouraging proposed development in this zone, through zoning classifications and regulations, to be built on the existing open land.

A third type of forested area should be mapped. This area should be designated as urban forest. The urban forest is characterized by higher density development such as South Norfolk, Great Bridge, and Western Branch areas. The trees in this designated area are to be preserved where possible, and in the event that trees must be cleared, they are to be replaced at a desirable number per acre cleared.

The three woodland preservation districts previously listed should be assigned a symbol to be used as a prefix to the existing zoning classification of any particular parcel within that district. The symbol will help the property owner/developer and the City officials recognize the importance of the vegetation and the restrictions that serve to protect it in that district. The symbol will also enable the City officials (Arborist) to tabulate, inventory and update information about Chesapeake's forest and woodlands on an ongoing basis.

In all three proposed geographically designated areas of the City, (urban, rural, and watershed) reforestation will need to be implemented in a variety of different ways. In the critical watershed areas, no trees or other vegetation should be removed unless there are strict requirements regulating the prompt replacement on a one to one basis. Close contact should be maintained with the Virginia Division of Forestry to ensure that prompt action is taken when clearing in this area takes place.

In the rural zones where the existing wooded areas should be protected by encouraging development on existing open land, trees that must be destroyed for construction purposes should be replaced at a prescribed number per acre. In addition to this requirement, development such as street tree programs should be implemented through an ordinance that will ensure reforestation within the construction zone. The previously mentioned replacement policy and street tree programs should also be implemented in the urban settings of Chesapeake. Examples of street tree programs that should be considered are as follows:

1. Any new subdivision, multi-family, or commercial development should be required to plant trees along the right-of-ways, medians and vehicular use areas at a prescribed number and size per linear foot.

The trees should vary in species from street to street to protect against devastation from disease, insects or unfavorable environmental conditions.

2. In previously established subdivisions, a program should be implemented that would allow the resident to enter into an agreement with the City whereby the City would purchase and plant the requested street tree and the homeowner would maintain and replace the tree as needed.

3. An inventory of City maintained trees should be taken by an experienced consulting firm. This inventory should be kept current and used to ensure an well balanced maintenance program.

4. An amendment to the ordinance to assure the same planting and preservation regulations and practices are applied to City as well as private projects.

The process for procuring a land disturbance permit should be enhanced to include a review of existing plant material and the proposed plant material to be retained. Plant material review should be encouraged as a method of erosion control.

Preservation of trees and various other necessary landscaping will be enhanced through a reorganization or consolidation of the City's employees who now serve to monitor the different aspects of the environment. A division of the environment should be formed to coordinate such activities as tree preservation, reforestation, street tree programs, landscaping and wetlands. This division should then be a part of the early planning process for development in Chesapeake.

Once the environmental operations have been organized, the City should actively pursue enabling legislation that will allow a municipality to form its own ordinances governing the preservation and replacement of vegetation. Ordinances should be amended and strengthened to the extent presently allowed, even before changes in the City character have been realized. In order to effectively and fairly enforce landscape policies, an ordinance should be enacted that will require all development in the City to have a landscape plan reviewed and approved subject to the standards and specifications of a landscape policy statement.

In the future, residential development in the rural areas of Chesapeake should be encouraged, through the establishment of an ordinance, to cluster homes, or other methods, in order to preserve open vegetated areas. This does not mean that the

overall density of a tract of land should be increased, but the footprint of the development should be reduced. The remainder of the surrounding tract should be held as open natural area.

Policies: Air

1. The quality of air in Chesapeake should meet or exceed all air quality standards adopted by the Commonwealth of Virginia and the U.S. Environmental Protection Agency.

IMPLEMENTATION TECHNIQUES:

Air

A very integral part of a healthy environment is the air quality. The Comprehensive Plan has adopted as policy air quality in Chesapeake that meets or exceeds air quality standards adopted by the Commonwealth of Virginia and the U.S. Environmental Protection Agency. Of those activities effecting air quality which the State of Virginia, through its State Air Pollution Control Board, has delegated to local government control, the greatest air pollution contributor is the burning of leaves by residential homeowners. Since the spread of air pollutants knows no political boundaries, Chesapeake should encourage Southeastern Virginia Planning District Commission to study a regional solution in combating burning leaves. In the absence of such a solution, Chesapeake should then investigate its options regarding the burning of leaves within its political boundaries.

Policies: Noise

1. The City should maintain working relationships with representatives of the U.S. Naval Airfield Fentress Station, Chesapeake Municipal Airport, and Hampton Roads Airport to mitigate the noise generated by air traffic and to update, if appropriate, and enforce land use controls within agreed upon AICUZ zones.

2. The off-site impact of noise associated with the use of land and with transportation facilities should be minimized.

IMPLEMENTATION TECHNIQUES

Noise

Management of the Chesapeake's environment also includes the

mitigation of noises arising from various land uses. While residential land uses do produce a certain amount of noise, the most objectionable noises tend to be noises arising from various manufacturing and warehousing processes. Within Chesapeake's existing Noise Ordinance, unusually loud noises are recognized as being a threat to the citizens' health and welfare. Such loud noises are considered to be degrading to the quality of life. The Comprehensive Plan lists two objectives instrumental to controlling the noise factor. These objectives are:

1. The City should maintain working relationships with representatives of the U.S. Naval Airfield Fentress Station, Chesapeake Municipal Airport, and Hampton Roads Airport to mitigate the noise generated by air traffic and to update, if appropriate, and enforce land use controls within agreed upon AICUZ zones.

2. The off-site impact of noise associated with the use of land and with transportation facilities should be minimized.

In both of the listed objectives, the primary tool for dealing with noise is land use management. Comprehensive planning in conjunction with zoning can form a formidable detriment to the spread of unnecessary noise in residential areas. Where land uses are considered to be incompatible, separation of the land uses should be encouraged. Since noise's impact is lessened as the distance grows, distance should be used to determine the separation between land uses. Generally, when distance is doubled, noise to a particular site is reduced by approximately six decibels. Land use planning can effectively reduce the effect of noise on Chesapeake citizens by isolating noise generators such as airports from residential land uses.

Review of subdivision regulation and site plan review are other possible planning techniques. Essentially, the amount of noise a development will incur (residential) or produce (business) should be considered. The developer of the proposed land use activity should be requested to mitigate future excessive noise levels upon either existing or future residents. In considering what constitutes an unreasonable noise level, reference should be made to the City's Noise Ordinance. Exceptions to noise considerations in the subdivision and site plan review stage should also be in accordance with the City's Noise Ordinance.

Mitigation of noise occurring from transportation development is also a goal of the City's Comprehensive Land Use Plan. In ground transportation planning, roadway improvements or the

construction of new roadways, noise control techniques should be required if a project will change the acoustical nature of an adjacent area. Various sound barrier technology can be utilized to alter the path of the noise, thereby reducing the amount of noise affecting nearby citizens.

Fundamental to all life is a healthy environment, which includes the quality of the air, land, water, and vegetation, plus the mitigation of modern life's various noises. It must be realized that when the land, air, water or vegetation is destroyed and abused, then the ecological balance of nature is disturbed and human life is negatively changed. Therefore, it is the goal of the Land Use Plan to seek a balance between development and nature that will ensure a harmonious lifestyle for Chesapeake's residents.

UTILITIES

Although most utilities are underground and out of sight, they are the principal determinant, other than natural resources, of whether a particular area of site is suitable for most urban and suburban types of development. Throughout the nation, wastewater collection and treatment systems, stormwater systems and water supply systems are traditionally the responsibility of local government. Solid waste disposal is often the responsibility of government, sometimes the responsibility of private scavengers, and frequently a combination of both. On the other hand, telephone service, electrical power and natural gas are traditionally provided by private corporations.

In rural areas, it is more common for utility services of all types to be provided by private businesses, the property owner, or the tenant.

In all cases it is wise practice for all utilities, public and private, and standards for utility service to be coordinated through the Comprehensive Plan.

GOALS

A safe, efficient, and dependable system of public and private utilities serving the basic health, sanitation, and communication needs of property owners and tenants.

Objectives: Water Supply

1. The City of Chesapeake should become more self-sufficient in its ability to supply fresh, potable water to its residents, business and industry.

2. A program of water conservation should be established and implemented to varying degrees as circumstances require, beginning with standard practices suggested by good stewardship to more substantial practices required during times of stress, and in a manner that minimizes adverse impact on economic activity and existing residences.

3. Water distribution systems and new hookups should be provided only in areas that can be served cost-effectively by a complete range of urban services, or in those areas where private groundwater supplies to existing residents are a threat to public health.

4. Private water treatment and distribution systems should be discouraged, except on individual lots in countryside and rural areas where groundwater supplies meet health standards.

5. Continued study should be given to all feasible long-term supply alternatives until the most cost-effective system or combination of systems for Chesapeake is determined.

IMPLEMENTATION TECHNIQUES:

The Comprehensive Plan seeks as its goal for Utilities a safe, efficient, and dependable system of public and private utilities serving the basic health, sanitation, and communication needs of property owners and tenants.

The first utility which has an enormous effect upon a city's development is the provision of an adequate water supply. It should be the City of Chesapeake's aim to become self-sufficient in its ability to supply fresh, potable water to its residents, business and industry. As circumstances

require, water conservation, ranging from standard practices suggested by good stewardship to more substantial practices required during times of stress, should be practiced in a manner that minimizes adverse impact on economic activity and existing residences.

The expansion of the water distribution system should be consistent with the cost-effective expansion of other utilities, or as dictated by health concerns. In Chesapeake, water distribution systems and new hookups should be provided only in areas that can be served cost-effectively by a range of urban services, or in those areas where private groundwater supplies to existing residents are a threat to public health. The availability of a range of municipal services, including municipal water service, should be used to determine the adequacy of a potential residential or commercial project.

The expansion of private water treatment and distribution systems should be discouraged, except on individual lots in countryside and rural areas where groundwater supplies meet the Chesapeake Health Department's qualitative standards.

Continued study should be given to all feasible long-term water supply alternatives until the most cost-effective system or combination of systems for Chesapeake is determined. The City is pursuing three strategies in its attempt to assure an adequate supply of water. These strategies are:

1. Initiation of Aquifer Storage Recovery (ASR) combined with diversion of water from the Dismal Swamp Canal. This project would allow 21 million gallons per day to be diverted from the Dismal Swamp Canal, then treated and stored in the ground for use at a later date, i.e., when the Northwest River supply has an unacceptable chloride level;

2. On November 17, 1987, Chesapeake entered into a contractual agreement with the City of Virginia Beach whereby Chesapeake will share in the development, cost and ownership of the Lake Gaston water resource project. The Lake Gaston project includes a plant in Chesapeake for the treatment of raw water from Lake Gaston;

3. Chesapeake is negotiating long-term water purchase agreements with the Cities of Norfolk and Portsmouth. Such long-term purchase agreements will help assure Chesapeake of an adequate water supply well into the 21st century.

Objectives: Wastewater Collection and Treatment

1. The treatment of wastewater should remain the responsibility of the Hampton Roads Sanitation District Commission.

2. The growth of Chesapeake should be consistent with its share of the capacity of the district treatment facility.

3. Sewer collection systems should be maintained and provided to all existing developed, developing, or underutilized urban/suburban areas for which on-site septic systems are unsuitable; however, extension of such systems to presently underdeveloped areas should be limited only to those minor contiguous areas which meet comprehensive planning criteria, and can be served cost-effectively. These areas are generally within one mile of an existing sewer intercepter.

4. Private wastewater collection and treatment systems should be discouraged, except on individual lots in countryside and rural areas where soil and groundwater conditions are suitable.

5. The City of Chesapeake Health Department and Department of Planning should review existing on-site standards with the U. S. Soil and Water Conservation Service and the U.S. Environmental Protection Agency to determine whether or not such standards and procedures should be amended in the future.

IMPLEMENTATION TECHNIQUES:

Another utility exerting great influence over development is the collection and treatment of wastewater. Within the Hampton Roads Area, wastewater treatment and collection is a regional effort accomplished through the Hampton Road Sanitation District Commission (HRSD). Although the expansion of HRSD's facilities will be in response to population and business growth, expansion of the wastewater collection and treatment system in Chesapeake will be determined by the amount and direction of wastewater flows within developing areas.

Developed, undeveloped, and urban/suburban areas with unsuitable soil for on-site septic systems should be provided municipal sewer service. Extension of such systems to

presently undeveloped areas should be limited only to those minor contiguous areas which meet comprehensive planning criteria, and can be served on a cost-efficient basis. Such areas usually lie within one mile of an existing HRSD sewer interceptor.

Since expansion of the municipal sewer service system opens an area for development, the City should determine whether its accompanying services are able to meet the projected increased demand, or whether it is ready to expand the accompanying services in granting extension of its municipal sewer service. Such a practice will help prevent "leapfrog" development and ensure that the City's fiscal needs do not outstrip its fiscal resources.

Except for private wastewater collection and treatment systems on individual lots in countryside and rural areas where soil and groundwater conditions are suitable, private wastewater and treatment systems should be avoided.

It is recommended that the City of Chesapeake Health Department and the Department of Planning should review existing on-site standards, by which private wastewater treatment and collection systems are allowed, with the U.S. Soil and Water Conservation Service and the U.S. Virginia Department of Health to determine whether or not such standards and procedures should be amended in the future. Such a meeting should occur and would effect the City's development standards such as its Subdivision Ordinance, Zoning Ordinance, Wetlands Permits, etc.

Objectives: Stormwater Systems:

1. The first line of defense against adverse stormwater impact is to protect 100-year floodplains below 5 feet above Mean Sea Level in the Northwest River drainage basin, and below 8.5 feet above Mean Sea Level in all other parts of the City; woodlands, grasslands and other permeable areas; and the capacity of natural waterways, drainage channels, and swales.

3. Construction within the 100-year floodplain should either be prohibited, should provide compensatory storage, or should be constructed in such a manner with the first floor at least one foot above the 100-year elevation so as not to interfere with the floodplain capacity.

4. In urban areas, separate stormwater sewer or drainage systems should be provided.

IMPLEMENTATION TECHNIQUES

The development of adequate stormwater systems is another utility that impacts the location and amount of growth in some parts of the City.

It is these stormwater systems that are the first line of defense against adverse stormwater impact in protecting 100-year floodplains below 5 feet above Mean Sea Level in the Northwest River drainage basin, and below 8.5 feet above Mean Sea Level in all other parts of the City; such as woodlands, grasslands and other permeable areas; and the capacity of natural waterways, drainage chemicals, and swales.

For those areas identified as lying within the 100-year floodplain, construction should not interfere with the flood plain capacity. Such a goal may be accomplished by either preventing construction within the 100 year floodplain, providing compensatory storage, or for construction in such a manner as to provide at least one foot above the 100-year elevation.

Objectives: Solid Waste Disposal

1. The City of Chesapeake should continue to cooperate with the Southeastern Public Service Authority on a regional solid waste disposal facility outside the City, and shall continue to provide a collection system and a transfer point on Greenbrier Parkway or at another suitable location.

2. The City should continue to study and implement long-term solutions to solid waste disposal in order to avoid future problems of service, capacity, environmental impact or cost.

IMPLEMENTATION TECHNIQUES:

The provision of continually adequate solid waste disposal is one of the goals of the Land Use Plan. Currently, the Public Works Solid Waste Division provides once a week garbage and trash collection service. Garbage and trash disposal is provided for by the Southeastern Public Service Authority (SPSA) with whom the City has a 30 year contract.

The Division's short term needs include equipment replacement on a five year cycle, a move toward an automated garbage collection system, and a firm disposition on hazardous waste handling and on the increased cost associated with the handling of hazardous waste.

Due to the fact that the generation and disposal of solid waste knows no territorial boundaries, one of the City's long-term solid waste needs includes continuous cooperation with SPSA on establishment of a regional solid waste disposal facility outside of the City. Other long-term needs include a fully automated collection system, source separation for sorting recyclable materials and increase usage of recycling.

As stated in the Solid Waste Disposal objectives, the City should continue to study long-term solutions to solid waste disposal in order to avoid future problems of service, capacity, environmental impact or cost.

Objectives: Private Utilities

1. The City should continue to rely on the Virginia Electric and Power Company for the supply of electricity, Commonwealth Gas Services, Inc. and the Virginia Natural Gas Company for the supply of natural gas, and the Continental Telephone Company of Virginia, and the Chesapeake and Potomac Telephone Company for telecommunications service.

2. The City should continue to work with these companies to minimize adverse environmental impacts from their facilities, including the burial of gas, electrical, telephone, and cable TV lines, unless a variance is granted.

IMPLEMENTATION TECHNIQUES

Growth of a City is ultimately determined by the provision of electricity, natural gas, and telephone services. The supply of these utilities can best be accomplished if the following objectives are followed:

1. The City should continue to rely on the Virginia Electric and Power Company for the supply of electricity, Commonwealth Gas Services, Inc. and the Virginia Natural Gas Company for the supply of natural gas, and the Continental Telephone Company of Virginia, and the Chesapeake and Potomac Telephone Company for telecommunications service.

2. The City should continue to work with these companies to minimize adverse environmental impacts from their facilities, including the burial of gas, electrical, telephone, and cable TV lines, unless a variance is granted.

TRANSPORTATION

The City's transportation system and level of accessibility has a major influence on economic development and on the basic function and form of the City in its metropolitan context. It also has the potential to generate adverse impacts on the community if not carefully integrated into its fabric.

The system is composed of major roadways, public transit, waterways, railroads, trucking, and airports. Each mode of transportation and all elements within each mode perform a specific role in the system, and should be appropriately coordinated to provide various levels of accessibility to areas and sites within the City. In turn, the arrangement of land uses and densities should be consistent with the role, level of accessibility, and capacity of each transportation facility. This critical, but fragile, relationship is fundamental to the overall performance of all urban areas.

GOAL

A cost-effective, well coordinated, safe, and environmentally-sensitive system for moving people and goods to and from, through, and within the City.

Roadways

A master road plan has been prepared by the Department of Public Works based on growth information derived from the adopted Land Use Plan by the Planning Department. This plan is now being reviewed through a number of Public Hearings. In the near future, the Master Road Plan will be scheduled for Public Hearings by the Planning Commission and City Council. When adopted the Master Road Plan will become a part of the Comprehensive Plan. Both text and maps will be incorporated into the Comprehensive Plan

It is clear from the road studies which have been done that the City's current roadway network is currently inadequate to serve existing traffic demands, and that the gap between the targeted service level and the service demand continues to grow. A recent study by the Public Works Department, which targets the City's most pressing road needs, estimated that the cost of road improvements to meet traffic demands existing by the year 2000 would be over 900 million dollars. This is far in excess of the City's capacity to fund with public dollars. As a result, it will be necessary for the City to prioritize road improvement projects. Priority should be given to improving and expanding roadway services in areas which directly serve or are directly served by the City's commercial and industrial centers, since the prosperity of the City depends upon the continued viability of these centers. In addition, rezonings to more intense uses which will increase the demand on inadequate roads should be discouraged, unless the necessary improvements are within local or state road improvement plans, or unless the developer provides improvements which directly meet the demands created by the development. Even when a developer makes such a provision, however, the overall impact of such a development nevertheless may be to exacerbate the overloading of an area road system, and approval of such a development may be untimely and therefore inappropriate.

Objectives: Transit:

1. Public transit service should be provided throughout built-up portions of the City to serve special target groups, and to reduce automobile usage.

2. Express bus service should be provided for commuters from the Greenbrier, Great Bridge, Deep Creek, and Western Branch areas to downtown Norfolk.

3. Normal bus service should be provided from residential areas to major activity centers within Chesapeake.

4. Special transit service should be available for the elderly and handicapped.

5. Developers, real estate managers, and major employers should be encouraged to provide private-sponsored para-transit service, van-pools, car sharing and other alternatives to individual automobiles.

IMPLEMENTATION TECHNIQUES

The 1988 City of Chesapeake Statistical Profile describes current transit service as consisting primarily of bus service, as provided by Tidewater Regional Transit (TRT). Although the use of mass transit has been considerable in the more populated suburban neighborhoods, full-scale bus service has not been shown to be compatible with the City's growth pattern. This growth pattern has been dominated by decentralized suburban units, whereas the private automobile is the overwhelming favorite mode of transportation.

Current bus service consists of both para-transit and full bus service. According to the Southeastern Virginia Year 2000 Transportation Plan, para-transit is a form of transportation service ranging between fixed route bus service and the private automobile. Para-transit is characterized by its low capital cost and innovative answers to the provision of transit. Its chief attribute is its flexibility.

Within the City, on-demand or para-transit bus service is provided to the elderly, handicapped, and other citizens where such service is available. Current service locations are (a) Great Bridge and its surrounding neighborhoods, (b) the northern sector of the Deep Creek Borough adjacent to the City of Portsmouth; and (c) the southern and northern tiers of the Western Branch Borough.

Full bus service is provided primarily in the densely populated locations in the South Norfolk Borough, and within the vicinity of the Campostella Square and Crestwood areas in the Washington Borough. Full bus service is also provided to Chesapeake General Hospital and the Civic Center in Great Bridge.

Short-term transit needs generally involve the use of TRT's para-transit services. Such services are easy to implement and cease, are low in cost, and usually provide the targeted ridership with origin-destination capabilities approaching the automobile. Current para-transit services include the the establishment of park and ride locations, implementation of express van service at park and ride locations to major activity centers, institution of a vanpool, carpool or buspool program to a specified destination, administration of a community-based van lease program, and operation of Dial-A-Ride services. The Dial-A-Ride services include both the Maxi-Ride and Handi-Ride programs. Given an one hour notice, the Dial-A-Ride services operate on a door to door basis, and have the ability to integrate with other TRT sponsored services in a door to transit interface modal.

While para-transit services are flexible enough to provide quick, safe, and convenient transit service on a short-term basis, high patronage of the service may justify its continual existence, evolve the operation into a conventional fixed route transit where appropriate, or justify providing door to other transit service on a long-term basis.

Identified methods to the provision of adequate transit service in Chesapeake are targeted toward long-term operation. The provision of public transit throughout built-up portions of the City to serve special target groups and reduce automobile usage will be accomplished unevenly in the City. Generally, the urban core areas of the South Norfolk Borough, and neighborhoods within the Crestwood and Campostella Square sections, presently exhibit the greatest amount of acceptance of transit service. In comparison to other sectors of the City, it is also true that these areas have a greater rate of non-automobile ownership, increased poverty levels, and densities favorable to traditional full service transit operation. In order that increased economic opportunities and mobility be afforded to the areas of South Norfolk, Crestwood, and Campostella Square residents, continuation and expansion, where justified, of conventional public transit is recommended.

Significant reductions in automobile usage will occur when public acceptance of transit service increases and automobile usage declines in the suburban sections of the City. Such acceptance will occur when the origin-destination capabilities of transit service approach the automobile. Establishment of express service for commuters from the Greenbrier, Great Bridge, Deep Creek and Western Branch areas to downtown Norfolk and other major employment areas employing large numbers of Chesapeake residents, should be designed to

increase overall transit patronage by lessening the convenience factor enjoyed by the automobile. Such increased usage, if not decreasing the number of automobiles, would slow the growth rate of the number of automobiles on the City's major arterials.

The provision of transit service, where justified, should be inclusive of the entire City. Normal bus service, including neighborhoods outside of the South Norfolk Borough and Crestwood and Campostella Square areas, should be provided from residential areas to major activity centers in Chesapeake. As the density in Great Bridge, Western Branch, Deep Creek and Greenbrier sections increases along with concurrent increases in the present transit usage, establishment of traditional full-line bus service should be evaluated in the identified areas where para-transit service is provided and highly utilized.

Objectives: Railroads:

1. Chesapeake should remain the mid-Atlantic terminus for the Norfolk & Southern, Seaboard Coast Line, and Chessie System Railroads.

2. Railroad service should be maintained and enhanced where appropriate in conjunction with major industrial parks and intermodal transfer points.

3. The City should encourage appropriate maintenance of railroad rights-of-way, yards, buildings, bridges, and crossings for purposes of safety and appearance, and where appropriate, should encourage the vacation of unneeded rail facilities, and their conversation to public open space or trails, or to compatible private development.

IMPLEMENTATION TECHNIQUES

The fact that Chesapeake is the mid-Atlantic terminus for the Norfolk and Southern, Chessie and Seaboard Coast Line Railroads has aided its economic development efforts. Within its industrial development parks, many of the newly attracted firms depend on daily railroad shipments. In fact, many of these companies have "door to door" railroad loading facilities.

Due to the fact that industrial development through the use of industrial parks is highly dependent upon railroad usage, it is recommended that the industrial area be designed to avoid rail and road interference. Ideally, each industrial lot (where railroad transportation is needed) should have railroad

spurs and dead-end street access coming in from opposite sides like "interlacing fingers", thereby, avoiding crossing. In a diagonal scheme the rails lie in a tree pattern diagonal to the lot, and access streets are fed in from around the periphery, again interlacing without crossing.

The magnitude of railroad development in a particular industrial area is going to depend upon the nature of the goods produced. Railroad dominated areas are generally dominated by large plants having high densities, frequently using more than one spur per plant and making relatively little provision for trucking as part of the industrial process. Much of the planned industrial parks in Chesapeake will be planned for a mixture of transportation modes whereby rail and truck transportation is provided. These areas will experience less dense railroad development while providing for both railroad and truck transportation. In auto-dominated industrial parks, railway facilities might be needed for some industries, but the main concern will be the provision of parking for the automobiles.

Like any business, the City should encourage the railroad companies to maintain their facilities including the upgrading of their crossings with lights where necessary. Where demand for a service has lessened to the extent that that facility is not needed, the facility should be converted to some other use compatible with existing surrounding land uses. These uses may vary, including donation of land to the City for a park to a new office building on the site.

Given the nature of a particular industrial park, railroad design can accommodate the industrial uses within that park. The need for various types of transportation uses within an industrial park need not generate any conflicting transportation problems. When the railroad industry has emulated the economic value in its existing facilities, it should be encouraged to either maintain or redevelop such property to benefit the surrounding community and ultimately the City.

Objectives: Trucking:

1. The City should encourage and assist the trucking industry to establish and maintain modern and attractive facilities at appropriate locations in the City in close proximity to freeways or major arterials and, if necessary, railroads or ports.

2. The City should regulate the use of certain roadways by trucks in order to improve safety, preserve capacity, or protect their condition.

IMPLEMENTATION TECHNIQUES

In today's modern world of urban goods movement, the trucking industry is a major participant. However, due to the potentially adverse environmental aspects of trucking terminals, freight distribution centers and warehouses, especially on residential neighborhoods, the location and encouragement of the trucking industry within a city often creates controversy. This controversy can often be mitigated, or even avoided, through the use of advance land use planning. It is from the perspective of long range planning that the Land Use Plan seeks to encourage the development of the trucking industry within Chesapeake.

In order to achieve the preceding goals, it is suggested that the City consider the establishment of transportation parks. A transportation park is a large area reserved primarily for the clustering of trucking terminals, distribution centers, warehouses, and closely related services. The transportation park would contain a cluster of trucking terminals, plus other transportation middlemen and distributors of consumer-oriented goods such as food, plumbing supplies, appliances, and other such goods. Freight distribution centers and warehouses would be included in the transportation park since they generate traffic demands similar to that of trucking terminals.

The development of transportation parks would facilitate concerns of both the residents of Chesapeake and truck terminal operators. Indeed, the clustering of similar industrial uses is not new. Chesapeake has successfully employed the use of industrial parks to attract new industry to the City. Clustering transportation uses (primarily trucking) possess the following advantages:

A. Avoidance of residential neighborhoods. Transportation parks should be located a fair distance from residential neighborhoods. Since these parks will contain mostly industrial uses, it is not generally recommended that such uses be located adjacent to residential neighborhoods. The Land Use Plan targets areas for various types of industrial uses and should be utilized to generally locate prime areas for a transportation park.

B. Prime targeting of land use. A transportation park can be located in order to take advantage of major arterials, freeways and, if necessary, railroad and port facilities while avoiding residential areas.

C. Increasing truck traffic can be directed towards certain major transportation arterials, while avoiding minor streets leading to residential neighborhoods.

D. Landscaping possibilities are enhanced. By having a cluster of trucking terminals, and like uses, in a few locations, terminal operations can be enhanced visually by the use of a buffer area, landscaping surrounding a transportation park, specifically designated access ramps from a freeway, or other similar environmental strategies.

E. Broader development possibilities. Development of a transportation park in conjunction with an industrial park is encouraged.

The availability of any type of freight-distribution facility is affected by four determinants: (1) truck transportation, (2) markets, (3) site availability and (4) labor availability. Of these factors, truck transportation has the most influence. This acknowledgement of truck transportation's influence is important to planning because it is the one factor that is most greatly influenced by the public sector. Therefore, by utilizing the Land Use Plan's plan for industrial areas, the trucking industry will be encouraged to prosper while not disturbing the City's various residential neighborhoods.

Objectives: Airport:

1. The City should cooperate with regional agencies to enhance air transportation services and facilities at the Norfolk International Airport.

2. The Chesapeake Municipal Airport should be expanded and improved over time to become a "Basic Transport" airport by the year 1990; planning, land use regulation, and infrastructure design should all be carried out in a manner that would permit improvement to "General Transport" status for general aviation and cargo flights in the future, should the City choose this alternative.

3. The privately owned Hampton Roads Airport should be encouraged to remain in operation as long as possible, and may be integrated in an "air industrial park".

4. Programs and regulations should be established, refined and implemented immediately to minimize noise and safety hazards generated by the above airports and the U.S. Naval Airfield Fentress Station, and the use of surrounding land should appropriately controlled to avoid the encroachment of incompatible development in the existing and future impact areas.

IMPLEMENTATION TECHNIQUES

In 1968, the Chesapeake Airport Authority was created by an act of the General Assembly of the Commonwealth of Virginia to develop aviation services within the City of Chesapeake. On August 1, 1978, the Chesapeake Municipal Airport was formally opened. Prior to that date, the City had been served by two privately owned general aviation facilities; Hampton Roads Airport and South Norfolk Airport. South Norfolk Airport ended aviation operations in the fall of 1985. Norfolk International Airport, formally Norfolk Regional, provides the Hampton Roads area with the necessary facilities for commercial airline transportation and air-freight terminals.

Chesapeake Municipal Airport, operated by Mid-Eastern Airways, Inc., is classified as a reliever airport to Norfolk International. Located on West Road, approximately 4.5 air miles southwest of the Chesapeake Civic Center and 13 nautical miles southwest of Norfolk International, the facility consists of a 3,600 foot runway, taxiway, aprons, hangars, and an administration building. There has been FAA approval to extend the runway to 4,200 feet. It is now base for over fifty aircraft.

With the exception of some low density residential to the east, most of the property surrounding the airport is agricultural. Property immediately to the north of the airport is intended to develop into airport-related industrial uses. However, this is not expected to be extensive until better road access and public water and sewer is available.

The present location of Hampton Roads Airport was selected shortly after the end of World War II. Originally, it was named Portsmouth Airport because Portsmouth was the closest city with a concentrated population. Soon after the City of Chesapeake was incorporated, the name was changed to Chesapeake-Portsmouth Airport. After the Chesapeake Municipal Airport went into operation, a critical situation developed because of a similarity of names. The name was changed to Hampton Roads Airport.

Located on the north side of Military Highway West in the Bowers Hill area, H.R.A. began with two grass runways, hangars, maintenance building, operations building and a fuel farm on 300 acres of land.

As the facility modernized and expanded, additional acreage was acquired to insure room for expansion and prevent intrusion of unacceptable construction adjacent to the airport. Total acreage today is approximately 1,250 acres.

The present facility, now classified as a reliever airport, consists of the following: one north-south 3,600 foot runway, one east-west runway 4,000 feet long in length, fuel farm, hangars, restaurant and an office building. Based inventory of aircraft is over 150. A total of ten airport-related businesses operate on site.

According to the Hampton Roads Airport Master Plan, additional expansion is in the future with plans already underway to build a new 5,350 foot east-west runway. The existing runway will become a taxiway. Commercial and industrial uses are scheduled just outside the buffer zone with access to the airport.

Major consideration need also be given to the Naval Auxiliary Landing Field Fentress in the land use planning process. Commissioned August 17, 1943, the 2,553.92 acre U. S. Government installation is located in the rural eastern part of Chesapeake. Among the first aircraft touching down on the field were the Hellcat, Avenger, and Corsair, well renown aircraft during World War II. Today some of the Navy's best high-performance planes use the facility.

Recognizing the problem of land development around military bases, the Department of Defense instituted a study program known as the Air Installation Compatible Use Zones (AICUZ) Program. Simply stated, it is a study to determine which lands near the military air installation will be significantly influenced by the function and operation of the facility. NAS Oceana and ALF Fentress have such programs. The U.S. Government has to date acquired air easements for approximately 10,000 acres within the ALF Fentress AICUZ footprint.

Airports for some time now have played an important role in determining land development patterns. They have become casual factors which can be used to direct, to focus, to guide and to create a business and employment center. They can be a buttress to an area's tax base and a stimulate to area development and commerce.

The City of Chesapeake must accentuate its support for its Municipal Airport and also recognize the need for the fruition of Hampton Roads Master Airport Plan. Fentress ALF must be protected by mutual understanding and cooperation by the U.S. Navy and the City of Chesapeake.

These airports should be protected from its neighbors and the neighbors from the airport. To accomplish this the following is recommended:

1. The Chesapeake Municipal Airport Study be updated every five years.

2. Hampton Roads Master Airport Plan be supported.

3. A thorough study be done of land within the AICUZ zone surrounding ALF Fentress to suggest the proper land use controls necessary for the compatibility of development.

Objectives: Waterways:

1. The City should cooperate with the U.S. Corps of Engineers and other appropriate public agencies to maintain the Southern Branch of the Elizabeth River, the Chesapeake and Albemarle Canal, and the George Washington Canal for waterborne commerce and/or recreational boating.

2. The City should encourage the provision of harbor, marine, port, maintenance and storage facilities associated with waterborne commerce and recreational boating.

IMPLEMENTATION TECHNIQUES

Proper management of waterways is a primary goal of the City of Chesapeake. The Local, State, and Federal and private scientific communities have proven that the type of land use and the location and extent of differing activities influences the amount and contents of runoff into our waters. Depending upon the body of water being documented in Chesapeake, such runoff can and does have a range of effects varying in intensity depending upon the City's objectives and the waterway's individual natural ecological system. In order that our waterways remain their most productive, land use activities should be designed to encourage the following environmental functions which are essential to a healthy marine life or of great importance to shoreline areas. These functions are:

a) Storage of energy, nutrients and essential materials;

b) Primary production of plant matter needed to support marine life;

c) Provision of essential or particularly significant habitat for marine organisms;

d) Maintenance of water quality;

e) Minimization of erosion and flooding upon coastal areas.

The above functions are performed by the existence of natural resources such as:

a) Vegetated and non-vegetated wetlands;

b) Spawning and nursery areas;

c) Coastal sand dunes;

d) Barrier islands;

e) Significant wildlife management areas;

In addition to the preservation of the above natural resources, management of the following resources is vitally important:

f) Significant public recreation areas;

g) Sand and gravel deposits;

h) Underwater historic sites

Through the Land Use Plan, land use management seeks to balance development of above environmental resources, which ensure the viability of our waterways, with the economic and recreational needs of the City.

Management of waterway development activities in Chesapeake is presently accomplished through a mixture of Local, State, and Federal agencies. Generally, the United States Army Corps of Engineers reviews development activities occurring in navigable waters and associated tidal and non-tidal wetlands; the City's Wetlands Board has jurisdiction over wetlands occurring in non-vegetated areas; while the State's Virginia Marine Resources Commission has jurisdiction over waters and

coastal areas located below mean tide (generally under water). Varying standards of water quality are maintained through monitoring of spills and discharges into the waterways by the State Water Control Board and the U.S. Environmental Protection Agency.

Through the above agencies' jurisdictional responsibilities, all of the above agencies cooperate to maintain the Southern Branch of the Elizabeth River, Chesapeake and Albemarle Canal, and the George Washington Canal. Such government supervision over the waterways also encompasses Pocaty Creek, the Dismal Swamp Canal, and various low lying areas throughout the City.

Given the environmental functions performed by our waterways, the increasing appreciation of resources which effectuate those functions, and the fact that waterway systems may or may not adhere to municipal boundaries, the City of Chesapeake should continue to cooperate with the U.S. Army Corps of Engineers and appropriate public agencies to maintain its waterways for commerce and recreational development.

Economic and Recreational Development of Our Waterways

Economic and recreation development of a City entails competent usage of its natural resources. In Chesapeake, information on vegetated wetlands and shoreline estimate 2,000 acres of vegetated wetlands, 114 miles of shoreline, 22.7 miles of artificially stabilized shoreline, 2.5 miles of beach, 60.6 acres of fringe marsh, and 28.3 acres of embayed marsh. The goal of the Land Use Plan is to manage these resources in such a manner as to encourage the provision of harbor, marine, port, maintenance, and storage facilities associates with waterborne commerce and recreational boating.

In recent years, State, Local and Federal agencies have combined to successfully monitor "point source" pollution, discharges from municipal and industrial sources. Much of today's emphasis on water quality is centered on "non-point source" pollution, water runoff from development into our waterways. While water runoff is a natural occurrence, land use activities influence the amount and composition of that runoff. Depending upon the ecological balance and City objectives for a particular waterway, such runoff can result in detrimental harm. Therefore, waterway management is concerned with identifying the City's goals per waterway, analyzing the effects of runoff per waterway, and assessing and enacting necessary environmental and land use regulations.

In Chesapeake, as well as other counties and cities considered to be in Tidewater Virginia, regulation of land use activities

to control "non-point sources" of pollution is positively effected by the Virginia General Assembly's passage of the Chesapeake Bay Preservation Act. This act targets the impacts of population growth and development on water quality. The Act seeks to balance the rights of the private property owner, local government's land use decision powers, and the State's right to preserve its irreplaceable natural resources. Localities are empowered to use their land use planning and zoning powers to protect water quality and establish mechanisms by which the State may effectuate local planning decisions and activities which have an impact upon the Chesapeake Bay. Local adoption of land use policies reflective of the Act's provisions is mandatory.

The Chesapeake Bay Preservation Act requires all effected localities to (1) incorporate general water quality measures into their comprehensive plans, zoning ordinances, and subdivision ordinances; and to (2) establish programs that identify areas which may impede upon the water quality of the Chesapeake Bay and its tributaries. Such requirements enable the City to establish goals and policies per waterway and then institute land use measures to implement established policies.

<u>Land Use Controls</u>

Increasingly, the relationship between land use and waterway planning and management has been recognized. In relationship to transportation, the type of land use desired in a particular waterway is going to determine the transportation mode and ultimately the composition of both "point source" and "non-point source" runoff. Local government's contribution toward waterways management revolves around land use management programs, which result in management of water quality. However, innovative programs do exist that link waterway development and land use development. It is recommended that the City investigate possible usage of the following programs or at least components of them:

a) Institution of Best Management Practices (BMPs) into the City's development processes. BMPs are defined as those methods, measures or practices to prevent or reduce water pollution from "nonpoint sources" of pollution and include but are not limited to structural and nonstructural controls and operation and maintenance procedures. Such controls should be written into the City's Subdivision Code, Zoning Code, etc.;

b) Addition of Performance Controls/Performance Zoning to the Zoning Code relating to waterways management.

The City currently practices performance zoning through its conditional rezoning process. Performance Zoning establishes performance standards which must be met by all uses within any district. Regular zoning procedures establish a hierarchy of uses and accompanying zoning district.

c) Use of Overlay zoning in certain areas to protect water quality and manage allowable land use activities.

d) Institution of incentive programs for control of "non-point source" pollutants. These incentive programs should vary depending on the development type and land use planned for a particular area. Such incentives should be incorporated into the City's development process.

All of the above land use control processes will work to establish varying levels of water quality. Combined with the City's objectives for a particular water body, water transportation types and their possible utilization will be determined.

Waterway Development

In this section, the City's goals and resulting management techniques in relation to each waterway will be discussed:

Northwest River

The Northwest River is a small coastal river within the Dismal Swamp System. The River possesses a limited ability to assimilate pollution and in the summer time, dissolved oxygen values between 2MG/1 part and 4MG/1 part are not uncommon. Dissolved oxygen values are important in that most higher life forms require oxygen for survival; reproductive success and growth are also affected by dissolved oxygen levels. For the Northwest River, dissolved oxygen levels (as determined by the State Water Control Board) should range between 4 MG/1 part to 8.5 MG/1 part. Its importance to the City is dictated by its use as the primary source of drinking water for a large portion of the population of Chesapeake. A secondary importance is its present and planned use for recreational water activities. The importance of mitigating the effects of "non-point source" pollution on the river dictate that land use activities within the watershed be strictly regulated by:

a) Promotion of the Northwest River's special characteristics and the need for water quality management;

b) Exclusion of activities which threaten the water supply from the basin, or at least the portion of the basin near the intake;

c) Constant monitoring of the river to ascertain water quality conditions:

d) Control and monitoring of land use activities; the institution of good land management practices.

The Northwest River also serves as a recreational vehicle for water related activities. The most popular activity is fishing. However, the intrusion of saltwater into the Currituck Sound during the summers of 1986 and 1987 has had a detrimental effect on the freshwater fish populations. Fall and Spring continue to be popular times to engage in fishing at the Northwest River. The river is also used for other water related activities throughout the year.

Water access to the Northwest River is limited and shoreline pedestrian access in inadequate. The one publicly accessible boat ramp, one ten-slip commercial marina and four cane put-in/take out points are able to handle current demand for water access with only occasional crowding. While shoreline pedestrian access is only available at Northwest River Park where either a shuttle bus ride or a 1.25 mile walk is required to reach the main stem of the River, expansion of such access is limited by the existence of hardwood swamps between the fastland and river channel.

Expansion of recreational opportunities on the Northwest River are encouraged as follows:

a) The abandoned Route 168 bridge over the Northwest River might be used to provide additional boat ramps in the future;

b) Improvements such as additional signs, parking, and bank reconstruction to facilitate water access should be considered along the designated canoe access points located on the Northwest River Scenic Waterway Trail;

c) Study the possibility of including the River from Bunch Walnuts Road to Northwest River Park in the Virginia Scenic River Water System. Such an inclusion would be dependent upon whether the City has any additional water development supply plans for the Northwest River;

d) Inclusion of some canoe trails along the Northwest River into a proposed regional scenic waterways system.

Elizabeth River

Within Chesapeake, the Elizabeth River is used both as a working river (along its Southern Branch adjacent to South Norfolk and Crestwood Areas), and for recreation (along the Western and Southern Branches). From earlier studies of the River, water quality programs should be designed to (a) maintain the usage of the river as an industrial and commercial highway; (b) maintain the aesthetic quality of the river for visual appreciation; (c) maintenance of water quality in a non-threatening manner to living resources using the River; (d) present adverse environmental impacts to adjacent waterways and areas; and (e) encouragement of compatible waterfront land use activities and decisions (including recreational development as proposed in Southeastern Virginia Planning District's 1988 study, The Waters of Southeastern Virginia).

Key land use processes needed to facilitate the above goals require the following steps:

a) A regional study to understand the impacts of elevated metals and organic levels located in the River. From this study, the source of the pollutants (whether they're "point source" or "non point source" additives) may be ascertained, thereby leading to land use regulations controlling discharges and runoff of the elevated ingredients found in the River;

b) All new development locating within the Elizabeth river basin should be subject to Best Management Practices (BMPs) which would require an erosion and sediment plan. Initial implementation of BMPs should involve parcels proposing a land use activity change or involving the use of hazardous waste materials;

c) Rigorous enforcement of the Wetlands, Sand Dunes and Subaqueous Lands Guidelines, developed by the Virginia Marine Resources Commission and the Virginia Institute of Marine Sciences, by local wetlands boards and the Virginia Marine Resources Commission. Such guidelines should be published and

utilized as a tool to educate the public on special development requirements along land lying in water sensitive areas such as the Elizabeth River.

Chesapeake Albemarle Canal and Dismal Swamp System

These waterways are considered freshwater systems comprised mainly of manmade canals and ditches. The only natural component of either of these systems is Lake Drummond. Lake Drummond, located in the Great Dismal Swamp Wildlife Refuge, is one of only two natural lakes in the State.

The Chesapeake and Albemarle Canal is an intracoastal waterway linking the Southern Branch of the Elizabeth River with North Landing River. Traffic usage along the Canal is considered moderate to heavy and is a combination of commercial and recreational boating. Recreational activity centers around fishing, water skiing and leisure boating. Wakes caused by heavy boat traffic generally preclude canoeing and fishing from small boats.

Current pedestrian shoreline access and marine and boat ramp facilities are inadequate. The two small marinas are filled to capacity in the Summertime and the boat ramp facilities receive heavy usage.

The Dismal Swamp System, which is a part of the Atlantic Intracoastal Waterway, is composed of three principal water bodies (the Dismal Swamp Canal, the Feeder Ditch and Lake Drummond). Usage of the Dismal Swamp Canal is mostly recreational and moderate with primary users being canoeist, fishermen, and transient boaters. However, traffic through the Dismal Swamp Canal has been curtailed over the past several summers due to closings of the Dismal Swamp Canal's locks. These locks were closed during periods of severe drought to maintain water levels, and to make lock repairs. While boat ramp access was still available through usage of the Virginia Game and Inland Fisheries' Dismal Swamp Canal Landing, transient and local boating traffic was denied access.

Current usage along the Dismal Swamp Canal System is mostly recreational. Numerous canoe and boat access points exist on Lake Drummond, thereby, providing adequate boat access to the Dismal Swamp Canal. Pedestrian shoreline access to the Canal is adequate, but difficult along the Feeder Ditch and Lake Drummond.

Improvements to the Chesapeake and Albemarle Canal and the Dismal Swamp System should include the following considerations:

a) Increase shoreline pedestrian and boating access to the Chesapeake and Albemarle Canal through a new eight mile hiking trail;

b) Institution of a 12.4 mile hiking trail along the Dismal Swamp to increase shore fishing opportunities and scenic vantage points;

c) Completion of proposals in the 1986 Dismal Swamp National Wildlife Refuge Master Plan designed to increase public access to the Refuge's water bodies;

d) Consideration of including the Dismal Swamp Canal trail and Feeder Ditch trail into a proposed regional scenic waterways.

LAND USE

The use of land is the most visible expression of economic vitality, market demand, and personal choice, tempered by environmental factors, accessibility, and the availability of utilities and services. Clearly, it is the focal point, not only of the Comprehensive Plan, but of community interest and concern.

It is recognized that management of land use involves the judicious balance between public benefit and private rights in real estate. Experience has indicated that difficult as this process may be at times, it is one which can produce a better physical environment, a strong public-private partnership and sense of community, and a satisfying quality of life for business, as well as for residents.

When referring to land use, emphasis is placed on the type of use, its intensity, and its character. The major categories include commerce, industry, residences, institutions, open space, and agriculture. Governmental and public uses are covered under the chapter, Community Facilities.

GOALS

The orderly arrangement of appropriate land uses in compatible relationship to one another, so as to establish desirable living, working and leisure environments.

Objectives: General

1. Each land use should be located only on an appropriate site in terms of access, environmental conditions, community facilities, and compatibility with its neighbors.

2. Desired land uses should be accommodated generally in accordance with anticipated market demands for each use; undesirable and incompatible land uses, or speculative development in excess of anticipated market demand should be discouraged. Even where market conditions may support the intensive location of certain similar uses which are economic competitors in a particular area, the saturation of an area with such uses may cause an overall deterioration in the quality of the environment, and in particular may have an adverse impact on neighboring residential uses. As a result, the placement of certain commercial or industrial activities should not only be a factor of market conditions, but should also consider particular land use impacts on surrounding properties.

3. Development patterns and trends should exhibit an orderly transition from urban uses in the northern part of the City to rural land uses in the southern part of the City along planned public sewer system corridors. Specific setback, landscaping and site arrangement requirements should be set out in the zoning and subdivision ordinances to ensure that there is appropriate spatial arrangement of buildings and uses, and sufficient buffering between different uses, to enhance the compatibility of neighboring uses and improve the relationship between different uses in the community. The City's services and infrastructure should be sufficient to support a proposed development of land.

4. Consideration of rezonings will be limited, especially after the anticipated comprehensive zoning ordinance and map are adopted. The City will

consider zoning for commercial, office or multi-family use, only in those areas which are located within one-half mile of an established community center (a list of these is to be prepared by the Planning Department) or of the intersection of two freeways or arterials.

IMPLEMENTATION TECHNIQUES

Placement of desired land uses in their most appropriate locations must adhere to the principles of good planning. That planning must begin with an underlying, shared vision of the City and its various communities. The Comprehensive Plan is intended to give that vision form, and the zoning, subdivision and related ordinances which give life to that form, by establishing for properties in the City certain standards and requirements which have the force of law, should reflect that vision. The vision is not static; it evolves as the City evolves. But that evolution should be reflected first in the City's primary planning documents and guides before specific development decisions are made which run counter to what is contained in those documents and guides. Decisions regarding changes in use for particular pieces of property should be able to identify and articulate how they are consistent with the values, goals and objectives set out in this Comprehensive Plan, and the proposals for change should be able to demonstrate that consistency.

As the City develops, the development pattern should be in accordance with the Land Use Plan, which generally transitions from urban in the northern part of the City to rural in the City's southern section. As development moves outward from existing suburban development, it should proceed along planned corridors with adequate infrastructure for development. Suburban or countryside type densities should not be permitted unless sewer is available. Septic tanks should be discouraged except where they are essential for bona fide rural dwellings. The above values should be enforced through use of specific setback, landscaping and site arrangement requirements in both the Zoning and Subdivision Ordinances.

Once the Comprehensive Plan and Zoning Ordinance have been adopted, consideration of rezonings not in compliance with policies promulgated by the Comprehensive Plan will be limited. Since the land use map carefully defines the City's desired overall development pattern, commercial, office or multi-family rezonings will only be considered if they are located within one-half mile of an established community center (a list of these is to be prepared by the Planning Department), or of the intersection of two freeways or arterials. Strict compliance, it is hoped, will serve to

accommodate land uses generally in demand by the market while limiting undesirable and incompatible land uses. Such a policy might also be instrumental in curbing speculative development in excess of anticipated market demand.

Objectives: Commerce

1. The City of Chesapeake should become more self-sufficient in terms of business employment, retail shopping, personal and business services, and entertainment to support its residents.

2. Commercial land uses should be organized according to their economic and environmental compatibility in planned centers, clusters, or districts, rather than as freestanding activities. Most uses will be accommodated in the following types of areas:

   - A major mixed-use activity center of regional significance
   - Regional shopping centers
   - Office and business parks of various scales
   - Community shopping centers or districts
   - Planned highway-oriented business districts
   - Neighborhood or convenience business centers or districts
   - Special, one-of-a-kind uses, e.g. an entertainment center.

3. The largest, highest density, mixed-use activity center in Chesapeake should be planned and developed as a coordinated district in the vicinity of I-64 and Military Highway from the Greenbrier Business Park and Shopping Mall on the east to Bainbridge Boulevard on the west.

4. Another regional shopping center is to be developed by 1990 at the intersection of Portsmouth Boulevard and Taylor Road in Western Branch. This center and nearby properties should be planned as a mixed-use "town center" serving Western Branch.

5. Community level centers and districts should be enhanced in the South Norfolk, Deep Creek, and Great Bridge areas.

6. Commercial corridors to be enhanced include Western Branch Boulevard, Military Highway west of the Elizabeth River, Bainbridge Boulevard north of Military Highway, and Battlefield Boulevard north of Great Bridge.

7. Commercial development in the vicinity of interchanges with the future Belleville Connector and the future Southeast Freeway should be encouraged.

8. Convenience business districts or centers should be permitted in a limited number of location throughout the City.

9. Commercial strip development should be strongly discouraged.

10. Tourism should be encouraged.

IMPLEMENTATION TECHNIQUES

Planning for commercial and industrial activity is a chief aim of the comprehensive planning process. Within Chesapeake, as in most communities, the economic viability of the City is dependent upon tax revenues generated from business development. In terms of cost of services to residential areas, residential development seldom pays its full-share cost. Revenues from business developments are used to make up the deficit created by residential growth within a City. Merely allocating land for various types of business development is not enough to encourage the development of commerce and industrial use within Chesapeake. While it is true that manufacturing plants, shopping centers, office buildings, and entertainment complexes strive for locations on major arterials, freeways, or highways, the character of the community is an increasingly important element in a business' decision to locate in a city and/or a part of the city. Since landscaping helps to establish a quality of life attractive to businesses, the City of Chesapeake considers pleasant landscaping of business sites, as well as highway medians, a priority. Landscaping should be an increasingly important consideration during the City's development processes. Indeed, if a community offers a pleasant way of life at a reasonable cost, personnel with the necessary skills can usually be found.

It is in the sphere of community character that the Land Use Plan seeks to address the location of future businesses. In turn, the existing location of a large plant, office complex,

or shopping center will have an effect on the community's character which will be reflected in the Land Use Plan. Consequently, not only present growth plans are effected, but the composition and location of future business growth is influenced.

The overall goal of the commerce section is to establish policies which will attract and retain businesses that service the various needs of the citizens of Chesapeake. As a policy statement, it is recommended that Chesapeake strive for greater self-sufficiency in business employment, retail shopping, personal and business services, and entertainment to support its residents. This goal is promoted through the judicious targeting of commercial areas as an accompaniment to residential growth. Shopping center locations are planned for convenient accessibility via freeways, arterial streets, or transit lines. Supporting office services are locationally planned as an outgrowth of shopping center development. Locationally grouping commercial interests positively influences interdependent business relationships and individual customer satisfaction.

The principal mode effecting commercial growth in Chesapeake involves the shopping center. Through the development of shopping centers, the City is better able to effectuate organization of commercial land uses according to their economic and environmental compatibility in planned centers, clusters or districts; thereby, discouraging strip development. The arrangement or locational distribution of shipping centers will be dependent upon the type of center or district. The various types of shopping centers and their ensuing uses are as follows:

A) A major mixed-use activity center of regional significance.

B) Regional shopping centers.

C) Office and business parks of various scales.

D) Community shopping centers or districts.

E) Planned highway-oriented business districts.

F) Neighborhood or convenience business centers or districts.

G) Special one-of-a-kind uses, e.g. an entertainment center.

In addition to better conglomeration of like services, the shopping center allows for greater continuity and attractiveness in overall design. Access points to major roads are better controlled and much fewer in number as compared to strip development. Furthermore, the provision and operation of City services are enhanced. Finally, in many cases, businesses in shopping centers are known to experience an increase in sales over a strip development location. Such a result is due to the added convenience and pleasure of a shopping center location versus strip highway shopping.

One of the best benefits resulting from shopping center development is the spin-off of additional commercial activity. Such action is especially prevalent around regional centers; however, this effect is also simulated around neighborhood and community centers on a smaller basis.

As a result of its locational characteristics and its being a planned unit development (PUD), the Greenbrier area is targeted as Chesapeake's "future downtown". While developed differently from traditional central business districts(CBDs), this area is targeted to be the largest, highest density, mixed-use activity center in Chesapeake. Located in the vicinity of I-64 and Military Highway from the Greenbrier Business Park and Shopping Mall on the east to Bainbridge Boulevard on the west. The Land Use Plan seeks a mixture of business uses comprised of general manufacturing, primarily office development, office-research-light industry, and other "regional mixed uses". Within this area, business type placement should be guided and influenced by rather traditional planning principals, e.g. shopping centers need good accessibility via freeways or major arterials, industrial areas should be designed with railroad and major arterial road capability; and residential areas should be generally separated from commercial and industrial uses through a series of buffer techniques, while being served by a series of local streets. Due to its designation as Chesapeake's "future downtown", the relationship between multi-family residential, industrial and commercial areas need not be as distinctly separated as in other parts of the City. Land use planning for this area envisions high density multi-family living as an answer to the housing needs created by additional commercial, office, and light industrial development in and around the existing Greenbrier and Parkview Shopping Malls.

The population growth of western Hampton Roads (particularly the Western Branch section in Chesapeake and the Churchland section in Portsmouth) has led to the development of another regional mall (by 1990) to be located at the intersection of Taylor Road and Portsmouth Boulevard in Chesapeake (Chesapeake

Square Mall). It is the goal of the Land Use Plan to encourage the development of adjacent properties in a mixed-use "town center" concept serving Western Branch. The targeted land uses surrounding the proposed Chesapeake Square Mall shopping center range from suburban single family housing to general commercial. Such a proposed diversity in land use types encourages development of compatible fringe uses such as high density residential units, planned office parks, motels, medical clinics and other non-retail uses. Such spin-off uses encourage aggregation of buying power, foster adjacent transitional uses such as apartments and office complexes, and promote the shopping center mall as a possible center of community life in a region.

Growth within the Western Branch Planning Unit will also be characterized by its national and international development. This is due to the planned industrial areas both north and south of the Chesapeake Square Mall area. These areas, such as the Bowers Hill area and northern sectors of Western Branch, lie adjacent to established or soon to be built arterial highways, while having access to adjacent railroad lines. A transportation network providing quick and easy access to industrial sites, which these areas in Western Branch provide, is considered vital in attracting future industrial concerns.

One of the objectives of the Land Use Plan is the enhancement of existing community level centers and districts in South Norfolk, Great Bridge and Deep Creek areas. The emergence of shopping districts within the various areas is due to the insular village growth characteristics of Chesapeake's various communities. The South Norfolk area, before Chesapeake was created, was a City itself. As a City, its commercial development grew in response to the needs of South Norfolk residents. The commercial area generally includes Bainbridge Boulevard, from Interstate 464 to Poindexter Street, and from the intersection of Poindexter Street and Bainbridge to Liberty Street. Empty commercial sites within this corridor are limited, however, commercial revitalization is a good possibility. Along Bainbridge Boulevard, the City should encourage new commercial development through refurbishing or replacement of existing structures. The Poindexter Street corridor possesses significant commercial possibilities through redevelopment efforts emphasizing continuous "turn-of-the-century" Victorian architectural unity among the immediate shops surrounding the 16 block South Norfolk Conservation Area. Such redevelopment efforts should incorporate pedestrian-friendly features with various mixed-uses designed to attract people from all over Hampton Roads due to the uniqueness of goods sold, the overall ambience of the area, or both.

Within the Deep Creek section of the City lies its ensuing business district. This district stretches along George Washington Highway from the Portsmouth City Line south to Camelot Boulevard. The Land use Plan also targets all four corners at the intersection of Military Highway and George Washington Highway for general commercial development. Furthermore, a large amount of land at the new Military Highway and Interstate 64 interchange is targeted for commercial development.

Public enhancement of the Deep Creek community centers and districts will entail access improvement to the various commercial centers. City improvements should provide for increased access to new shopping centers vial major arterials. Moreover, as in other commercial centers, shopping center development should be enhanced through required landscaping techniques. Generous use of planter beds in and around new shopping centers is strongly encouraged as a way to improve the visual impact of a center.

The last community level center and commercial district to be considered is the one in Great Bridge. This business district stretches approximately two miles from Tilden Avenue in the north to Ashley Drive at the southern end.

Like its Deep Creek counterpart, the Great Bridge community has historically flourished and grown in a village or town-like concept within both the old Norfolk County and the present City of Chesapeake. While municipal operations are now generally concentrated in the Great Bridge area, this section of the City has retained its village-like atmosphere.

Future commercial growth within the Great Bridge business district should also be of a neighborhood or community type center; thus, reflecting its village-like character. The goal of business should be to serve residents of Great Bridge and adjacent northeastern North Carolina. The business district is not intended to be regional in nature.

Encouragement of the above goals will be served by the provision of good access via major arterials utilizing special right and left turn lanes to accommodate shopping center traffic. As in all future commercial developments, extensive use of landscaping is urged to erase the appearance of "concrete city".

Given the source and timing of available funds, the Land Use Plan targets expansion of the following commercial corridors: (a) Western Branch Boulevard, (b) Military Highway west of the

Elizabeth River, (c) Bainbridge Boulevard north of Military Highway, and (d) Battlefield Boulevard north of Great Bridge. The City's new Master Highway Plan determines the type and priority of road needs of the above commercial corridors.

While Battlefield Boulevard should be expanded, traffic progression would be greatly facilitated with expansion of Battlefield Boulevard south of Great Bridge. Again, the new Master Highway Plan would determine the type and amount of improvements needed.

Not only should Military Highway west of the Elizabeth River be expanded, but also all of Military Highway east of the Elizabeth River. Such expansion is justified due to planned commercial growth along Military Highway; and targeted development of office, warehousing, and other regional mixed-use land uses in the Greenbrier area. The new Master Highway Plan determines the priority, type , and amount of needed highway improvements.

New population and business growth argue favorably for expansion of Western Branch Boulevard, while infill commercial growth along Bainbridge Boulevard north of Military Highway will necessitate road improvements.

The Land Use Plan urges the City to promote commercial development in the vicinity of interchanges with the future Belleville Connector and the future Southeast Freeway. Location of the new regional mall in Western Branch, Chesapeake Square, is due in large part to the site's close proximity to the Bowers Hill/Belleville Connector's Portsmouth Boulevard interchange. Future commercial development along the Connector and the planned Southeast Freeway will probably be of a community or neighborhood interest. Community or neighborhood center growth affords the opportunity for the needed provision of services not normally located in a regional mall. Studies have shown that planned proliferation of compatible land uses around a regional mall encourages that mall's economic development; thereby, resulting in further commercial development of the area. Also, by locating these commercial centers near freeway interchanges, clustering of businesses in one location (shopping center) is encouraged while strip highway development is discouraged.

Orderly commercial development allows for the development of convenience business districts or centers in a limited number of locations throughout the City. Generally, these centers provide the quick stop and go services needed by a residential area.

The Land Use Plan strongly discourages commercial strip development. Indeed, the commercial sector of the Land Use Plan deals with business growth occurring in clusters of offices and/or retail stores. Strip development can be further discouraged by the trend to include the location of probable commercial sites in a residential development during the rezoning and site planning process. From a land use viewpoint, it allows the City to best position various land uses according to the Land Use Plan and the existing character of the community. Such a trend allows prospective and current citizens of Chesapeake and the City detailed vision of a particular area's land use designs given the boundaries set forth by the Land Use Plan. Indeed, this trend argues favorably for the reinstitution of planned unit developments (PUDs) in the Chesapeake Zoning Code.

Another way to restrict strip development is to refuse to approve any rezonings, use permits or site plans which do not occur in areas targeted for general commercial use by the Land Use Plan.

The Land Use Plan seeks to encourage tourism in the City. The best way to accomplish this goal is through continual development of office and general warehousing parks. The successful establishment of office parks would allow the clustering of businesses demanding tourist-type accommodations such as hotels, restaurants, and nearby entertainment.

In its efforts to attract the tourist industry, Chesapeake should promote its significant historical heritage. Before becoming a City, Chesapeake was a part of the old Norfolk County. The County, which predates the Revolutionary War, has played a significant part in the religious, economic and cultural development of the nation. Within Chesapeake, there are buildings and sites of significant historical importance that are still in existence and carrying out their original functions. Architectural themes of the various buildings can be divided into (a) buildings depicting late eighteenth century gambrel roof houses, (b) mid-nineteenth century houses exhibiting side hall plan chimneys on one end and Federal or Greek Revival details, (c) buildings used for early twentieth century schools, and (d) selected developments which relate to the development of the railroads and waterways as a main passage artery in Chesapeake. Buildings which satisfy one or more of the above criteria can be found in the City's Reconnaissance Survey of the City of Chesapeake, Virginia, July 1987.

Although Chesapeake is a booming city, and is located in an area where tourism is a major economic force, it is not benefitting from tourism. Policies needed to reverse this situation include:

(A) Establishment of a preservation district or historical zone. Such a district or zone should incorporate liberal usage of the use permit and conditional rezoning processes. The use permit process would allow the City to consider the appropriateness of a project in relation to the historical character of an area, and to enforce the special standards of a historical zone at the site plan approval stage. Institution of the conditional rezoning process allows the developer or person building in a historical community the process to offer special considerations, given the community or structure's significant historical importance. Indeed, such a zone would clarify the City and immediate neighborhoods' expectations of future architectural structures within a particular area.

The inclusion of such a zone in the Zoning Code would allow the City to fairly regulate the type of land use in a particular historical area.

B) Erection of a museum or historic house to be housed in a historic structure, if possible.

C) Encourage tax credit investment in the commercial area of the South Norfolk Historic District.

D) Establishment of a scenic route through the Dismal Swamp Canal. The Canal and swamp need to be protected, but there should also be limited access for canoeist, campers, and educational groups.

E) Placement of historic highway markers in historic communities.

F) Encourage the formation of an organization committed to historic preservation in Chesapeake.

G) The City should convene a meeting of interested community leaders to explain the findings of the Reconnaissance Survey and to solicit additional historic preservation ideas.

The City of Chesapeake is a new city created by the merger of Norfolk County and the City of South Norfolk in 1963. However, unlike many new cities, the City of Chesapeake has a long and varied past. The Reconnaissance Survey showed that Chesapeake is fortunate to have good examples of its past still in existence, and, in some cases, still performing their

original duties. As an economic tool, the City should promote preservation and knowledge of these historical artifacts. By making the existence of these artifacts known, commercial development through tourism is promoted. Preservation of a community's history allows it to examine its past, to arrive at a reason for its existence, and to help plan the kind of future it desires.

Economic development through increased commercialization is not only necessary to Chesapeake's fiscal future, but in its ability to provide the necessary services and jobs within its boundaries customary of a full-scale City. Merely allocating land for commercial development is not enough, the City, through its Land Use Plan, must strive to make a positive influence upon the character of its various communities. Indeed, while industrial locations are more concerned with the necessary transportation modes and market availability, commercial interests give more weight to a community's character. It is in this sphere that the Land Use Plan seeks to operate. It seeks to balance community character, and interests with the City's need for increased revenue enhancement from further commercial development. If successful, a liveable City is the result.

Objectives: Industry

1. Special attention should be given to the reservation and improvement of industrial areas and sites having deep water potential, and the recruitment of compatible industries should be encouraged.

2. Adverse environmental impacts of certain existing waterfront industries should be eliminated or mitigated.

3. Land owners should be encouraged to redevelop abandoned or underutilized industrial sites for more suitable land uses.

4. New industries not requiring waterfront property should be located in planned industrial parks, such as the Greenbrier Commerce Park and the Cavalier Boulevard Industrial Park.

5. Industrial land uses should be required to meet environmental performance standards appropriate to Chesapeake and the specific location, including the buffering of such uses from adjacent residential, commercial, institutional, or public uses.

6. A City-sponsored air/industrial park should be considered in the vicinity of the Municipal Airport.

IMPLEMENTATION TECHNIQUES

While commercial development is weighted toward local market demand, the location of future industrial concerns give more weight to national and regional markets. Proximity to materials sources and components suppliers is essential to the operations of many types of manufacturing and processing plants. While truck transportation has reduced the need for rail service, railroad provision is still needed by many different industrial concerns.

The City of Chesapeake is blessed with an abundance of land well suited for industrial development. Potential industrial areas have been analyzed and zoned to reserve choice industrial sites for future development.

Land and location requirements for industrial use have been substantially affected by recent changes in the technology of manufacturing and transportation. New production methods generally favor one story plants and warehouses that require relatively large land areas. Additional space is required to provide off-street parking for a work force oriented primarily toward automobile transportation and, when needed, the use of buffer zones to separate industrial concerns from other uses with a smaller environmental impact. An increasing number of industries demand large amounts of space that can be landscaped to enhance the company's image and improve visual impact upon the community. The demand for more space has caused substantial location or relocation of industries from urban to suburban or outlying areas - from which Chesapeake has benefited greatly.

A large part of a city's ability to encourage increased industrial activity lies within its ability to provide a pleasant and liveable environment.

The City of Chesapeake has a substantial amount of industrially targeted land available along a deep water river. Several hundred acres of heavy industrial use land is available along the Southern Branch of the Elizabeth River. It is the Land Use Plan's intention that industrial areas having deep water port potential be reserved and improved upon along with recruitment of compatible industries.

Such areas are advantageous in that they are a break-bulk point - which means that they have the transportation costs of a raw material and market location, while being far from either of those locations. This peculiar economic

characteristic arises out of the fact that since cargo must be transferred from carrier to carrier it is frequently as easy to process the product at the break-bulk location as at either the raw material site(s) or final market(s) and experience no increase in transit charges from loading and unloading or paying two short-haul fees as opposed to one lower long-haul fee.

In line with increased emphasis upon wetlands and the general environment, adverse environmental impacts of certain existing waterfront industries should be eliminated or mitigated. Much of these impacts will be and are governed by performance standards established in Federal and State environmental laws. For example, the discharge of point and nonpoint source pollutants into the water is governed by the Federal Clean Air and Water Act of 1970.

Enforcement of the necessary Federal laws will result in a cleaner environment. Performance standards in these laws generally allow existing uses a reasonable amount of time to conform.

Where the Land Use Plan is concerned is in the enforcement of the implementation plans through use of the permit system. Under Federal initiative, States are required to have adequate legal authority to prevent construction or continued operation of a source that emits pollutants in violation of the national standards. Regarding air, EPA classifies air pollution sources as direct (smelters, paper mills, steel mills, etc.) and indirect (facilities that attract mobile sources such as highways, shopping centers, and airports). The Clean Air Act of 1970 charges the U.S. Environmental Protection Agency (EPA) with establishing national air quality standards for seven types of pollutants (carbon monoxide, nitrogen oxides, hydrocarbons, ozone, particulates, sulfur oxides, and a miscellaneous group including heavy metals, radioactive agents, and other pollutants). Each state is required to formulate a plan to implement achievement and maintenance of federal air quality standards. States that do not contain any Air Quality Maintenance Areas must plan measures to prevent significant deterioration of air quality. States that do contain such areas must also submit a more detailed analysis of the impact of future growth and development on air quality. Therefore, the quality of air in a particular area influences the type and amount of land use activity allowed in a certain area.

Regarding the regulation of water, again Federal standards establish environmental goals to be attained. The Federal Water Pollution Control Act of 1972 set goals for the attainment of (1) water suitable for swimming and fishing and

(2) procedures and timetables for the elimination of pollutant discharges. Due to the differing environmental conditions of various waterways, the Act controls the amount of pollutants that may be discharged in each instance. Due to each particular water body's differing ability to handle pollutants, criteria for each particular body of water is set individually. EPA allows the States to administer water quality controls provided that they submit programs that receive EPA approval and that they have passed laws giving that State authority to enforce the controls. As with air quality, water quality is regulated by a permit system. Therefore, if a proposed land use fails to meet the performance standards as established for that water body, the right to construct or operate can be refused.

Water pollution discharges are classified as point sources, such as a sewer outfall or an industrial waste outlet, and nonpoint sources, such as runoff from a paved area or from an agricultural operation. The standards that are used in administering water quality regulations are complex and they depend basically on the type of effluent and the absorption capacity of the receiving waters. Standards will vary according to the local situation, the quality of the water, the affected fish and wildlife, and the need to protect public health. Every point source is classified according to two standards: a technology standard which prescribes what is economically achievable in pollution reduction, and a water quality standard which prescribes the additional reduction needed to achieve the environmental goal appropriate for that body of water. Technology standards are used as a base level for limitations, but the discharge of pollutants is governed by water quality standards if they are more stringent.

Close monitoring of waterfront industries should take a particular waterbed's economic and recreational goals into account. Where predominantly recreational activity is the goal, industrial activities should be severely restricted. However, an industrial waterway need not necessarily be a limiting factor in providing recreational activity (depending on the activity). For example, the Southern Branch of the Elizabeth River is clearly a "working man's river". Along the bank of this River in South Norfolk lie a series of industrial concerns. Pleasure boats are still capable of utilizing the waterway as a recreational resource.

It should be the City's goal to encourage the redevelopment of abandoned or underutilized industrial sites for more suitable land uses. Older industrial buildings with low rents can plan an important incubator role in providing for infant industrial enterprises. Within Chesapeake, particular consideration should be given to redeveloping industrial areas lying along railroad lines and deep water channels.

Industrial development, not requiring waterfront property, should be concentrated in planned industrial parks. With the exception of very large plants and those that require free-standing sites because of their need to be close to raw material sources or because of their incompatibility with other plants, industrial parks provide the most advantageous locations because they are designed to meet the requirements of modern industries. Operating efficiencies can be gained and conflicts with neighbors can be avoided when an area is especially planned to accommodate industrial development. Interdependent plants can take advantage of opportunities to cluster in close proximity.

In planning an industrial park, particularly large ones (over 500 acres), railroad service is considered vital. Proximity to airports, both for air shipments and executive travel, is considered desirable by many industries. Locations adjacent to freeways offer several advantages. Time savings in truck transportation result in lower costs and expanded market areas. The labor market area also expands as the time-distance to the work place decreases. Certain industries benefit from advertising value of visual exposure to a freeway, particularly if their plants are sources of pride, and close proximity to a freeway minimizes the impact the park's impact on local arterial streets.

Industrial park development offers the City the ability to landbank attractive future industrial park sites. Landbanking occurs when the City identifies land as potential industrial, buys the land, and waits for demand to justify its development. Such a procedure guarantees that future vacant industrial land will be available at a reasonable price. Unlike commercial development, industrial development tends to be land intensive and, therefore, sensitive to high land prices. However, industrial sites should not be so widely scattered or so distant from other planned urbanization as to result in unnecessarily high public costs for street maintenance, utilities, police and fire protection.

The Land Use Plan supports the use of site specific environmental performance standards appropriate to Chesapeake, including the buffering of such uses from adjacent residential, commercial, institutional, or public uses. It is recommended that performance zones be introduced into the Zoning Code where industrial uses are concerned. Instead of allocating industrial land uses according to the assumed severity of their impacts, specific standards for observable or scientifically measurable industrial plant emissions and other potentially detrimental impacts should determine where industrial uses are allowed. In the case of new industrial

uses, it is proposed that the applicant would have to prove that his operation's emissions does not violate Federal and State environmental standards. Various industrial districts, with varying standards, could be assigned throughout the City. If an industrial use proves acceptable (emission output), then it would be allowed within that particular industrial district.

It should be the intent of the City to encourage compatible land uses. Land Uses should be buffered according to the severity of their impact upon the community. Industrial land uses should not be located immediately adjacent to residential, commercial, institutional, or public uses without proper buffering of land uses. In properly developed industrial areas, light industrial uses such as electronic, printing, and research may be effectively used as buffers between heavy industrial uses and other types of land uses.

The City should consider sponsoring an air/industrial park located in the vicinity of the Municipal Airport. A similar privately sponsored air/industrial park should be encouraged in the vicinity of the Hampton Roads Airport. The Land Use Plan proposes the establishment of a general warehousing-manufacturing district around both the Municipal and Hampton Roads Airports. The type of industrial uses around the airports should be tied closely to their need for airport service.

As stated in the beginning chapter dealing with growth and change, Chesapeake is blessed with many development attributes. The goal of the Land Use Plan is how to use those attributes in such a way as to promote growth that gives the most benefit. Therefore, the City is seeking to attract and manage its industrial growth in such a manner as to gain the most benefit possible. Concentrating industrial growth within planned industrial parks will promote interdependent relationships among industrial businesses and allow for economies of scale in the provision of City services.

Objectives: Residences

1. Housing units of all types should be structurally sound, provide basic utilities and facilities required for healthful living, and exhibit appropriate levels of maintenance.

2. Discrimination in housing based on color, race, religion, sex or national origin is prohibited, and unfair disparities in housing conditions and supportive services are also to be eliminated. Appropriate handicap access in all housing types is to be encouraged.

3. A variety of housing types should be provided at affordable prices throughout the city to meet the needs of the present citizens of Chesapeake and the new families which will be attracted to live in the City.

4. It shall be a policy of the City of Chesapeake to promote the inclusion of affordable housing for all socio-economic groups. This shall be a cross-sectional policy to provide affordable housing for all socio-economic groups. This shall be a cross-sectional policy to provide affordable housing opportunities in all areas of the City. As a strategy to affect a policy of affordable housing in Chesapeake, it is recommended that an extensive study be undertaken to assess needs and consideration of the affordable housing policy.

5. A suggested percentage distribution for a balance of housing types in the City as a whole is:

Single family detached	65%
Single family attached (townhouses, etc.)	20%
Apartments	15%

6. Housing units should be arranged in efficient and attractive manners, and should be provided with supporting and amenities, so as to provide a variety of desirable residential environments, from urban to rural.

7. A desirable range of gross residential densities (units per total acres of residential land area) should be:

Rural.	One unit per 3 or more acres
Countryside	One unit per acre to one unit per ten acres
Suburban SF	One unit per acre to something less than four units per acre
Urban SF	Four units per acre to something less than seven units per acre

Low Density MF . . . . . .Six units per acre to something less than ten units per acre

High Density MF . . . . . Ten units per acre to something less than sixteen units per acre

8. Ownership of residential units is to be encouraged for those who prefer this form of tenure.

9. Publicly-assisted housing should be provided in appropriate locations.

10. Aging, but appropriately located, residential areas should be preserved, rehabilitated, and provided remedial treatment in order to establish and maintain desirable living conditions.

11. Desirable design innovations to accommodate a variety of housing types and densities in a planned environment should be seriously considered.

12. Infrastructure should support residential development.

IMPLEMENTATION TECHNIQUES

Chesapeake's existing housing stock is predominately single-family detached units on large lots (ten to fifteen thousand square feet) with ample mixture of apartments and townhouses as well as large farmette type lots. The suggested percentage of housing types adopted by City Council is:

Single-family detached	65%
Single-family attached	20%
Apartments	15%

If the City is to retain the suburban type of residential growth we now enjoy, we should strive to retain approximately the mix suggested. A predominance of apartments or townhouses, if located indiscriminately, would alter the character of the City as well as place an added burden on a transportation system that is not designed for high densities. Sites for medium to high density development in the City should be located in such a manner that they:

1. Are visually compatible with their setting or location.

2. Are provided with streets of adequate capacity to serve the developments.

There is much the City can do to improve both aesthetic and functional aspects of future residential development and insure that the City is able to provide affordable housing to its present and future citizens. Some of these could be:

Cluster Housing This allows for the grouping of homes in clusters without increasing the density. The result is large amounts of open space and considerable savings on the provision of utilities and street construction.

Planned Unit Development A planned Unit Development offers the unique opportunity to master plan a variety of housing types along with other types of land use. If done properly, a PUD offers the best tools for good development available.

Providing for a Wide Variety of Densities The range of densities adopted by the City Council in the Basic Policies Plan provide for a wide variety of lot sizes and densities. The Zoning Ordinance, being prepared, will need to translate those densities into lot sizes and spatial requirements.

Site Plan Review The review of site plans and subdivisions can be tailored to produce more compatible and aesthetically pleasing communities. The revised zoning ordinance should provide the guide lines for a more efficient site plan review process.

Landscaping and Open Spaces Requirements These items should be a priority of the new ordinances. The City should have a mandatory open space requirement that is fair to all developments regardless of the development's size.

The objective of structurally sound housing units with the basic utilities and facilities required for healthful living, and the continued maintenance of these units, has been addressed by the City in a number of effective ways. The City has adopted the BOCA Building Code as the standard for construction. However, it should be pointed out that the City has no control over the content of the Code. This is determined by the State of Virginia. The building code insures that new construction in the City is sound. The maintenance of our existing housing stock is the responsibility of the Minimum Housing Authority.

Dilapidated homes are defined as those evidencing advanced deterioration such as, leaning chimney, sloping foundation, or caved in roof. Dilapidated structures are generally beyond the financial capabilities of the residents to bring the structures up to standard and require substantial financial aid from federal, state, or local governments.

Since aid from federal and state levels has generally been reduced, it is becoming more and more the responsibility of local government to financially assist in the rehabilitation of dilapidated housing. Much can be done to prevent housing from becoming dilapidated by constant monitoring of our housing stock neighborhood for deterioration. Often the first signs of a declining neighborhood shows up in the yards through the accumulation of junk before the dwelling units themselves show more than minor signs of deterioration.

In order to maintain quality housing throughout the City, it is recommended that the City re-evaluate its housing and enforcement codes to assure that we are doing all we can to prevent our housing stock from deterioration. Much can be done through self help programs if problems are identified in time.

AFFORDABLE HOUSING

In order for a "full-fledged" city to serve all its present and expected residents, the provision of adequate housing for all socio-economic groups through land use planning is a necessity. It shall be the policy of the City of Chesapeake to promote the inclusion of affordable housing for all socio-economic groups within its boundaries. Such a policy shall be applicable to all sectors of the City regardless of economic class.

Providing for affordable housing through land use planning involves planning for sufficient amounts of various residential housing types. Generally, because of the use of common walls, greater utilization of infrastructure and higher densities, multi-family housing such as apartments, townhouses and condos are less expensive to own and operate. Given this variable, affordable housing in Chesapeake can be advanced through the judicious use of various housing types. Affordable housing can be promoted and achieved through the creative use of different modes of housing on both older and new communities.

While affordable housing is promoted by use of multi-family housing, the affordability of single family homes is significantly affected by building codes and land development regulations of a City. Usage of extensive lot size and house

yard requirements, effectively serve to significantly increase the price of a new single family home. Other barriers to single-family home affordability include extensive minimum net floor area per zoning type as regulated by the Zoning Code, and the discouragement of manufactured housing within a City.

Within Chesapeake, much can be done to increase single family home affordability. The City should institute the following actions to increase single-family affordability. These actions include:

A) Promotion of well designed, efficient, smaller houses.

B) Use of compact lots, planned for privacy and livability.

C) Greater flexibility in the siting of houses.

D) Greater flexibility in the design of streets, sidewalks and other site improvements.

One good way to reduce housing costs is to reduce the size of the house. The affordable small house does not have to be a no-frills box. Through good design, many smaller houses retain amenities such as privacy, a patio, a well-equipped kitchen, and a garage. Such design features satisfy current buyers and allow the smaller houses to blend into an area's existing pattern of development.

In today's economic climate, smaller houses make sense for several reasons:

A) Families are smaller than they used to be.

B) There are more single people and childless couples interested in owning a small house.

C) Many people no longer have the time or money to maintain large houses and lawns, more single people are heads of families, and an increasing percentage of married women work outside of the home.

D) The elderly population is on the rise, they also want compact, well-designed houses that are easy to care for.

Through the use of compact lots, a significant advancement in housing affordability is initiated. By utilizing smaller or well-designed houses on smaller lots, major cost savings are

achieved through reductions in the length of streets, sidewalks, utility runs, and land.

The attractiveness of smaller, compact lots is enhanced when special attention is given to parking arrangements, the provision of attractive open space, and enhancement of privacy provisions. With very compact lots, it is recommended that parking be located in the rear and provided access to these spaces from alleys.

The provision of open space in any community enhances a neighborhood's overall aesthetic qualities. In a community of small lots, an effective way to increase open space is through the use of clustering houses together. Also, such space can be increased if small-lot communities are located adjacent to parks (where applicable).

Assuring privacy in a small-lot community should be addressed at the site planning process. Many communities have solved this problem by requiring landscaped walls, fences, or by requiring units to be sited in such a way as to ensure private indoor and outdoor space.

Single-family affordability is increased through greater flexibility in the siting of homes and design of streets, sidewalks and other improvements. By allowing greater use of flexible siting requirements such as zero lot line development and the clustering of homes on small lots to achieve open space, significant reductions in the length of streets, sidewalks and other siting requirements can be achieved. Such a reduction translates into significant price breaks for home buyers in a competitive market.

In order to help housing affordability, the City should determine whether its residential requirements in the subdivision ordinance may be adjusted. Many cities are reconsidering street and sidewalk requirements to determine if they are excessive. For example, in many instances, communities are finding that minimum standards that were set years ago can be reduced. Some communities determine the width of residential streets on a project-by-project basis, rather than some inflexible standard. Many of those communities are finding that narrower streets encourage slower driving speeds, reduce pavement costs, and may even reduce ambient heat levels. Other communities have found that sidewalks on one side of the street can adequately meet the needs of a given development.

One of the most affordable single family housing types is the manufactured home. Due to federal and local regulations, modern factory-built housing is just as safe and durable as

its "site built" counterparts. Factory-built housing is available for people located in a great range of economic brackets. Because a person able to afford a $50,000 house will not be able to afford land prices in a $150,000 home community, housing types per community should not vary anymore than presently witnessed. Combined with developer restrictions and a family's income, the size and style of a factory-built house will reflect that particular neighborhood's housing character.

The Land Use Plan clearly emphasizes that it shall be Chesapeake's policy to promote the inclusion of affordable housing for all socio-economic groups within its municipal boundaries. In order to implement such a policy, the City should commence a study of its land development policies for review of excessive demands. Such a study would examine land policies ranging from dedication requirements to subdivision and zoning ordinance regulations to the City's policy on accepting open space donations from developers. This study should be orchestrated through the City's Planning Department with other departments participating on a City-wide basis in the study. A study such as this should consider the following points:

A) Encouragement of a variety of housing types according to the Land Use Plan.

B) Review of land development policies to revamp policies to revamp excessive development policies.

C) Encouragement of well-designed houses on smaller lots.

D) Promotion of innovative house siting arrangements on smaller lots involving the following:

1) Zero Lot Line Development;

2) Use of well-designed compact lots;

3) Use of cluster designs in sitings.

E) Identify the housing needs of Chesapeake citizens, including specialized needs.

F) Establish a mechanism by which building designs and plans for new or renovated subsidized housing, could receive preliminary review for the purpose of coordinating such reviews into the HUD plan and review process. At present, planning review and revision time gets stretched out between HUD and the

City, thereby jeopardizing construction start by violating HUD mandated guidelines.

The above study should incorporate how the attainment of open space and other amenities are possible through flexible house siting utilization.

Affordable housing is not just housing for poor persons, but housing for all persons. If Chesapeake is to continue to be an attractive place for new businesses, the City must have in place policies which encourage decent and safe housing of various types for all people. Lastly, affordable housing does not mean ugly, cheaply built, ill-designed housing units, but attractive units designed for persons of various economic brackets.

Objectives: Open Space

1. Public and private open space should be integrated into the fabric of the City at all scales, in order to provide for leisure and recreation, preserve natural resources, and provide a healthy and attractive environment.

2. Where possible, open spaces should be arranged or connected in a linear form, in order to provide a network or system that can be traversed by foot, bicycle, automobiles, or watercraft, as is appropriate.

3. The preservation of open spaces should emphasize and encourage public access to waterways, wetlands, and forested areas.

4. Land within the rights-of-way of certain roadways should be treated as an open space corridor, and maintained as parkways.

5. The City should review and update its policy and guidelines for accepting open space land or facilities when offered to the City by developers or other agencies.

IMPLEMENTATION TECHNIQUES

Many of the objectives for open space are addressed under the Park and Open Space section of this plan. However, a number of actions can be taken to assure that we retain the look of openness so characteristic of Chesapeake. Some of these are:

1. Include a provision for a percentage of open space to be retained and landscaped in commercial, office and industrial areas, in the Zoning Ordinance.

2. The City should make an effort to maintain open space corridors along appropriate streets. This would require very little additional right-of-way and could be implemented through the Subdivision Ordinance.

3. Establish the requirement of open space dedication or cash contributions from developers of residential property.

4. Increase requirements for landscaping and intensify review of site plans to assure that landscaping is adequate and appropriate.

Objectives: Agriculture

1. Agriculture is a basic social, economic and environmental asset, and the City should encourage its survival.

2. Prime agricultural lands should be mapped and conserved as long as agriculture is a financially feasible use.

3. The functional and visual integrity of rural and agricultural areas should be maintained.

4. Residential development in rural areas should be limited in accordance with well thought out guidelines which balance the productivity of land, the financial needs of landowners, the future needs of homeowners, and the integrity of the area.

5. Residential lots of less than 3 acres should be discouraged; residential lots of 3 to 10 acres may be accommodated, but should be distributed, arranged, and designed in a manner that blends in with the rural landscape and does not result in major subdivisions of land and concentrations of buildings.

IMPLEMENTATION TECHNIQUES

Farming, agribusiness, forestry and horticulture have always been among the most important industries in the City of Chesapeake. These uses occupy most of the remaining undeveloped land in the City and covers a land area larger

than any other commercial or industrial group. A substantial percentage of the City's jobs and income have been generated from these activities. Distinctive features to support these industries include highway, rail service, airports, utilities and a deep water port; all assets of the City. With its mix of agriculture, agribusiness and close proximity of farmland to consumers, Chesapeake can maintain as a viable producer of food and fiber in a regional, national or international market.

Chesapeake with 56,000 acres of crop land is ideally suited for the primary crops of corn, wheat and soybeans. Land which has been termed "prime land" and a moderate climate have produced some of the highest average yields for soybeans and corn in the state.

The existence of agriculture in the City has been clearly established by a basic pattern of physical constraints. It simply exists wherever soil conditions are supportive and absent where there is poor drainage, unsuitable soils or replacement by urbanization.

By national standards, prime farmland is the best land for farming. Its flat or gently rolling acres is susceptible to little or no erosion. In addition, prime land has a soil quality, growing season and moisture supply that assures high production of food and fiber at a minimum cost.

Prime farmland is also the easiest and least costly land to develop. Frequently it is these lands that are used for houses, business, highways, recreation, airports and industry. Sometimes this development takes place in a "leapfrog" or "buckshot" type development which breaks up or isolates these lands. To create new agriculture land may have unacceptable cost, including social, environmental and economic ones.

A map from the late 1800's of Norfolk County shows the location of farms and forest. While most lands then were forested, a pattern emerged which generally exists today of an existing agriculture activity occurring where said conditions are supportive.

In Western Branch, the farmed areas bordered the Western Branch of the Elizabeth River and its tributaries, slowly giving way to development over the past twenty-five years.

Deep Creek Boroughs farm activity is mainly contained on its eastern boundary with the Pleasant Grove Borough. Large acreages have been cleared on the west bank of the George Washington Canal, north and south of the Feeder Ditch. These clearings have taken advantage of some of the Dismal Swamps highest elevations.

The Borough of South Norfolk is predominantly urban and should sustain this land use characteristic.

Much of Washington Borough was cultivated. Since the mid 1970's its land use has seen a transition to a rapidly expanding urban corridor moving from north to south. An orderly progression should continue as City services are provided.

The major land use category in the southern portion of the City is still agriculture. Development in these areas has been low density and scattered. No specific areas of growth have been designated nor have any public utilities been scheduled. These are the areas which need to be carefully studied before development is endorsed.

Planning to preserve prime farmland is an important issue. To assure a means of reasonable review in potential development proposals, an up-to-date mapping system must be maintained. This objective can be met by:

- A complete set of current USGS maps;
- Five year aerial photo flights
- A program to integrate delineated farmland and soil information on 200 scale planimetric or topographic maps independently or on overlay.

Historically, the urbanized and rural sectors of the City have been mutually dependent economically. The contribution of agriculture to society has been assessed mainly from the standpoint of production of food and fiber. But, there are other key components which affect the balance and harmony of land use for a lot of people. These are the parts of the rural sector to which the senses and psyche react. The aesthetic quality of an environment which produces uncluttered, unspoiled and attractive roadsides, fields, and woodlands; areas for participating recreation; habitat for wild animals; and natural areas for solitude and understanding of natural processes. Qualities of the rural environment are a definite consideration in maintaining the compatibility of a rural urban land use pattern.

Success in achieving these qualities can be met by consistent policy statements or ordinance to:

- Protect and enhance the productivity of croplands and prevent soil erosion;

- Guard against despoiling the earth with toxic waste;

- Preserving open lands to help maintain local water supplies by absorbing precipitation and transferring it to the ground water system;

- Maintain and improve the condition and appearance of all construction.

- Maintain and create pleasant developments, open space, highway rights-of-way, scenic vistas and other immediate surroundings through localized and grand scale landscaping.

Typical in all parts of the country, with the City of Chesapeake being no exception, are two patterns of urbanization. One is the suburban or fringe development adjacent to the older urban areas. The second type is the noncontiguous or "leapfrog: development which takes place in a scattered or "buckshot" pattern. When planning for the agriculture/rural areas, three basic criteria area are used: halting urban sprawl; minimizing expensive public services, and preventing damage to environmentally sensitive areas.

Scattered development causes a rise in values and taxes, disrupts other open space values such as visual harmony, results in incompatibilities, increases the cost of services to the City, increases air pollution, road usage, energy consumption, etc.

To minimize these negative aspects when considering a transition of agriculture to some other use, certain guidelines should be applied during the review stage. Generally, it would not be recommended that lands be removed from agriculture classification unless:

- The size and shape of the land area is impractical or impossible to cultivate;

- Public services are available or in close proximity and the areas is adjacent to a similar established district.

- Activities existing or planned on adjacent properties are incompatible with the agriculture use of the areas.

- Agriculture is no longer a viable use for the area;

- A change in land use would not be in conflict with adjacent agriculture uses;
- Soil conditions cannot be overcome;
- The proposed use would not require services the local government would be unable to provide.
- The development minimizes the amount of land to be removed from cultivation.

Agriculture land is popular with developers. Cropland is already cleared for site engineering. It usually has good drainage and topography and can be assembled easily in large tracts. Further, it is plentiful just beyond the urban fringe, making it cheaper than raw acreage in areas already partially developed.

These and other factors encourage the farmer to sell his property. Many farmers only substantial asset is real property. When he gets close to retirement, the farms' value becomes a "pension plan."

Local governments usually attempt to save rural land by zoning it for large lots. Through this type of zoning, government hopes to minimize development, restrict services and preserve open space.

The Basic Policies for the Comprehensive Plan of Chesapeake adopted by the City Council recommends that lots of less than three acres should be discouraged; that lots of three to ten acres may be accommodated, but that these developments be designed in a manner to blend with the rural landscape and not result in major subdivisions and concentrations of buildings.

There are alternatives which may be explored to provide for the preservation of rural areas, such as:

- Conditional uses;
- Multiple zones;
- Review by criteria;
- Reduction in taxes for farm investment;
- Purchase of development rights;
- Transfer fee plan;

- Active farm with Homeowner's Association
- Performance zoning.

This is by no means an all inclusive list. The topic of preservation of rural areas is very broad and complex, therefore, a number of avenues should be examined for their own merit.

It should always be remembered that farmers deserve and must receive every possible change to succeed, for agriculture is still the economic backbone of this country.

COMMUNITY FACILITIES

Community facilities are provided by the City, other local governmental agencies, institutions and non-profit organizations, and in certain cases, profit-making organizations and real estate developers. They include municipal buildings, educational facilities, libraries, parks and recreational facilities, cultural arts facilities, public safety, hospitals, and certain other facilities which strongly influence the health, education, and welfare of the community and its residents.

GOALS:

An array of public and quasi-public services and facilities which provide for the health, well-being, and personal development of residents of all ages.

Objectives: Municipal Buildings

1. The Civic Center in Great Bridge shall be the focal point and campus for the legislative, administrative and judicial functions of municipal government.

2. Consideration should be given to the distribution and location of certain administrative activities elsewhere in the City for the convenience of its citizens. To the extent possible, these activities should be coordinated in leased or publicly-owned centers.

IMPLEMENTATION TECHNIQUES

It is the goal of the Land Use Plan to provide City services in the most efficient and effective manner.

Like any business, the City is concerned with providing the most services with greatest amount of efficiency and effectiveness. In order to do this, it will be necessary to periodically update building maintenance and operating procedures. Recognizing this fact, the City commission the study of space needs, Municipal Center Master Plan, for the City's administrative offices, which was finished in February 1986.

Based on population projections (1985), program development for the Municipal Center called for an additional 188,971 net square feet of administrative office and courtroom space. The existing center contained only 116,293 net square feet. With the addition of central services, circulation and other required, nonfunctional space, the Chesapeake Municipal Center was projected to need a total of 473,928 square feet. In addition to building area, the Center will require over 2,300 parking spaces.

The new Municipal Center Master Plan identified the following concerns in the modernization of the Civic Center:

A) Provide for all needed space in a realistically phased plan.

B) Group Similar functions.

C) Provide a proper "image".

D) Unify the campus around the central axis.

E) Unify building materials.

F) Improve accessibility - pedestrian and vehicular.

G) Preserve "green space".

H) Provide a framework for future expansions.

Implementation of this plan is centered around a five phase building plan. The first phase, which is centered around a new 133,500 gross square feet Administrative Building and a new Juvenile and Domestic Relations Court, is being completed at this writing. Further implementation of the Municipal Center Master Plan is recommended in order that expanding services may be accommodated more efficiently.

Where possible, consideration should be given to the distribution and location of certain administrative activities elsewhere in the City for the convenience of its citizens. To the extent possible, these activities should be coordinated in leased or publicly-owned community centers. Activities which might qualify for such grouping are distinguished by their extensive involvement with the public. Such activities might be real estate, treasurer, libraries, various park and recreational activities, voter registration, and various other public safety activities. These activities might be consider for expansion in a "mini-center" concept involving the planning of new and old school sites. Also, activities such as these should be encouraged to locate in areas with high public usage, such as shopping centers and libraries.

The ability of City government to provide the greatest amount of services in an effective and efficient manner is influenced by the arrangement of working conditions. In implementing its Municipal Center Master Plan and providing decentralized services to its citizens, it is hoped that the greatest amount of service at the least cost will be the end result.

Objectives: Education:

1. Existing and new public schools should be provided in attractive and safe locations readily accessible by students on foot wherever possible, and in a manner that is consistent with the rate and pattern of residential development.

2. The environment of public schools, especially elementary schools, should be protected from the adverse impacts of non-residential uses and heavy traffic.

3. School sites should be identified, reserved and acquired as early as possible to guarantee appropriate locations as reasonable price.

4. School sites should be planned to enhance the public educational program, provide opportunities for recreation, preserve desired open spaces, enrich the beauty of the building and grounds, and where appropriate, encourage the joint use and funding of capital improvements.

5. Schools should be located near or in conjunction with parks, libraries, and community centers consistent with the primary functions of each.

6. Schools should be located to minimize serious distractions from study and classroom activity.

7. Schools should be located on ground which is relatively level but well drained, and which has the capability to support the necessary structures.

8. Chesapeake Public Schools guidelines for minimum site size are:

   a) Elementary site - 15 acres
   b) Junior high site - 40 acres
   c) Senior high site - 50 acres
   d) Elementary/junior high campus - 45 acres
   e) Primary/intermediate campus - 30 acres
   f) Junior high/senior high campus - 85 acres
   g) Elementary/senior high campus - 65 acres
   h) Elementary/junior high/senior high - 110-115 acres

9. Educational facilities and services for the handicapped and other special groups should be appropriately provided.

10. The Tidewater Community College should be encouraged to prosper and grow at its Bells Mill campus, and to provide classes at other convenient locations when appropriate.

11. The attraction of other public or private college and universities, or extensions thereof, should be strongly encouraged and aggressively pursued.

IMPLEMENTATION TECHNIQUES

The provision of adequate educational services is one of local government's greatest responsibilities. Land use planning has its greatest influence upon primary and secondary educational services through the location of future school sites. Like planning for future business or residential areas, planning for the location of new school sites is designed to maximize use of land and quality of design, and improve spatial distribution of activities. The above goals for school planning are intended to enhance the educational process for all citizens, preserve and increase open space, and foster community spirit through an array of neighborhood activities, whereby the school is the central headquarters.

Land use planning's effect upon educational planning principally evolves around site selection and building design. Site selection involves choosing a parcel of land that will advance educational attainment of a population while providing opportunities for recreation, beautification of grounds, preservation of open space and encouragement of joint use and funding of capital improvements. Land use criteria advancing such goals are:

a) Advance purchase of sites before land speculation;

b) Buildings should be designed to be architecturally harmonious with the surrounding neighborhood;

c) Enhancement of building and land through landscaping;

d) Sites chosen should reflect the City's growth and, as much as possible, minimize environmentally dangerous and unpleasant sceneries such as:

   1) busy highways and interchanges;
   2) areas of intense noise and pollution;
   3) areas of poor drainage.

e) Design of school parcel should encourage multiple activity usage of grounds;

f) Sites should follow minimum size guidelines as established by the City of Chesapeake Public School System;

Advanced land acquisition of school sites will help to guarantee adequate locations for needed for school sites at a reasonable price. For all future school sites, it is recommended that the School Board (a) plan for stable school zone boundaries, (b) revise new construction plans annually, (c) project new construction requirements one decade in advance of need, (d) require all new school sites to be unencumbered by restrictions and free of easements that limit the school system's ability to fully use the site, and (e) plan for campus sites (sites which will house more than one school) wherever possible.

Due to the fact that a significant amount of future residential growth will involve usage of the rezoning procedure, this procedure should be utilized to secure adequate and appropriate school sites within or around a development. When a rezoning application is submitted and the proposed development(s) cause the need for new schools, developers should be encouraged to dedicate or donate school sites within or around their development to the City (School Board). Reservation or dedication of school sites by residential developers will result in maximum site usage by the Schools if the following recommendations are followed:

a) Identification of site locations before finalization of the rezoning application. This will aid in the determination of site size, location and general appropriateness;

b) All off site improvements to the site including water, sewer, drainage, and road improvements necessary for a school (or schools) to operate shall be paid for by the developer. These improvements should be finished by the first third of development is completed (as determined by building permits issued);

c) The school system will pay only the price of raw land where reserved sites are concerned;

d) All sites should be fronting streets with at least 60' right of way in order to provide efficient transportation flow.

One of the overall objectives of the school system is to locate schools on ground which is relatively level but well drained, and which has the capability to support the necessary structures. Regarding sites reserved or dedicated by residential developers, the following is recommended:

a) Before any action by the Planning Commission or City Council, the developer shall provide the school system with a topographical map of proposed site;

b) Prior to Planning Commission or City Council action, the developer shall provide the school system with soil borings from locations specified by the school system. The School system will indicate sites for soil borings on the proposed school site (at least two borings from each probable building site, and four from the parameters of the (site).

c) The determination as to whether a site is buildable, meaning that it will not cost more in site preparation than it would cost to buy a more buildable site elsewhere, shall be made before any action by the Planning Commission and City Council. Buildable sites will also be interpreted to include consideration of neighborhood characteristics, and if those characteristics are conducive to educational learning and other community activities. The determination of buildable sites regarding neighborhood characteristics should be a joint project between the Planning Department and School Board before any Planning Commission or City Council action.

d) Once a buildable site has been identified and approved, the developer shall not use the site for the dumping of waste materials (such as soil, trees, stumps, torn up pavement, etc.) nor strip the site of top soil without the written consent of the school system. Significant change to the development plan should also require a re-examination of the project by the Planning Department, Planning Commission and, if necessary, City Council.

Building design criteria is generally concerned with insuring program development and operating mode effectiveness through proper architectural achievement. It is recommended that school buildings be designed to:

a) Accommodate various types of programs that enhance the educational curriculum and promote community participation. The basic instructional, administrative, and extracurricular activities of the School System should receive priority in school design;

b) Be free of safety and health hazards;

c) Promote ease of maintenance;

d) Accommodate the handicapped by allowing all students to participate fully in accordance with their ability;

e) Be in architectural harmony with the surrounding neighborhood.

In the design of new educational facilities, it is a goal of the School Board to promote cooperation of services among differing governmental units. The "service area" school is regarded by many educational experts as the successful school. By being the general center of activities within a service area, the school becomes a focal point. It therefore is necessary to consider the plans and programs of other community agencies which, in the course of their operations, acquire land areas. Park and recreational boards, community planning agencies, libraries, etc. have program planning agendas which in many cases can be merged with school plans to maximize resources and create a campus effect of municipal services. In the case of Parks and Recreation, joint use of site areas will often prove possible, desirable, and have a positive effect upon the provision of educational and recreational services to citizens.

The use of "service area" schools seeks maximization of racial integration within the School System. Racial integration should be a goal in the locational criteria of new and/or remodeled schools. The placement of any school site should not adversely affect racial integration.

In order to readily achieve the goal of "service area" schools in Chesapeake, it is proposed that a citizen's task force be established to study the community use of school facilities, explore with community agencies the need for a shared indoor track facility and swimming pool in the City, and explore the feasibility of shared stadium facilities among the high schools of the City. Where appropriate, the placement of City services should incorporate a campus effect. Such an effect would promote ease of service to citizens and cooperation among different City agencies in their planning areas.

The provision of educational services is probably local government's most visible service. This is because communities tend to establish emotional bonds to schools

located closest to their neighborhoods. Such bonding of schools to the surrounding area is developed through the multi-faceted use most school buildings receive. While the provision of educational services is the primary goal of any school, school buildings are often used to house activities serving the needs of the immediate and surrounding neighborhoods. These activities may be an extension of other services offered by the local government, such as parks and recreation, or by a private entity providing needed community services. Land use planning in Chesapeake seeks to continue the bonding of schools to neighborhoods and promote quality education through proper land siting and, to a lesser degree, building design.

Objectives: Libraries

1. Library services and facilities should be expanded to serve the needs of a growing population and business community. The following standards for Virginia Public Libraries are recommended: (a) 0.6 sq. ft. of building space per capita in each service area; (b) 1.5 sq. ft. of parking space per capita in each service area; and (c) 1.0 handicapped space per 25 parking spaces.

2. The Headquarters Library should be expanded to provide adequate space for movies, exhibits and other programs that are part of the library's service.

3. Area libraries should be conveniently and centrally located in the areas they are intended to serve, including a new Greenbrier Library and expansion of, or a new facility for, the Russell Memorial Library in Western Branch.

IMPLEMENTATION TECHNIQUES

This report represents an update of a report completed in January, 1974. This report reflects the passage of a $10.6 million bond referendum in November, 1988, and the renovation and 3,000 square foot addition currently being performed on the South Norfolk Memorial Library. Without the success of the bond referendum and the improvements at South Norfolk, the substance of this report would have been considerably different.

The purposes of this section of the Community Facilities Study are:

1. To establish guidelines and standards for library

service and facilities to serve as measures for the Chesapeake Library System;

2. To analyze the existing system in comparison to these criteria;

3. To develop a plan for correcting existing system deficiencies and meeting future demands for library service and facilities.

The quality of any library system is measured not so much by the number of books in the system or by the number of square feet of library space, but by the quality of services offered the public. Unfortunately, the quality of services is difficult to measure in that it is dependent on the resourcefulness, expertise, and enthusiasm of the library system's staff. Since it is impossible within the scope of this study to deal adequately with this more subjective service measure, we will concentrate on the more quantitative measures of system adequacy. However, it should be remembered that we are establishing standards for the library facilities that will make it possible for a conscientious staff to do an excellent job. Without these tools, the most resourceful staff could only do a marginal job of serving the public.

It should be noted that the staff of the Chesapeake Library System has exhibited through its performance, an ingenuity and willingness to experiment that has tapped to the utmost the physical resources available to the system.

To be successful, a library system must promote its services; it cannot be passive and generate satisfactory circulation or adequate utilization of its facilities and personnel. One necessary component of this promotional effort is a location that permits patrons to conveniently use the library in the normal course of their daily lives. To meet this objective, libraries and bookmobile stops:

1. Should be located where people are - in shopping centers, or in active community centers, not in parks, or quiet residential communities.

2. Should be placed where they are accessible to the greatest number of potential users - on major thoroughfares preferably near major intersections.

3. Should be located near the center of its service area, preferably near the focal point of several neighborhoods.

Each of these criteria is not coincidentally appropriate to commercial uses as well. Hence, the cost of sites meeting these criteria can be expected to be high. However, if service is the measure of system quality, the importance of these locational criteria cannot be dismissed simply on an added-cost basis.

1. Adequate off-street parking should be available on, or adjacent to, the library site. In general, there should be 1.5 sq. ft. of parking for each sq. ft. of library space per library, unless special intensive-use programs are contemplated.

2. Sites should be large enough to accommodate parking and landscaping, and permit expansion to optimum size, without encroaching on these site functions.

3. Library sites and bookmobile stops should be clearly marked with a symbol which allows for quick association with the library system.

Although numbers of books and square footage of building are not the proper sole measures of the library system, standards for these measures are instrumental in the evaluation of the Chesapeake system. The Virginia State Library & Archives has established a recommended standard between 2-4 books per capita. For a City the size of Chesapeake, a minimum standard should be 3 books. This criterion will serve as an adequate general objective for the system. The American Library Association has established an interior space standard of .6 square foot of library space per capita of population. This criterion should be acceptable as a general guideline for the Chesapeake system. Again, it should be remembered that these standards are not absolutes, but give only a general indication of system adequacy and minimum expectations for library service.

The location, site, square footage, and book stock criteria listed above are basic standards in accord with the American Library Association and State guidelines. However, the service criteria listed below are recommended to reflect the particular problems of the City of Chesapeake and the needs characteristic of its population:

1. Full service library facilities should generally be available within three miles of all major population centers, with auxiliary bookmobile stops or checkout facilities with 1 1/2 miles of the users both in the urban and rural section of the City.

2. Library facilities should be available on a schedule that maximizes user potential. In particular, weekday evening and seven-day scheduling should be implemented at all libraries.

3. As a general measure of service, the ratio of book circulation to book stock should approximate four to one.

Existing Chesapeake Library System

The Chesapeake Public Library System consists of the Headquarters Library and four area libraries.

Headquarters Library

The Headquarters Library is located on Cedar Road as a part of the Chesapeake Civic Center Complex. The current facility was built with federal revenue sharing funds in two phases, starting in 1971 and being completed in 1972. The Headquarters Library houses the library system administrative offices, the processing and automated services departments for the system, the Wallace local history room and the City Law Library in addition to other special and general collections.

As the Headquarters' collection and the population of Chesapeake has grown, the 18,900 sq. ft. Headquarters Library has become increasingly inadequate to fulfill the role of main library for the system. The bond referendum passed in November, 1988, will provide the funds to renovate and expand the Headquarters Library to 50,000 sq. ft. This renovation and addition will bring the facility up-to-date, allow the library system to expand the variety and number of services and materials provided and rectify many of the problems that presently exist with the building and parking.

The Headquarters Library is so located as to be near the geographic center of Chesapeake. As the main library for the Chesapeake System, its location enables the library to function successfully as the main library for the system, as well as serving as area library for the Great Bridge area. The location in the Civic Center places the library staff in a good position to interact with City Government and serve as an information source to the public.

During the 1987-88 fiscal year, the Headquarters Library housed a collection of 86,000 items and had a circulation of 238,333 for a circulation of book stock ratio of 2.77 per

capita, enough below the national standard of 4.0 to indicate inadequacies in the book collection in terms of meeting library users' needs.

In spite of the obvious space deficiencies in the current building, the staff has been able to take advantage of the interior's flexibility to offer a variety of children's programs, progressive reference service and an automated circulation system.

South Norfolk Memorial Library

The South Norfolk Memorial Library is located at the corner of Poindexter and Decatur Streets. Originally built in 1958, the library is currently undergoing a renovation and addition of 3,000 sq. ft. which will bring the total square footage to nearly 7,000 sq. ft. The South Norfolk Memorial Library is underutilized in spite of its central location near businesses and housing. The 1987-88 circulation was only 48,793 with a collection of 31,000 items. (turnover rate 1.57) This is not significantly different from the turnover rate in 1974. This history of low circulation could be attributed to such factors as:

1. The old building was crowded, in poor condition and unattractive,

2. The collection was largely out-of-date and did not meet the needs or interests of the community,

3. The library lacked the facilities to provide programs in an appropriate setting,

4. The South Norfolk business center had deteriorated and was not the center of activity it once was,

5. Johnson Park is not intensively used. It is, in essence, a mowed field with little to encourage active use by the public.

The South Norfolk Community is currently undergoing a revitalization of its neighborhoods. The renovated library will be a welcome enhancement to this undertaking and will serve as an example of the City's commitment to improving the South Norfolk Community.

The new library will include many improvements over the existing facility. These include:

1. A doubling of the number of parking spaces.

2. A literacy study tutoring room.

3. Attractive landscaping which will feature a readily visible sign.

4. Increased space for the collection.

5. A separate children's area.

6. A meeting room.

7. Optimal use of the available land by expanding out the front of the building. This leaves room in back for future expansion and park development as well as preserving some of the original structure.

Parthenia Russell Memorial Library

In 1967 Charles Russell donated land and money for the construction of a library in memory of his wife, Parthenia Russell. The library was completed in 1968. An addition to the library was made in 1984, which added a meeting room and additional shelf space. Located at 2408 Taylor Road, the Russell Memorial Library was easy to reach from all points of Western Branch due to its location on Taylor Road, a major thoroughfare, and the proximity to Portsmouth Boulevard. However, in 1987, the City re-routed Taylor Road which left the library located on a dead-end street. The re-routing made Russell less accessible which led to a stagnation in the library's circulation growth. With a collection of 34,000 items, Russell had a circulation of 79,611 and a turnover rate of 2.35 in 1987-88.

As the library added shelving to accommodate the growth in the collection, the seating available to the public declined to nine seats. The library is also unable to provide the reference or circulation materials required by the community due to inadequate space. The library shares its building and parking lot with a branch of the City Treasurer's office which causes parking conflicts during the Treasurer's peak tax season.

The shortage of space at the Russell Library has meant that many Western Branch residents are not able to find the materials they need without traveling to another library and the distance from Western Branch to Great Bridge does not always make it convenient to go to Headquarters. To resolve this pace and distance problem, a 14,000 sq. ft. replacement for the current Russell Library was a part of the 1988 Bond

Referendum. This new library will provide the services and materials needed to serve Western Branch, realizing this community is located the farthest distance from the Headquarters Library in Great Bridge.

The new facility will be built at a different location since the present site cannot accommodate a larger building. The ideal site will adhere to the considerations listed at the beginning of this report:

1. Be a location with high visibility, such as near shopping centers,

2. Be located where access is easy - on major thoroughfares preferably near major intersections,

3. Be located near the center of the library's service area.

Indian River Library

The Indian River Library is located at the corner of Old Greenbrier Road and Providence Road. The library opened its doors in 1978 as a replacement for a rented facility in the Indian River Shopping Center.

The Indian River Library has alternated, over the years, with the Russell Library as the busiest Chesapeake area library. With its location next to two schools, between two major roads and close to residential housing, Indian River is well located to attract a variety of patrons. In 1987-88, Indian River's circulation grew by 20% to 95,884. With a collection of 34,000, Indian River has a turnover rate of 2.82, the highest in the Chesapeake system. This substantial increase can be attributed in part to the growth in population of the Greenbrier area of the City. These residents currently do not have their own library, but use Indian River. The library is also well used by school children and visiting classes.

Indian River is an attractive library with a good floor plan. Although the pressure the library is feeling right now will be alleviated somewhat with the construction of the Greenbrier Library, Indian River still has needs which will require attention in the future. The most pressing of these are the expansion of the meeting room which is frequently too small to handle all the children wishing to attend programs and the expansion of the children's area to accommodate more shelving and books to meet the requirements of school children, preschoolers and visiting classes. Although the adult area still has some space for adding shelves without encroaching on available seating, the potential need for additional adult shelving space will require monitoring.

Major Hillard Library

Built in 1977, the Major Hillard Library serves the Deep Creek area of Chesapeake from its location of George Washington Highway, North. Major Hillard has the smallest collection in the Chesapeake system, and upon the completion of the new South Norfolk and Russell Libraries, will be the smallest branch in terms of square footage.

With the recent addition of a new circulation desk, bookcase end panels and overhead lights, Major Hillard has become a more attractive facility.

This area library has been underutilized in the past, with a circulation of 62,400 and a turnover rate of 2.31 in 1987-88. This could be attributed to:

1. The small collection size (27,000 items) potentially make the library unappealing to users who would like access to more resources,

2. The location on a busy highway away from residential areas making it difficult for children and pedestrians to visit,

3. The size of the library limits the number of additional materials which can be added to the collection, especially children's materials.

4. The meeting room is too small to accommodate all the children who would like to attend programs.

Greenbrier Library

As a result of the November 1988 Bond Referendum, funds will be made available to build a 10,000 sq. ft. library in the Greenbrier growth area. It is anticipated that the library will be built next to the police/fire complex, not far from the intersection of Volvo Parkway and Eden Way. This site has several advantages:

1. The location is in a residential area, yet located near a major intersection which will make it easy to locate,

2. Children and pedestrians can walk to the library without risk from traffic,

3. It will be a facility large enough to provide service to the nearby business community as well as traditional library service.

Bowers Hill Library

The November 1988 Bond Referendum also allowed for funds to purchase a piece of land in the Bowers Hill area for the eventual construction of a 10,000 sq. ft. library in the southern part of Western Branch. In addition to serving Western Branch, the facility will be accessible to residents in the northern area of Deep Creek, supplementing the Major Hillard Library.

Bookmobile Service

The City of Chesapeake ceased to provide bookmobile service in 1977 when the bookmobile was destroyed by lightening. The funds which had been set aside for a new bookmobile were instead used to construct the Major Hillard Branch Library in Deep Creek.

However, as a part of the November 1988 Bond Referendum, the expansion of the Headquarters Library is to include square footage for a bookmobile service room, a loading ramp conducive to loading a bookmobile and a shelter area for parking the bookmobile. It is planned to apply for a grant to purchase a new bookmobile with LSCA Grant Funds through the Virginia State Library & Archives.

The bookmobile will be used primarily to serve the parts of the City without easy access to a permanent facility and those residents lacking personal transportation. The rural southern and eastern areas of the City are notably without library service.

The preceding discussion has been an overview of the facilities of the Public Library System that serves Chesapeake.

In summary, it can be stated that generally the libraries in the public system are well located, with the few exceptions as noted. The passage of the November 1988 Bond Referendum and the renovation and addition to the South Norfolk Memorial Library will go far towards correcting the serious space problems that currently exist in Chesapeake. With its current population of 150,000, Chesapeake should have 90,000 sq. ft. of library space. It currently has approximately 38,700. With the completion of the new buildings, the City will have approximately 92,900 sq. ft.

The library system's biggest problem from a locational standpoint is that the existing permanent facilities do not provide the distribution of library services necessary to adequately meet the needs of the public. The bookmobile should help relieve this problem to some extent.

Recommendations

The preceding paragraphs established general guidelines for effective library service and analyzed the existing Chesapeake Library System in relation to these standards. This section of the report will recommend a program of action to ease the existing deficiencies in the system and to meet the demand for library services as Chesapeake continues to grow.

Before discussing specific recommendations for existing and new library facilities, general, system-wide recommendations are offered:

1. A system of signage be utilized to clearly mark the location of and route to libraries. Once a bookmobile is again in operation, stops should also be clearly marked and a schedule freely distributed.

2. Efforts should continue to build the book collection to 3 books/capita and to add such formats as compact discs, and audio and video tapes to the A-V collection. The addition of on-line data bases, CD-ROM and more materials in microform will enable the library to provide users with a broader range of more current information,

3. As new materials are added to the collection, serious efforts should be made to weed the collection of all the Chesapeake Libraries. All collections contain many volumes which are out-of-date, have not circulated in years and are badly worn or damaged.

4. A library requires sufficient staff to provide quality service during all hours that is it open. All of the Chesapeake libraries are currently understaffed. The system is also understaffed in terms of the ratio of professional to paraprofessional staff. The Guidelines developed by the Virginia State Library and Archives specify the number of staff a library should be based on the circulation and the number of hours the library is

open. Because of the vast geographic area of the City of Chesapeake, libraries should be open for full service for 68 hours a week, requiring a public service staff as follows:

2.5 FTEs at Circulation
2.5 FTEs for Reference
2.5 FTEs Children's
plus

one additional FTE for every 20,000 circulations after initial 20,000 (annual count)
one additional reference FTE for every 2000 questions answered per month after initial 2000

5. When the developers of residential subdivisions make proffers to the city of land for schools, dollars for roads, or other arrangements to offset the cost of providing City services, such offers should also include a parcel of land for the construction of a library.

6. All new libraries should be opened with a collection that represents a minimum of two books per capita for their service area.

Existing Libraries - Improvements and Additions

Headquarters Library

The Headquarters Library as it currently stands is plagued by serious deficiencies in space, technological currency and collection size and quality.

The 31,100 sq. ft. addition planned for Headquarters should go far to relieve these inadequacies and make the building a functional facility for years to come.

It is particularly important that attention be paid to such current deficiencies as:

1. Meeting room space.

2. Dedicated space for children's programs.

3. Room to house and display A-V materials.

4. Room to house the bookmobile and its collection and staff.

5. Quiet study areas.

6. Adequate electrical wattage and outlets.

Parthenia Russell Memorial Library

As with Headquarters, the construction of a new Russell Memorial Library will eliminate the problems that exist in the current facility.

In the design of the new Russell Memorial Library, special care should be given to making the facility as staff efficient as possible. Widely separated service desks, blind corners or many small rooms should be avoided. The library should be designed to include a separate, enclosed children's area, adequate study seating, shelf space for an ultimate collection of 100,000 volumes, an expanded reference collection and an extensive A-V collection.

South Norfolk Memorial Library

As with Headquarters and Russell Memorial Libraries, the renovation and addition to the South Norfolk Memorial Library should much to relieve the physical problems at this facility. To assure greater utilization of South Norfolk, the following suggestions are offered:

1. The Collection is out-of-date in many areas and contains many volumes which have not circulated in 10 years or more. The collection should be heavily weeded and replaced with current materials.

2. Consideration should be given to the community's composition when selecting materials:

   A) A large collection of large print books should be maintained for the elderly,

   B) The needs of the illiterate and functionally illiterate should be taken into consideration,

   C) Ethnic materials should be purchased in quantity.

3. Staff should make frequent efforts to take materials and services into community.

4. The composition of the community should encourage the staff to develop a program of services that is as innovative as necessary to meet the diverse needs of South Norfolk.

5. Johnson Park should be developed to become a vibrant open space and recreational center. The improvement of this park and its development as an active place would do much to improve the use of this library.

The population of South Norfolk Community is expected to remain relatively stable over the next 15 years. The 7,000 sq. ft. facility should be able to house a collection of around 40,000 volumes which, when supplemented by the collection at Headquarters and the other Chesapeake libraries, should serve the community successfully.

Indian River Library

Already an attractive well-designed facility, the Indian River Library does a good job of serving the Indian River Community. There is sufficient room to add shelving to allow for some expansion of the collection without compromising seating space. Planning should begin however to enlarge the facility within the next five years and bring it in line with other area libraries. Indian River currently has 5,900 sq. ft. An additional 1,100 sq. ft. would permit the expansion of the meeting room, which is frequently insufficient, and the children's book area, which cannot hold enough books to adequately meet the needs of all the students and classes that visit the library.

Since the Indian River population is expected to remain relatively stable over the next 15 years, the 40,000 volumes this library can be projected to hold once the addition is complete should prove sufficient, especially with the Greenbrier Library nearby.

Major Hillard Library

Soon to be the smallest area library in the Chesapeake system, Major Hillard should be earmarked for expansion within the next three years. Additional square footage would allow for the needed expansion of the meeting room and the adult and juvenile shelving areas.

Since the population in the Deep Creek area is expected to remain relatively stable over the next 15 years, this expansion would allow the library to house 40,000 volumes and hold the library in good stead, especially once the Bowers Hill library is constructed.

Greenbrier Library

As a result of its location in the fastest growing residential

area in Chesapeake and in the City's central business district, Greenbrier should be designed to serve multiple audiences: families and school children and the business community. This can be achieved by providing:

1. A children's area separate from the rest of the library to control noise.

2. A conference room in addition to a meeting room.

3. A substantial collection of business reference materials.

4. A librarian trained in business reference.

5. A children's collection that takes the school curriculum into consideration.

These items would be in addition to the traditional library collection and services.

Bowers Hill Library

Land for this library should be purchased as soon as possible, but construction can be timed to correspond with the completion of the Bowers Hill- Belleville connector and the construction of additional residential neighborhoods in the Bowers Hill area.

Bookmobile Service

In addition to the permanent facilities mentioned above, a bookmobile needs to be added to the system. The size and distribution of Chesapeake's population makes it impossible to serve all of the citizenry from stationary facilities. Bookmobiles serve an important role in providing intermediate service and establishing the needs for a permanent facility in a service area. The role of the bookmobile in extending service to the rural and under-served sections of the City and in meeting the particular needs of the elderly and other individuals with limited transportation resources cannot be overstressed.

Southern and Rural Eastern Chesapeake

Fifteen years from now, the population of Southern Chesapeake including Fentress and Hickory is expected to be the fifth highest in the City, ahead of Indian River and Deep Creek, which already have permanent libraries. The City should begin planning for a permanent library facility to serve both the

Hickory and Fentress areas. In light of escalating land costs, this purchase should take place in the next five years.

Crestwood

Although Crestwood's population is not expected to grow substantially in the next fifteen years, the area is sufficiently isolated geographically and in terms of access to personal transportation to warrant future consideration for a area library. The Crestwood area will be one area of Chesapeake to definitely receive bookmobile service. The response the bookmobile receives will be a determining factor in deciding when a permanent library facility is needed in Crestwood.

Conclusion

In terms of facilities, the biggest problem the Chesapeake Library System has is providing access to library services for all citizens. The improvements made possible through the South Norfolk project and the passage of the 1988 Bond Referendum will do much to relieve this, as will improvements to the Indian River and Major Hillard Libraries and the building of facilities in Bowers Hill, Fentress/Hickory and Crestwood. For the present, a bookmobile is a critical component in the library's efforts to provide service to those individuals without access to library service. Careful attention needs to be paid to how successfully one bookmobile is able to do this. The addition of a second vehicle may be necessary to adequately cover Chesapeake's 353 square miles.

Objectives: Parks and Recreation

1. The City should provide a parks and recreation system that will serve all segments of its population with a variety of facilities and programs necessary to meet expressed needs.

2. The location of local parks to serve residents, especially children, should be consistent with sound neighborhood planning principles; e.g., adjacent to elementary schools.

3. The City should develop a set of recreational standards more representative of Chesapeake than those prepared by the National Park and Recreational Association.

4. The City should consider the provision of a municipal golf course and one or more municipal swimming pools.

5. A site suitable for mass participation events, such as the Chesapeake Jubilee, should be provided and improved.

6. Northwest River Park should be maintained as a multi-purpose park and should be expanded or supplemented by other city parks along the Northwest River.

7. Community parks should serve 20,000 to 25,000 persons each; examples are Western Branch Park, Deep Creek Park, Great Bridge Locks Park, and Indian River Park.

8. The City's policies and guidelines for accepting parkland and recreational facilities from developers or other agencies should be updated.

9. The City's system of pathways, bikeways, and equestrian trails should be substantially expanded, including the following long distance trails:

   - Centerville Corridor Bikeway
   - Southeastern Expressway Bikeway
   - Rural Access Bikeway
   - Dismal Swamp Access Trail
   - Indian Creek Rural Access Bikeway
   - Indian Creek Science Bikeway
   - Shillelagh Road Bikeway
   - Tyre Neck/Bruce Road Bikeway

   and the following neighborhood trails:

   - Cooper's Ditch Hiking Trail
   - Greenbrier Bikeway System
   - Mt. Pleasant Bikeway
   - South Norfolk Loop Bikeway
   - Providence Connector Bikeway
   - Jolliff Bikeway
   - Indian River Hiking Trail

10. Recreational boating facilities should be expanded and improved along the South Branch of the Elizabeth River, along the Chesapeake and Albemarle Canal, and the North Landing River, and a system of scenic canoe or rafting trails should be established along small waterways.

IMPLEMENTATION TECHNIQUES

The Comprehensive Plan recognizes the very important role recreation plays in the provision of a healthy environment. Under the Land Use section of the Comprehensive Plan, the need to expand and preserve recreational services is used to justify increased emphasis upon open space preservation in all aspects of the City's development. Urban man's need for planned open space and increased recreational activities is documented by many behaviorists. Such persons maintain that our environment shapes and molds attitudes, producing tranquility or tension, pleasure or dissatisfaction. Our various attitudes are often expressed by our actions. If these attitudes are shaped by a preponderance of negatives arising from the environment, so will our actions result in a variety of anti-social behavior. The high crime rates found in the overcrowded sections of many central cities are partially attributable to a lack of urban man's contact with the environment. Modern development must always seek to provide man with adequate open space for various recreational activities. We must plan for adequate and usable parks to serve the present and future needs of Chesapeake's citizens.

In conjunction with the open space objective, the City's Comprehensive Plan places great emphasis upon a variety of park and recreational activities. The section on Parks and Recreation within the Comprehensive Plan is a guideline to the development of park services within Chesapeake. The Master Parks and Recreation Plan scheduled for completion within fiscal year 1989/1990 will discuss specific avenues for attaining objectives outlined in the Comprehensive Plan for Parks and Recreation.

The overall goal of the Parks and Recreation section is to provide a parks and recreation system that appeals to and will readily serve its population with a variety of facilities and programs. In order to accomplish this, sound community planning principles must be used. Continued cooperation between the Parks and Recreation Department and Chesapeake Schools is encouraged. Joint development and maintenance of the School System's playgrounds and athletic facilities is encouraged. Since placement of school facilities is reflective of the area population's accessibility to the school(s), joint development of athletic and playground facilities in a rural setting might satisfy the practical need for a neighborhood park. Where the City is characterized by urban and suburban growth, more definitive guidelines should govern the adequate provision of parks and recreational services and facilities.

In addressing what is adequate and what is not, the City has developed a set of recreational standards more reflective of Chesapeake than those prepared by the National Park and Recreation Association. The spring of 1989 park and recreational survey being conducted will be used to refine and update the citizens' park and recreational wants. After completion of the survey, the professional planning staffs of Parks and Recreation and Planning will design a program which reflects the citizens desires and incorporates basic park and recreational standards. To stimulate public participation into governmental decision-making, the Chesapeake Parks and Recreational Advisory Board will hear citizen comments and recommendations as they consider survey results and forthcoming plans.

Any study which seeks to establish parks and recreational standards particular to Chesapeake must incorporate a study of the City's current policy of accepting park land and recreational facilities. Up until the recent acceptance of park land from several developers, the City was not in the practice of accepting park land and recreational facilities from outside agencies and businesses due to budgetary concerns. However, with increased development comes increased pressure for open space. As much of Chesapeake's scenery has changed from open fields to new homes and businesses, the need for parks and recreational facilities has increased. The eventual trend toward smaller lots in the suburban sections of Chesapeake reduces the amount of available free open land with a natural environment. Moreover, the cost to purchase either developed land or land in a developed area for parks and recreation is very expensive. In order to secure future park land and to help satisfy current needs, the following steps are recommended:

a. Land banking for parks and recreation use. In order to acquire future park land, the City should investigate the purchase of large parcels of undeveloped land as dictated by growth trends and resulting park and recreational needs.

b. An establishment of a mechanism to provide for current park and recreational needs. While the City's new Open Space Amendment to the Subdivision Ordinance is adequate for the provision of future open space requirements in neighborhoods, it does not address the present deficit of available park land and recreational activities. Before Chesapeake proceeds to purchase large amounts of park and

recreational land, The ensuing Master Parks and Recreation Plan should establish the type of parks to be built by location and recreational activities per park type. The Master Parks and Recreation Plan should also establish a system of financially supporting the various improvements through user fees, general revenue funds, or a combination of the two options.

The expansion of the Chesapeake parks and recreation system should strive to meet in whole or part the following goals as established by the City's Comprehensive Land Use Plan. These objectives are:

a. The City should consider the provision of a municipal golf course and one or more municipal swimming pools.

b. Improve the Chesapeake City Park to better serve as a site for mass events such as The Jubilee, large fund-raising activities, or corporate picnics while also serving open space needs of individuals or small groups.

c. The Northwest River Park should be maintained as a multi-purpose park and should be expanded or supplemented by other city parks along the Northwest River. While park and recreational activities along the Northwest River should be maximized, all low lying sections (preferably raw land) are prime targets for the development of parks. Those areas which lie within the City's Conservation zones should be examined as to what part they can play in the development of Chesapeake's park and recreational service. In the waterways management section of the Comprehensive Land Use Plan, expansion of various boating and scenic recreational opportunities are encouraged.

d. Plan park land at the rate of 10 acres for every 1,000 persons. This standard incorporates neighborhood parks at 3 acres per 1,000 persons, community parks at 3 acres per 1,000 persons, and district parks at 4 acres per 1,000 persons. Suggested sizes for the various park types should be a minimum of 5 acres for a neighborhood park, 20 to 50 acres for a community park, and 50 to 150 acres for a district park. Service areas for various park types should be planned at approximately 1/2 mile for a neighborhood park, 3 to 7 miles for a community park, and about 20 minutes driving time for a district park. The Departments of Parks and Recreation and Planning have targeted the development of seven new and/or expanded community parks. These parks are as follows:

1. Western Branch Planning Unit - a park is planned adjacent to the Jolliff Woods subdivision. This park would be expanded as development proceeds in the area. In addition to the proposed community park at Jolliff Woods, an additional community park should be planned west of the proposed Bowers Hill/Belleville Connector.

2. Southern Chesapeake Planning Unit - there will be a need to establish a community park along Cedar Road between New Mill Creek and Deep Creek.

3. Greenbrier/Butts Station/Crestwood Planning Unit - several community parks are forecast for this area. It is hoped that the State borrow pit located off Byron Street and behind Wickford Townhouses may be eventually used as an attractive community

park site. Moreover, the establishment of a community park between Centerville Turnpike and Kempsville Road is forecasted.
A 20 acre park is to be developed off of Elbow Road as a part of the proposed Centerville Properties project.

4. Great Bridge Planning Unit - a community park in the proximity of Great Bridge High School will be needed.

5. Indian River Planning Unit - joint development between the School System and the Department of Parks and Recreation to develop school property along Dunbarton Drive and Military Highway into a community park. The current site possesses a man-made lake which would make a picturesque park environment.

In addition to the above community parks, various new and/or expanded neighborhood and district parks are planned. As with community parks, the demand for neighborhood and district parks is driven by population growth and trends. While the City's new Open Space Policy will help to provide for community and neighborhood parks, the size of district parks calls for a long-range commitment regarding the acquisition of land for future park use. Future district and neighborhood parks expansion are planned as follows:

a. Western Branch Planning Unit - although the City's Comprehensive Land Use Plan identifies Western Branch Park as a community park, given its size and expansion potential, this park should be targeted for district park status. Land surrounding the State borrow pit off of Jolliff Road should be investigated as a possible neighborhood park. Joint development by Parks and Recreation and Schools of a neighborhood park within the Western Branch educational cluster of schools off of Bruce and Tyre Neck Roads is encouraged.

b. Sunray/Camelot/Deep Creek Planning Unit - establishment of a district park adjacent to Moonyah area in Deep Creek. As part of the park development stage, efforts should be directed to having the old Gilmerton Cut declared a historic site. A neighborhood park is needed on the east and the west sides of George Washington Highway, north of Military Highway. A large amount of park land development opportunity is present in the form of shoreline access on land located along the Southern Branch of the Elizabeth River which should be analyzed for community park development. The City should encourage park land development in this area through joint park development with the commercial owners.

c. South Norfolk/Indian River Planning Unit - purchase of Indian River Park from the City of Norfolk. The size of this park should render it appropriate for district park development. Additional opportunity for park development lies with land adjacent to the Southern Branch of the Elizabeth River. Since much of this land is wetlands and is privately owned, joint development of park land, by the City through its Parks and Recreation Department, the Corps of Engineers, and the various commercial entities is encouraged.

d. Great Bridge Planning Unit - park planning in this area envisions development of the City's old land fill site as a district park. As an alternative to development of a community park at Great Bridge High, a series of neighborhood parks might be jointly developed by the City and the School Board.

e. Greenbrier/Butts Station/Crestwood- development of the Chesapeake Park (Jubilee Site) for mass participation events throughout the year should render it a park of district proportions. If the Greenbrier Planning Unit develops adjacent to the Virginia Beach City Landfill #2, the City should consider joint development of that landfill with Virginia Beach.

f. Southern Chesapeake Planning Unit - proposed development of a park along the Chesapeake/Albemarle Canal. This park would be a district size. The expansion of neighborhood parks around Hickory and Southeastern Elementary Schools is proposed in conjunction with population growth in the area.

In addition to the above proposed neighborhood and district parks, the City should study the feasibility of developing a district park south of Dominion Boulevard. This park should be located within the following boundary description:

> South of Dominion Boulevard extending to the northern edge of the wetlands, extending east to Shillelagh Road, and west to possibly encompass the Chesapeake Alternative School.

Development of park and recreational open space in the South Norfolk Planning Unit will be characterized by neighborhood parks. This phenomenon is due to South Norfolk's high percentage of urban development resulting in a shortage of underdeveloped land.

In addition to neighborhood park development in South Norfolk, similar park services are needed in the Western Branch Planning Unit. The growth of such parks in Western Branch should be generally concentrated around the Western Branch Educational Cluster off of Bruce Road and Tyre Neck Road.

The goal of expanding the City's park and recreational system should include substantial improvement to its pathways, bikeways and equestrian trails. Such a system might possibly include the following trail opportunities:

- Centerville Corridor Bikeway

- Southeastern Expressway Bikeway
- Rural Access Bikeway
- Dismal Swamp Access Trail
- Indian Creek Rural Access Bikeway
- Indian Creek Science Bikeway
- Shillelagh Road Bikeway
- Tyre Neck/Bruce Road Bikeway
- Cooper's Ditch Hiking Trail
- Greenbrier Bikeway System
- Mt. Pleasant Bikeway
- South Norfolk Loop Bikeway
- Providence Connector Bikeway
- Jolliff Bikeway
- Indian River Hiking Trail

As Chesapeake expands its parks and recreation system, it is recommended that recreational boating be expanded and improved along the Southern Branch of the Elizabeth River, along the Chesapeake and Albemarle Canal, and the North Landing River; supplemented by a system of scenic canoe or rafting trails along various small waterways. The type of boating access expansion will vary according to the particular waterway. Expansion of waterway recreational activities should also incorporate expansion of pedestrian shoreline access to the waterfront.

Assessment of Land Needs for Parks

Due to the fact that Chesapeake is becoming an increasingly urban and suburban environment, the need to insure adequate open space for future residents has and will continue to increase. The proposed Open Space Amendment is designed to require residential developers to either dedicate or reserve land for open space usage within their development. This amendment targets future park demand from new residential development. Existing park demand must be met through the City's various acquisition powers or through establishment of

TABLE A EXISTING NEEDS

GROWTH AREA	1/1/89 POP.	EXISTING NEED	EXISTING PARK SUPPLY	EXISTING NET NEED	RECREATIONAL FACILITIES	PARK NEED CONSIDERING RECREATIONAL FACILITIES
INDIAN RIVER	19456.30	194.56	8.00	186.56	141.38	45.18
GREENBRIER EAST	13098.40	130.98	70.00	60.98	13.60	47.38
GREENBRIER WEST	5405.60	54.06	0.00	54.06	32.24	21.82
CRESTWOOD	6070.20	60.70	10.24	50.46	32.12	18.34
SOUTHERN CHES.	14989.60	149.90	59.95	89.95	27.40	62.55 *
CAMELOT	7989.50	79.90	0.00	79.90	16.34	63.56
DEEP CREEK	12616.80	126.17	14.00	112.17	72.29	39.88
WESTERN BRANCH	22241.30	222.41	88.00	134.41	140.96	-6.55
GREAT BRIDGE	24249.50	242.50	14.00	228.50	166.43	62.07
SOUTH NORFOLK	26585.70	255.06	7.00	258.06	55.96	202.10
TOTALS:	152522.70	1525.23	271.19	1254.04	698.72	555.32

TABLE B FUTURE NEEDS

GROWTH AREA	TOTAL FUTURE NEED	NEIGH. PARKS NEED	COMM. PARKS NEED	DIST. PARKS NEED
INDIAN RIVER	23.90	7.17	7.17	9.56
GREENBRIER EAST	651.80	195.54	195.54	260.72
GREENBRIER WEST	48.94	14.68	14.68	19.58
CRESTWOOD	180.60	54.18	54.18	72.24
SOUTHERN CHES.	794.54	238.36	238.36	317.82
CAMELOT	39.67	11.90	11.90	15.87
DEEP CREEK	21.67	6.50	6.50	8.67
WESTERN BRANCH	387.39	116.22	116.22	154.95
GREAT BRIDGE	365.24	109.57	109.57	146.10
SOUTH NORFOLK	8.19	2.46	2.46	3.27
TOTALS:	2521.94	756.58	756.58	1008.78

Note: Future park needs were calculated by taking the various residential land uses identified in the Comprehensive Plan, and applying the various Park and Recreation standards per thousand persons as pertaining to the supply of neighborhood, community, and district parks. This future need identifies additional park land to be needed.

* See note section on Northwest River (2nd page, 2nd paragraph)

Existing net need was calculated by taking the January 1, 1988 growth area populations, and applying the various Park and Recreation standards per thousand persons as pertaining to the supply of neighborhood, community, and district parks. The net need was calculated by subtracting existing park acreage by park type and joint use recreational facility acreage from the existing need for that type of park land. Total net need was calculated by adding the amount of needed park land per type by growth area minus the location of existing parts.

If the Northwest River Park acreage is considered, park needs would be reduced. However, since the park is 765 acres, 59 acres are considered to satisfy Southern Chesapeake's existing district park needs. The remaining 706 acres are considered to be a regional park. Since a regional park is not a part of this study, the remaining 706 acres are not included in the calculation of various park needs.

The Northwest River Wilderness Area and the Mamie and Morris Fine Parks are not considered in the list of existing park supply. The Northwest River Wilderness Area is a conservation area reserved for wilderness study, hiking, camping, or hunting - and therefore does not fit the definition of an overall active park. The Mamie and Morris Fine Park is not considered since this is extremely low lying land that is frequently flooded and, therefore, inaccessible to the general public.

joint development ventures with other private or public entities. Existing park demand was calculated by employing the January 1, 1989 population per planning unit along with established standards for neighborhood, community, and district parks. Net existing park demand was computed by subtracting existing park supply from existing park demand. Existing park demand is shown in Table A.

Future park demand was calculated by taking the amount of land per residential land use type in each planning unit - as established by the Comprehensive Land Use Plan, estimating the possible resulting population, and applying established standards for the supply of neighborhood, community, and district parks. Existing park needs are shown on Table A and future park needs are shown on Table B.

Objectives: Cultural Arts

1. Programs and facilities should be established and provided to encourage public and private arts activities, including design arts and performing arts.

2. A program of art in public places should be established.

3. A program of business and the arts should be encouraged.

4. Consideration should be given to incorporating a cultural center serving the entire city into the regional mixed use complex recommended on the former Volvo Industrial Center in Greenbrier.

IMPLEMENTATION TECHNIQUES

In order for a municipality to be considered a "full-fledged city", the provision of certain services is considered a necessity. While a City must provide adequate police, fire, roads, drainage, schools, water and sewer services, the provision of cultural opportunities is also very important. By enabling its citizens to experience cultural opportunities not easily accessible in the past; the rich human-interests worlds of both the performing arts and visual arts are used to enhance peoples understanding of themselves and why they think and act as they do. More importantly, as citizens become more involved in the various cultural arts, their increased understanding of different living patterns allows them to better interpret the type of city they want.

The Fine Arts survey conducted in 1986 by Cultural Experiences Unlimited not only documented the need for increased Fine Arts programming, but specified the size and capability of a new Fine Arts Complex. This new complex would consist of 35,016 square feet (28,530 sq.ft. in the first phase and 6,486 in phase two) and would provide needed space for theater presentations, classroom instructions and various work areas. Once completed, the building will have the necessary space for classroom training in both the visual and performing arts.

The Comprehensive Land Use Plan targets the development of an art program in public places in Chesapeake. Actually, top artistic renderings (paintings) are displayed in the Chesapeake Public Library at the Headquarters Library in Great Bridge, which is currently the home of the Chesapeake Fine Arts Commission. Once the new Fine Arts Complex is completed, the type and amount of art exhibition at the library and other possible public facilities will need to be examined. The accessibility of the new Fine Arts Complex versus other public facilities such as libraries, should be a variable in determining where various art work is taught and displayed.

A futuristic arts program in Chesapeake involves the development of a program whereby the business and art communities are more closely aligned. In order to accomplish this objective, the Fine Arts Commission needs to institute a study examining how long-term business involvement could improve the presentation of various art forms in Chesapeake. The 1986 Fine Arts Survey found a basic core of support for the arts in Chesapeake's business community.

The City's Comprehensive Land Use Plan encourages the establishment of a cultural center, serving the entire city in the regional mixed use complex on the former Volvo Industrial Center in Greenbrier. However, the 1986 Fine Arts Survey, after examining a number of sites, recommended land located on the Chesapeake Campus of Tidewater Community College as the site for the Fine Arts Complex. Out of seven variables (accessibility, site acquisition, geographic/demographic location, existing site improvements compatibility with adjacent sites, staffing and funding) the Tidewater Community College site scored highest in the aforementioned variables.

The provision of Fine Arts in Chesapeake will take a significant step forward with the opening of the planned Fine Arts Complex on the Chesapeake Campus of Tidewater Community College. In order to augment the proposed Fine Arts Complex and to continue the growth of Fine Arts presentations, the Fine Arts Commission should initiate a study, with help from the Planning Department, as to how other public facilities

(Parks and Recreation, Schools and Libraries primarily) can best be used to display and teach various forms of Fine Art, and how voluntary funds from businesses within Chesapeake should be and can be used to bolster the Fine Arts program in Chesapeake.

Objectives: Public Safety

1. The Public Safety Building in the Civic Center shall remain the headquarter for police and fire protection, and should be improved as needed, or a new police headquarters should be constructed more centrally located to major population concentrations.

2. The Second Precinct building in South Norfolk should be expanded and rehabilitated.

3. Two new precincts should be established, one in the Deep Creek area and one in the Washington area, for combination police and fire facilities.

4. The existing Greenbrier Fire Station should include additional space for a police precinct facility.

5. Fire Stations 3, 5 and 11 should be replaced at more centralized sites; Fire Stations 9 and 10 should be consolidated and relocated on Military Highway near Cavalier Boulevard.

IMPLEMENTATION TECHNIQUES

Police Department

The Chesapeake Police Department currently has an authorized strength of 239 sworn Police Officers, 49 Civilian Personnel, and 33 part-time School Crossing Guards. These personnel comprise the major Bureaus of the Department, which are Uniform Patrol, Criminal Investigations, Support Services, Operational Support, and Administrative Services.

Police Department facilities are strategically located throughout the City, and consists of five (5) Precincts. The First Precinct, co-located with Police Headquarters, is in the Public Safety Building, located within the Civic Center Complex. From this facility the major bureaus operate their support staff, in addition to the Central Records, Identification, Communications, Crime Prevention, and Data Processing Sections. The First Precinct is manned by a desk officer on a 24-hour a day basis, and is responsible for

Weapons Permit Application processing in addition to normal report proceedings.

The Second Precinct is located in the South Norfolk area, and is also manned on a 24-hour a day basis. This facility is in need of numerous renovations to allow for its optimum usage. Four (4) of the City's thirteen (13) Police Patrol Districts operate from this Precinct.

The Third Precinct is located in the Bowers Hill area, on Homestead Road, and is attached to Fire Station #10. This facility is not manned on a continuous basis, and is used primarily for changing shifts, storing equipment, the writing of reports, and as a meeting place with the public.

The Fourth Precinct is located in the Pughsville area of Western Branch. This large facility, consisting of seven (7) jail cells, a locker room, and a general office and working area is also currently an unmanned Precinct. Several plans are now being reviewed in an effort to again staff this Precinct on a 24-hour a day basis, including a proposal to share this facility under a regional agreement with the Cities of Suffolk and/or Portsmouth. Recent economic and residential growth in the Western Branch Section has caused a review of the usage of this building to be re-examined, in an effort to better serve the community in that area.

This same type of economic and residential growth has mandated the opening of our Fifth Precinct in the Greenbrier Section. This Precinct, again an unmanned facility, is located within the same building as Fire Station #14. Currently, this Precinct serves as a change-over location for shifts, also providing a storage area and report writing facility.

The Public Safety Training Academy is located on Number Ten Lane, in the Deep Creek Section of the City. Here, training occurs on an on-going basis for Police and Fire Personnel; and is also available for use by other area law enforcement and armed forces personnel. This facility maintains an approved four (4) lane firing range, a repelling tower, a physical fitness gym/workout area, as well as numerous classrooms. Arrangements have been made with a private organization to allow for usage of the now un-occupied Volvo Production Plant area in the Greenbrier Section, as a Driver Training Facility.

The Police Department Assigned Vehicle Program, allowing officers to take police vehicles home and operate them for personnel use within the City, has expanded to approximately 130 participating units. This added Police Department

exposure, coupled with the availability of additional police units on the street at varying times, has proven again and again to be a beneficial program.

Another recently initiated program within the Police Department has been the assignment of two (2) Police Officers to the Drug Abuse Resistance Education (D.A.R.E.) Unit. These officers instruct on a daily basis within the Cities Intermediate School level on the dangers and consequences of drug use.

Other basic Programs and Units within the Police Department include:

1. Crime Prevention Unit.
2. Crime Line.
3. Auxiliary Police Unit.
4. Police Chaplains Unit.
5. Family/Sexual Trauma Unit.
6. Automated Fingerprint Identification System (AFIS).
7. Warrant Unit.
8. Youth Service Unit.
9. Water Patrol Unit.
10. Planning and Analysis Unit.
11. Computer Operations.
12. Traffic/Accident Analysis.
13. Police Officer Education/Development.

Recommendation:

1. The continuation of the Assigned Vehicle Program.

2. Continued review and emphasis on the re-manning of the Fourth Precinct, on a 24-hour a day basis.

3. An increase in the number of Police Officers so as to at a minimum keep pace with the City's increased population trends.

4. Continued Police Officer education emphasis.

Fire Department

The City of Chesapeake has 14 operating fire stations throughout the City with administration located in the Civic Center's Public Safety Building. In 1977, a study was made entitled "Chesapeake Fire Station Report, a Survey of Needs and Recommendations." The study was an in-depth look at the number of fire fighters, types of equipment, and plant facilities. For the purpose of this comprehensive report,

only minimum assessment will be made of plant facilities and personnel.

Aside from the administrative section, the Fire Department consists of Fire Prevention, Fire Suppression, and Emergency Medical Services (EMS). There are 240 uniformed personnel supported by 25 volunteer firefighters and 46 EMS volunteers. The volunteers go through extensive training to provide this service to the citizens of Chesapeake and should be commended for it.

Varying degrees of City services, the fire service no exception, are required with different types of land uses. Densely populated areas will require more fire service than a rural area with scattered development. Commercial areas will have higher building value than residential, but residential fires account for the greater hazard to life. Therefore, it is necessary to evaluate all major land use areas to determine what special problems may be associated with each.

Chesapeake is a unique city with its vast expanse of rural land and a steadily increasing urban corridor. But not unlike other cities, certain factors, when assessing the fire service provided to its populace, must be taken in account and weighed very carefully. Priority must be given at all times to water supply, with emphasis on adequacy and reliability. Company distribution with staff to man the apparatus are always a top item in a list of needs for any department. There should always be a continuous effort to assure that each station houses the latest and most advanced apparatus and equipment possible. Aggressive training and fire prevention programs will also help any department maintain the high standards that its citizens place on the quality of service expected.

Chesapeake's professional firefighters are housed at the following locations:

Station 1 - Relocated in 1969 from a Liberty Street location to 1201 20th Street.

Station 2 - Relocated in 1975 from Bainbridge Boulevard and Freeman Avenue to the 1100 block of Freeman Avenue.

Station 3 - Constructed in 1951 on Rokeby near its intersection with Military Highway.

Station 4 - Constructed in 1961 on a one-acre site at Lenore Trail and Battlefield Boulevard, North.

Station 5 - The oldest existing station. It was constructed in 1947 on land leased from the U.S. Government. It is located in the 100 block of Reservation Road adjacent to the Chesapeake and Albemarle Canal.

Station 6 - The original station was built in 1949 and replaced with a new facility in 1982. This residential-looking structure is located on a one-acre tract of land at Whittamore Road and Centerville Turnpike South.

Station 7 - This station was constructed in 1959 on a one-acre parcel of land in the 3300 block of Battlefield Boulevard, South. In recent years it has been renovated.

Station 8 - Built in 1960 on a one acre tract, this station is in the 200 block of George Washington Highway, North.

Station 9 - Constructed in 1960. It is in the 1400 block of Sherbrooke Road.

Station 10 - Located on a one-acre site in the 600 block of Homestead Road. Built in 1971.

Station 11 - Constructed in 1960 on a 0.86 acre site in the 2000 block of Dock Landing Road.

Station 12 - Built in 1968 on a two-acre site in the 4400 block of Taylor Road.

Station 13 - Completed on a two acre site at 2900 Benefit Road Road in 1973.

Station 14 - The newest station, it was completed in 1988 at Volvo Parkway and Eden Way.

With Chesapeake's expanding growth comes a need to look at the demands made of its Fire Department. The following are brief recommendations to take into consideration over the next five years, these are:

1. To assure that each station is manned with enough personnel to quickly and efficiently handle fire suppression needs.

2. The relocation of Station 3 to a more centralized location in its running area.

3. (Relocation of Station 5 has been approved for 1991.)

4. Relocate station 9 to the center of its response area.

5. Renovate station 10 to accommodate an additional engine company and medic unit. Provide spaces to handle increase in personnel.

6. Build an additional station in the Western Branch area, possibly at Jolliff and Portsmouth Boulevard.

7. Construct another station in the area of Dominion Boulevard and Cedar Road.

Migrating through the transition years from a volunteer to a paid professional Fire Department has not been easy. The City of Chesapeake's governing body in its 26 years, along with the dedication of its volunteer and professional firefighter, has maintained a high quality of service which guarantees an uncompromising future.

Objectives: Health Facilities:

1. Chesapeake Health Department clinics at the Department's headquarters building and on 20th street should be expanded as needed.

2. The Chesapeake General Hospital should be expanded to meet the need of area residents, and should be protected from adverse impacts of future nearby development.

3. Public or private outpatient and rehabilitation service facilities should be located to provide effective service and minimize impacts on the neighborhood.

4. A new nursing-care home should be encouraged in the immediate vicinity of the general hospital

IMPLEMENTATION TECHNIQUES

In order to ensure adequate health care to persons of lower economic standing, the public health clinics at the

headquarters building and on 20th Street should be expanded as needed. Currently the Chesapeake Health Department has plans to at least double the size of its clinic on 20th Street. While the specifics of the expansion have not been finalized, an architectural and engineering committee has been formed to investigate various building decisions.

While the Chesapeake Health Department services all persons regardless of economic standing, its clientele is primarily composed of working low-income persons with no health insurance. Approximately 25-40% of the patients receive free medical service, 20% pay the full fee and the resulting patient load pay for medical services based on a sliding scale as determined by family income. Given the generally low-income of persons receiving medical care from the Health Department, planning for future facilities is designed to enhance medical care (especially pediatric services) to Chesapeake's low-income citizens. In light of this fact, the Chesapeake Health Department has plans for a new clinic (would be the third public clinic in Chesapeake) to be located in the Crestwood section of the City. It is anticipated that such a clinic would reduce the patient load at the Health Department's Headquarter's clinic, and the level of low-income persons receiving necessary pediatric care would rise substantially.

A very vital part of any health care delivery system is the availability of hospital services. Citizens of Chesapeake are provided hospital services by a number of area hospitals depending on where you live in Chesapeake. Within its targeted service area, Chesapeake General Hospital (CGH) should be expanded to meet the needs of area residents, while being protected from the adverse impacts of future nearby development. Due to the population growth of CGH's service areas, CGH is currently expanding its physical plant by 166,096 square feet, and renovating an additional 66,935 square feet of existing space. This $30,000,000 expansion will provide 100 additional beds (giving CGH a total of 310 beds), correct various operational inefficiencies, patient safety problems, and various facility limitations inherent in the original design of the hospital; and drastically increase the inpatient and outpatient design capacities of the various clinical departments.

Protecting Chesapeake General Hospital from the adverse impacts of nearby future development will best be achieved by prohibiting incompatible land uses from locating close to the hospital. The primary tool to be utilized involves the zoning code. Through the use of various zoning techniques, land uses

incompatible with the operation of a hospital can be prohibited.

Given the growth of any particular area within Chesapeake, public or private outpatient and rehabilitation service facilities should be located to provide effective service with minimum disruption upon the surrounding neighborhood. Generally, these facilities should be located in areas targeted for commercial development.

Lastly, it should be the City's goal to encourage the establishment of a new nursing care home within the vicinity of Chesapeake General Hospital.

HISTORIC PRESERVATION AND URBAN RENEWAL

The legacy of Chesapeake's history and the potentials of its mature areas are also valuable resources for the future. They are the common denominators that bind together past and future generations of residents.

GOALS

The preservation, conservation, and rehabilitation of Chesapeake historic landmarks and mature areas.

Objectives: Historic Preservation

1. The City should prepare and maintain a comprehensive inventory of historic buildings, site, and districts.

2. The City should organize and implement a program of historic preservation.

3. The Great Bridge Battlefield Park should be preserved and improved as a visitor attraction.

4. The George Washington Canal should be preserved.

IMPLEMENTATION TECHNIQUES

Although Chesapeake is a young city (created in 1963), it is a city with a significant historical past. Within Chesapeake there are existing buildings and sites which allow active glimpse of life during much of our nation's past. Historical buildings within Chesapeake generally fall into three categories: a) 18th century gambrel roof houses, b) mid 19th century houses with side hall plan chimneys on one side along with the usage of Federal or Greek architectural detail, c) buildings which served as early 20th century schools, and d) selected developments which document Chesapeake's past in the early development of the waterways and railroads as major modes of transportation.

Preparation of an inventory of Chesapeake's historical buildings and sites was accomplished with the completion of the Reconnaissance Survey of the City Chesapeake, July 1987. The reconnaissance Survey is an inventory of buildings with significant historical meaning.

As shown, by the Survey, many of these historical examples are in good physical condition, and, in some cases, still performing their original duties.

A historic preservation program that would implement and coordinate suggestions made in the Reconnaissance Surveys should be implemented. These suggestions are:

A) Establishment of a preservation district or zone. Such a zone should have citywide application, while detailing a particular area's historic building standards.

B) Erection of a historic museum or historic house in a historic zone to display artifacts from Chesapeake's history.

C) Develop tax incentives for development in the commercial sectors of the South Norfolk Historic District.

D) Establishment of a scenic route through the Dismal Swamp Canal.

E) Placement of historic markers in historic neighborhoods.

F) Encourage the formation of an organization committed to historic preservation in Chesapeake.

G) The City should convene a meeting of interested community leaders to explain the findings of the Reconnaissance Survey and to solicit additional historic preservation ideas.

Historic preservation should include preserving and expanding the Great Bridge Battlefield Park. The land this park sits on is currently under the jurisdiction of the U.S. Corps of Engineers. The City, through Parks and Recreation, is currently trying to obtain control of this land. Moreover, expansion of park and recreational along the Chesapeake and Albemarle Canal, which the park abuts, are also being studied.

The preservation of the George Washington Canal should be an integral part of any City historic preservation program that might be established. Park and Recreation's plans to declare the Gilmerton Cut a historic site, and should be expanded to include the whole George Washington Canal. Again, as with the Great Bridge Battlefield Park, this land is currently under the control of the U.S. Corps of Engineers.

A historical district has been designated in South Norfolk and much work has been accomplished toward the preservation of buildings with historical significance.

It is strongly recommended that the City establish an architectural review board or committee whose duties would be to adopt historic district design guidelines, and to conserve those buildings and neighborhoods within our historical district and to establish other historical districts or designations throughout the City.

Objectives: Urban Renewal

1. Obsolete, aging, deteriorating, and underutilized mature areas should be mapped and inventoried.

2. A continuing program of conservation and rehabilitation should be maintained for assistance to such areas.

3. Compatible development or redevelopment of vacant and underutilized sites should be encouraged as an alternative to development of rural land and as catalyst for reinvestment in mature areas.

IMPLEMENTATION TECHNIQUES

Technically, the term "urban renewal" refers to the rehabilitation of mature, depressed areas of all kinds of land use activities. Since the issue of housing rehabilitation is addressed in the affordable housing section, urban renewal in this section of the Land Use Plan principally addresses the rejuvenation of older business areas within Chesapeake. Historically, urban renewal has been the mechanism by which the core areas of cities have been rehabilitated to provide attractive business and housing sections characterized by a mixture of land use activities. While Chesapeake is a new city with its recently-built thriving business and housing areas, there are mature areas, which once rehabilitated possess the potential to become a major business force attracting new shoppers and businesses to Chesapeake.

Before any extensive urban renewal program is contemplated, the City needs to identify areas needing rehabilitation. The Land use Plan identifies as an objective a study designed to map and inventory obsolete, aging, deteriorating, and underutilized mature areas in Chesapeake. Such a study would identify the various land use activities within set boundaries, along with their corresponding physical conditions.

A very vital part of an urban renewal program is a continuing program of conservation and rehabilitation to areas needing rejuvenation. As a part of renewing these areas, governmental investment per area will differ (esp. in the case of commercial interests) depending on the mixture of businesses within an area. Such aid can range from recruitment of viable, healthy businesses to invest in the area, to direct cash investments by a governmental entity to a program whereby preservation of historical areas is the goal. Regardless of the particular program or targeted area, commercial

revitalization pivots upon the formation of a private-public partnership which brings major developers, financial institutions, and community leaders together with elected officials and staff of a city.

Within a public-private partnership, it is incumbent upon each participant to fulfill their obligations to the union. Merchants must be committed to remain in the neighborhood, to reinvest, and to work with the managing organization. Local government as described above, should strive to implement various assistance strategies ranging from technical assistance, to the securement of funds for the program, to actual public improvements. Local banks are recruited as a part of financing strategy to make loans available for businesses and residents within the area. Most importantly, the surrounding neighborhood must support these revitalization efforts through their patronage of shops in the area, usage of professional services provided there, and attendance at special events held there. If the redevelopment activities are successful, and each participant fulfills its duties, then the targeted area will advance along the revitalization path.

As a catalyst for urban renewal in mature areas, the City should encourage compatible development and redevelopment of vacant and underutilized sites as an alternative to development of rural land. Implementation of such a policy would involve a mixture of economic revitalization and physical renovation of an area's businesses and homes. Renovation includes the rehabilitation of stores (and homes where appropriate), public improvements, and a variety of activities designed to enhance the mature area. Economic revitalization centers on catering the area to consumers' present demands....while helping to advertise the shopping area and entice new consumers to come visit the rejuvenated area.

Encouraging the development of mature areas is by its nature a preservationist objective. Therefore, if the City is to practice urban renewal, its land use policies must seek to preserve where possible and build where necessary. Although it is a housing benefit, given its preservationist orientation, the City would be encouraging affordable housing through rehabilitation of existing housing stock.

Urban renewal is a very old term used to imply leveraging of governmental funds and actions to develop or redevelop underutilized or declining areas. In order for urban renewal in any City to be successful, there must be extensive co-operation between the residents, businesses, and governmental units; with each participant successfully fulfilling their duties. Within Chesapeake, urban renewal could be advanced through the following steps:

A) Identification and mapping of declining areas.

B) Establishment of an active conservation and rehabilitation program to needed areas.

C) Encourage development of vacant or underutilized urban land.

D) Promotion of historical preservation.

PLANNING UNITS

Planning units are sectors of the city that exhibit unique characteristics and contribute to the city's quality of life in a special way. Planning units form the basis for "specific planning." At least seven such areas can be identified.

- I-64/Battlefield Boulevard activity center
- South Norfolk/Indian River
- Greenbrier/Crestwood
- Camelot/Deep Creek
- Western Branch
- Great Bridge
- Southern Chesapeake

GOALS:

A variety of living and working areas, each having a sense of place that together make up the City of Chesapeake.

Objectives: I-64/Battlefield Boulevard Activity Center

1. The function of this area is to be the primary employment, business and shopping area of Chesapeake, including activities of regional significance.

2. The character of the area is to be a relatively high density, mixed use complex of individual developments.

3. Land uses should be located and designed in close relationship to the transportation systems and facilities which serve them.

4. Although not a "downtown" in the traditional sense, the area should be linked together over time by an internal circulation system and by common design elements.

Objectives: South Norfolk/Indian River

1. The function of this area is twofold: (a) to provide a range of housing and living environments for those residents who prefer mature areas close to Downtown Norfolk and the Elizabeth River; and (b) to provide for economic development requiring access to a deepdraft coastal waterway and major railroad lines.

2. The character of this area is to be heterogeneous, and is to take advantage of its historic, architectural, and cultural diversity.

3. Revitalization and rehabilitation efforts should eliminate or reduce land use conflicts and enhance the organization and environment of residential neighborhoods and local business districts.

Objectives: Greenbrier/Butts Station/Crestwood

1. The primary function of this area is to provide a wide range of contemporary residential living environments supported by local businesses and community facilities.

2. The character of the area should reflect sound standards of suburban land planning and contemporary design, featuring higher densities near I-64, interspersed with public and private open spaces.

3. Special attention should be given to the design and appearance of Battlefield Boulevard as the spine of the area.

4. Waterfronts and wetlands north of the Chesapeake and Albemarle Canal should be preserved and enhanced.

Objectives: Sunray/Camelot/Deep Creek

1. The functions of this area are twofold: (a) to provide for a wide variety of industrial and commercial development in proximity to the Elizabeth River, Military Highway, the Norfolk and Western Railroads, and the Norfolk and Southern Railroad; and (b) to maintain and enhance a variety of housing types and residential environments in the George Washington Highway corridor.

2. Open lands and historic landmarks should be preserved and enhanced along Deep Creek and the Deep Creek locks.

3. Land use conflicts should be reduced, and appearance should be improved in the Military Highway Corridor.

4. Wetlands and hardwood swamps between the Dismal Swamp and the Norfolk and Western Railroad should be preserved.

Objectives: Western Branch

1. The function of this areas is to provide a variety of suburban and countryside living environments supported by appropriate retail, business and community services.

2. The character of this area should continue to reflect the natural amenities of waterfronts and woodlands with higher densities in the eastern part of the area and near Western Branch Boulevard, and lower densities west of the future Belleville Connector.

3. Existing and new development in the vicinity of Portsmouth Boulevard and Taylor Road should be planned as a mixed use "town center," strip commercial development should be strongly discouraged.

Objectives: Great Bridge

1. The function of this area is two-fold (a) to be the governmental center of Chesapeake; and (b) to provide a range of residential environments linked together as a countryside village or town, supported by limited retail, business, and community services.

2. The character of this area is to remain of lower density, and should reflect the historic fabric of the area and its synergy with natural resources and nearby rural areas.

3. Relationships to the Chesapeake and Albemarle Canal should be enhanced, including improvement of the Great Bridge Battlefield Historic Site.

Objectives: Southern Chesapeake

1. The primary function of this area is threefold: (a) to sustain agriculture and protect open space; (b) to provide for rural residential environments; and (c) to provide remote compatible sites for the U.S. Naval Airfield and the Chesapeake Municipal Airport.

2. The character of this area is to remain low density, rural, and natural--a complimentary contrast to the remainder of the City.

3. Generally, this area should not be served by public sewer and and water systems.

4. Country roads are to be preserved, traffic volumes minimized, and roadsides enhanced with natural vegetation.

5. Wetlands and hardwood swamps outside the Dismal Swamp should be preserved, and the water quality of the Northwest River should be protected from wastewater, and from siltation caused by stormwater runoff and erosion.

IMPLEMENTATION TECHNIQUES

The goals and objectives expressed in this section have been incorporated into the Planning Department's work program. This work program not only includes the planning unit studies but other components of the Comprehensive Plan. The three major studies scheduled for the next eighteen months are: the Great Bridge Study, the Western Branch Study, and a Parks and Recreation Plan. The priority of Planning Unit studies should be based on the urgency of needs resulting from development pressures on the particular areas or from needs that must be addressed to stabilize or improve existing conditions.

IMPLEMENTATION

Comprehensive plans are seldom self-fulfilling prophesies, no matter how closely they parallel market demands and/or citizen's desires. They require a coordination of public and private resources and actions directed toward their implementation, carried out in the spirit of community consistent with state statutes and municipal charters.

Like other municipalities throughout the United States and Virginia, Chesapeake must continually review and evaluate its capability to achieve its adopted goals, objectives, and plans and, when appropriate, modify or improve its implementation resources and procedures. In communities experiencing substantial or accelerating growth this can be a demanding exercise. Nevertheless, it is the municipality's responsibility to provide for the health, safety, and general welfare of its citizens. It is also the municipality's responsibility to carry out is obligations effectively and equitably.

GOALS

A coordinated "Growth Management System." effectively utilizing the resources and creativity of the public and private sectors in pursuit of common goals consistent with the Comprehensive Plan.

Objectives: General

1. The growth management system should include a variety of elements:

    - state and local legislation
    - general and specific planning
    - regulations and incentives
    - administrative techniques
    - fiscal management
    - education
    - communication networks
    - land acquisition

2. The growth management system should provide for appropriate means of public participation.

3. The City of Chesapeake should expand, strengthen, and coordinate its professional and administrative resources to efficiently and sensitively implement city policies related to growth and change.

4. The City should publish annually a report on the growth of Chesapeake, the status of the Comprehensive Plan, and the effectiveness of the growth management system.

5. The City's growth management system should be networked with other public and private agencies, such as the Southeastern Virginia Planning District Commission.

6. The City should sponsor, with other public and private agencies when appropriate, an education program dealing with growth issues in general and in particular with the Comprehensive Plan and the growth management system.

Objectives: Comprehensive Plan

1. A new Comprehensive Plan should be completed and ready for review by the Planning Commission and City Council in 1990.

2. The Comprehensive General Plan should be reviewed, and amended, if appropriate, no less than annually.

3. A program of "specific Planning" should be undertaken to supplement the General Plan; one high priority area for specific planning is the I-64/Military Highway activity center from Greenbrier to I-464.

Objectives: Zoning

1. The comprehensive revision to the Chesapeake Zoning Ordinance should be completed in 1990.

2. The revised zoning ordinance and map should be consistent with the Comprehensive Plan.

3. Consideration should be given to the consolidation of existing residential zoning districts.

4. Consideration should be given to the use of overlay districts for floodplains, airport noise and hazard impact areas, historic districts, critical highway corridors, etc.

5. Consideration should be given to the application of "conditional use" zoning techniques.

6. Consideration should be given to the rationale for phasing zoning map changes.

7. Consideration should be given to lands which, because of changed circumstances, should be rezoned.

8. Lands which have been zoned for development, but remain unimproved after a period of five (5) years, should be reviewed.

9. General policies related to the control of signs and billboards should be reviewed.

Objectives: Subdivision

1. The Subdivision Ordinance should be reviewed and amended to bring it into harmony with the Comprehensive Plan and the new Zoning Ordinance.

Objectives: Land Acquisition:

1. In order to achieve open space objectives and the conservation of critical natural resources, the City should formulate a program for the purchase, lease, dedication or other means of acquiring development rights in key parcels.

Objectives: Mid-Range Budget

1. The City should prepare and update annually a mid-range budget for a period of 3 to 5 years, including a projection of fiscal trends and a Capital improvements Program.

2. The Capital Improvements Program should be coordinated with implementation strategies of the Comprehensive Plan and growth management system. This document should be approved by the Planning Commission for its consistency with the Comprehensive Plan.

Objective: City Charter

1. The City Council should consider amendments to the City Charter that would enhance the city's legal authority and capability to manage future growth and change.

Objectives: Private Sector

1. The City should encourage private sector organizations to take an active role in sharing responsibilities for implementing the Comprehensive Plan.

2. The City should encourage private sector organizations, specifically those related to the real estate development industry, to sponsor events directed toward the "pursuit of excellence" in building and serving the City of Chesapeake consistent with the City's Comprehensive Plan.

IMPLEMENTATION TECHNIQUES

The City should fully utilize the resources of the public and private sectors so that an effective growth management system can be implemented. An effective growth management system would include regulations to control growth on Federal, State, and Local levels combined with incentives for the right kind of growth. The City should maximize public participation in

the growth process by providing communication networks and education programs designed to educate the public and proposed changes in land use or policy that would affect growth of the City. Studies and plans having influence on the Cities growth should have adequate public hearing, preferably in the communities they most affect.

The City should report annually on the status of the Comprehensive Plan and its effectiveness on the growth management system.

The major tools used to realize our growth management system are:

The Comprehensive Plan - This is part of that document and is now under review. The Comprehensive Plan should be reviewed annually and amended if necessary. Every five years the Comprehensive Plan should be evaluated as to its relevance to current problems and policies.

The Zoning Ordinance - The Zoning Ordinance is currently being drafted and will be consistent with the objectives of the Comprehensive Plan.

The Subdivision Ordinance - A new subdivision ordinance is currently being written to help implement the objectives of the Comprehensive Plan.

An ordinance for the acquisition of open space through development is currently under consideration, when adopted, this will provide much of our needed recreational open space. The Wetlands Board in conjunction with the Corps of Engineers and VIMS are charged with the stewardship of our wetland resources. The City currently has a conservation zone that has been applied to much of the land along the North West River, Chesapeake and Albemarle Canal, and the Dismal Swamp. The Chesapeake Bay Preservation Act will add substantially to the City's open space resources when it goes into effect.

The City Attorney's Office should prepare a list of City Charter changes that would enhance the City's ability to manage growth and change and to pay for some of the needs resulting from growth. The City should sponsor changes in State legislation that would enhance the City's ability to provide the necessary services for new growth.

The City should establish links of communication with the private sector that would bring the development community and the community at large firmly behind a growth management program. The Comprehensive Plan land the Land Use Plan are our primary tools for implementation. It is essential that the citizen at large believe that these plans are being adhered to in the political process.

Adopted
7/18/00

PROPOSED AMENDMENTS
TO THE
COMPREHENSIVE PLAN

PHASE II CBPA COMPLIANCE
CITY OF CHESAPEAKE, VA

WATER SECTION (Page 24)

4. Rigorous enforcement of the Wetlands, Sand Dunes and Subaqueous Land Guidelines developed by the Virginia Marine Resources Commission (VMRC) and the Virginia Institute of Marine Science (VIMS). These guidelines should be strictly enforced by local wetlands boards, as well as the VMRC and VIMS.

5. Rigorous enforcement of CBPA guidelines , specifically Resource Protection Area (RPA) and buffer zone requirements.

To reduce the potential threat of contamination from the improper use and handling of fertilizers, pesticides, and hazardous substances, the City should foster sufficient public awareness and education of these matters. The City should continue its efforts to educate businesses and residents about the proper use, handling, and disposal of these substances and their importance.

The remediation of all contaminated sediment from the Elizabeth River tributaries, which includes the Southern Branch, would take many years, if not decades. The costs of remediation will be substantial. This effort would require a partnership consisting of the neighboring cities that share the Elizabeth River tributaries, the state government, the federal government, and the private sector. The City should maintain a dialogue with the Elizabeth River Project, the neighboring cities, the U.S. Army Corps of Engineers, DEQ, and other public and private agencies which can contribute toward the cleanup of the Southern Branch. The City should contribute toward efforts involving the cleanup of the Southern Branch as far as available resources permit.

As a means to minimize nonpoint source pollution from stormwater runoff, the City should adopt a citywide stormwater management ordinance that addresses water quality protection. This ordinance should also address illicit discharges in the stormwater system and the handling of substances that are potentially harmful to water quality.

The removal of abandoned vessels and other derelict marine structures from the Southern Branch is a costly and lengthy undertaking. This effort requires a partnership consisting of the neighboring cities that share the Elizabeth River tributaries, the state government, the federal government, and the private sector. The City should maintain a dialogue with the Virginia Marine Resources Commission, the U.S. Army Corps of Engineers, the neighboring cities, and other public and private entities that can contribute to the removal of these structures. The City should contribute toward such efforts as far as available resources permit.

While all good water management eventually relates to the accompanying land use, management of the Northwest River is directly tied to allowable land uses on its shoreline.

WATER SECTION (Page 27)

3. Institution of Best Management Practices into the City's development process (Subdivision ordinance, Zoning Code, Use Permit Process, Building Permit Application, etc.).

~~4. Once the criteria for the Chesapeake Bay Preservation Area is enacted, the City should immediately begin to modify its development process to reflect The Chesapeake Bay Preservation Act's requirements. Although the Act requires adoption of the program's criteria within 24 months by localities, work to modify the City's development processes should begin immediately after adoption of the Chesapeake Bay Preservation Area's criteria.~~

4. All wetlands must be identified and mapped in the development process. The City's Chesapeake Bay Preservation Act Ordinance enforces performance standards and appropriate requirements for development proposals impacting wetlands in RPAs and RMAs.

5. Institution of incentive programs for the control of nonpoint source pollution.

While protecting the wetlands, the City and various regulatory agencies should require at least acre-for-acre replacement of lost wetlands due to a particular projects(s). Such areas might then be considered for conservation zoning (C-1). The City should incorporate this requirement in the Zoning Ordinance and/or in other development regulations to implement this policy. Such a requirement may either be applied Citywide or within a special overlay district where extensive wetlands are present.

In coordination with the Wetlands Board and appropriate city, state, and federal agencies, the Planning Department should prepare a study to identify potential sites for restoring wetlands and to explore the feasibility for carrying out their restoration. The study should also contain recommendations regarding implementation.

One of the Comprehensive Plan's objectives is the avoidance of adverse groundwater mining and contamination from man-made sources.

COMPREHENSIVE PLAN AMENDMENTS
PHASE II CBPA COMPLIANCE

WATER SECTION (Page 30)

The City will begin to implement the water quality objectives pursuant to the Chesapeake Bay Preservation Act upon the adoption of its local Chesapeake Bay Preservation Act program. This program involves the identification and designation of certain lands – Chesapeake Bay Preservation Areas [see page 30 (A)] that if improperly used or developed, may result in substantial damage to the water quality of the Chesapeake Bay and its tributaries. The program also involves the implementation and regulations and standards for land use and development in Chesapeake Bay Preservation Areas through the Zoning Ordinance, Subdivision Ordinance, Erosion and Sedimentation Control Ordinance, and the Comprehensive Plan (CP-91-1).

The above guidelines pertained to new development. Because South Norfolk is the oldest section of Chesapeake, South Norfolk is concerned more with redevelopment opportunities than new development restrictions. The City currently does not have any IDAs designated. Despite this, there are still opportunities for water quality enhancement through the revitalization process. Based upon background studies completed to date, the City should prepare an assessment of older developed areas such as the South Norfolk Area to determine whether any significant opportunity for water quality improvement via redevelopment exists. Such an assessment would involve two primary steps. The first is to identify areas where considerable redevelopment is likely to occur in the near future as a result of poor existing conditions and as identified under public and/or private redevelopment programs. The second is to determine whether water quality controls can be successfully employed and/or infrastructure-related improvements that would improve water quality can be constructed as part of the redevelopment process. This assessment should be prepared by the Planning Department with input from the Real Estate Assessor's Office, the Chesapeake Redevelopment and Housing Authority, and other appropriate agencies. This assessment, in conjunction with any proposed amendments to the Comprehensive Plan and/or the City Code should be submitted to the Planning Commission for consideration and for recommendation to the City Council.

~~The City has a responsibility to its citizens to guide land use and development in a fashion which recognizes that water quality and economic development are compatible and integrally related objectives. Pursuant to the Chesapeake Bay Preservation Act and Regulations, the City will study the issues listed below and consider any appropriate policies and implementation techniques that would enhance the City's Chesapeake Bay Preservation Act program through a work plan and schedule approved by the Chesapeake Bay Local Assistant Board. The scope of such study is to examine the relationship of the types of land uses relative to the goals and objectives of the Chesapeake Bay Preservation Act and Regulations and the City's Chesapeake Bay Preservation Act program.~~

~~The issues to be studies are as follows~~:

~~1. Physical constraints to development, including soil limitations, and soil suitability for septic tank use.~~

WATER SECTION (Page 30) Cont.

2. ~~Protection of portable water supply, including groundwater resources~~.

3. ~~Relationship of land use to commercial and recreational fisheries.~~

4. ~~Appropriate density for docks and piers.~~

5. ~~Public and private access to waterfront areas and effect on water quality.~~

6. ~~Existing pollution sources~~.

7. ~~Potential water quality improvement through the redevelopment of intensely developed areas. (CP-91-1)~~

Assuring adequate visual access is vitally important in Chesapeake, due to its flat topography which limits opportunities to enjoy scenic vistas.

COMPREHENSIVE PLAN AMENDMENTS
PHASE II CBPA COMPLIANCE

CHESAPEAKE BAY OVERLAY DISTRICT MAP [New Page 30 (A)]

Add the map entitled, "CBPA Boundaries in Chesapeake" as new page 30 (A). See attached map.

WASTEWATER COLLECTION AND TREATMENT SECTION (Page 42)

Except for private wastewater collection and treatment systems on individual lots in countryside and rural areas where soil and groundwater conditions are suitable, private wastewater and treatment systems should be avoided. The City should continue policies that discourage the use of septic systems throughout the watershed. The mandatory connection requirements described in Chapter 78 of the City Code should continue to be implemented. The land use plan in conjunction with the Zoning Ordinance discourages the development low-density subdivisions that require septic systems, except in the rural and countryside areas of the City, which are located at the southern fringes of the watershed.

It is recommended that the City of Chesapeake Health Department and the Department of Planning should review existing on-site standards, by which private wastewater treatment and collection systems are allowed, with the U.S. ~~Soil and Water~~ Natural Resource Conservation Service and ~~the U.S. Virginia Department of Health~~ other appropriate agencies to determine whether or not such standards and procedures should be amended in the future. ~~Such a meeting should occur and would effect the City's development standards such as its Subdivision Ordinance, Zoning Ordinance, Wetlands Permits, etc.~~ This evaluation should also determine whether alternative technologies offering superior water quality benefits are available at a reasonable cost. Such an evaluation, which should involve a study or report, may provide recommendations for amending certain standards to improve water quality. Such standards may involve the Zoning Ordinance and the Subdivision Ordinance, among other regulations.

Objectives: Stormwater Systems:

1. The first line of defense against adverse stormwater impact is to protect 100-year floodplains below 5 feet above Mean Sea Level in the Northwest River drainage basin, and below 8.5 feet above Mean Sea Level in all other parts of the City; woodlands, grasslands and other permeable areas; and the capacity of natural waterways, drainage channels, and swales.

~~3. Construction within the 100-year floodplain should either be prohibited, should provide compensatory storage, or should be constructed in such a manner with the first floor at least one foot above the 100-year elevation so as not to interfere with the floodplain capacity.~~

2. Construction within the 100-year floodplain and other floodplain areas should be minimized to the extent practicable, if not prohibited and be subject to compensatory storage where appropriate, and be required to have either the first floor above the 100-year floodplainor provide other appropriate flood-proofing measures.

~~4.~~ 3. In urban areas, separate stormwater sewer or drainage systems should be provided.

STORMWATER SECTION (Page 43)

It is these stormwater systems that are the first line of defense against adverse stormwater impact in protecting 100-year floodplains below 5 feet above Mean Sea Level in the Northwest River drainage basin, and below 8.5 feet above Mean Sea Level in all other parts of the City; such as woodlands, grasslands and other permeable areas; and the capacity of natural waterways, drainage chemicals, and swales.

For those areas identified as lying within the 100-year floodplain, or other flood-prone areas, construction should not interfere with the flood plain capacity. Such a goal may be accomplished by either preventing construction within the 100-year floodplain, providing compensatory storage, or ~~for~~ requiring construction of the first floor ~~in such a manner as~~ to be ~~provide at least on foot~~ above the 100-year elevation.

The City should seek to identify flood-prone areas associated with fluvial flooding, particularly along smaller tributary streams. The identification of such areas would involve a study by the U.S. Army Corps of Engineers with support from the City. The City's support would involve matching funds and sharing information. The study would focus on those streams, or on portions of them, where flooding problems currently exist and/or where major development activity is expected, as determined by the Departments of Planning and Public Works. The information to be obtained from such study would be utilized for the management of floodplains and stormwater. This information would also identify any potential flood hazard areas that are not covered under the current Federal Flood Insurance Program.

WATERWAY DEVELOPMENT (Page 59)

Such requirements enable the City to establish goals and policies per waterway and then institute land use measures to implement established policies.

~~Land Use Controls~~ Waterway Management

COMPREHENSIVE PLAN AMENDMENTS
PHASE II CBPA COMPLIANCE

WATERWAYS SECTION (Page 56)

Objectives: Waterways:

1. The City should cooperate with the U.S. Corps of Engineers and other appropriate public agencies to maintain the Southern Branch of the Elizabeth River, the Chesapeake and Albemarle Canal, and the George Washington Canal for waterborne commerce and/or recreational boating.

2. The City should encourage the provision of harbor, marine, port, maintenance and storage facilities associated with waterborne commerce and recreational boating.

3. To the degree practicable, the development of new waterfront access facilities, and the improvement of existing ones, should avoid adverse impacts to environmental resources that are important to water quality.

IMPLEMENTATION TECHNIQUES

WATERWAYS SECTION (Page 57)

Management of waterway development activities in Chesapeake is presently accomplished through a mixture of Local, State, and Federal agencies. Generally, the United States Army Corps of Engineers reviews development activities occurring in navigable waters and associated tidal and non-tidal wetlands; the City's Wetlands Board has jurisdiction over wetlands occurring in non-vegetated areas; and ~~while~~ the State's Virginia Marine Resources Commission has jurisdiction over waters and coastal areas located below mean tide (generally under water). The City also manages waterway development through the implementation of its local CBPA program. Varying standards of water quality are maintained through monitoring of spills and discharges into the waterways by the State Water Control Board and the U.S. Environmental Protection Agency.

WATERWAY DEVELOPMENT - LAND USE CONTROLS (Page 60)

The City currently practices performance zoning through its conditional rezoning process. Performance Zoning establishes performance standards which must be met by all uses within any district. Regular zoning procedures establish a hierarchy of uses and accompanying zoning district.

c) ~~Use of Overlay Zoning~~ Application of the City's CBPA regulations, including buffer area requirements and implementation of the City's Stormwater Management Ordinance in ~~certain~~ appropriate areas to protect water quality and manage ~~allowable~~ permissable land use activities.

d. Consideration of including the Dismal Swamp Canal trail and Feeder Ditch into a proposed regional scenic waterways.

CONCLUSION

The Planning Department, with the assistance from Parks and Recreation staff and the Economic Development Department, should conduct a water access study. The objectives for this study should be as follows:

- Evaluate the demand for the development of future waterfront access facilities.
- Evaluate potential conflicts posed by the development of future waterfront access facilities, particularly in regard to water quality, aquatic resources, recreation, economics, and general community welfare.
- Identify potential sites where necessary development of waterfront access is appropriate, both in regard to minimizing environmental impacts and to meeting community needs.
- Develop regulatory strategies to minimize adverse impacts to water quality and aquatic resources.

The results and recommendations of the study should be incorporated into a water access plan, which should be considered by the Planning Commission and City Council for adoption as a component of the Comprehensive Plan.

OPEN SPACE SECTION (Page 90)

5. The City should review and update its policy and guidelines for accepting open space land or facilities when offered to the City be developers or other agencies.

6. Where feasible and practicable, locate future parks, recreation areas, and open spaces adjacent to Resource Protection Areas (RPAs), particularly near tidal waters.

7. Minimize intensive land uses along RPAs, particularly near tidal waters, except those areas designated by the City for current and future industrial development.

IMPLEMENTATION TECHNIQUES

Many of the objectives for open space are addressed under the Park and Open Space section of this plan.

OPEN SPACE (Page 31)

4. Increase requirements for landscaping and intensify review of site plans to assure that landscaping is adequate and appropriate.

5. Locating future parks and open spaces adjacent to RPAs can be accomplished through the open space ordinance, the cluster provisions of the Zoning Ordinance, the acquisition of land by the Parks and Recreation Department, or a combination thereof. Where feasible and practicable, the City should use these practices to achieve this objective.

Objectives: Agriculture

PARKS AND RECREATION (Page 120)

10. Recreational boating facilities should be expanded and improved along the South Branch of the Elizabeth River, along the Chesapeake and Albemarle Canal, and the North Landing River, and a system of scenic canoe or rafting trails should be established along small waterways; to the extent practicable, the location and design of such facilities should avoid adverse impacts to environmental resources.

11. Where feasible and practicable, locate future parks, recreation areas, and open spaces adjacent to Resource Protection Areas (RPAs), particularly near tidal waters.

12. Minimize intensive land uses along RPAs, particularly near tidal waters, except those areas designated by the City for current and future industrial development.

IMPLEMENTATION TECHNIQUES

PARKS AND RECREATION SECTION (Page 128)

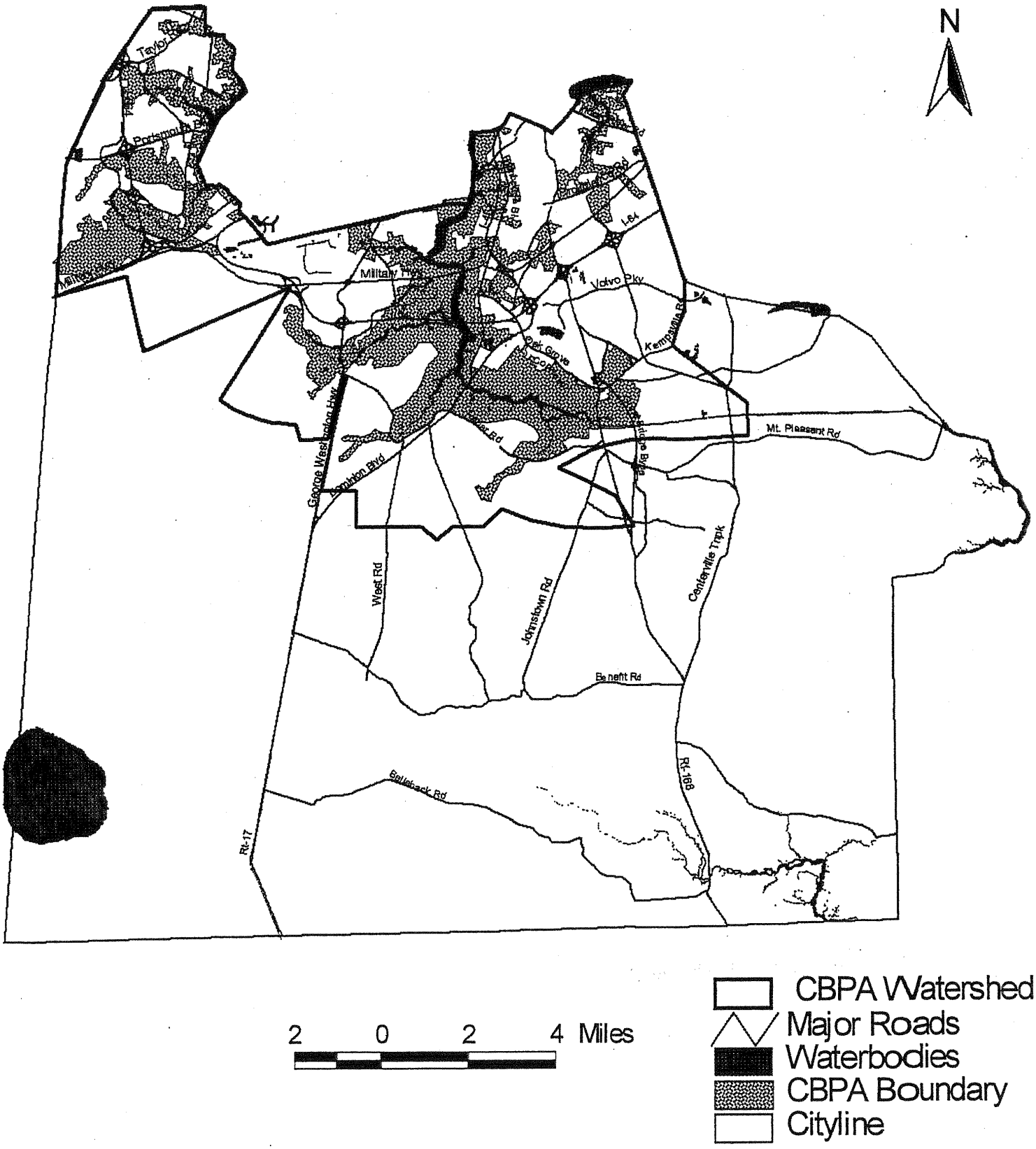
As Chesapeake expands its parks and recreation system, it is recommended that recreational boating be expanded and improved along the Southern Branch of the Elizabeth River, along the Chesapeake and Albemarle Canal, and the North Landing River; supplemented by a system of scenic canoe or rafting trails along various small waterways. The type of boating access expansion will vary according to the particular waterway. Expansion of waterway recreational activities should also incorporate expansion of pedestrian shoreline access to the waterfront. The recommendation concerning environmental protection as discussed in the Transportation Chapter of this plan should be followed.

Locating future parks and open spaces adjacent to RPAs can be accomplished through the open space ordinance, the cluster provisions of the Zoning Ordinance, the acquisition of land by the Parks and Recreation Department, or a combination thereof. Where feasible and practicable, the City should use these practices to achieve this objective.

Assessment of Land Needs for Parks

Due to the fact that Chesapeake is becoming an increasingly urban and suburban environment, the need to insure adequate open space for future residents has and will continue to increase.

CBPA Boundaries in Chesapeake



PROPOSED AMENDMENTS
TO THE
SOUTH NORFOLK AREA PLAN

PHASE II CBPA COMPLIANCE
CITY OF CHESAPEAKE, VA

LAND USES / ENVIRONMENT / ZONING (Page 11)

ENVIRONMENT

The South Norfolk Planning Area entirely lies within the drainage basin of the Chesapeake Bay. Most of the Planning Area drains to the Southern Branch of the Elizabeth River, while a small portion of the eastern edge drains to the Eastern Branch of the Elizabeth River. The topography is essentially flat with slopes seldom exceeding two percent. Steep slopes are limited to areas along streams, creeks, and riverbanks. Ground elevations range between sea level (along major navigable waterways) to 25 feet above sea level.

The following tributaries are located within this planning area: Scuffletown Creek, Jones Creek, Gilligan Creek, and Mildam Creek. Except for the freshwater upstream portions of the tributaries, the waters are tidal and brackish. These tributaries support tidal and non-tidal wetlands which serve a valuable function in water quality protection. Wetlands convey and store flood waters, give protection for land against erosion, remove sediment and pollution from surface water and groundwater; and provide food and habitat for fish and wildlife species. In South Norfolk, much of the natural environment has been altered due to its origin as an industrial town in the late 1800s; however, wetlands can be found contiguous to the Elizabeth River tributaries, i.e. Scuffletown Creek, Jones Creek, Gilligan Creek, and Mildam Creek. Industrialization and high density development has left South Norfolk without most of its natural features.

Lands that impact water quality of the Chesapeake Bay are included as the Chesapeake Bay Overlay District [see page 12(A)]. This district identifies Chesapeake Bay preservation areas (CBPAs) that are subdivided into two categories: Resource Protection Areas (RPAs) and Resource Management Areas (RMAs). RPAs in South Norfolk primarily consist of Elizabeth River tributaries and their respective streams, tidal wetlands, tidal shores, and non-tidal wetlands connected by surface flow. Development in the RPA is restricted to water-dependent uses, redevelopment of previously developed areas, or passive recreational uses.

Resource Management Areas or RMAs in South Norfolk include lands that have a significant impact on how the RPA lands function. RMA examples include nontidal wetlands, lands with highly erodible soils, highly permeable soils, and 100-year floodplains. Please see page 12 (A) for RMA boundaries. Growth and development are not restricted in the RMA if certain performance standards are followed and the development is in accordance with established zoning designations.

Although much of the area has been developed previously, the City recognizes the opportunities to achieve water quality improvements through revitalization of the planning area. The Chesapeake Bay Preservation Act provides guidelines for this through its "Intensely Developed Area" designation, but the City has yet to adopt this optional designation. A study will be completed to address potential water quality improvement opportunities, including measures such as regulations, incentives,

LAND USES / ENVIRONMENT / ZONING (Page 11) Cont.

acquisition of property, or a combination thereof. The city's new Stormwater Management Ordinance also provide water quality enhancements with the adoption of its strict standards.

SOUTH NORFOLK AREA PLAN TEXT AMENDMENTS
PHASE II CBPA COMPLIANCE

Implementation Strategies (page 15)

The Resource Management Area (RMA) is the area located landward from the RPA of which development is allowed and subject to certain performance standards.

An assessment of South Norfolk should be prepared to determine whether any significant opportunity for water quality improvement exists through the redevelopment process. Areas within South Norfolk should be identified for possible future redevelopment (based on existing conditions and on identification of future public or private redevelopment projects). A determination must be made whether water quality controls and/or infrastructure improvements could be constructed as part of the redevelopment process.

SOUTH NORFOLK AREA PLAN TEXT AMENDMENTS
PHASE II CBPA COMPLIANCE

SOUTH NORFOLK LAND USE PLAN (Page 12)

Add the following note to the lower left-hand corner of map

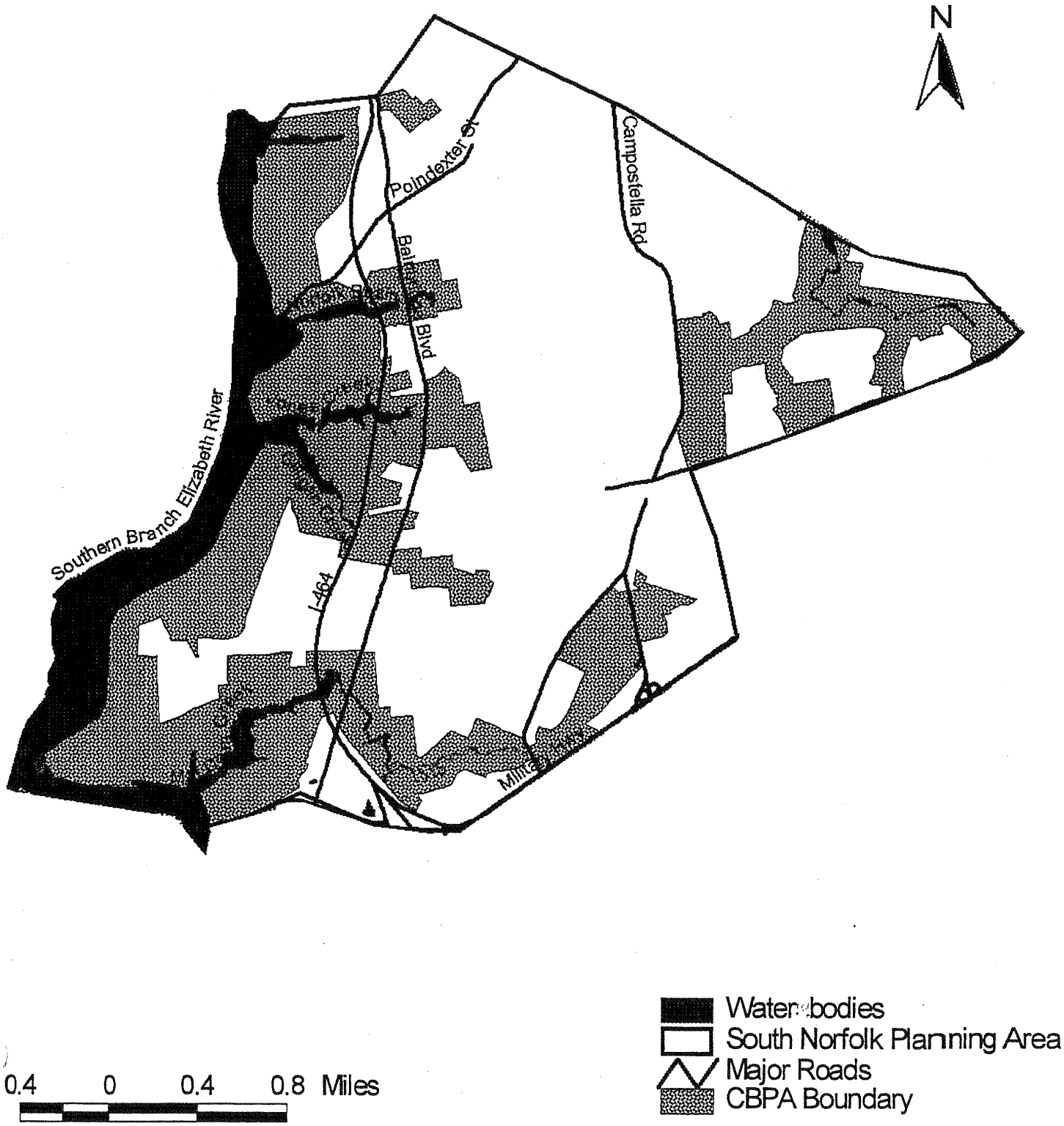
Note: Please refer to page 12(A) for the Chesapeake Bay Overlay District in South Norfolk. Land development within this District is reviewed on a site-by site basis for determination of applicable development restrictions based upon RPA and/or RMA features.

SOUTH NORFOLK AREA PLAN TEXT AMENDMENTS
PHASE II CBPA COMPLIANCE

CHESAPEAKE BAY OVERLAY DISTRICT MAP [New Page 12 (A)]

Add page 12(A) entitled, "CBPA Boundaries in South Norfolk". See attached map.

CBPA Boundaries in South Norfolk



PROPOSED AMENDMENTS
TO THE
WESTERN BRANCH AREA PLAN

PHASE II CBPA COMPLIANCE
CITY OF CHESAPEAKE, VA

Public and semi-public uses are scattered throughout the area. Public areas with substantial acreage include the cluster of four schools campuses, including Western Branch High School in the northern portion of the study area and the 80 acre Western Branch Park, located near the Portsmouth Boulevard/I-664 interchange.

ENVIRONMENT

The Western Branch Planning Area entirely lies within the drainage basin of the Chesapeake Bay. The topography is essentially flat with slopes seldom exceeding two percent. Steep slopes are limited to areas along streams, creeks, and riverbanks. Ground elevations range between sea level (along major navigable waterways) to 25 feet above sea level.

The tributaries of the Western Branch of the Elizabeth River are the major drainage features of the Planning Area. Except the upstream portions of the tributaries, the waters are tidal and brackish. ~~Undeveloped land is located throughout the study area with the largest concentration west of I-664. Much of this land contains tidal and nontidal wetlands.~~ These tributaries support tidal and non-tidal wetlands which serve a valuable function in water quality protection. Wetlands convey and store flood waters, give protection for land against erosion, remove sediment and pollution from surface water and groundwater; and provide food and habitat for fish and wildlife species. In Western Branch, tidal wetlands can be found contiguous to the Elizabeth River tributaries, i.e. Stern's Creek, Drum Point Creek, Bailey Creek and Goose Creek. Non-tidal wetlands can also be found contiguous to tidal wetlands in these areas and as isolated patches of forested wetlands west of I-664.

West of the I-664 corridor, the areas of greatest potential conflict between wetlands and development interests exist. Forested non-tidal wetlands are present in this area which cause both delineation and development difficulties. Although these areas do not always exhibit the easily observable characteristics of marshes, swamps, or bogs, they do at least provide water quality benefits that upland forested areas typically provide. Even though I-664 has increased development pressure on these resources, federal wetland regulations, future state regulations, and the City's local CBPA and Storm Water Management programs protect these lands. While recognizing the economic opportunities the I-664 corridor can bring, the City must balance growth with the potential aesthetic and water quality-related assets of wetland resources.

To protect these resources of the Chesapeake Bay, the City defined its Chesapeake Bay Preservation Overlay District in 1991. It can be found as a City Ordinance and as an overlay to the Land Use map. Specific CBPA designations within Western Branch can be found as Exhibit 1(A) of this plan. Chesapeake Bay preservation areas (CBPAs) are subdivided into two categories: Resource Protection Areas (RPAs) and Resource

Management Areas (RMAs). RPAs in Western Branch primarily consist of Elizabeth River tributaries (Stern's Creek, Drum Point Creek, Bailey Creek, and Goose Creek) and their respective streams, tidal wetlands, tidal shores, and non-tidal wetlands connected by surface flow. Development in the RPA is restricted to water-dependent uses, redevelopment of previously developed areas, or passive recreational uses.

The Resource Management Areas or RMAs in Western Branch include lands that have a significant impact on how the RPA lands function. RMA examples include nontidal wetlands, lands with highly erodible soils, highly permeable soils, and 100-year floodplains. Please see Exhibit 1(A) for RMA boundaries. Growth and development are not restricted in the RMA if certain performance standards are followed and the development is in accordance with established zoning designations.

ZONING

GOALS, OBJECTIVES & IMPLEMENTATION STRATEGIES (Page 11)

Implementation Strategies

- Continue to work with the respective Federal and State environmental agencies and other appropriate nonprofit organizations to develop effective means of protecting the environment.

The City of Chesapeake should continue cooperating with agencies such as the U.S. Army Corps of Engineers, Environmental Protection Agency, Virginia Department of Environmental Quality, State Water Control Board, Chesapeake Bay Local Assistance Department, Virginia Marine Resources Commission, as well as other agencies such as the Elizabeth River Project and its Public Access Committee. These agencies either enforce environmental regulations in their respective jurisdiction concerning wetlands and water quality and/or help the city to develop strategies to manage environmental resources.

Western Branch is substantially impacted by the State of Virginia's Chesapeake Bay Preservation Act and the Federal Government's permitting process pertaining to non-tidal wetlands. To comply with the Chesapeake Bay Preservation act, the City of Chesapeake has adopted development restrictions within a 100 foot buffer adjacent to defined tidal wetlands (Resource Protection Areas). Development of adjacent land that could degrade water quality or potentially diminish the value of the Resource Protection Area is restricted. In addition, all development of land deemed to contain nontidal wetlands is subject to the Federal Permitting process administered through the U.S. Army Corps of Engineers~~.~~ and the City's Stormwater Management Ordinance.

WESTERN BRANCH AREA PLAN TEXT AMENDMENTS
PHASE II CBPA COMPLIANCE

WESTERN BRANCH LAND USE PLAN [PAGE 12(A)]

Add the following note to the lower left-hand corner of Exhibit 1:

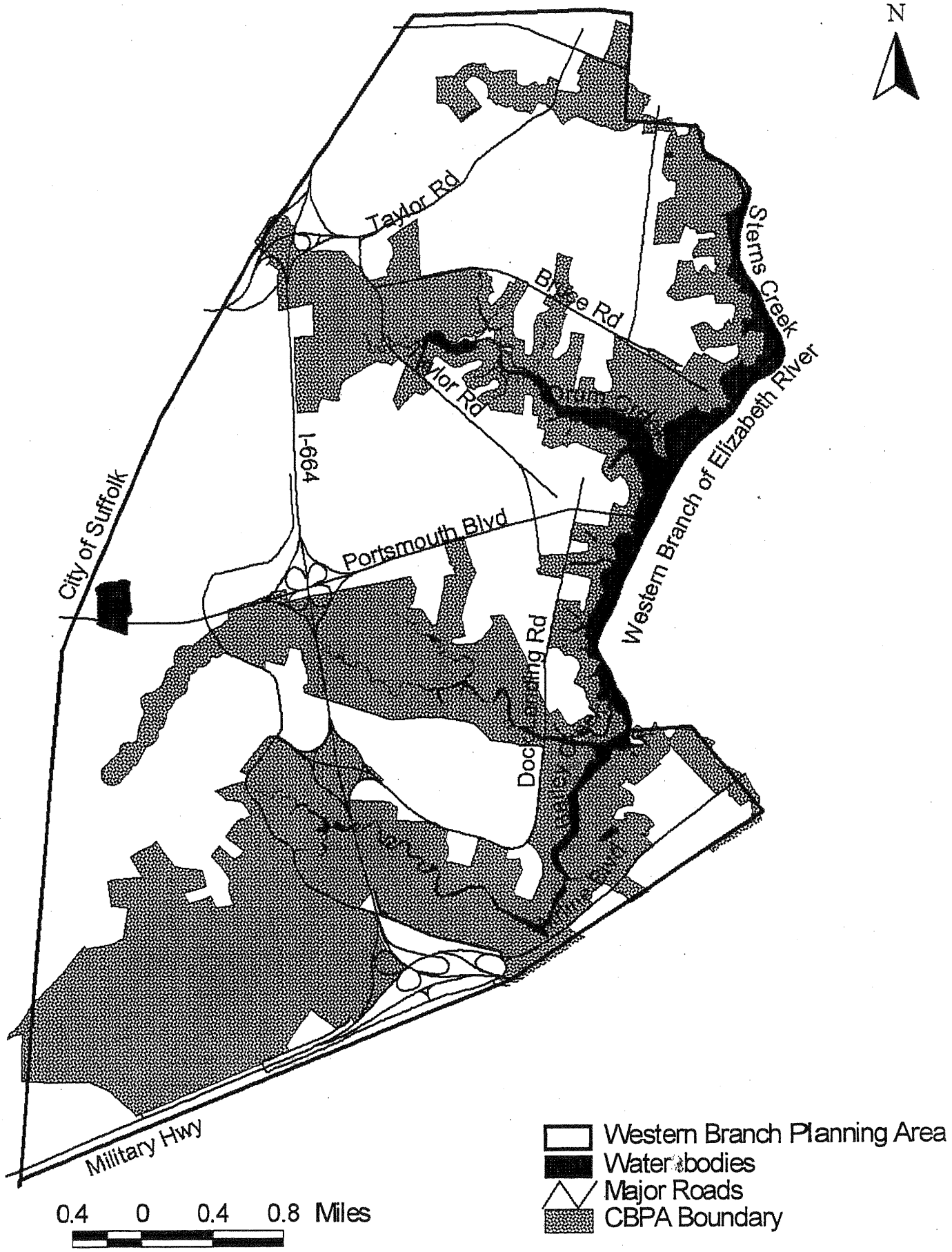
Note: Please refer to Exhibit 1(A) for the Chesapeake Bay Overlay District in Western Branch. Land development within this District is reviewed on a site-by site basis for determination of applicable development restrictions based upon RPA and/or RMA features.

WESTERN BRANCH AREA PLAN TEXT AMENDMENTS
PHASE II CBPA COMPLIANCE

CHESAPEAKE BAY OVERLAY DISTRICT MAP [New Page 12 (B)]

Add Exhibit 1(A) entitled, "CBPA Boundaries in Western Branch" and identify it as page 12(B). See attached map.

CBPA Boundaries in Western Branch



RESOLUTION TO AMEND THE CHESAPEAKE COMPREHENSIVE PLAN, PLANNING AND LAND USE POLICIES, TO REQUIRE THAT THE LEVEL OF SERVICE REVIEW INCLUDE CONSIDERATION OF THE IMPACT OF THE PROPERTY BEING REZONED.

BE IT RESOLVED by the Council of the City of Chesapeake, that the Chesapeake Comprehensive Plan, Planning and Land Use Policies, be amended as follows:

PLANNING AND LAND USE POLICIES

City Council has previously established a number of policies related to planning and land use. This includes all of the policies formalized in the Basic Policies For The Comprehensive Plan (adopted in 1988), Land Use Plan (adopted in 1988), Master Road Plan (adopted in 1990), Comprehensive Plan (adopted in 1990), and the Proffer Policy (adopted as amended in 1994). City Council, Planning Commission, and City staff rely extensively on these policies in making decisions on all land use matters, including rezonings, conditional use permits, preliminary subdivision plans, preliminary site plans, and street closures.

Under Virginia law, the existing zoning for a piece of property is presumed to be valid, and the burden is on the applicant to show that the existing zoning is unreasonable and should be changed. Section 16-106(b)(3) of the Zoning Ordinance (a copy of which is attached) sets out the factors which should be addressed in deciding whether a proposed rezoning of a piece of property should be approved.

The first factor listed is whether the proposed rezoning is consistent with the Comprehensive Plan. Many applicants refer only to the Land Use Plan to argue that their proposed rezoning is consistent with the Comprehensive Plan. The Land Use Plan shows the anticipated ultimate development of the City when it is fully built out. It does not provide

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policies or standards on whether the property should be rezoned. Those policies and standards are provided in the text of the Comprehensive Plan.

The section of the Comprehensive Plan entitled "Growth and Change" sets out five of the key Comprehensive Plan policies used in evaluating the appropriateness of rezoning requests:

1. Require "that rezoning and use permit applications which would bring more intense uses to properties either demonstrate that existing services and infrastructure would not be adversely affected by the new uses, or proffer improvements that would directly satisfy the service and infrastructure demands which the new uses would create."
2. Support "developments and improvements which strengthen and fill the major economic activity centers identified in the plan."
3. Discourage "untimely developments in outlying areas which tend to create a "leapfrogging" effect, an effect that strains both public infrastructure and services."
4. Evaluate and act upon rezoning and use permit applications "on the basis of their timeliness - that is, whether the uses proposed are compatible with the surrounding community as it now exists, even if the proposed uses are projected by the Plan as an ultimate development, and whether the

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introduction of the new uses at a particular time would cause deterioration of the surrounding community instead of strengthening the community in its transition to its ultimate projected character."

5. Discourage "rezonings to more intense uses which will increase demand on inadequate roads, unless the necessary improvements are within local or state improvement plans, or unless the developer provides improvements which directly meet the demands created by the development."

Although these adopted policy statements have been of great assistance in the past in evaluating rezoning and conditional use permit requests, there are several issues that have surfaced in the past that warrant further review and discussion. The following is a listing of outstanding planning/land use related issues and policies which will provide various approaches to address each issue.

A. Timeliness of Development

As noted, rezonings are often requested for parcels with the applicant using the argument that the adopted Land Use Plan shows the land use and densities being proposed by the applicant. The problem in many cases is that the necessary public facilities to service the proposed development are either not available or are inadequate. Since the Land Use Plan shows only the recommended "ultimate" use of properties and does not address the timing and coordination of development, many rezoning requests may be consistent with the Land Use Plan but still be premature and untimely, and therefore inappropriate.

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Adopted Policies

1. The policies from the Comprehensive Plan, as listed above, will be followed to the maximum extent possible.

2. City staff has prepared City-wide Level of Service (LOS) standards for schools and roads for inclusion in the Comprehensive Plan. LOS standards for schools and roads were included in the adopted Western Branch Area Plan and the adopted South Norfolk Area Plan. Similar LOS standards are to be applied on a City-wide basis to all rezoning applications, including applications for planned unit developments. Basic supporting information for schools, roads, and sewer capacity is now available. The Chesapeake School Administration has up-to-date school enrollment and capacity data for all schools in the City; the City's Public Works Department has current information pertaining to traffic volumes and capacities of the various major roads throughout the City; and the City's Public Utilities Department and the Hampton Roads Sanitation District have current information concerning sewer capacities throughout the City. Such LOS standards are intended to provide an objective standard for determining whether public facilities are adequate to meet the demands created by a proposed rezoning, and this standard will be applied consistently to all rezoning applications to determine their timeliness. The LOS standards for roads and schools are

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contained in attachment "B."

3. A policy similar to the sewer policy adopted by City Council in June, 1994 will be used in making rezoning decisions; that is, Council specifies as part of its zoning policy that a proposed residential rezoning, including residential portions of planned unit developments, will not be approved if there is no existing sewer capacity to service the property. Allowing an accumulation of approved residential rezonings without assured sewer capacity could result in a sudden surge in development once sewer became available that would be beyond the capacity of other City infrastructure and services to meet. In the case of non-residential rezonings, the requirement for existing sewer capacity may be waived or modified by City Council upon a finding that the rezoning will enhance economic development in Chesapeake, provide employment opportunities and increase public revenues. However, the applicant must establish that adequate sewer facilities, whether public or private, will be provided prior to the commencement of business activities, in accordance with City and state laws and policies.

4. City staff is directed to conduct an ongoing assessment of the existing inventory of undeveloped residentially zoned land in the City and the potential impact of the development of that land on existing infrastructure and on new residential rezoning.

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B. Directing Growth

Directing growth into appropriate locations creates a more cost effective and efficient land use pattern. "Leap-frog" development, as previously identified in Policy #3 from the Comprehensive Plan, causes an unnecessary strain on City services and facilities.

Adopted policies

1. The Comprehensive Plan and Land Use Plan will be followed as much as possible in making rezoning, conditional use permit, and capital improvement decisions.

2. The section of the Comprehensive Plan related to Public Utilities is hereby strengthened to indicate that major sewer line extensions will be directed into areas where the City would like to channel growth and will not be approved for areas where the Plan discourages growth. Sewer lines, in particular, will be extended only into areas for which adequate services and facilities of all types can be provided for all future development that is expected to occur. Also, sewer service will not be extended into areas that do not have an appropriate land use designation on the City's Land Use Plan, such as the "Countryside" and "Rural" areas.

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3. Infrastructure extensions by HRSD and other agencies will be reviewed by the Planning Commission for compliance with the Comprehensive Plan in accordance with state law.

4. Encourage "infill development" rather than "leap-frog" development, to the maximum extent possible.

C. Rural Area Development

City Council has previously discussed the issue of Rural Area Development during Council work sessions. The Zoning Ordinance discourages "major" developments (more than 5 residential lots) in the Rural Overlay District. However, there are some that believe that this may be too stringent and that rural, large-lot residential development should not be discouraged, particularly if the applicant voluntarily agrees to pay the full capital cost impact amount through the proffer system.

Adopted policy

1. This issue will be addressed as part of the ~~preparation of the South and West Area Plan~~ current ongoing review and update of the Comprehensive Plan.

ATTACHMENT "B"

A. ADEQUATE ROAD FACILITIES

1. All rezoning applications are required to pass the test for Adequate Road Facilities. A proposed rezoning will pass the test for Adequate Road Facilities if the nearest major road and/or existing signalized intersection, which will carry the majority of traffic expected to be generated by the future development on the

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property proposed to be rezoned, has a Level of Service (LOS) of "D" or better. The determination of the road and/or existing signalized intersection which will carry the "majority" of the traffic expected to be generated by the future development of the property proposed to be rezoned shall be made by the Director of Public Works or ~~his~~ designee. In addition, the designated "major road" for which the LOS determination will be made must be one of the roads shown on the City's adopted Master Road Plan. If the nearest road which will be impacted by traffic from the future development is not shown on the Master Road Plan, then the Director of Public Works~~,~~ or ~~his~~ designee~~,~~ shall determine which major road shown on the Master Road Plan will carry the majority of traffic expected to be generated from the property proposed to be rezoned, and the LOS test shall be used on that road even though that road may not be adjacent to the property under consideration for rezoning.

2. If the nearest major road and/or signalized intersection which would serve the majority of traffic expected to be generated by the property proposed for rezoning, as determined under Section A.1. above, is currently LOS "E" or "F," the proposed rezoning does not pass the test for Adequate Road Facilities and City staff will recommend denial of the rezoning application. In addition, the proposed rezoning will not pass the test for Adequate Road Facilities if such road and/or existing signalized intersection will operate at LOS "E" or "F" upon development of 1) the property proposed for rezoning, using for residential properties, the maximum number of lots into which the property could be subdivided under applicable zoning regulations and development criteria, and

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for nonresidential properties, the most intense development permitted under the proposed zoning classification; and 2) all unimproved lots in the service area shown on construction plans approved by the Department of Public Works and shown on minor subdivision plats (five lots or less) recorded in the Clerk's Office of the Chesapeake Circuit Court. The service area for roads and existing signalized intersections is to be determined by the Director of Public Works, or designee, and should include all properties which are expected to utilize the road or existing signalized intersection under consideration as a primary means of transportation to or from the property. Where a road improvement project is scheduled to be completed within one year of the date that the City Council is expected to consider a rezoning request which will improve the LOS of the "major" road under consideration to LOS "A," "B," "C," or "D," giving full consideration to the future impact from development of the property proposed for rezoning and all unimproved lots shown on approved construction plans and unimproved lots shown on recorded minor subdivision plats (five lots or less), the proposed rezoning will pass the test for Adequate Road Facilities. The road improvement project may be a state or local project, or the rezoning applicant may offer voluntarily to provide such improvements. The Director of Public Works or ~~his~~ designee, shall determine ~~make the determination of~~ whether or not~~, in his opinion,~~ the road improvements will be completed within one year of the date that City Council is scheduled to consider the subject rezoning application and whether the road improvements will increase the LOS to an acceptable level (A, B, C or D).

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3. In certain instances, the City Council and Planning Commission may consider an existing road LOS of "E" to be acceptable for a proposed nonresidential rezoning request. Such factors as the degree of fiscal impact to the City, potential employment, and the degree to which the proposal will achieve the City's economic development goals will be used in making this determination.

4. All residential rezoning requests which would not allow for the creation of more than five (5) lots for single-family dwellings, excluding all multi-family developments, are exempt from the LOS test for Adequate Road Facilities. The number of lots which can be created shall be determined on the basis of development criteria in the Chesapeake Zoning Ordinance. In addition, all nonresidential rezoning requests which will not result in an increase in traffic by more than fifty (50) vehicle trips a day, as determined by the Director of Public Works or designee, than could be generated by development under existing zoning, are exempt from the LOS test for Adequate Road Facilities. Current and potential vehicle trips will be determined on the basis of the most intense uses permitted under the current and proposed zoning.

5. All rezoning requests which will not result in an increase in the amount of traffic over the amount of traffic that would be generated by potential future development under existing zoning are exempt from the LOS test for Adequate Road Facilities.

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B. ADEQUATE SCHOOL FACILITIES

1. All residential rezoning applications are required to pass the test for Adequate School Facilities. A proposed residential rezoning will pass the test for Adequate School Facilities if all public primary, intermediate, middle and high schools which would serve the future development on the property proposed for residential rezoning currently have adequate capacity to accommodate each of the existing student populations. If any of the applicable public schools which would serve the future residential development on the subject property exceed 120% of rated capacity at the time of the review of the subject rezoning request, the proposed rezoning does not pass the test for Adequate School Facilities, and City staff will recommend denial of the residential rezoning request. In addition, the proposed rezoning will not pass the test for Adequate School Facilities if the rated capacity of any school to serve the subject rezoning will exceed 120% of rated capacity upon development of 1) the property proposed for rezoning, using the maximum number of lots into which the property could be subdivided under applicable zoning regulations and development criteria; and 2) all unimproved residential lots in the service area shown on construction plans approved by the Department of Public Works and shown on minor subdivision plats (five lots or less) recorded in the Clerk's Office of the Chesapeake Circuit Court. The service area for each school will be determined by the Chesapeake School Administration based on current school districts.

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Where, under the LOS test prescribed above for both current conditions and potential development, the rated capacity of any public school is determined to exceed 120%, and where such public school is expected to be improved to less than 120% of rated capacity within one year of the date that City Council is scheduled to consider the subject rezoning request, the residential rezoning will pass the test for Adequate School Facilities. The anticipated improvements must reduce the rated capacity of the schools to 120% or less based on enrollments and other conditions which will result from the development of the property proposed for rezoning, all unimproved residential lots in the service area shown on approved construction plans and on recorded minor subdivision plats. The Chesapeake School Administration shall make the determination of the rated capacity for all of the applicable public schools and shall also make the determination of whether or not any capital school construction project would improve the rated capacity of any of the applicable schools to less than 120%, giving consideration to both current conditions and impact from potential development, including impact from the property proposed for rezoning and all unimproved residential lots shown on approved construction plans and on recorded minor subdivision plats (five lots or less), within one year of the rezoning request.

2. All residential rezoning requests which would not result in an increase in the number of students expected to be generated from the future residential development, as determined by Chesapeake School Administration, or which

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would not allow for the creation of more than five (5) single-family lots, as determined based on development criteria in the Chesapeake Zoning Ordinance, are exempt from the Adequate School Facility test. Also, residential rezonings which include proffers for multifamily projects ~~which~~ that will not generate children, such as housing for the elderly, are exempt from the Adequate School Facility test.

ADOPTED by the Council of the City of Chesapeake, Virginia, this 20th day of February, 2001.

APPROVED:

William E. Ward

Mayor

ATTEST:

Deborah A. Moore

Clerk of the Council

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