

Comprehensive Plan for the County 2002



Washington County, Maryland

CERTIFICATE OF RESOLUTION

I, Paula A. Lampton, Chairperson of the Planning Commission for Washington County, Maryland, do hereby certify that the following is a true and correct copy of a Resolution passed by the Planning Commission, approving and recommending for adoption the revised Plan for the County, and that a true copy of the same is attached hereto and is made a part of this Resolution by reference.

RESOLUTION

WHEREAS, The Board of County Commissioners for Washington County, Maryland, on February 17, 1981, adopted the Plan for the County, Development Analysis Plan Map and Policies; and

WHEREAS, The Planning Commission for Washington County, in 1995, recognized the necessity to revise the Plan in order to more fully provide for the long-term needs of the citizens of the County consistent with orderly growth; and

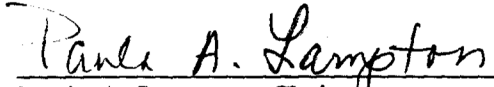
WHEREAS, In 1995, The Planning Commission began an extensive revision to the Plan that involved the citizenry of the County, and the result of that five-year effort is a policy document that reflects the advise and assistance of many conscientious and dedicated citizens; and

WHEREAS, Pursuant to the authority prescribed in Article 66B of the Annotated Code of Maryland, the Planning Commission referred to all adjoining jurisdictions the recommended Plan and subsequently presented the proposed, revised Plan for the County in Public Hearing, now be it

RESOLVED BY THE PLANNING COMMISSION FOR WASHINGTON COUNTY, That the Commission does hereby approve the revised Plan for the County and the same is incorporated herein by reference in its entirety and made a part hereof; and be it further

RESOLVED, That the entire Plan for the County and the entire text of same and accompanying maps be certified and attested to by the Chairperson of this body on said entire text as required by Section 3.07 of the Annotated Code of Maryland; and be it further

RESOLVED, That a certified and attested copy of the Plan for the County incorporated herein by reference shall be transmitted to the Board of County Commissioners for Washington County, Maryland.



Paula A. Lampton, Chairperson

APPROVAL AND ADOPTION

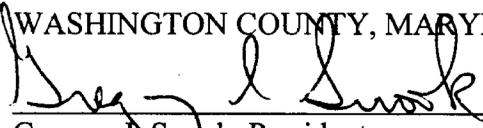
This Comprehensive Plan for the County is hereby approved and adopted by the Board of County Commissioners of Washington County, Maryland this 27th day of August, 2002.

Effective the 27th day of August, 2002.

ATTEST:



Joni L. Bittner, Clerk

BOARD OF COUNTY COMMISSIONERS OF
WASHINGTON COUNTY, MARYLAND


Gregory I. Snook, President

Washington County Comprehensive Plan 2002

Acknowledgments

This Plan was prepared by the Washington County Department of Planning and Community Development Department and updates the 1981 Comprehensive Plan for Washington County. The input and comments of citizens, municipal officials, groups, and organizations are gratefully acknowledged.

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PREFACE

As a precursor to writing the update of the Comprehensive Plan, the Washington County Planning Commission and Staff members held several local meetings around the County. The input gained at these meetings was very helpful in determining how to proceed in writing the update. We would like to thank all of the citizens who came to these meetings, offered input and took an active stance into planning the future of the County we share.

Between September 4, 1997 and November 20, 1997 there were 13 public input meetings held at various sites across the County. Of the thirteen meetings, three were unattended by the public. At the meetings, surveys were distributed to give further opportunity for local residents to respond. There were a total of 53 surveys and 4 written responses returned. Each response was reviewed and considered during the course of the update.

The results of the survey responses clearly indicated that the residents of the County are concerned about a perceived intensification of population growth in the area. Accompanying these concerns are the issues of growth management, land use, resource management, stress on the infrastructure, and quality of life. Of the 57 total responses that were received, approximately 90% listed growth management and land use issues as a top priority in the planning of the County's future resources. The remaining 10% listed infrastructure and preservation issues as top priorities.

Many of the responses were sensitive to localized planning issues. The issues ranged from preservation and resource management in rural areas to stormwater management, transportation, and housing issues in the urban areas. Ultimately, the

majority of the surveys returned from residents throughout the County identify the “westward migration” of the larger cities like Baltimore and Washington D.C. as the biggest threat to the County. When asked what the greatest asset the County has, most residents responded our location, rural/small town atmosphere, and our rich history were most important.

In May of 2001 the staff of the Washington County Planning and Community Development Department introduced the first draft copy of the update to the Comprehensive Plan. This initial meeting was followed by eighteen (18) smaller town meetings held from May through July of 2001. These meetings were arranged to seek public input into the strengths and weaknesses of the draft update. Once the meetings were concluded the Washington County Planning Commission held a series of workshop meetings to discuss the input given and make any necessary changes to the draft update.

Updating Washington County’s Comprehensive Plan has been a long, involved process. We believe that the document that has been produced has attempted to address a majority of the comments made during the entire public input process. However, the County has striven to create a balanced document that will give a solid basis for the future planning of the County and its resources for the next 20 years.

ARTICLE I

INTRODUCTION AND BACKGROUND INFORMATION

CHAPTER 1

INTRODUCTION

A. PURPOSE

1. Comprehensive Plan

“Washington County is still today primarily agricultural in character. However, pressures for urban development will continue to increase in proportion to expanding metropolitan regions. South Mountain is no longer a physical barrier to the east. It may rather be viewed as a lookout for Washington Countians from which they can view the encroaching sprawl of megalopolis and its inhabitants who seek to escape a pressure-cooker way of life. The natural barriers to Washington County have been overcome by the interstate road system. The County’s physical beauty and economic potential may now have been discovered.” This is the first paragraph in the **Plan for the County** (Comprehensive Plan) adopted by the Washington County Planning and Zoning Commission on October 12, 1971. As it did almost 30 years ago, this statement accurately depicts the critical juncture that the County is at with the issue of managing growth. The development and adoption of a revised Comprehensive Plan will be a major step in managing the rational and equitable use of the County’s resources for well into the 21st Century.

The Comprehensive Plan adopted for the County in 1971 was the first Comprehensive Plan adopted. It focused on addressing new growth through the creation of new communities at several locations throughout the County. This Plan set the stage for the adoption of the County

Zoning Ordinance in 1973.

In 1981, the County adopted a new Comprehensive Plan. This Plan changed the emphasis from addressing growth through the creation of new communities to addressing growth in designated growth areas around the existing towns and cities. A new Zoning Ordinance was not adopted after adoption of the 1981 Comprehensive Plan. However, major amendments to various regulations occurred as result of adoption of this Plan. These changes were summarized in a document, “Status Report - Comprehensive Plan for Washington County” in January 1991.

During the 1990’s, several major amendments to the Comprehensive Plan took place. Most of these were as a result of legislation passed by the State and included addition of: the “Seven Visions”, a Sensitive Area Element, a Regulatory Streamlining Element, and specific identification of “Rural Villages.” A new Transportation Element was also adopted along with creation of a Special Planning Area for the Fort Ritchie area as a result of the closing of the military base. This amended version of the 1981 Comprehensive Plan is the foundation for the new 2002 Comprehensive Plan.

State enabling legislation, Article 66B, “*Planning and Zoning*” states: “The plan shall be made with the general purpose of guiding and accomplishing the coordinated, adjusted, and harmonious development of the jurisdiction, and its environs which will, in accordance with present and future needs, best promote health, safety, morals, order, convenience, prosperity, and general welfare, as well as efficiency and economy in the process of development; including among other things, adequate provisions for traffic, the promotion of public safety, adequate provision for light and air, conservation of natural resources, the prevention of environmental pollution, the promotion of the healthful and convenient distribution of population, the promotion of good civic design and arrangement, wise and efficient expenditure of public funds,

and the adequate provision of public utilities and other public requirements”. As such, the Comprehensive Plan becomes a policy document which must be flexible enough to address changing circumstances yet rigid enough to establish a reasoned and practical vision of the future which can balance the need to grow and develop with the protection of the natural, cultural and human resources which make Washington County a unique place to live, work and play.

2. Legal Basis for the Comprehensive Plan

The Annotated Code of Maryland, Article 66B, “*Planning and Zoning*,” provides the authority for Washington County to plan and zone property. In particular, Section 3.05(a) states, “It shall be the function and duty of the commission to make and approve a plan which shall be recommended to the local legislative body for adoption and which shall serve as a guide to public and private actions and decisions to insure the development of public and private property in appropriate relationships and which shall include any areas outside its boundaries which, in the commission’s judgement, bear relation to the planning responsibilities of the commission. In addition, the following elements are required to be included in the Comprehensive Plan:

- (1) Statement of goals and objectives,
- (2) Land use plan element,
- (3) Transportation plan element,
- (4) Community facilities plan element,
- (5) Mineral resources plan element,
- (6) Regulatory streamlining or implementation element,
- (7) Sensitive area element,

The “Seven Visions” identified in the Maryland Economic Growth, Resource Protection, and Planning Act of 1992 were also to be incorporated into the Plan. An eighth vision has now also been added to the list and states that; “Adequate Public Facilities and Infrastructure under the control of the County or municipalities are available or planned in areas where growth is to occur.”

The law also requires that the Comprehensive Plan be reviewed and updated, as necessary, at intervals of no more than six years.

3. Relationship to Other County Documents

The Maryland Economic Growth, Resource Protection, and Planning Act of 1992 included a provision, which requires “consistency” for all implementation tools. These tools include: zoning and subdivision regulations, capital improvements for sewerage, water supply, parks, schools, and transportation, and design guidelines. The Planning Act of 1992 also requires that the Comprehensive Plan play a role in determining where federal and state funds can be used, and that these funds only be used for projects that are consistent with the Plan, or for projects involving extraordinary circumstances with no reasonably feasible alternative.

The Comprehensive Plan is also used as a foundation for the preparation of other “functional plans” or planning related documents. In particular, the Water and Sewerage Plan, Land Preservation and Recreation Plan, Solid Waste Plan and the Long Range Transportation Plan are all inter-related with the Plan. Development of the 6 year Capital Improvement Program (CIP), historic preservation plan, forest conservation ordinance, agricultural preservation program and economic development plan are activities that also take impetus from the Comprehensive Plan.

The Comprehensive Plan looks at two horizon years, 2020 and 2050, for future projections and needs analysis. It uses both of these dates in the development of the land use plan.

B. PORTRAIT OF WASHINGTON COUNTY

1. Location

Washington County is located in the west-central part of Maryland and includes the

narrowest part of the State's panhandle. The northern boundary of the County is shared with Pennsylvania (Fulton and Franklin Counties) along the Mason-Dixon Line. Except for a 2 mile stretch that is shared with Virginia (Loudoun County) at the southeastern edge of the County, the southern boundary of the County is the Potomac River and is mainly shared with West Virginia (Morgan, Berkeley, and Jefferson Counties). Sideling Hill Creek forms the direct western boundary with Allegany County, and the crest of South Mountain forms the eastern boundary with Frederick County.

Washington County stretches 47 miles east to west along the Mason Dixon Line, but is less than 2 miles wide from north to south near Hancock, where the Potomac River makes its northernmost bend. The area of the County is 467 square miles, of which approximately 455 square miles is land. It also contains over 100 miles of shoreline on the Potomac River. Hagerstown is the County seat, and is located approximately 70 miles northwest of Baltimore and Washington DC and 165 miles southeast of Pittsburgh. (See Map 1 & Map 2.)

2. Physical Characteristics

Washington County is geologically located in the Cumberland Valley and includes parts of two physiographic provinces - the Blue Ridge and the Ridge and Valley. The general trend of the ridges and intervening valleys is approximately northeast/southwest. South Mountain and Elk Ridge running north to south on the eastern boundary of the County represent the westernmost extent of the Blue Ridge physiographic province. The Hagerstown Valley (the Maryland part of the Great Valley) occupies the area from the western base of South Mountain to Fairview Mountain west of Clear Spring. The valley, along with the smaller ridges and valleys west of Clear Spring, represent the Ridge and Valley physiographic province with the smaller ridges being part of the Appalachian mountain system. Elevations range from the highest point

in the County, Quirauk Mountain at 2,145 feet above sea level, to an elevation of approximately 300 feet above sea level in the Hagerstown Valley near the Potomac River. (See Map 3.)

Two streams and a drainage divide form three of the four County boundaries. All major streams including Sideling Hill Creek, Tonoloway Creek, Licking Creek, Conococheague Creek and Antietam Creek, drain into the Potomac River. (See Map 4.)

The geology of the County is complex. All of the surface rock strata and most of the subsurface rocks in Washington County are of sedimentary origin and consist of limestones, shales and sandstones. The Hagerstown Valley is underlain predominantly by relatively soluble limestone and shows evidence of sinkholes and caverns associated with karst topography. Limestone is also found in the Ridge and Valley province with the geomorphic features exhibiting characteristics produced by erosion and sedimentation. The more narrow valleys tend to be underlain mostly by shales, while the ridges are formed by resistant sandstones or quartzite.

Slopes are steepest along the eastern border of Washington County, as well as the areas between Licking Creek and Little Conococheague Creek; along the Little Tonoloway Creek; and along Sideling Hill Creek. In the Hagerstown Valley, which comprises more than half of the land area of the County, the land is, to the greatest extent, gently rolling. Nearly 30% of the County's total land area have slopes greater than 15% with an additional 8,000 acres on slopes above 30%.

3. Historical Sketch

Washington County, before 1739, was the home of the Delaware and Catawba Indians. The influence of white settlement on Native Americans was the same here as elsewhere in the country. The Indians were the stewards of the land. They did not know or understand the concept of private ownership of land. Large land grants were made to the Germans, Scotch and

English, who were willing to traverse South Mountain. The grants depleted more and more of the hunting and fishing grounds of the Delaware tribes and eventually resulted in their movement to unsettled territory.

The first European settlers in Washington County migrated here during the 1730s from Pennsylvania and the Frederick Valley in Maryland. They were joined by colonists from Southern Maryland who had prospered as tobacco farmers during the 17th & early 18th centuries.

The first major road through the Cumberland Valley, established in 1735-36, linked Harris' Ferry (Harrisburg) on the Susquehanna River to the Potomac at the mouth of the Conococheague Creek.

In 1739, Jonathan Hager took out several patents along the headwaters of the Antietam Creek. A new surge in population led to the development of towns like Sharpsburg which was settled in 1763 and Elizabeth Town (laid out by Jonathan Hager) in 1765, which later became known as Hagerstown.

Washington County was formally created from a larger Frederick County in 1776 with Hagerstown designated as the county seat. With the close of the 18th century it was apparent that the English and German settlers in the Great Valley region established two distinctly different economic and cultural traditions. Settlers from the Tidewater region transplanted the tobacco culture, including their slave labor force to Washington County with mixed success. German farms generally raised livestock and grain with wheat dominating the economy.

Early industry was dependent upon local farms and natural resources. Grain mills dotted the County and the iron industry produced arms and ammunition for the Revolutionary War. Transportation routes improved as the population and quantities of marketable goods increased.

The National Road was completed in Washington County in 1819 while the C & O Canal was completed in 1842. By 1860 the Cumberland Valley Railroad was providing regular service between Hagerstown and Philadelphia. These railways together with the turnpike system and the C & O Canal provided Washington County with transportation links to the major cities of the Mid-Atlantic coast. The improvements in transportation and accessibility to regional markets increased the prosperity of local farmers. However, this prosperity was interrupted by the Civil War. The transportation system, which linked the area to neighboring states, also acted as a crossroads for hostile armies. Major battles at South Mountain and Antietam in 1862 along with smaller battles across the County after the Battle of Gettysburg in 1863 have forever hallowed the soil of Washington County.

Washington County remained primarily agricultural after the Civil War. Manufacturing increased throughout the late 19th century, and was enhanced by a reliable and stable supply of labor and adequate transportation to ship out finished goods. Flour mills, sawmills, paper mills, furniture shops, knitting mills, agriculture equipment manufacturers, and manufacturers that related to the railroad industry all shaped the County economy. The importance of the rail industry in Washington County is exhibited by Hagerstown garnering the nickname the “Hub City” as a result of no less than 9 railroad lines intersecting here.

The number of manufacturing establishments dropped dramatically after 1900 with the trend toward industrial consolidation slowed only by the Great Depression. Changes also occurred in agriculture, especially the decreasing size of farms in Washington County. In 1870, the size of a typical farm was 143.9 acres. By 1930 that number had declined to a mere 93.5 acres.

By 1930 crop production had dropped with the exception of barley and oats. The

production of dairy products grew steadily even through the Great Depression. The railroad industries began their decline in the 1930s, and have continued to decline through the present day. The development of the interstate highway system has reinstated Washington County as a critical transportation hub. This transportation system also established Washington County as a home for commuters to the Baltimore and Washington DC employment areas.

Farming, manufacturing, and freight transportation have remained vital sectors of the County economy during the later half of the 20th Century. In the last twenty years these industries have been supplemented by the development of national financial transaction processing centers, large scale printing facilities, major regional commercial centers and promotion of tourism attractions as major employers in the local economy.

The historic development of the County has led to a unique blending of the past with the modern. As we head into the new millennium, the challenge will be to preserve the County's historic rural character while trying to meet the need to grow in order to effectively compete in the new global economy.

CHAPTER 2

VISIONS, GOALS AND OBJECTIVES

A. PLAN VISIONS

1. County Government Mission

On January 16, 2001 the Board of Commissioners of Washington County adopted the following as the County Mission. The Mission of Washington County Government is to provide exemplary public services by:

Supporting and strengthening individual and community self reliance and responsibility;

Promoting education, economic opportunities, public health, safety, and welfare;

Protecting the environment and cultural resources we share; and

Planning for future urbanization and a culturally diverse population.

The County's Mission of County Government along with the States "Eight Visions" have been used as the basis for the development of the goals and objectives articulated in the Comprehensive Plan.

2. State Visions

The Maryland Economic Growth, Resource Protection and Planning Act of 1992 gave new responsibilities to jurisdictions in the State of Maryland to establish priority areas for growth and resource conservation. In an effort to provide consistent guidance and minimum standards for land use planning, "**Eight Visions**" were adopted in the Planning Act of 1992. They are included in the Washington County Comprehensive Plan as mandated by that legislation. The

Eight Visions are:

1. Development is concentrated into suitable areas;
2. Sensitive areas are protected;
3. In rural areas, growth is directed to existing population centers and resource areas are protected;
4. Stewardship of the Chesapeake Bay and the land is a universal ethic;
5. Conservation of resources, including a reduction in resources consumption, is practiced;
6. To assure that development is concentrated in suitable areas and that sensitive areas are protected, economic growth is encouraged and regulatory mechanisms are streamlined;
7. APFO and Infrastructure under the control of the County or municipal corporation are available or planned in areas where growth is to occur; and
8. Funding mechanisms are designed or revised to achieve the visions.

As an extension of the State Visions, the initiatives of the 1997 Smart Growth and Neighborhood Conservation Act have also been integrated into the update of this document. By incorporating these initiatives into the County Comprehensive Plan, further effort has been made to protect the natural environment by promoting the revitalization and continued growth of existing centers of development.

B. GOALS AND OBJECTIVES

Four major goals have been developed as a result of consideration to County and State visions, public input, analysis of past and projected growth trends, studies on the fiscal impact of growth, anticipated capital improvement program funding levels, and review of strengths and weaknesses of the former Comprehensive Plan.

Each of the Goals is supported by a list of Objectives that articulate a program for implementation of the plan. Taken together the Visions, Goals and Objectives establish a policy framework, which shall be the County's principal source of land use, environmental, and growth

policy. All other County plans and programs shall be consistent with, and supportive of, that framework.

GOAL 1: PROVIDE OPPORTUNITIES FOR INDIVIDUAL CHOICE AND SELF FULFILLMENT

Objectives:

Establish a variety of residential housing types, densities and locations.

Identify and promote the development of sites for economic development that have the ability to generate a variety of employment opportunities.

Provide recreational locations and sites that will create the opportunity to pursue various active and passive leisure activities.

Promote the location of public safety, emergency service and health care facilities to foster accessibility to all residents.

Encourage the use of different modes of transportation by providing facilities that allow for different transportation options.

GOAL 2: PROMOTE A BALANCED AND DIVERSIFIED ECONOMY, INCLUDING AGRICULTURE

Objectives:

Maintain at least 50,000 acres of land in the County in agricultural production by expanding current agricultural land preservation initiatives with an emphasis on preserving farming as a way of life and promoting the agricultural support industry.

Preserve mineral resource areas for continued and future production.

Promote the retention and expansion of existing businesses and industry while encouraging the development of new manufacturing and hi-tech industries to broaden the employment base.

Provide locations for new industry that encourage the use of existing infrastructure facilities and that take advantage of the interstate transportation system.

Encourage and expand opportunities for recreational, leisure and educational tourism with particular emphasis on development of heritage tourism attractions as destinations.

Promote educational opportunities that develop and improve the labor force.

Maximize opportunities for using the airport and railroads in promoting economic development.

Continue transformation of the former Fort Ritchie military base to the new Lakeside Corporate Center.

GOAL 3: ENCOURAGE THE STEWARDSHIP OF THE ENVIRONMENT AND THE COUNTY'S HERITAGE

Objectives:

Balance future growth with the need to preserve the historical, cultural and scenic beauty of the County for future generations.

Promote the compatibility of the built and natural environments by ensuring that the scale and character of developments are harmonious with existing conditions.

Target development away from lands with quality agricultural soils; thereby, maximizing agricultural potential and limiting conflicts with existing agricultural operations.

Limit the amount of development in sensitive areas.

Safeguard the unique environmental character of designated special planning areas.

Promote Rural Legacy initiatives in all rural areas of the County.

Maintain, and where feasible, expand forest conservation efforts.

Protect surface and ground water quality through storm water management, on lot sewage disposal, and wellhead protection regulations.

Encourage recycling and resource conservation.

GOAL 4: ESTABLISH PARAMETERS FOR MANAGING GROWTH

Objectives:

Concentrate development in designated growth areas and coordinate development to occur in an orderly manner.

Encourage opportunities where infill development can take place.

Promote the reutilization of brownfield sites.

Limit expansion of public water and sewer facilities outside of designated growth areas to only those extensions necessary to address health issues.

Locate and time growth so that it does not exceed the capacity of public roads, schools, parks and utilities or so that facilities can be upgraded to accommodate development as needed.

Promote policies that attribute costs for new services to new users.

Implement policies that avoid the premature conversion of farmland to non-agricultural uses.

Where feasible develop incentives to encourage development in designated growth areas or disincentives to discourage development in areas not designated for growth.

Encourage the efficient use of energy and water resources.

Ensure that the Capital Improvement Plan is consistent with the Comprehensive Plan.

Promote intergovernmental and interagency cooperation in land use decision making.

In summary, growth and development should be directed to the Urban or Town Growth Areas and Rural Villages where development now exists to maximize the investment in infrastructure and services. This, will in turn, minimize new investment in duplicate facilities and reduce development pressure on agricultural, open space and environmentally sensitive areas leading to the increased likelihood of their protection. The use of the capital improvement program to encourage development along with the promulgation of incentives and disincentives are the implementation method of choice in developing consistency with the Visions, Goals and Objectives.

CHAPTER 3

BACKGROUND DATA

A. DEMOGRAPHIC

1. Population

Between 1940 and 1990 the population of Washington County grew by 52,555 people. This is an annual rate of approximately .76% per year. By the year 2000 the population grew by an additional 10,530 persons to 131,923 persons. This represents an annual growth rate of approximately .86% per year for the 1990s. The County estimates the population to increase to 149,835 by the year 2020 and 176,868 by 2050. These numbers are based on trends in new housing unit permits issued throughout the County as well as extrapolation of group quarter projections from the State. For projection purposes the County has used an annual permit issuance rate of 600 per year. It also anticipates a decrease in the average household size in accordance with State projections. (See Graph 1.)

In contrast, the State projects a population of 145,400 for the County in 2020 based on a formula which looks at births, deaths, in/out migration and group quarters. Historical data indicates that State projections for the future tend to increase with new projections. Therefore, the difference should close as future projections are completed. The County is not aware of any formal projections completed by the State through 2050.

The average annual growth rate between 1940 and 1990 and projected through 2020 shows a peak during the 1950s, and another smaller peak during the 1990s. From 2000 to 2020 the average annual growth rate is projected to average less than .7%. The State projection is slightly lower. (See Graph 2.)

The significance of this rate is that it shows that Washington County, unlike some of its neighbors to the east (Frederick, Carroll, etc.) is not currently experiencing, nor is it projected to experience, extremely rapid growth. The projected growth rate of well less than 1% per year should provide the County with an opportunity to keep infrastructure and services on a pace to meet future demand.

2. Housing Units

The 1990 census indicated that Washington County had a total of 47,448 housing units. By 2020 the County projects the total to rise to approximately 62,800 units and by 2050 to 77,688 units. Therefore, Washington County must absorb 15,352 units by 2020 or 30,240 units by 2050. This number is more significant for planning purposes in Washington County than are the population projections because of the large group quarter population (11,193 in 2020) in the County. (See Graph 3.) Group quarters include prisons, nursing homes, dormitories and other similar facilities.

3. Employment

In 1970, employment in Washington County was estimated at 45,700. By 1990 the number of jobs in Washington County had risen to 66,700 with estimates placing the number of jobs in 2000 at 77,800. By 2020 the number of jobs in Washington County is projected to increase to 89,601, or approximately 22,901 more than in 1990. Employment projections from 2000 to 2020 show an estimated increase of approximately 11,800 jobs. During that same time period population growth is expected to be in the range of 18,000 with approximately 1,800 of the population growth being associated with group quarters. This means that there would be approximately 16,200 new people for approximately 11,800 new jobs. From this perspective it appears that the County would not have the labor force needed to supply potential new jobs.

Commuting patterns for the area show the importance of Washington County in the regional job market. In 1990, the distribution of inter-county commuters working in Washington County showed approximately 42.5% coming from Franklin County, PA; 7.2% from Fulton County, PA; 18.2% from Berkeley County, WV; 2.5% from Jefferson County, WV, 5.4% from Morgan County, WV and 8.6% from Frederick County, MD. With all of these Counties populations projected to grow faster than Washington County, they should be able to supply any additional labor needed to satisfy projected employment growth in the County.

This issue was specifically reviewed in the Fiscal Analysis Study completed by Tischler & Associates, Inc. for Washington County in 1998. The Fiscal Analysis Study looked at five growth scenarios with employment peaking under an “economic development” scenario at 21,190 jobs from 2000 to 2020 and a low of 6,441 jobs based on a “low growth” scenario. The “Trends” ,or base scenario, which projects an employment scenario of 11,800 jobs, has been utilized for planning purposes in this update of the Comprehensive Plan.

From a land use perspective, critical importance is not only associated with the total number of jobs but also the type of employment. A comparison between the years 1970, 2000, and 2020 shows the future types of jobs anticipated in Washington County. These percentages are based on projections done by the Department of Planning.

Employment Projections			
Employment Type	1970	2000	2020
Farming	3.7%	1.5%	1.0%
Ag. Service, Forestry, Fishing, Etc.	0.4%	0.9%	0.9%
Mining	0.1%	0.1%	0.1%

Construction	5.0%	6.4%	6.2%
Manufacturing	30.9%	13.9%	11.7%
Transportation & Public Utilities	7.7%	5.4%	5.3%
Wholesale Trade	3.3%	5.0%	4.9%
Retail Trade	15.5%	18.3%	17.8%
Finance, Insurance & Real Estate	3.9%	7.3%	7.9%
Services	14.7%	30.3%	34.6%
Government	15.1%	10.8%	9.6%
Total	100%	100%	100%

From the table above it can be seen that the “Services” sector of the employment base has grown, and is projected to grow, substantially while the manufacturing base dropped significantly from 1970 to 2000. It should also be noted that farming is projected to continue to drop over the next 20 years. Government employment at all levels also shows a marked decrease from 1970 to 2000 and is projected to further decrease into the year 2020.

4. Socio-Economic Characteristics

The socio-economic characteristics of Washington County at times parallel closely those of the State of Maryland while at other times they contrast quite significantly. A comparison of various Washington County socio-economic characteristics from 1970 to 2000, with projections to 2020 (by the Maryland Department of Planning), against those of the entire State reveals the following:

Male and Female

A comparison of the male and female ratio for Washington County against the State as a

whole reveals that Washington County does not fit the State or the national statistical pattern. In 1970, females outnumbered males in both Washington County and the State. However, by 2000 that number has changed and there are more males than females in Washington County which is opposite of the ratio the State. This same trend of more males than females is projected for 2020 and again it is opposite State overall projections for 2020. The reason this occurs is the prisons in Washington County. The group population statistics associated with the prisons tend to skew several socio-economic statistics in this manner.

	Year 1970	Year 2000	Year 2020
Male – County	49.3%	51.0%	51.3%
Female - County	50.7%	49.0%	48.7%
Male - State	48.9%	48.7%	48.8%
Female - State	51.1%	51.3%	51.2%

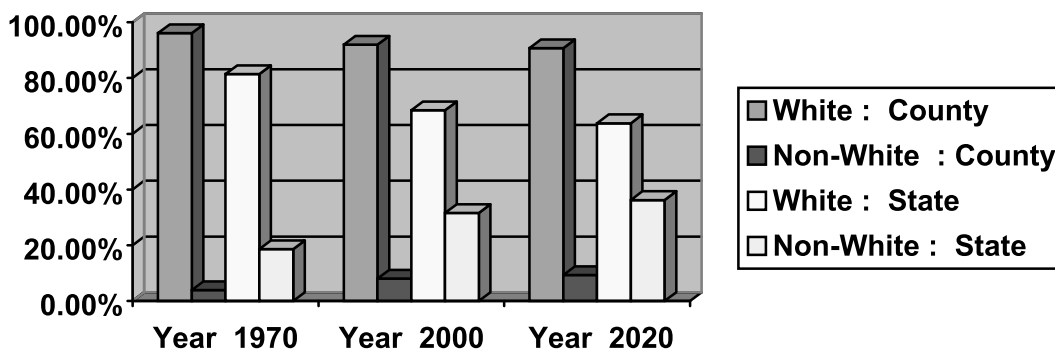
White and Non-White

This category also reflects a major contrast between patterns for the State as a whole and Washington County. In 1970 it can be assumed the difference is reflective of a lack of a large minority population historically associated with Washington County. As this difference grows in 2000 and 2020 it may be more reflective of immigration settlement patterns across the state of Maryland with the more urban areas around Baltimore and Washington DC attracting a larger share of immigrants than Washington County.

	Year 1970	Year 2000	Year 2020
White: County	96.1%	92%	90.7%
Non-White: County	3.9%	8%	9.3%

White: State	81.4%	68.4%	63.8%
Non-White: State	18.6%	31.6%	36.2%

White and Non-White

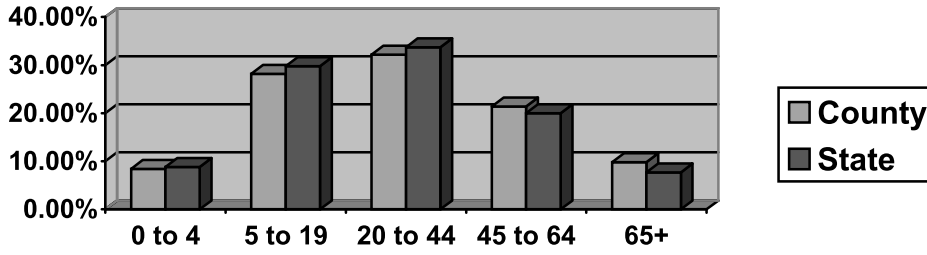


Age Cohorts

The age cohorts for Washington County for the years 1970, 2000, and 2020 parallel the patterns for the State of Maryland with all 20 to 44 age cohorts showing the largest percentage in all three years analyzed. The 2020, 20 to 44 age cohorts for Washington County are slightly higher than for the State as a whole. This again probably reflects the influence of the prison population in Washington County. It should also be noted that the 65+ age cohort for Washington County nearly doubles from 1970 at 9.8% of the population to 18.6% in 2020. This trend is consistent with both state and national trends with the percentage for Washington County maintaining approximately a 2% higher rate than the State throughout the 50-year time period.

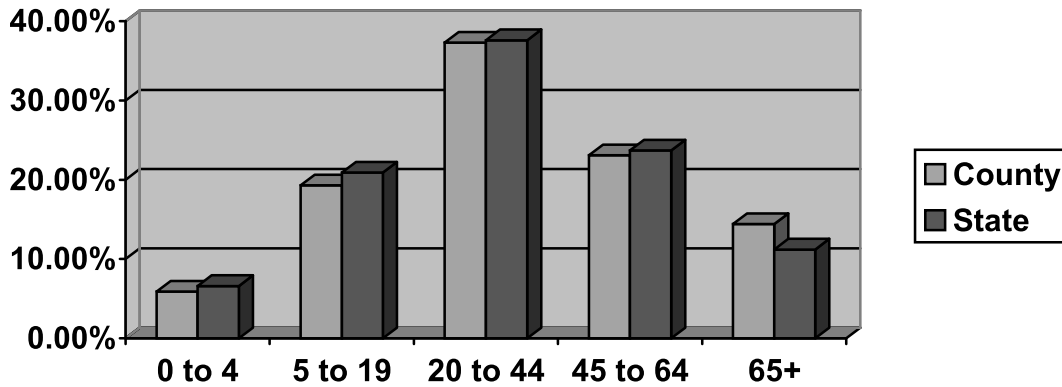
1970 Age Cohort					
	0 to 4	5 to 19	20 to 44	45 to 64	65+
County	8.4%	28.2%	32.2%	21.4%	9.8%
State	8.8%	29.8%	33.7%	20%	7.7%

1970 Age Cohort



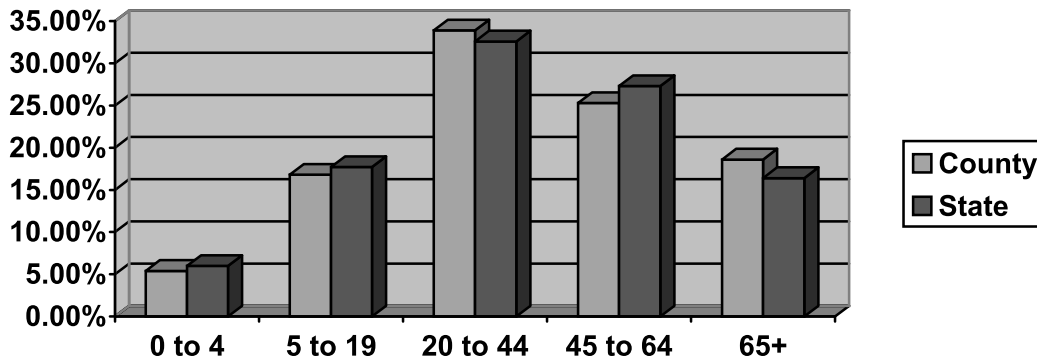
2000 Age Cohort					
	0 to 4	5 to 19	20 to 44	45 to 64	65+
County	5.9%	19.3%	37.3%	23.1%	14.4%
State	6.6%	20.9%	37.6%	23.7%	11.2%

2000 Age Cohort



2020 Age Cohort					
	0 to 4	5 to 19	20 to 44	45 to 64	65+
County	5.4%	16.8%	33.9%	25.3%	18.6%
State	6.0%	17.7%	32.6%	27.3%	16.4%

2020 Age Cohort

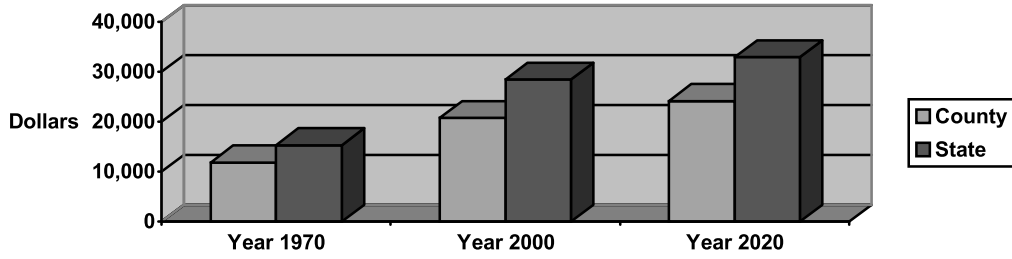


Per Capita Income

A review of the per capita income shows that Washington County’s per capita income figure rises from \$11,837 in 1970 to \$24,199 by 2020. However, this figure lags behind the overall State figure significantly. In 1970, the State figure was \$15,327 and in 2020 it is projected to be \$32,949. This shows that a difference between the County and State per capita figures in 1970 of about \$3,500 is projected to rise to approximately \$8,750 in 2020. Obviously these figures reflect a difference in wages and salaries between the rural areas and the urban areas of the State. However, again the presence of the prisons has an effect. The population from the prisons tends to lower the overall per capita figure through the inclusion of a large population group, which adds little income to the overall County figure.

Per Capita Income Comparison			
	Year 1970	Year 2000	Year 2020
County	11,837	20,795	24,199
State	15,327	28,457	32,949

Per Capita Income

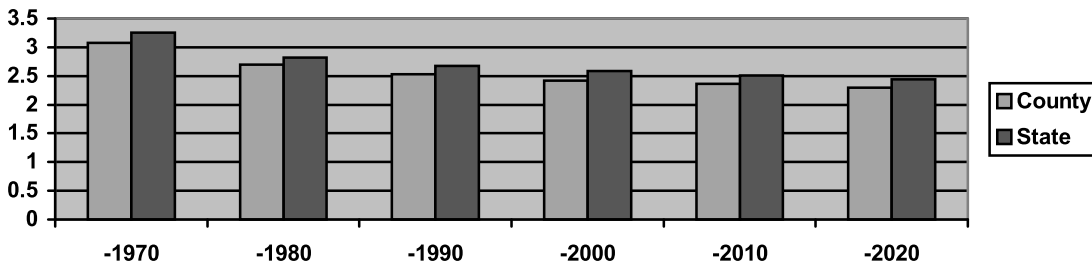


Persons Per Household

The person per household trend continues to decrease in Washington County as well as across the State as a whole. Washington County’s trend is slightly lower than the State. This number is significant in estimating population based on projected new unit development. The population estimates completed by the Washington County Planning Staff utilize the estimates prepared by the Maryland Department of Planning.

Persons Per Household Average						
	(1970)	(1980)	(1990)	(2000)	(2010)	(2020)
County	3.08	2.70	2.53	2.42	2.36	2.30
State	3.25	2.82	2.67	2.59	2.51	2.44

Persons Per Household Average



B. LAND USE

1. Land Use

Washington County contains approximately 298,851 acres. Information developed by the Maryland Department of Planning and supplemented by the County indicates that the largest land use in 1997 was agriculture with a total of 142,515 acres or 47.69%. The following table of broad based land use illustrates land use changes from 1973 to 1997.

Land Use Patterns 1973 – 1997 (in %)					
	(1973)	(1981)	(1985)	(1990)	(1997)
Low Density Residential	2.4	2.8	2.9	5.1	7.3
Med\High Den. Resid.	1.6	1.7	1.7	1.9	3.2
Commercial/Industrial	1.5	1.6	1.8	2.0	2.8
Institutional\Open Space	0.7	0.7	0.8	1.0	1.3
Agricultural	53.5	52.9	52.6	50.4	47.7
Forest	38.3	38.3	38.2	37.6	35.9
Water	2.0	2.0	2.0	2.0	1.8

These changes can be readily seen in the attached graph of “Land Use Change Over Time.” (See Graph 4.) This statistical information includes the areas inside the growth areas including municipalities, and is depicted on the Land Use Map. (See Map 5.) The figures in the table do not differentiate between public and private land ownership. For example, forested land which may be owned by a public entity and designated a park, is categorized the same as privately held forested land and not as institutional/open space. Water is included as a category because the Potomac River is considered within the jurisdiction of the State of Maryland. The

water values change over the years because of more accurate land use mapping technology.

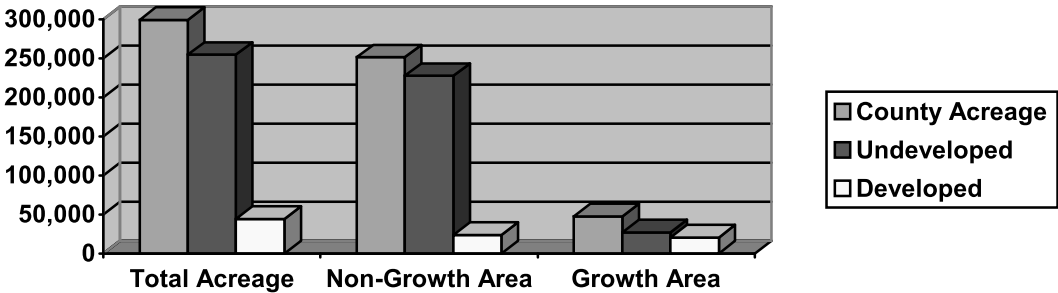
Though the information is broad based, it does highlight several key points in the development patterns in Washington County over the last 25 years. Land dedicated to residential development has increased from approximately 4% to 10.5% with approximately 5% of this increase taking place in the low density residential category. Commercial/Industrial land use area has nearly doubled increasing from 1.5% to 2.8%. Likewise, Institutional/Open space has also doubled to 1.3% from 0.7%.

The increase in the other land use categories has primarily come at the expense of agricultural land use which has shown a decrease of almost 6% during this time. Forested area has also shown a decrease of approximately 2.5% during this period.

However, statistical numbers by themselves may not accurately illustrate development patterns within Washington County. In 1983, the County Comprehensive Plan was amended to introduce growth management control through the adoption of designated “growth areas.” (See Map 6.) The “Urban Growth Area” (UGA) boundary was adopted around the City of Hagerstown and the Towns of Funkstown and Williamsport. “Town Growth Areas” (TGA) were also adopted around Boonsboro, Smithsburg, and Hancock. Approximately 48,237 acres or 16% of the County area is within designated growth areas with the UGA containing approximately 38,047 acres and the remaining TGAs containing 10,190 acres. This leaves 250,614 acres, or 84%, of the County outside of designated growth areas. It is estimated that 44,522 total acres, or 15%, of the County has been developed. Of this developed area, 20,898 acres are within Growth Areas and 23,624 acres outside growth areas. The following table and chart depicts this development relationship.

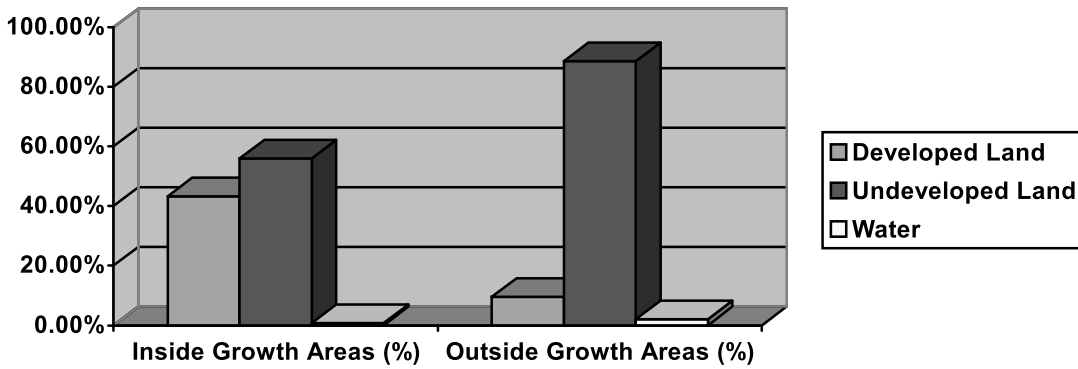
Developed/Undeveloped Area within County			
	Total Acreage	Non-Growth Area	Growth Area
County Acreage	298,851	250,614	48,237
Undeveloped	254,329	226,990	27,339
Developed	44,522	23,624	20,898

Developed/Undeveloped Area within County



A comparison of developed and undeveloped land both within and outside growth areas shows the following:

Development Comparison Inside vs. Outside of Growth Areas		
	Inside Growth Areas (%)	Outside Growth Areas (%)
Developed Land	43.3%	9.5%
Undeveloped Land	55.9%	88.5%
Water	.8%	2%



From these tables and charts it can readily be seen that Washington County is growing, but that most of the County remains undeveloped. Furthermore, the greatest amount of development is taking place in the growth areas designated for development and that there is still ample land available in these areas to address projected growth. A more detailed look at current land use patterns both within and outside the growth areas compared to the County as a whole, based on data compiled by the Maryland Department of Planning, shows the following:

Detailed Land Use Breakdown in Acres			
Land Use Category	County Wide	Outside Growth Areas	Inside Growth Areas
Low Density Res.	21,797	18,272	3,525
Medium Den. Res.	7,941	1,204	6,737
High Density Res.	1,596	108	1,488
Commercial	4,787	594	4,193
Industrial	2,196	42	2,155
Institutional	2,706	1,187	1,519
Extractive	1,281	1,013	269
Open Urban Land	1,334	562	772

Cropland	118,374	101,931	16,443
Pasture	17,162	14,827	2,335
Orchards	6,097	5,360	737
Other Agriculture	882	807	75
Deciduous Forest	85,147	81,221	3,926
Evergreen Forest	2,412	2,117	295
Mixed Forest	15,844	14,077	1,767
Brush	3,790	2,197	1,592
Water	5,505	5,095	409
Total	298,851	250,614	48,237

This information shows that cropland followed by deciduous forest are by far the largest overall land uses in the County. Low density residential ranks a distant third followed closely by pasture and mixed forest. (See Graph 5.) Not surprisingly, these same land uses dominant the bulk of the land use outside of designated growth areas. The dominant land uses inside of the growth areas, however, change somewhat. Though cropland still remains the largest land use, medium density residential followed by commercial are a close second and third. These again are not unexpected since commercial and residential development is targeted to the growth areas. (See Graph 6.)

The large amount of low density residential development outside of designated growth areas tends to reflect the large number of “rural villages” which have been identified in the current Comprehensive Plan. (See Map 7.)

2. Zoning

Zoning was first established in Washington County in 1973. Since then many amendments to the Zoning Text and Map have occurred. The most significant recent map amendment was the comprehensive rezoning of the 17 interstate highway interchanges that took nearly 4 years to complete. The volume of amendments over the years as well as the need to maintain a document consistent with current land use principles and technology will generate a need for a major rewrite of the document. In addition, map revisions to support this version of the Comprehensive Plan will be needed.

The Washington County Zoning Ordinance currently contains 26 zoning classifications. These classifications cover 286,986 acres of the County with the remaining 11,865 falling within the jurisdiction of the municipalities that have their own land use controls. Of the 286,986 acres, 250,440.2 acres are outside of currently designated growth areas while the remaining 36,545.8 acres are within. The following table illustrates the breakdown of total acreage by zone as well as the amount outside or inside growth areas. It should be noted that current growth area boundaries are not fixed by property lines and these acreages are estimates based upon land historically determined as associated or non-associated with growth areas.

Zoning Classification Acreages			
Classifications	Total Acreage	Acres Outside GA's	Acres Inside GA's
Agriculture - A	145,067	132,655	12,412
Agriculture – PUD	69	0	69
Agriculture – HP	117	76	41
Airport – AP	606	2	604

Business General – BG	684	146	540
Business Local – BL	344	28	316
Business Local – BL-HP	2.5	0	2.5
Business Transition – BT	16	3	13
Conservation – C	112,730	110,755	1,975
Conservation – HP	85.5	85.2	.3
Conservation – IM	255	255	0
Highway Intrchnge 1 – HI-1	5,130	392	4,738
Highway Intrchnge 2 – HI-2	1,921	45	1,876
Historic Preservation – HP	14	13	1
Industrial General – IG	2,176	72	2,104
Industrial Mineral – IM	4,328	3,773	555
Industrial Restricted – IR	72	0	72
Industrial Transition – IT	16	0	16
Planned Business – PB	199	0	199
Planned Industrial – PI	892	0	892
Residential Multifamily – RM	227	1	226
Residential Rural – RR	5,393	1,513	3,880
Residential Suburban – RS	3,525	12	3,513
Residential Suburban PUD – RS – PUD	517	0	517
Residential Urban – RU	1,986	0	1,986

Special Economic Dev. – SED	614	614	0
Total Acreage	286,986	250,440.2	36,545.8
Towns	11,865	753	11,112
Total County Acreage	298,851	251,193.2	47,657.8

Note: The PUD- Planned Unit Development, HP-Historic Preservation, and IM-Industrial Mineral are all floating zones. The HP and IM areas that are not associated with another zoning classification reflect designations at the time of adoption of the Zoning Ordinance. The Antietam Overlay Zone is not represented since it is overlaid over other zoning classifications and does not supplant but adds to the current underlying zoning regulations.

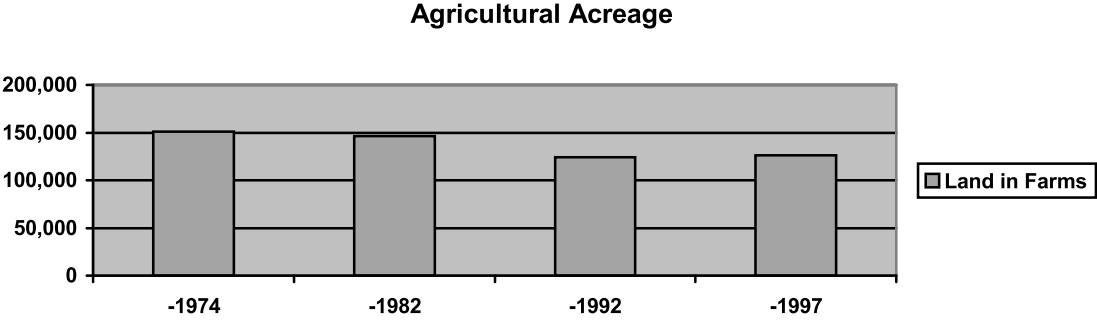
By far the largest zoning classifications in the County, by acreage, are Agriculture and Conservation (See Graph 7). This same relationship exists outside of designated growth areas with Agriculture being the largest classification and Conservation being the second largest classification. However, this relationship does not hold true inside the growth areas. Agriculture is still the largest classification; however, Highway Interchange -1 is the second largest classification inside of growth areas. (See Graph 8.) The large amount of Highway Interchange -1 zoning coincides with the large amount of existing commercial development identified under land use.

The large amount of area zoned Agriculture and Conservation in the County is readily visible from the Zoning Map. (See Map 8.) The relationship of the growth areas to the majority of the zoning classifications is quite evident, particularly the Urban Growth Area around the City of Hagerstown.

3. Active Agriculture

In 1997, it was estimated that Washington County had 126,292 acres in some form of “active agriculture”. This was a decrease of approximately 25,000 acres from the early 1970s.

Agricultural Acreage				
	(1974)	(1982)	(1992)	(1997)
Land in Farms	150,903	145,983	123,932	126,292



The decreasing trend in the amount of farmland in the County reached a low point in the early 1990s with the gaining of over 2,000 acres between 1992 to 1997. This increase in acreage can be linked to agricultural preservation efforts by the County, as well Christmas tree growing and scrubland conversion to farmland.

The agricultural areas of Washington County are primarily located with the Great Valley region of the County that stretches from South Mountain to Clear Spring. (See Map 9.) This corresponds quite accurately with where the best soils (Class 1 & 2 - Soil Capability Analysis) for agricultural production are located. (See Map 10.)

From 1974 to 1997 the number of farms in Washington County decreased from 856 to 768. During this same time period the average size of farms decreased from 176 acres to 164 acres. These numbers are somewhat skewed because of changes in the statistical analysis used for farms in 1982.

Number of Farms and Average Size				
	1974	1982	1992	1997
Number of Farms	856	962	809	768
Average Size	176	152	153	164

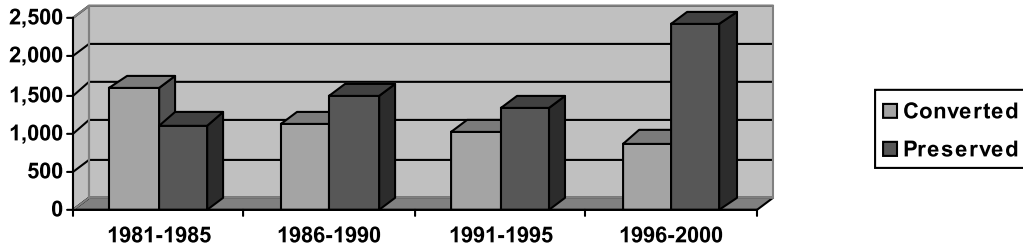
If the trends are looked at from 1982 instead of 1974 the same decrease in the number of farms is evident. However, the average size of the farms increases from 152 acres to 164 acres. This increase in the size of a farm reflects land not being sold by farmers for development but instead being sold to other farmers for incorporation into existing farms.

The attached map provided by the Washington County Soil Conservation District identifies the location of farms within Washington County. (See Map 11.)

During this 23-year time period the loss of farmland was recognized as a problem and development of programs to preserve farmland were initiated by Washington County. From 1981 to 2000, it is estimated that 1,763 more acres will be preserved in agriculture rather than converted to other uses.

Washington County Farmland - Preservation versus Conversion (Acres)					
	1981-1985	1986-1990	1991-1995	1996-2000	TOTAL
Converted	1,598	1,120	1,010	870	4,598
Preserved	1,106	1,494	1,334	2,427	6,361
Difference	-492	374	324	1,557	1,763

Farmland Preservation Versus Conversion (Acres)



This chart reflects only land that has been preserved by the selling of development rights through the Maryland Agricultural Land Preservation Program to create permanent agricultural easements. The chart shows that during the period 1981 to 1985, 492 more acres were converted from agricultural use than were preserved for agricultural uses. However, by the 1996 to 2000 time period the trend had been completely reversed with over 1,500 more acres preserved than converted. Additional land preserved through the State purchasing of easements around Antietam Battlefield, the Rural Legacy Program and private conservation groups as well as 10 year ‘agricultural districts’ when added in substantially increase the figure.

4. Vacant Lands

Of the 298,851 acres in Washington County, approximately 286,986 acres are under development regulation control of the Washington County Government. The remaining 11,865 acres are under the jurisdiction of the municipalities. This acreage can be viewed in 5 broad zoning classifications from the perspective of developed versus undeveloped land.

Percentage of Developed vs. Undeveloped Land by Zoning Category					
In Percent	Agriculture	Business	Conservation	Industrial	Residential
Total Land	50.6	1.3	39.3	4.0	4.8
Developed	6.8	.6	5.4	1.9	2.6

Undeveloped	43.8	.7	33.9	2.1	2.2
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From the table below, it can be seen that the zoning classifications associated with the rural areas of the County, Agriculture and Conservation make up approximately 90% of the zoned land while accounting for only 12.2 percent of the developed land. In contrast, the urban classifications of Residential, Business, and Industrial account for approximately 10% of the zoned land with 5.1% being developed. These numbers reflect the influence of the Urban and Town Growth Area boundaries. In addition, a substantial portion of the Agricultural zoned property that has been developed is located within growth areas and not in the rural area. For analysis purposes the acreage associated with the HI-1 classification, because of its emphasis on heavy commercial and light industrial land uses, has been divided between the business and industrial categories. In addition, a substantial portion of the industrial category reflects Industrial Mineral zoning which, when excluded, reduces the overall amount of industrial zoning to approximately 3% and the undeveloped industrial land to a little over 1%.

The following table provides for a more detailed breakdown based upon developed and undeveloped acreage by individual zoning classification.

Developed vs. Undeveloped Acreage by Zoning Classification			
Zoning	Developed	Undeveloped	Total (acres)
Agriculture	19,404	125,663	145,067
Agriculture-PUD	0	69	69
Agriculture-HP	19	98	117
Airport	549	57	606
Business General	341	343	686

Business Local	245	99	344
Business Local-HP	2.5	0	2.5
Business Transitional	11	5	6
Conservation	15,343	97,387	112,730
Conservation-HP	6.5	79	85.5
Conservation-IM	255	0	255
Highway Interchange 1	1,946	3,184	5,130
Highway Interchange 2	403	1,518	1,921
Historic Preservation	14	0	14
Industrial General	1,264	912	2,176
Industrial Mineral	1,617	2,711	4,328
Industrial Restricted	60	12	72
Industrial Transition	8	8	16
Planned Business	130	69	199
Planned Industrial	637	255	892
Residential Multifamily	184	43	227
Residential Rural	2,867	2,526	5,393
Residential Suburban	2,169	1,356	3,525
Residential Sub.-PUD	194	323	517
Residential Urban	1,592	394	1,986
Special Economic Dev.	356	258	614
TOTAL	49,617	237,369	286,986

This table is significant in that it identifies overall undeveloped acreages for each zoning classification. However, in most cases the data needs to be refined in order to present an accurate picture of potential land use activity. Nevertheless, certain undeveloped land values do stand out. For example, the 912-acre figure for IG and 12 acre figure for IR is quite small. With a major portion of the IG zoning located in the Hopewell Valley Area, where large parcels, in the 80 to 100 acre range, have been developing, the amount of IG currently available could easily be built out in the next 20-year horizon period. The lack of zoned Industrial property is mitigated somewhat by the 3,184 acres of Highway Interchange 1 zoned property which allows for Industrial Restricted uses.

The amount of undeveloped, residentially zoned property also is less than anticipated for a County of this size. However, the fact that development can occur on one acre lots on Agricultural zoned and three acre lots on Conservation zoned property relegates these zoning classifications more towards large lot residential zoning districts than Agriculture and Conservation zones which their names indicate. The huge amount of undeveloped land associated with these zoning classifications provides the potential for residential development well in excess of any projected demand in any foreseeable horizon period.

Satisfying future residential demand is best addressed through analysis of parcels which have been approved for development but which have not yet been built out, as well as looking at raw acreage with the potential for development. A parcel analysis reveals that there are approximately 4,000 existing parcels that could be considered candidates for residential development in the County. Of these 4,000 parcels, approximately 1,500 are inside the Urban Growth Area and 2,500 in rural areas. However, not every existing parcel will be built out for a variety of reasons.

From a growth management perspective, the goal is to channel development toward the designated growth areas. An analysis of the current designated “growth areas” based on raw acreage and approved units, using current development trends and utilizing the criteria set forth by the Maryland Department of Planning for sizing Priority Funding Areas, shows that the current growth areas have the capacity to meet demand for the 2020 horizon. However, by 2050 it is anticipated that demand will exceed supply even if all 2,500 units outside the current growth areas as well as available land inside the growth areas are built out. This issue can be addressed through the higher density uses or minor revisions to growth boundary areas during the 50-year horizon period.

As stated before, there is ample land in the County to meet projected future need. Therefore, the issue becomes not amount of land but method of utilization of land to further the goals of the Comprehensive Plan. (See Map 12.)

5. Public Lands

A significant portion of the land in Washington County is owned by, or is associated with, public entities. Out of the 298,851 acres in Washington County, approximately 38,830, or approximately 13%, are associated with a public entity. Major land areas include:

<u>Facility</u>	<u>Acreage</u>
Community Parks (Towns)	338
Community Parks (City of Hagerstown)	281
County Parks	757
Hagerstown Community College	315
Washington County Bd. of Education	1,240
Edgemont Reservoir (City)	1,721
Landfill Facilities	1,006
Correctional Facilities	1,059
Airport	419
University of Maryland Farm	484
State Lands	22,370
Federal Lands	8,840
Total	38,830

Property for offices, road maintenance facilities, fire and rescue operations as well as quasi-governmental facilities are not included in these totals. (See Map 13.)

Agriculture preservation programs and battlefield protection programs also play a significant role in shaping the landscape of Washington County. The County agriculture preservation programs have placed almost 30,000 acres in either 10-year agricultural districts (21,447 acres), or purchased permanent agricultural easements (6,530 acres). Easements owned by the Maryland Environmental Trust around the Antietam and South Mountain Battlefields (3,302 acres) and Federal Scenic Easements (1,416 acres) along with private easements owned by the Save Historic Antietam Foundation (40 acres) and Conservation Fund (173 acres) push the amount of open space or protected land in Washington County to approximately 71,738 acres. Another 1,500 acres are anticipated to be preserved through the use of Rural Legacy Funds by 2001. This total should grow to about 73,238 acres, or 24.5 % of the land area of the County that will be under some form of open space protection measure. (See Map 14.)

6. Sensitive Areas

The Planning Act of 1992 required that Comprehensive Plans include a “Sensitive Area Element”. The adopted Sensitive Area Element addressed five areas of concern. Four of the sensitive areas are required to be addressed by State Law with a fifth added by the County. The State required sensitive areas are: floodplains, steep slopes, habitat of threatened and endangered species, and stream buffers. The County added sensitive area, labeled as “Special Planning Areas”, includes the Edgemont and Smithsburg Reservoir Watersheds, Appalachian Trail Corridor, and the Upper Beaver Creek Basin and Trout Hatchery.

Washington County chooses to utilize the Federal Endangered Species List to address the endangered species requirement because of location adjacent to the States of Pennsylvania,

Virginia and West Virginia. The endangered species associated with the Federal List are located in the western part of the County. Steep slopes tend to be located along South Mountain and Elk Ridge along with the ridge and valley area west of Clear Spring. Floodplains and stream buffers are located all over the County in the drainage basins that lead to the Potomac River. The Special Planning Areas are located in the eastern part of the County and tend to be associated with South Mountain.

It is not unusual for the sensitive areas to overlap with each other, as well as parks and permanently protected open space areas. Development is not precluded from a sensitive area but additional development regulations may be required to mitigate potential impacts. (See Map 15.)

7. Historic Sites

The history of Washington County is well documented with many sites from the past still in existence today. A five year effort began in the 1970s identified and catalogued many pre-1860 resources. This initial effort identified 1,316 individual sites throughout the County. In 1983, a second survey, generally referred to as the Getty Survey, was completed. This survey identified an additional 82 properties dating to the early 20th century. In 1989, Washington County began working with the small towns in the County to identify historic sites within their corporate areas. This effort identified an additional 1,785 sites. A rural community survey was done in the 1990s with the unincorporated areas of Maugansville, Rohrsersville, Pen Mar, Fairplay, and Tilghmanton being surveyed. This added another 291 sites to the County inventory.

Almost 25 years of survey and identification has yielded 3,474 sites with a significant majority of them being dwellings. The 1990 census indicated that approximately 13,570 housing

units in Washington County were constructed prior to 1939. With fifty years generally considered the threshold for historic site designation under various Federal and State programs, this leaves a significant number of potential historic sites yet to be identified. The following map identifies historic sites identified in Washington County. (See Map 16.)

8. Unique Natural Features

Washington County is home to a number of significant historical sites, unique natural settings and scenic features. The following list identifies a few of the more significant ones: Fort Frederick, Antietam Battlefield, South Mountain Battlefield, Chesapeake and Ohio Canal, Appalachian Trail, High Rock scenic overlook, Crystal Grottoes, Beaver Creek Spring, Devils Racecourse, Harper's Ferry Geologic Section, Weaverton Cliffs, Round Top Heritage Area, Sidling Hill I-68 Road Cut, Woodmont Geological Section, and Mt. Briar Wetland. (See Map 17.)

9. Community Facilities

a) Schools

The Washington County Board of Education operates several facilities across the County including 25 elementary schools, 7 middle schools, 7 high schools, 1 combined middle /high school, 1 alternative education, 2 special education and 1 pre-school. Washington County has 4 post secondary education facilities: Hagerstown Community College (Robinwood Dr.), Frostburg State University, Hagerstown Branch (City of Hagerstown), Hagerstown Business College (Pennsylvania Avenue), and Antietam Bible College (Broadfording Road). The County also contains several major private or parochial education facilities including: St. James School, Broadfording Christian Academy, Grace Academy, Heritage Academy, Highland View Academy and St. Maria Goretti High School. Technical and trade educational opportunities are

available as well as parochial elementary education facilities and pre-school educational centers.

b) Police

Three major police forces, as well as a number of minor ones operate within the County. The State Police Center is located on Sharpsburg Pike just south of the I-70 interchange. The County Sheriff Department operates from a location on Western Maryland Parkway. The City of Hagerstown operates a major Police Department located on Burhans Boulevard. The Town of Hancock has its own municipal police force while most of the smaller towns in the County participate in the resident trooper program run by the State Police.

c) Fire Service and Ambulance Service

Washington County has a total of fourteen (14) volunteer fire companies and seven (7) volunteer ambulance companies. In addition, Community Rescue Services operate an ambulance substation in Maugansville and the Smithsburg and Boonsboro Fire companies operate fire company substations located at Fort Ritchie and Rohrsersville respectively. The City of Hagerstown has a total of six (6) fire companies located within its city limits.

Out-of-county fire and ambulance companies in certain areas also provide service. Four specialty companies serve the County. These include County Air Unit, Special Operations (HAZMAT), County Emergency Rehabilitation Unit, and Civil Defense. Washington County also operates an emergency communication facility that handles the 911 calls.

d) Water and Sewer Service

The primary water service for most of the public water uses in the County is the City of Hagerstown water system. The City operates two water treatment plants – the Breichner plant in Smithsburg and the Wilson Plant in Williamsport. The Washington County Water and Sewer

Department operate water treatment facilities in Sharpsburg, Highfield/Cascade, Mt. Aetna, Elk Ridge and Sandy Hook areas. The Towns of Smithsburg, Clear Spring, and Hancock operate their own water systems, while the Towns of Boonsboro and Keedysville operate a joint water system. Fort Ritchie has operated a private water system in the past, and a small number of County residents in the Weverton area are served by water service from Frederick County.

The primary sewer service providers are the Washington County Water & Sewer Department and the City of Hagerstown. The County operates the Conococheague Wastewater Treatment Plant near Williamsport. The City of Hagerstown operates the Water Pollution Control plant on the Antietam Creek near Funkstown. The County also operates the Antietam Wastewater Treatment Plant near Sharpsburg, the C. William Winebrenner Wastewater Treatment Plant near Fort Ritchie, the Smithsburg Wastewater Treatment Plant and the Sandy Hook Treat Plant in Sandy Hook. Washington County also has developed a pre-treatment facility located adjacent to its Conococheague Treatment Plant. The Towns of Hancock, Boonsboro, Clear Spring and Funkstown all operate their own wastewater treatment facilities. In addition, a major private wastewater treatment facility exists at the Maryland Correctional Institute.

e) Libraries

The Washington County Free Library operates a system of libraries across the County. The major central library is located in Hagerstown. Branch or satellite facilities are located in Hancock, Smithsburg, Sharpsburg, Keedysville, Boonsboro, Clear Spring and Williamsport.

f) Landfills

Washington County currently operates one landfill in the County. The 40 West Landfill is located west of Hagerstown along US 40. The new landfill accepts all normal municipal waste

as well as rubble and construction materials.

g) Airport

One public airport operates in Washington County. The Hagerstown Regional Airport is located between I-81 and US 11 just north of Showalter Road. It provides for commercial, corporate and private service to the region.

h) Health Facilities

The Washington County Health System operates a number of health care sites across the County. The main hospital campus is located in the City of Hagerstown with a major satellite facility located at the Robinwood Medical Campus. Smaller clinics are operated at the Smithsburg Family Medical Center, Northern Avenue Medical Center in Hagerstown, Boonsboro Professional Building, Williamsport Family Medical Center, Kenly Avenue Medical Center in Hagerstown, and the Walnut Street Medical Center in Hagerstown. (See Map 18.)

C. TRANSPORTATION NETWORK

1. Highways

The backbone of the transportation network in Washington County is the interstate highway system. Interstate Routes 70 and 68 traverse the County in an east/west pattern while I-81 crosses the County in a north/south direction. The intersection of I-70 and I-81 west of Hagerstown has led to the location of major warehouse distribution centers and trucking companies in the County.

In addition to the interstate system, there is an extensive network of highways in the County. The general layout is a hub and spoke pattern, with Hagerstown, Williamsport, and Boonsboro all acting as hubs. US 11, MD 65 and MD 60 are the major north-south highways,

with US 40 and MD 68 oriented to the east and west. MD 63 is an important road connecting Williamsport with Pennsylvania and MD 67 connects Harper's Ferry in West Virginia to Boonsboro. MD 34 from Boonsboro to Sharpsburg is another significant road. Many of these roads have historical significance and follow travel corridors developed by the early settlers.

Most of the local roads in the incorporated towns and cities are laid out in grid patterns with the exception being Keedysville that forms a narrow strip. Connectivity between and within the Urban and Town Growth areas is generally good with the only difficulty being in the Hagerstown area where the railroad tracks separate the north and west sides of the growth area from the south and east. (See Map 19.)

2. Public Transportation

Local general public service is provided by the County Commuter transit system and several taxi companies operating in the City of Hagerstown. The County Commuter system is primarily a fixed route operating system with schedule changes and points of connection altered based on demand.

Commuter and inter-city services available in Washington County include park-and-ride facilities, commuter bus, inter-city bus, and commercial air. MARC service can be accessed in Martinsburg, Duffields, and Harper's Ferry, WV as well as in Brunswick, MD. MARC service will also be available in Frederick, MD in the early 2000s. Commuter bus service is also operated from Hagerstown to the Shady Grove Metrorail Station in Montgomery County. There are six park and ride facilities located within the County from which commuters can car pool to the Washington DC and Baltimore metro areas.

The Grey Hound Bus Company operates inter-city bus service out of its facility located south of the I-70 and MD 65 Interchange. AMTRAK service can be accessed in Martinsburg,

WV.

The Hagerstown Regional Airport is located adjacent to I-81 just north of Hagerstown and provides service to the quad state area. General aviation and commercial air service through US Airways Commuter Service are provided.

Human service transportation programs are generally provided by non-profit agencies in the County as well as the County Commuter. These services take the form of program and non-program related travel. Examples of service providers would be the Commission on Aging or the Association for Retarded Citizens.

3. Bicycle and Pedestrian Facilities

Bicycle and pedestrian facilities for non-recreational purposes are primarily limited to the growth areas. As one moves away from the urbanized areas, recreational trips become more prominent. Pedestrian facilities in the County tend to be limited to sidewalks within, and extending from, municipalities as well as internal walkways associated with “planned unit developments”. In contrast, a large number of roads in the County have been identified as bicycle routes on bicycle tour maps developed by the State and County. In addition, two regionally significant pedestrian/bicycle trails run along Washington County’s borders: the C & O Canal Trail along the Potomac River, and the Appalachian Trail along the border with Frederick County.

4. Rail Service

Three major railroad companies maintain track facilities in Washington County. They are: CSX, Norfolk Southern and the Winchester and Western Railroads. The rail lines roughly parallel the major road corridors with Potomac River crossings at Williamsport and Sharpsburg. No major inter-modal facilities are located in Washington County, although a minor facility

operated by Norfolk Southern is located south of the City of Hagerstown and CSX operates a small facility along Hump Road.

5. Air Service

Air service of both a commercial passenger and freight nature are available through the Hagerstown Regional Airport. US Airways provide connection passenger service from the Airport to Pittsburgh International Airport.

6. Commuting Patterns

In 1990, the number of people commuting out of Washington County to work was nearly equivalent to the number commuting into Washington County to work. Statistics compiled by the Maryland Department of Planning for 1990 show 13,550 people commuting out of the County to work and 13,845 commuting into the County to work. Though the number of in versus out commuters is relatively close, the direction of the commuters is vastly different. For example, over 50% of the commuters from Washington County go to either Frederick County (38.3%) or Montgomery County (19%). The next highest out commute County is Franklin in Pennsylvania with 12.9% followed by Berkeley County, West Virginia at 5.2%, and Washington DC with 4.1%. The remainder of the commuters is spread throughout the other counties in the region at rates ranging from slightly higher than 2% to less than 1%.

In contrast, few in commuters come from Frederick or Montgomery Counties in Maryland. The greatest number of commuters comes from Franklin County (42.5%). A large number of these people work at Citicorp located adjacent to the Pennsylvania border on I-81. The next largest number of commuters comes from Berkeley County, WV at 18.2% followed by Fulton Co., PA 7.2% and Morgan County, WV at 5.4%.

An analysis of commuting patterns after completion of the 2000 census is anticipated to

show that these commuting patterns have not changed significantly. If anything, they may have become more entrenched with the creation of thousands of new jobs both along the I-81 corridor and the I-70/I-270 corridor in Frederick and Montgomery Counties. (See Map 20.)

D. COST OF DEVELOPMENT

In 1998, Washington County commissioned Tischler & Associates, Inc. to complete an analysis of the cost associated with providing services to new development by Washington County. The analysis looked at the County as a whole, as well as five sub- areas known as fiscal impact zones designated as Central, East, South, West and Far West. (See Map 21) It also looked at five different development scenarios: Trends, Economic Development, Dispersal, High Residential Growth and Low Growth, with a 2020 horizon time period.

The Trends scenario is based on population and employment projections compatible with current statistical patterns. The Economic Development scenario looks at more jobs being created than the current Trends pattern, and the impact of additional population growth associated with the additional jobs. The Dispersal scenario looks at development statistical patterns consistent with the Trends scenario, but takes more of the development and places it outside of the designated growth areas. It looks at the financial implications of more development taking place in the rural sections of the County. The High Residential Growth scenario looks at doubling anticipated growth identified in the Trends scenario, and what affect that has on the cost of maintaining services in the County. The Low Growth scenario looks at lower population and job growth than currently projected under Trends, and how that impacts the County's ability to pay for new service demands.

The analysis covered a 22-year period (1998 to 2020) and evaluated for three time segments: years 1 to 5, years 1 to 10, and years 1 to 22. The analysis was based on a 1998

general fund budget of \$99,090,000. The results for all five scenarios included operating costs and revenue in addition to capital costs. The results indicate that all scenarios produced a net revenue gain over the short, intermediate, and long term time periods. Over the long term the best results occur under the Economic Development scenario, with an annual average increase of revenue of 9.4% for the 22-year analysis. The percentage falls to 4.3% over the immediate period and 2.4% during the short term period. The High Residential scenario produces the second best results over the long term with average annual net increase of 9% over the 22-year analysis period. This percentage drops to 4.2% during the intermediate period and 2.5% (slightly higher than the Economic Development scenario) for the short term period. The Trends and Dispersal scenarios show the next best results generating similar outcomes 6.5% and 6.6% respectively over the long term period. The Trends scenario drops to 2.7% and 1.3% over the intermediate and short term time periods. The Dispersal scenario 4.2% and 2.5% respectively over the intermediate and short term time periods. The Low Growth scenario generates average annual net revenues of about 3.3% over the long-term analysis period. This value drops to 1.2% and .5% respectively over the intermediate and short term time periods.

Over the first five years of the analysis period, the average annual net revenues range from 0.5% to 2.5% surplus of the 1998 budget for the various scenarios. “These results can be considered fiscally neutral” with any increases in levels of service likely to absorb any of the small surpluses over the short term. For example, increases in service levels may include school operating and capital costs resulting from higher student cost generation rates and/or fire protection costs if the volunteer system is more subsidized or changed to a paid system.

Over the entire 22 year analysis period, the average annual net revenues range from 3.3% to 9.4 % of the current budget (in constant dollars) for the Low Growth and Economic

Development scenarios respectively. This shows the advantage of pursuing an economic development strategy in the future. The High Residential scenario also produces good results (9.0% average over the 22-year period). However, increased service levels for schools, would impact the High Residential scenario to a larger degree than it would impact the Economic development scenario. The County would therefore run less of a fiscal risk in pursuing an economic development strategy given that the majority of costs related to service level increases, such as schools, are impacted by residential growth.

The major reasons for these results are summarized as follows:

Over the long term, the Economic Development scenario produces the best results due to the greater number of jobs projected. The result is a job to housing ratio of 1.97 for the Economic Development scenario. This ratio is substantially higher than the 1.37 jobs to housing ratio in 1998 and indicates that even the Trends scenario value of 1.70 reflects a substantially higher capture of jobs to housing units.

The High Residential scenario, which has a jobs to housing ratio of 1.18 (lower than the current 1998 ratio of 1.37), produces results almost as good as the Economic Development scenario over the long term and actually produces slightly better results over the short term. This indicates that the higher value of new single-family housing helps generate net positive revenues. The analysis found that new single-family housing units generate a net positive effect of \$696, and Townhouses break even with a \$20 surplus. Apartment units were shown to not be self-supportive by generating a net deficit of \$45 dollars. The major reason for this is due to the higher market value of new single-family housing, which results in greater amounts of property and income tax revenues.

The major reasons that higher value housing generates positive fiscal results are: 1) 30%

of General Fund revenues come from income taxes paid by residents, 2) 58% of General Fund revenues come from property taxes, with a large portion from residential land, and 3) market values of new housing units are higher than the current Countywide average. The current average market value per housing unit in the County is about \$68,000. This compares to an average market value of approximately \$121,000 for new units. Not only is more property tax generated from new units, but more income tax is generated per unit as well. This is because household income increases with the market value of housing. Given that property and income tax revenues represent about 88% of total revenues, higher market values therefore have a significant impact on the fiscal health of the County.

All non-residential development produces positive fiscal results with office space generating the best results. New office space is the best for the County from a fiscal perspective, generating about \$860 in net revenue per 1,000 square foot. Office space produces the best results of all the nonresidential development types because: 1) it has the highest market value and therefore generates more in real property taxes, 2) it has the highest density of employees per square foot of space and therefore generates the most in personal property tax revenues, and 3) it generates relatively less trips than retail space resulting in smaller public safety and road costs.

New retail and industrial flex space also generate positive fiscal results. Given that a lot of vehicle activity is generated at new retail development, road costs and public safety costs are higher. As a result, retail space generates the smallest net revenues of all the nonresidential uses. Industrial /flex space (which includes warehouse distribution centers) generates intermediate positive fiscal results lying between office and retail space.

On the expenditure side, another major reason positive results occur is because school costs account for more than 50% of the County budget and the school system currently has extra

capacity, specifically in middle and high schools, precluding the need to build and maintain new schools. Thus, from a marginal perspective, revenues generated from new higher value housing are greater than the costs for services.

Results for the Trends and Dispersal scenarios are not significantly different with the Dispersal scenario, producing only slightly more net revenue than the Trends scenario over 22 years. The housing units are less concentrated under Dispersal scenario with more single-family and less townhouse and apartment units being built. The higher number of single-family units produces the slightly better results. The costs for both scenarios are about the same primarily because the difference in the amount of units is not large enough to impact infrastructure costs, such as roads, to a significant degree.

Based on the analysis, it is apparent that the County is in a good position to accommodate new growth. This is primarily a result of the higher market values of new development. “To a certain degree, the County has the freedom to choose a growth strategy without having to be concerned about whether or not new growth pays for itself. New growth pays for itself for all scenarios, although the results for each scenario can be considered fiscally neutral.”

“It is important to acknowledge that fiscal issues are only one concern. Environmental, land use, housing affordability, jobs/housing balance, and traffic issues must also be taken into consideration when making any final assessments on what is best for the County. The general fiscal neutrality of all the scenarios, however, allows the County to steer the path, pace, and quality of future growth through policy decisions without any major financial constraints hindering the process.”

For purpose of developing the Comprehensive Plan, the Trends development scenario has been used since it is the scenario that has the greatest probability of fruition. The Trends scenario

also focuses more development into the designated growth areas consistent with current development patterns and future growth management considerations. However, the Economic Development scenario will also be encouraged when appropriate and consistent with other development considerations in order to maximize positive financial impact.

ARTICLE II

THE GENERAL PLAN

CHAPTER 4

ECONOMIC DEVELOPMENT

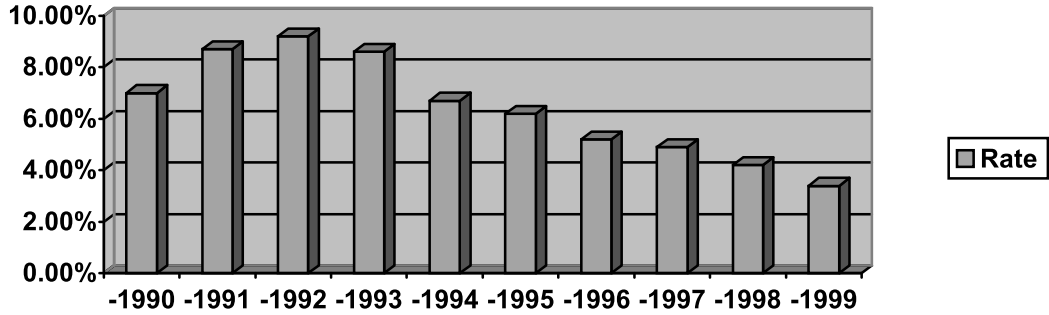
A. INTRODUCTION

The economy of Washington County has changed dramatically from its creation in 1776. Rural areas of the County maintain its connection with its agricultural roots, while urban areas have seen dramatic changes in types of employment opportunities. From farming area, railroad hub and heavy manufacturing center, to regional retail center, warehouse/distribution hub and hi-tech financial processing clearinghouse; the evolution of the economy of Washington County has seen it all, and is poised for further expansion and evolution in the 21st century.

Unemployment trends in the County have plummeted over the decade of the 1990s from near double digit at the beginning of the decade, to around 3% by the end of the decade. This decrease in unemployment rates is consistent with both Maryland and National employment patterns. In contrast, at the beginning of the decade Washington County's unemployment rates were higher than both the State and National averages, while at the end of the decade Washington County's unemployment rates have been lower than the State and National averages. The following table illustrates annual average unemployment rates in the 1990s.

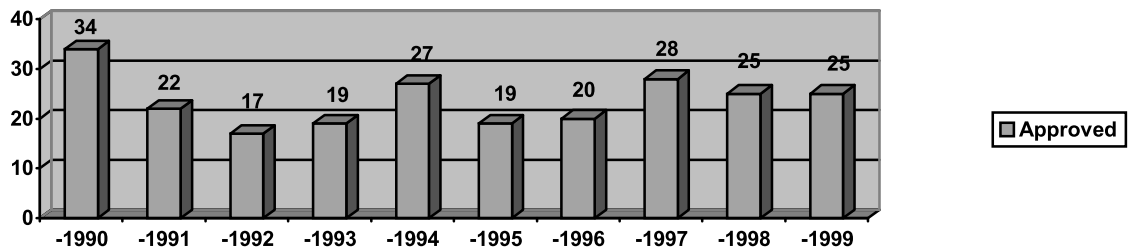
Average Annual Unemployment Rates 1990-1999										
Year	(1990)	(1991)	(1992)	(1993)	(1994)	(1995)	(1996)	(1997)	(1998)	(1999)
Rate	7.0%	8.7%	9.2%	8.6%	6.7%	6.2%	5.2%	4.9%	4.2%	3.4%

Average Annual Unemployment Rates 1990-1999



This decrease in unemployment correlates with the number of major site plans approved for development during the 1990s with a significant number of major developments being approved toward the end of the decade.

Major Site Plans Approved 1990-1999



The economic impact of recent development is also felt through an increase in the amount of corporate real property tax assessment, rising from approximately 24% of the total County assessment in 1995 to 26% in 1999.

The factors contributing to this economic development growth are location, labor force, infrastructure and available land. When combined with land use initiatives that target areas of the County for economic development, such as Hopewell Valley, these factors provide the components to sustain economic growth well into the 21st Century.

The Tischler Fiscal Analysis Study utilizes employment projections for the period 1998-2020 ranging from 9,252 new jobs under the “Low Growth” scenario to 26,801 under the “Economic Development Scenario”. Under the “Trends” scenario projected new job growth is 18,493. From the period from 2020 to 2050 these employment figures could easily be duplicated generating 40,000 to 50,000 new jobs in the County during the longer 50-year horizon period. Sites to house these new jobs, as well as the needed infrastructure to support the new growth, must be planned for now if sites to accommodate the anticipated growth will be available in the future.

Approximately 10,763 acres in the County are zoned for industrial or commercial activity. This equates to approximately 3.75% of the County zoned land. Of these 10,763 acres, approximately 48% are developed. This leaves approximately 5,570 acres for potential development. When roads, infrastructure, storm water management facilities, environmental sensitive areas, and forest conservation requirements are considered the actual area available to address new job growth becomes significantly reduced.

Prime sites for economic development identified within the Urban Growth Area and

Town Growth Areas need to have proper zoning in place to facilitate economic development. Sufficient land needs to be identified to meet employment projections over at least the twenty (20) year planning period, and allow for a variety of choices in site location and size.

Economic Development strategies need to sustain and expand existing businesses and industries, attract new firms which can diversify the industrial/commercial base, promote increased opportunities as well as economic mobility for the labor force, while remaining sensitive to high standards of environmental quality. To accomplish these objectives, County economic development strategies have placed emphasis on:

Increasing efforts to retain and expand existing businesses;

Expanding educational opportunities to facilitate development of a prepared work force to meet future demands;

Development and implementation of strategic marketing to attract higher technology and higher wage jobs;

Encouraging the development of new industrial parks;

Developing strategic partnerships that can foster economic growth through development of financial and regulatory incentives;

Diversifying the County economy to insulate against cyclical economic swings;

Preserving sufficient area to promote agriculture as a viable economic industry;

Promoting recreational and heritage tourism;

Encouraging redevelopment, revitalization, or rehabilitation of existing developed areas or sites where appropriate; and

Targeting specific areas for economic development and providing the needed infrastructure to support new development.

These strategies are not meant as the only actions steering economic development efforts

in Washington County. However, they do establish a framework for land use policy associated with economic development both in the urban and rural areas of the County.

B. ANALYSIS

1. Economic Development in Urban and Town Growth Areas

The amount of land needed in designated growth areas for commercial, industrial and office space is difficult to project since markets for these types of space are very dynamic. Nationally, the expansion of existing business is the most significant factor associated with generating the need for new space. However, relocation into or within a community by a large business may have a significant impact on growth area plans. Industrial site location is driven by specialized needs for infrastructure, parcel acreage, building configuration, access, and regional resource requirements. Commercial site locations tend to reflect the need to be located where the market can best be served. The general trend in industrial uses is shifting away from heavy manufacturing, and toward service industries. In many instances the differences between industrial and commercial, or wholesale and retail use has become blurred with the terms business park and industrial park being used interchangeably. The Tischler Study uses the term “industrial-flex” to address the blurring of traditional land use classifications. With the majority of new jobs anticipated to be in the service arena, the traditional areas set aside generally for industrial and commercial sites need to be supplemented by office/hi-tech areas and mixed use areas.

Sites identified for industrial, commercial or office uses should generally conform to the following requirements:

Infrastructure and utilities should be either available or capable of being provided;

Access to the interstate system should be over arterial highway routes that do not require the movement of heavy traffic through residential neighborhoods;

The ability to mitigate developmental impacts on sensitive environmental, historical or cultural features;

Physical characteristics that minimize site improvement costs;

Sufficient land area to accommodate development including buildings, parking, storm water management, buffering, and screening if required;

Avoidance of areas where there is a high probability of incompatibility with existing residential development;

Locations where mixed uses can provide opportunities for transitioning from heavy industrial or commercial uses to institutional or residential uses;

Adaptive reuse of existing sites or buildings as a catalyst for rehabilitation or preservation of historic or environmental resources;

Retail commercial sites are located where they best serve the market niche being targeted whether regional, community wide or neighborhood; and

When feasible association with an approved or proposed Enterprise Zone.

2. Enterprise Zones

Approximately 5,100 acres in Washington County are associated with three state designated enterprise zones. Local and state incentives are available to new or expanding companies in these zones to promote growth of the industrial and commercial economic base. Each enterprise zone is approved by the state for a ten-year period. (See Map 22.) The three Enterprise Zones are:

City of Hagerstown/Washington County Enterprise Zone

Renewed by the State of Maryland in 1992, this zone encompasses approximately 1,400 acres, including 1,200 acres within the City of Hagerstown and 200 contiguous acres in Washington County. The Washington County Business Park, CSX Valley Park, Downtown Hagerstown, and the City of Hagerstown Business Park are located within this zone.

Hancock Enterprise Zone

Approved in 1995, this 1,500 acre zone surrounds the Town of Hancock, stretching from the Pennsylvania border down to the Potomac River. The zone includes commercial and industrial development opportunities in select areas of the town, as well as commercial frontage along Main Street.

Hagerstown Regional Airport Enterprise Zone

Renewed in 1994, this 700 acre zone includes the Hagerstown Regional Airport, Topflight Airpark, Washington County Business Airpark and property along US 11.

3. Zoning

Industrial General (IG) and Highway Interchange One (HI-1) are the two zoning categories with the most undeveloped acreage in the growth areas. The HI-1 zoned areas are primarily located around the I-81 and I-70 interchanges with the largest amount of undeveloped IG zoning being found in the Hopewell Valley Area. The HI-1 classification allows for light industrial and heavy commercial as well as offices. The IG classification is associated with heavy industrial uses. The Airport – “AP” zoning classification is an industrial type classification with height limitations located around the airport. With the majority of new jobs projected to be in the transportation, wholesale trade, retail trade and service areas of the economy, these three zoning classifications or similar variations of them would appear to be positioned to meet the bulk of the need.

Other significant zoning classifications related to economic development are: Industrial Restricted, which is primarily a light industrial classification; Business General, a broad based commercial classification; Business Local, a limited commercial classification; Planned Business, a commercial classification geared toward large shopping center type developments; Planned Industrial, which has been associated with industrial park developments; and the Special

Economic Development area which was created to facilitate the reuse plan for Fort Ritchie. Major commercial development has also occurred as part of planned unit development projects. Existing zoning classifications need to be examined for potential revisions to address changes in the economic development environment. In some cases, existing zoning classifications may no longer be appropriate and should be eliminated or revised.

Advances in information management and communication technology have provided a need for a “business or office park” zoning classification separate and distinct from other classifications in order to satisfy demand for high quality office facilities in areas not associated with heavy industrial or commercial activity.

4. Economic Development within the Rural Area

The industries associated with the greatest economic impact on the rural areas of the County are agriculture, tourism and mining. Rural businesses of a service variety are also scattered throughout the rural area. Current zoning for the rural area is primarily Agricultural, Conservation or Industrial Mining. The zoning classification Special Economic Development district was created for implementation of the reuse plan for Fort Ritchie.

Agriculture

According to the National Agriculture Statistical Service (NASS), the market value of agricultural products sold in Washington County in 1997 was \$61 million. This was an increase of \$7 million dollars from the \$54 million figure in 1987. The \$7 million figure can mostly be attributed to inflation during this time period, indicating that market value for agricultural products has remained stable.

The most significant economic consideration is that approximately 80% of the market value comes from animal agriculture. A continued decline in the number of dairy farms could

significantly impact the viability of agriculture as a major component of Washington County's economy. Increased concerns over manure storage, environmental regulations, and fluctuating market prices are issues, now more than any time over the last few decades, creating instability in the animal agricultural economy.

During this same time period, average annual net farm income for the County remained around \$14 million dollars. However, there was a wide disparity in net cash value between farms. The farms producing net gains over the period showed net cash return increasing from \$39,000 in 1992, to \$48,000 in 1997. In contrast while the net cash return increased during this 10 year period, the percentage of farms reporting net gains decreased from 55% in 1992 to 47% in 1997.

The value of farmland and buildings for the average Washington County farm increased from \$399,000 in 1992, to \$454,000 in 1997. In the same manner, the average value of machinery and equipment increased from \$52,000 in 1992, to \$68,000 in 1997. These increases can be explained in part by the fact that while the number of farms has decreased, the amount of active farmland has remained stable with the average farm size increasing from 153 acres in 1992 to 164 acres in 1997.

Agricultural and Conservation zoning classifications associated with the rural areas have had both positive and negative impacts on agriculture. While one acre residential development has permitted a farmer to sell small parcels of property for income generation in times of cash flow shortages, it has also generated incompatibility issues associated with odors, spraying of pesticides, and traffic. Sustaining agriculture as a viable part of the Washington County economy in the future will depend upon addressing the incompatibility issues.

Mining

Quarrying has been a part of the economy of Washington County throughout its history. Limestone and shale are currently the two primary minerals involved with mining activity. Major quarry operations conducted by H.B. Mellott, St. Lawrence Cement Corporation, Martin Marietta, C. William Hetzer and Redland Brick should be continuous throughout the 20-year horizon period for this plan. Zoning for major mining operations is addressed through the Industrial Mining classification, which is a floating zone classification restricted to areas outside of designated growth areas. Compatibility issues between expanding mining operations and nearby residential development have been on the rise. Addressing incompatibility issues must be balanced with efforts to insure the sustainability of the industry and utilization of the resources.

5. Tourism

Tourism is a major part of the Washington County economy. Unlike other industries it transcends the bounds of the rural and urban areas providing economic opportunities all across the County. Active and passive recreation areas, National and State Parks, restaurants, hotels, outlets and specialty shops, spectator sports, performing arts, museums, and a variety of scenic and historic sites support the tourism industry.

The major non-retail tourism attraction in Washington County is the Antietam Civil War Battlefield. Efforts by the State of Maryland to create a “Civil War Trails” program will highlight this attraction as well as other Civil War sites in Washington County. The creation of the South Mountain State Civil War Battlefield should also add to the promotion of the Civil War Heritage of Washington County.

Development of a “Civil War Heritage Area” in conjunction with Carroll and Frederick Counties will provide opportunities to promote conservation of historical sites as well as target

dollars to encourage heritage tourism investment. Development of an Arts and Entertainment District in the City of Hagerstown is also taking place to promote more tourism within the County.

The major commercial tourism attraction in Washington County is shopping. With two major interstate highways providing access and exposure to huge traffic volumes, retail expansion, particularly in the discount shopping or outlet arena, has significantly increased this segment of the tourism industry. Antiquing is another major segment of the retail tourism economy.

Recreational tourism has also been a popular attraction in the County. Pen Mar Park, Greenbrier State Park, C & O Canal, Appalachian Trail and the Western Maryland Rail-Trail are some of the major recreational tourism attractions bringing visitors to the County.

Protecting Washington County's natural, historic, cultural, and man made resources is vital for tourism. However, it is important to protect these resources not only for tourism, but also for their use in attracting and retaining new businesses and industry. While factors such as business climate, work force and location are important aspects in business location decisions, community environment and amenities can also be a very important factor.

6. Lakeside Corporate Center

The redevelopment and reuse plan for the former Fort Ritchie Military Base is designed to turn the facility into the Lakeside Corporate Center. The Pen Mar Development Corporation is charged with the task of overseeing the redevelopment and reuse of the facility and they have adopted a reuse plan. The plan emphasizes a combination of residential, educational, and hi-tech uses building on the physical plant and electronic communication infrastructure left in place by the military.

7. Capital Improvement Program

Infrastructure improvements are essential to sustaining and enhancing the economy of Washington County. Improvements to the infrastructure system are primarily addressed through the programming of tax, grant, bond or general revenue funds through the Capital Improvement Program. The Capital Improvement Program or “CIP” is a six (6) year program for coordinating the expenditure of funds for infrastructure improvements.

Projects normally funded include: road and bridge improvements, storm water management facilities, sanitary sewer facilities, public water facilities, parks and recreation facilities, mass transit facilities, community and public buildings, solid waste facilities, airport facilities, Washington County Board of Education facilities and Hagerstown Community College facilities.

Because the amount of dollars needed to both maintain and expand the infrastructure system is substantially greater than the amount available in any given year, dollars need to be targeted to those projects that provide the maximum return on the investment. Of critical importance is the targeting of dollars to support land use policy that directs economic development to the appropriate areas. In addition, coordination of capital improvement expenditures with economic development marketing efforts can act as inducement to attract new industries or maintain and expand existing industries.

C. RECOMMENDATIONS

Urban Areas

The County has previously targeted investment to encourage economic development to occur in several primary areas within the Urban Growth Area. They include: (See Map 23.)

Hopewell Valley: This is a moderate-heavy industrial area that has seen significant development

in the later part of the 1990s. Development is primarily low-tech in nature with emphasis on manufacturing, warehouse/distribution centers and freight transportation support facilities

I-70/MD 632 Interchange Area: Development is anticipated to be high-tech in nature with emphasis on corporate offices along with research and development facilities.

The Friendship Technology Park will be the primary catalyst for development in this area. High-tech development could eventually bridge the area from MD 65 to MD 632 along I-70.

Airport Area: The area around the Hagerstown Regional Airport is anticipated to continue to develop in a mixed-use pattern of commercial, industrial and office facilities.

With the extension of the airport runway, reuse of existing buildings, as well as infill of the Business Airpark and the Airport Business Park are anticipated. New development of a commercial and light industrial or industrial flex nature is anticipated on the south side of Showalter Road.

Since these three areas contain a significant amount of the appropriately zoned property in designated Enterprise Zones, the County should continue to target investment to these areas.

Future investment to support economic development activity should also focus on, but not be limited to, the following areas:

Hancock Area: Development of sites and infrastructure necessary to support economic growth in the Rayloc Plant area east of Hancock. This development would primarily be low-tech in nature with emphasis on manufacturing or industrial flex facilities.

US 40/I-81 Area: Development of sites in this area is primarily anticipated to be associated with commercial/retail development. Coordination with the City of Hagerstown's development plans for this area is essential to maximize future infrastructure investment.

Brownfields Reuse: Support the reuse of brownfield sites in accordance with State policies and

incentive programs. Development of these facilities would be on a case-by-case basis as appropriate.

Urban Revitalization: Encourage revitalization of urban commercial and industrial areas through support for infrastructure improvements and/or when appropriate adaptive reuse of existing facilities.

Additional Recommendations

Existing Zoning Classifications: Review existing industrial and business classifications and eliminate those that are no longer considered relevant and revise remaining classifications to reflect development standards appropriate to promote economic development activity envisioned in that zoning classification.

New Zoning Classification: Develop a zoning classification primarily for office and business parks that would incorporate flexible design requirements that would promote the development of corporate office and/or research facilities.

Enterprise Zone Areas: Work with the State to expand Enterprise Zones in the Airport area and to designate a new enterprise zone in the Friendship Technology Park area.

Information Technology: Identify and map existing and planned hi-tech communication linkages for use in future economic development land use planning.

Comprehensive Regulatory Mitigation: Where feasible address storm water management, forest conservation, wetlands mitigation or other regulatory requirements on a comprehensive regional basis to achieve business cost parity or advantages with adjacent states.

Airport: Ensure that the Hagerstown Regional Airport remains an economic engine in the future by restricting non-compatible development around the perimeter of the Airport.

Rural Areas

Agriculture: Use Rural Legacy Program and Agricultural Preservation Program to preserve large blocks of agricultural land to sustain agriculture as a viable economic activity in the County.

Agricultural Support Industries: Promote agricultural support industries (equipment repairs, supplies and markets, banking, etc.) by promoting preservation of farm acreage sufficient to sustain their viability and the promotion of land use regulations that provide for the location of these types of industries.

Existing Zoning: Make revisions to existing zoning classifications to reduce incompatibility issues between agricultural and mineral extraction operations with residential development.

New Zoning Classifications: Establish a new Rural Business classification as a floating zone classification that can be located anywhere in the Rural Agricultural area. Restrictions on permitted uses, spacing between Rural Business districts, and architectural and scale compatibility should be included in the zoning regulations.

Adopt new zoning classifications or regulations that encourage preservation of historic, cultural or environmental resources that promote tourism.

Infrastructure Improvements: Target infrastructure improvements such as road widening to areas where there is a need to facilitate the movement of farm equipment or to facilitate recreational or heritage tourism promotion.

Fort Ritchie: Support and facilitate where possible the conversion of the Fort Ritchie Military Base into the Lakeside Corporate Center.

CHAPTER 5

TRANSPORTATION ELEMENT

A. INTRODUCTION

The Transportation Element establishes goals and policies for maintenance and improvement of the County's transportation system. This element recognizes the important inter-relationship between land use and transportation planning, and promotes an integrated inter-modal system.

The County transportation system is part of a regional system for which transportation planning functions are provided by the Hagerstown/Eastern Panhandle Metropolitan Planning Organization. The Long Range Transportation Plan adopted by the HEPMPO on November 3, 1997 was the basis for a revised Transportation Element adopted by Washington County in January 1998. The detailed background data and analyses from the HEPMPO Long Range Transportation Plan remains the primary source of information and recommendations for the Transportation Element. The overall **goals** for the transportation system include:

1. Maintain and improve the quality of the transportation system.
2. Increase the efficiency of the existing transportation system.
3. Promote desirable social and economic impacts from the transportation system.
4. Minimize the costs to improve the quality and efficiency of the transportation system.
5. Minimize undesirable impacts of the transportation system.

The Transportation Element addresses the Urban and Town Growth Areas and the Rural Agricultural Areas separately in keeping with the format of the Comprehensive Plan. However, the transportation system goals outlined above are common to both.

B. ANALYSIS

Urban and Town Growth Areas

Transportation Policies

1. Develop and maintain an integrated multi-modal transportation system that supports existing and planned development in the Urban and Town Growth Areas.
2. Plan for, develop and encourage the use of alternatives to single occupant vehicles.
3. Provide a multi-modal transportation system that meets the mobility needs of the citizens of Washington County, including the transit-dependant.
4. Provide a multi-modal transportation system that effectively links the Urban and Town Growth Areas, and accommodates inter-regional travel through the County.
5. Maintain the policy for determining adequacy of existing roads, as required under the Adequate Public Facilities Ordinance.

Highways

Washington County's status as a transportation hub springs from the regional geography. Interstate 81, the principle north-south alternative to I-95, follows the Great Valley route from the northeast to the southwest. Interstate 70 parallels the Potomac River, using gaps in the mountains made by this river, to provide east-west travel to the Baltimore and Washington DC metropolitan areas. These two interstates intersect between Hagerstown and Williamsport within the Urban Growth Area.

Apart from the interstate facilities, there is an extensive network of highways. The general layout is a hub and spoke pattern with Hagerstown, Williamsport and Boonsboro all acting as hubs. US 11, MD 65 and MD 60 are the major north-south highways, with US 40 and MD 68 oriented to the east and west.

Most of the local roads in the municipalities are laid in a grid pattern. Hagerstown has outgrown its grid spilling into the surrounding radial network. Connectivity within the Urban

Growth Area is generally good with the exception being in Hagerstown, where the railroad tracks separate the north and west sides of the city from the south and east sides.

Highway Classification System:

Maintaining the functional integrity of the Washington County highway system is important in terms of mobility, accessibility and safety. The two major considerations in classifying highway and street networks functionally are mobility and access. The primary purpose of higher order facilities, such as freeways and arterials, is to provide mobility. The purpose of local streets is to provide access to adjacent land uses. Collector facilities tend to combine both functions. (See Map 24.)

Highways are further classified into rural and urban systems since urban and rural areas have fundamentally different characteristics with respect to: density and types of land uses, density of street and highway networks, nature of travel patterns, and the way in which these elements are related. The classification system used in Washington County is based on the Federal Highway Functional Classification System. The functional classification system standards have been modified to more closely reflect the conditions in Washington County. All standards conform to accepted engineering practices with the standards contained in the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets providing primary guidance. (See Table One-Highway Standards to follow.)

HIGHWAY STANDARDS

(Table One)

Functional Classification	Principal Arterial (Interstate)	Other Principal Arterial (Non-Interstate)	Minor Arterial (Urban or Rural)	Major Collector (Urban or Rural)	Minor Collector (Urban or Rural)	Local (Urban or Rural)
Design Type	Freeway	Freeway/Expressway	Expressway/Two or Multi-Lane Highway	Two or Multi-Lane Highway	Two Lane Highway - Occasionally Multi-Lane	Two Lane Highway
Character of Travel	Interstate or Statewide	Inter-Regional	Intra-Regional	Intra-County	Inter-Community	Intra-Community
Type Generators Served (Population)	Interstate Urbanized > 50,000 or Intra-State > 25,000	Urban Area of 5,000 – 25,000	Major Towns or Communities of 1,000 – 5,000	Towns and Communities of 500 – 1,000	Villages and Neighborhoods of 100 – 500	Individual Properties
Typical Mean Traffic	Rural > 10,000 ADT Urban > 25,000 ADT	Rural > 5,000 ADT Urban > 20,000 ADT	Rural: 2,000 – 5,000 ADT Urban: 5,000 – 25,000 ADT	Rural: 1,000 – 3,000 ADT Urban: 2,000-10,000 ADT	Rural: 500 – 1,500 ADT Urban: 1,000 – 3,000 ADT	Rural < 1,000 ADT Urban < 2,000 ADT
Typical Operating Speed	55-70 MPH	Rural 45-60 MPH Urban 35-50 MPH	Rural 40-45 MPH Urban 30-40 MPH	Rural 40-45 MPH Urban 25-35 MPH	Rural +/- 40 MPH Urban +/- 25-30 MPH	Rural 30-40 MPH Urban +/- 25 MPH
Access Spacing	No direct property access. Grade separated interchanges only.	Minimum 750' distance between all new access points.	Minimum 500' distance between all new access points.	Minimum 300' distance between all new access points.	Minimum 100' distance between property access points & 250' between public street access points.	No restrictions on new property access points. Street jogs less than 150' ft. not permitted.
Minimum Right-of-way	150' to 300'	150'	100'	80'	60'	50'

(1) Engineering data listed herein shall be considered a guide only. Specific design requirements are contained in the appropriate Washington County Division of Public Works, Engineering Department design standards.

(2) Mean traffic is expressed in ADT (Average Daily Traffic) or the number of vehicles passing a given point in both directions within a 24 hour period. Values shown are typical ranges only and are not to be used to determine particular road classifications. Existing and/or projected volumes are to be used to determine the number of traffic lanes required for a particular road.

(3) Standards for access spacing and right-of-way widths are enforced through the Subdivision Regulations. Right-of-way wider than the minimum may be required especially when accommodating multi-lane highways.

Highway Conditions

The HEPMPO Long Range Transportation Plan referenced earlier examined current and future (2020) traffic and safety conditions on the highway system within the County. Six highway sections within, or immediately adjacent to growth areas were found to be deficient.

These include:

1. I-81 between US 40 and MD 58
2. MD 64 between MD 66 and MD 77
3. MD 60 east of Long Meadow Road
4. US 40 between MD 63 and Walnut Point Road
5. MD 65 between I-70 and MD 68

In addition, subsequent studies have identified failing conditions at several major intersections; Dual Highway and Edgewood Drive, Massey Boulevard and Halfway Boulevard, Alt. 40 and Edgewood Drive, along with the Mangan's Avenue road link from I-81 to US 11.

The Long Range Transportation Plan also examined future 2020 traffic conditions to identify additional highway deficiencies projected to occur in the future. This analysis identified the following projected deficiencies:

1. All I-81 and I-70 segments within the Urban Growth Area
2. MD 63 between Williamsport and the Pennsylvania State Line
3. US 11 between Halfway Boulevard and Wilson Boulevard
4. US 11 between Long Meadow Road and downtown Hagerstown
5. Potomac Avenue north of Northern Avenue
6. MD 65 between Oak Ridge Drive and I-70
7. Jefferson Boulevard/Eastern Boulevard intersection.

Subsequent studies have added the following road segments and intersections to this list: Robinwood Drive from Medical Campus Road to Jefferson Boulevard, US 11 between Halfway Boulevard and Massey Boulevard, and the Dual Highway and Hebb Road Intersection.

Current as well as future traffic flow conditions along West Oak Ridge Drive through the Town of Funkstown, and Edgewood Drive to the Dual Highway are of particular concern. The

completion of the proposed Southern Boulevard project would assist in alleviating traffic congestion in this area, particularly traffic flowing through the Town of Funkstown. Future traffic studies proposed for completion in this area may indicate the need for a future connector road from Alternate 40 to Hebb Road in order to further decrease traffic flowing through Funkstown from the southern part of the County.

Highway Improvements

Improvements to the highway system are undertaken by the County through its Capital Improvement Program (CIP), and the State through its Consolidated Transportation Program (CTP). These programs contain a full range of improvement types, including reconstruction, rehabilitation, facility upgrades and new construction.

Developer financial contributions or construction of improvements required through the application of the Adequate Public Facilities Ordinance are another key method of implementing highway improvements. (See Map 25.)

Public Transportation

Public transportation services available to the citizens of Washington County can be grouped into three categories: 1) Local General Public Services, 2) Commuter and Inter-city Services, and 3) Human Service Transportation. Each category plays an important role in meeting the public transportation needs of the region. The State of Maryland has established a goal of doubling ridership in the next 20 years.

Local general public services include local bus operations and taxicab services. Washington County operates the County Commuter local bus system and several taxi

companies provide taxi service. The County Commuter provides local bus service in Hagerstown and inter-community travel operating Monday through Saturday. Taxi service is available seven days a week twenty-four hours per day.

The County Commuter operations in Washington County presently serve the highest transit need areas. While the current network is expected to provide adequate service coverage to the urban areas, as new development occurs, a shifting of resources or the addition of new routes may be appropriate.

Commuter and inter-city services available to Washington County citizens include park-and-ride facilities, commuter bus, inter-city bus, and commercial air. In addition, Washington County citizens can access the AMTRAK/MARC rail line in Martinsburg, WV; Duffields, WV; Brunswick, MD and Frederick, MD.

The location of the park-and ride facilities in Washington County are shown on Map 26. Usage counts conducted in 1997 showed that the lots are approximately 50% full overall.

Commuter bus services are operated from Hagerstown to the Shady Grove Metrorail station in Montgomery County, MD. Departures from Hagerstown leave Monday through Friday in the a.m. peak period and return in the p.m.

The Greyhound Bus Company operates inter-city bus services from Hagerstown to destinations in Baltimore, Cumberland, Pittsburgh, Cleveland, and Washington DC. The Greyhound Station is located off of MD 65 near the I-70 interchange. Capital Bus operates service to Harrisburg. These services are available Monday through Saturday.

The Hagerstown Regional Airport is located adjacent to I-81 about four miles north of Hagerstown and serves the tri-state area of Western Maryland, Eastern

Panhandle of West Virginia and south central Pennsylvania. General aviation and commercial air services are provided. The need to attract additional airline service to address passenger needs has been a problem because of runway length. A runway expansion project is budgeted in the County CIP for the early part of the 2000 decade. Reconstruction of a portion of US 11 to allow the runway extension to be constructed over the road is essential to the project.

Human Service Transportation

Human Service transportation services are generally categorized as program related and non-program related. Program related trips are travel by clients that would not exist without the existence of the program. Non-program related travel is travel required regardless of the existence of a program. An example of a program related trip would be a trip to an educational seminar by an agency and a non-program related trip would be a trip to a doctor's office. Major human service providers in Washington County include: Washington County Commission on Aging, Washington County Association for Retarded Citizens, Goodwill Industries, Homewood Retirement, Reeder's Memorial Home, Western Maryland Hospital Center, and the Washington County Human Development Council.

In order to adequately serve projected demand for human service transportation, it is recommended that human transportation services be coordinated through a transportation entity or provider. Where appropriate, general public services need to be aligned to provide access to frequently visited human service and governmental sites in an effort to allow ambulatory clients to rely more on general public transit services than paratransit services. Likewise where appropriate, human service transportation services should be made open to the general public for a fee in order to provide transportation services to those living in locations where none or little public transportation service exists.

Bicycle and Pedestrian Facilities

Bicycle and pedestrian trips can have recreational and non-recreational purposes. Within urbanized areas, the predominate use is non-recreational, such as trips to school shopping and work. As one moves away from the urbanized area, recreational trips are more prevalent, such as trips to parks and scenic areas. An effective County wide system would serve a balance of recreational and non-recreational trip purposes.

The Urban Growth Area has an extensive network of roads that serve as bicycle routes. These routes were identified through a number of sources available to the public, including the Maryland Bicycle Touring Map, the Washington County Bicycle Tours Map, The Maryland Scenic Tours Map, and the MPO Long Range Transportation Study – Bikeway Systems Inventory Report. In addition, two regionally significant pedestrian trails run along Washington County's borders. They are the C & O Canal Trail along the Potomac River, and the Appalachian Trail along the border with Frederick County.

Deficiencies exist within the bicycle facility network. These deficiencies primarily take the form of gaps in the system. However, they may also take the form of needed improvements to a road, such as adding paved shoulders, to better accommodate bicycle traffic. The State of Maryland has adopted a policy of upgrading or providing shoulders for bicycle use as part of their normal rehabilitation and maintenance work on State highways. (See Map 27.)

Development within the Urban Growth Area increases the need for pedestrian facilities. In recognition of this need, the County has started development of an urban sidewalk system with the following features: minimum width 3 feet with larger widths in high-use areas, buffering from motor vehicles for pedestrian safety and comfort, and where feasible shade and wind protection.

Continued development of an urban sidewalk system on State roads utilizing the State Highway Administration's statewide sidewalk program should remain a priority. This program provides funds for repair and construction of sidewalks. The following is a list of candidate roads for sidewalks within the Urban Growth Area. (See Map 28.)

Virginia Avenue	Halfway Blvd. - Williamsport Boundary
Robinwood Drive	Medical Center – MD 64
Halfway Boulevard	Massey Boulevard – MD 632
Mt. Aetna Road	US 40 - Black Rock Golf Course
Maryland Avenue	Wilson Blvd. – Doub's Woods Park
Pennsylvania Avenue	Fountaindale Elementary – Maugan's Ave.
Long Meadow Road	Pennsylvania Ave. - Paramount School
MD 60	Long Meadow Shopping Center - Marsh Pike
Dual Highway	Cannon Ave. - Edgewood Drive
Wesel Boulevard	Halfway Blvd. - Burhans Blvd.
MD 65	Battlecreek Blvd. - Wilson Blvd.
Jefferson Boulevard	Eastern Blvd. - Chewsville
Edgewood Drive	Dual Highway - Alt. 40 (Funkstown)
Maugan's Avenue	Maugansville Road - Long Meadow Road
Maugansville Road	Reiff Church Road - Maugan's Meadows
Salem Road	Maugansville Road - Garden Spot
Marsh Pike	MD 60 - Spring Valley Drive
Hebb Road	Beaver Creek Road - Funkstown
MD 632	Garden Lane - Halfway Blvd.
Massey Boulevard	Halfway Boulevard - Cole Road
Eastern Boulevard	Mt. Aetna – MD 60

Greenway areas provide another opportunity for bicycle and pedestrian movement.

Though more orientated toward recreational use rather than people movement, they do perform a dual role. The Maryland DNR has developed a Greenway Plan that identifies greenways in Washington County. The County has developed a greenway plan, utilizing primarily floodplains and railroad right-of-way, to connect areas within the Urban Growth Area. Linkage between greenways and facilities for bicycle and pedestrian movement need to optimize the use of these resources. (See Map 29.)

Goods Movement

Truck

The intersection of two major interstate highways provides a logical impetus for development of truck transportation. Several national companies along with major regional carriers have large terminals or warehouse/distribution centers in the area. The total terminal capacity greatly exceeds local requirements, clearly showing the importance of the Washington County in freight transfer operations. Due to the nature of freight transfers and the confluence of two major interstate roadways, truck freight analysis must focus not only on locally generated truck traffic, but also on truck trips through the area.

The location of truck terminals generally follow the modern interstate defined pattern of locating as close to the freeway system as the available land allows. It is very unusual for a modern terminal to be located more than two miles from the nearest freeway interchange. Several terminals are placed close to this limit indicating the high demand for sites in the area.

Given Washington County's status as a transportation hub, truck traffic in the region can be expected to grow steadily. The following table shows truck freight flows by major entry and exit points, expressed in truck trailer loads, projected in the forecast year of 2020.

Projected 2020 Truck Freight Flows by Major Entry and Exit Points							
	I-81 to north	I-81 to south	I-70 to east	I-70 to northwest	I-68 to west	Local Destinations	Sum
I-81 from north		1,933,215			229,011	90,684	2,252,910
I-81 from south	2,416,816				7,106	85,385	2,509,307
I-70 from east				935,087		397,978	1,333,065
I-70 from northwest		55,024	486,379			71,234	612,637
I-68 from west	325,482					23,095	348,577
Local Origin	36,349	38,706	108,785	34,733	9,978	24,549	253,100
Sum	2,778,647	2,026,945	595,164	969,820	246,095	692,925	7,309,596

Rail

Three major railroads operate through Washington County today: Norfolk-Southern, CSX, and Winchester and Western. (See Map 30.) All railroads combined send approximately 30 trains per day through Hagerstown. Many rail lines roughly parallel the major highway corridors. Topography and historic development patterns provide the basis for this structure. There are several interchange points for these railroads in the area. The largest lies immediately southwest of downtown Hagerstown.

Perhaps because of past competitive rivalries, rail plays only a small role in local freight transportation. Only seven percent of all freight volume originating or terminating in the area is carried by rail. Terminal and transfer facilities are limited. CSX Transportation operates a small yard, and Norfolk-Southern assembles most local freight outside the area.

Current and anticipated rail service impacts on the highway network are limited. Where grade crossings exist they are marked and many have swing arm gates. The County CIP includes funding for improving grade crossings.

Air

Air freight currently comprises only a tiny fraction of the total shipping in the County. Air is not expected to be a significant element of the future freight transportation mix until the proposed runway extension is completed. Its expense restricts its use to time-sensitive goods; therefore, the proportion of this material in goods produced or consumed in the County cannot be expected to increase significantly. The proportion of shipments in 1990 that used air transport on any leg of their journey was 0.04%. If converted to truckloads, this would represent 391 shipments, or just over one load per day. Most of this will continue to be trucked in from other airports since consolidating shipments usually saves money. The planned extension of Runway

9/27 would make the airport capable of handling larger cargo planes. This will provide an impetus for more air freight movement through Washington County.

Inter-modal Transfer

Inter-modal transfer facilities in Washington County are limited. CSX currently operates a small inter-modal facility off of Hump Road. A small siding is located in the I-70/I-81 Industrial Park and the development of a railroad siding has been discussed in conjunction with the Newgate Industrial Park.

With the development of MD 632 and I-70 Interchange there may be an opportunity to develop an inter-modal facility along the Norfolk-Southern line in the MD 632 area.

Rural-Agricultural Areas

Transportation Policies

1. Manage and operate the transportation system in a manner that protects and preserves the County's farmland, forests, open space and other significant natural, historic or cultural resources.
2. Maintain and improve the existing transportation system to promote safe travel for all vehicles.
3. Provide safe and efficient linkages to the Urban and Town Growth areas, as well as to natural, historic and recreational areas.
4. Minimize conflicts between traffic related to agricultural operations and residential uses.

Rural Highways

Topography has driven the layout of highways in the rural portions of Washington County. Interstate 70 east of Hancock, and I-68 to the west, provide a continuous east-west freeway route. The major north-south route is comprised of Interstate 70 to the north of Hancock and US 522 to the south. Most other through roads in this part of the County align with small

valleys. There are more alternative routes east of Clear Spring. MD Routes 494, 40 and 68 all provide east-west travel routes in addition to Interstate 70.

In the northeastern portion of the County, the highway network has a generally radial configuration, with Smithsburg acting as the hub. From Boonsboro down to the Potomac River travel routes are constrained by terrain. East-west travel is provided by MD 34, US Alt. 40 to the north and US 340 at the southern tip of the County. Almost all other through roads run north to south following the valleys. MD 67 to the east and Harpers Ferry Road to the west are the main through routes. MD 65 provides a direct north-south route between Hagerstown and Sharpsburg; while MD 632 connects Hagerstown and Downsville. East-west routes in this portion of the County include MD 68, MD 63, and Bakersville Road/Keedysville Road.

Highway Conditions

The MPO Long Range Transportation Plan undertook an analysis of traffic conditions in the rural-agricultural areas of the County. From an operations perspective the only deficient segment that was identified under existing and future conditions was the US 340 approach to the Potomac River Bridge. Ten other highway segments were projected to operate at a level of service that is not considered deficient but does indicate potential problem areas in the future.

Public Transportation

The need for public transportation services in the rural-agricultural areas of Washington County is associated with both program and non-program human service transportation. Future demand for these types of services is projected to exceed current service levels. Meeting existing and future public transportation needs in these areas is a costly task. Implementation of a traditional fixed route system would be neither appropriate nor cost-effective. The more appropriate service delivery option would be a demand-response, or paratransit approach. Since

a great share of the service in the rural-agricultural areas have a destination in the Urban Growth Area a single provider structure would probably be the most efficient means of delivering these services. A service tied to the urban area would permit convenient access to County Commuter service. Since many agencies currently provide service, the single provider structure need not be one agency but development of a service coordination agency.

Bicycle and Pedestrian Facilities

The primary purpose of bicycle and pedestrian travel in the rural-agricultural areas is recreational. Many of the existing bicycle loop tours pass through the rural-agricultural areas of the County. Pedestrian walkways are also important consideration for rural villages. Pedestrian walkway improvements should also be implemented in a manner and scale appropriate to rural village development. Opportunities for development of recreational walking trails should be identified. Ideally, these trails should provide linkages between residential areas, commercial areas, schools, parks and other recreational areas. Potential trail opportunities could utilize utility easements, new or existing roadway rights-of-way, green spaces within developments and/or abandoned rail lines.

C. RECOMMENDATIONS

Highway Network Improvements

The following highway network improvements are proposed based on existing or anticipated traffic flow conditions, future land use development patterns or economic development considerations.

1. Reconstruction of US 11 to accommodate Airport runway extension.
2. Reconstruction of the Dual Highway and Edgewood Drive/Robinwood Drive intersection.
3. Construction of Southern Boulevard from West Oak Ridge Drive to Hebb Road.

4. Reconstruction of the Halfway Boulevard and Massey Boulevard Intersection.
5. I-81 widening to six lanes.
6. Halfway Boulevard Extension to MD 63.
7. Newgate Boulevard Extension from Halfway Boulevard to US 40.
8. New connector road from Eastern Boulevard to Leitersburg Pike/Marsh Pike.
9. Widening of MD 65 from Oak Ridge Drive to Poffenberger Road.
10. Robinwood Drive widening from Medical Campus Road to HCC and Robinwood Drive realignment to MD 64.
11. Widening of I-70 from Frederick County line to MD 63 Interchange.
12. Reconstruction of US 11 from Wilson Boulevard to Massey Boulevard.
13. Reconstruction of US 11/Pennsylvania Ave. from Long Meadow Road to Prospect Street.
14. Widening of Maugans Avenue from US 11 to Maugansville Road.
15. Widening of Robinwood Drive from Mt. Aetna Road to Dual Highway.
16. Reconstruction of the Dual Highway and Hebb Road/Day Road Intersection.
17. Construction of passing lane on Alternate 40 between Boonsboro and Funkstown.
18. New Connector Road between Robinwood Drive and Eastern Boulevard.
19. Reconstruction of the Alternate 40 and Edgewood Drive Intersection.
20. Extension of Yale Drive to new connector linking Robinwood Drive and Eastern Boulevard.
21. New major collector road from MD 68 to MD 67 in Boonsboro.
22. Extension of Crayton Boulevard to Showalter Road.
23. Rench Road realignment with Battlecreek Boulevard.
24. Widening of the Jefferson Boulevard and Eastern Boulevard Intersection.
25. Widening of MD 64 between MD 66 and MD 67.

26. New connector road from Alt. 40 to Hebb Road.
27. Widening of Maryland 60 from Northern Boulevard to Pennsylvania Line.
28. Widening of US 40 between MD 63 and Walnut Point Road.
29. Construction of Cross Creek Service Roads.

Transit Improvements

The following transit network improvements are primarily based on recommendations made by the Maryland Mass Transit Administration.

1. Increase the frequency of transit service and expansion of hours of operation to better accommodate employment trips.
2. Enhance the quality of service to transit riders in Washington County by providing better passenger amenities, including ten bus shelters with benches and emergency telephones at key transit stops. These enhanced shelters will also include transit user information such as system maps and schedules. Locations will be determined based on the need to provide improved amenities at key stops such as hospitals and shopping centers, at transfer points, and at locations of high usage.
3. To assist in dispatching and provide increased on-board security, automatic vehicle locator systems using global positioning systems and mobile data terminals should be implemented.
4. Provide for an additional 200 parking spaces at park-and-ride lots served by transit. These should include consideration of new spaces at the current lots at MD 65 and US 40, or a new facility located to serve the southern part of the County.
5. Consideration of expanding service by expanding service hours and frequencies, and adding Sunday service. This action would bring consistency with State Transit Service Guidelines.
6. Improvements to the quality of facilities for passengers making transfers will require appropriately scaled transfer centers in several locations in Washington County. A new downtown transit center in Hagerstown, as well as small bus transit centers in Williamsport, the Valley Mall, Center at Hagerstown and at the Prime Outlets should be considered. Feasibility studies should be conducted, including the review of potential alternative sites, and development of conceptual plans. The feasibility studies should address the function; scale and required amenities needed to make transit attractive and convenient, and to provide the maximum connectivity to the system.

7. Extension of current services in the MD 65 corridor. This would extend route serving the Prime Outlet Mall to serve the Greyhound Station, the MTA 991 commuter bus park and ride lot, and the motor vehicle administration.
8. The long term improvements to the rural areas of the County should be focused on providing addition service. Consideration should be given to providing service to Boonsboro, Sharpsburg, and Clear Spring. In addition demand response service to the rural areas of the County needs to be enhanced to meet the basic mobility needs of people living in rural Washington County.
9. As the fleet grows with the expansion of the transit system, there will be a need for additional maintenance and storage capacity.
10. Provide for pedestrian access improvements to transit stops and linking of transit stops with nearby origins and destinations to improve the quality of access.
11. Require new developments to be transit friendly through inclusion of transit stops, park-and-ride facilities, improved streetscapes and pedestrian connections.
12. Encourage the State to move forward with the extension of MARC service as proposed to Hancock, as well as consideration of MARC service extension into the Williamsport and Hagerstown areas of Washington County.

Bicycle Routes

1. See previous recommendations under Analysis section.

Pedestrian Facilities

1. See previous recommendations under Analysis section.

Airport

1. Complete construction of the proposed 9/27 Runway extension during this planning period to enhance both passenger as well as freight capabilities.
2. Continue to pursue providing additional passenger service through the addition of new air carriers to the airport.

Freight Movement

1. Continue to look for opportunities to develop inter-modal facilities.
2. Encourage development and expansion of railyards in industrial areas.

3. Work with local trucking firms and distribution centers to identify highway improvements that can facilitate freight mobility.

CHAPTER 6

MINERAL RESOURCES

A. INTRODUCTION

Vast areas of Washington County are underlain by minerals that have economic value. These minerals play a pivotal role in creating and sustaining the built environment by providing basic raw materials for building and road construction, concrete aggregate, bricks, cement, glass and agricultural limestone manufacturing among other products. These resources are non-renewable. Planning for the efficient utilization of these resources will help insure an economically viable supply of construction materials for the future.

In the past, mineral extraction and processing operations involving numerous types of minerals for a variety of purposes could be found throughout Washington County. As the economic viability and demand for many of these products has diminished, most of these extractive operations have disappeared. Currently, mineral extraction in Washington County involves mining of limestone and dolomite for concrete, cement and construction aggregate. High quality silica sand is found in far western Washington County, however, it is not currently being mined. This resource is also found in nearby West Virginia where it is being mined for use in the process of manufacturing glass and other industrial applications. Geological studies have also indicated the possible occurrence of natural gas, generally in the Oriskany Sandstone found the far western part of the County.

The following is a listing of the geologic formations in which deposits of industrial minerals may be found: Rockwell Formation, Romney Formation, Oriskany Sandstone, Helderberg Formation, Tonoloway Limestone, Tuscarora Sandstone, Martinsburg Formation, Chambersburg Limestone, St. Paul Group, Pinesburg Station Dolomite, Rockdale Run

Formation, Stonehenge Limestone, Conococheague Limestone, Elbrook Limestone, and Tomstown Formation. These units were selected primarily by noting the presence of prior and current mining operations and literature descriptions.

Map 31 illustrates the general locations of selected mineral resources in Washington County, as well as existing extractive operations. The suitability of specific locations for mineral extraction is influenced by a number of factors including the chemical quality and physical properties of the minerals, topography and ground water conditions, presence of environmental or historically sensitive areas, access, proximity of a ready market, existing surface development and the value of land for alternative uses.

B. ANALYSIS

Surface mining is the method currently used for the extraction of minerals in Washington County. Surface mining, by definition, alters the natural environment. Changes to the natural landscape are unavoidable. Local and State regulation is designed to eliminate or minimize the environment, aesthetic and reclamation issues that may accompany mineral extraction operations. The extraction and processing of minerals is often an intensive activity that may have significant impacts upon nearby communities.

The extent of many of the impacts generally associated with mineral extraction is highly subjective. Effective long-range planning can avoid direct adverse impacts on communities by separating mineral extraction areas from areas intended for residential development. Doing this will help insure that competing land uses will not conflict with existing and future extractive operations. Consideration must also be given to how the land will be reclaimed once the mining activity is completed.

When zoning was enacted in 1973 approximately 5,000 acres of land were classified,

Industrial Mineral (IM). Most of the lands zoned IM at that time were in the ownership of companies either actively engaged in mineral extraction, or in mineral extraction business with apparent plans for removing minerals on their property. Mineral extraction was also permitted as a Special Exception on land with other zoning classifications. Following an exhaustive study of the aspects of mineral extraction operations and the regulations in effect at the time, a completely new IM section of the Zoning Ordinance was adopted in 1983. The new text divided mineral extraction into three categories based on the amount of area disturbed and the length of operation time. New high volume mineral extraction operations were only permitted outside the Urban Growth Area. The IM zoning designation was changed from traditional classification to a “floating zone”. These changes have resulted in both traditional IM zoning districts and floating IM districts appearing on the Zoning Maps for Washington County. There are also some existing extractive operations permitted as special exception uses in other zoning districts.

New high volume operations must achieve the IM zoning designation through the rezoning process prior to the start of operation. Applicants must show details of the proposed operations and methods to limit effects on adjacent properties. Methods of reclamation must also be provided. Change or mistake need not be proven as in applications for “traditional” zoning classifications. These limitations on the areas eligible for mineral extraction, changes in the application procedures, and an increase in the technical information to be provided and standards to be met, help insure that mining operations are located in the most appropriate areas.

In 1975, Maryland’s Surface Mining laws were enacted to provide a uniform approach for licensing operators for implementing environmental controls through State-approved mining and reclamation plans. The law established a permit requirement for mining companies; thus adding a new regulatory process intended to achieve uniformity and predictability for the

industry, and environmental protection for the public. The County's review and approval process for extractive operations are designed to work concurrently with the State process.

Deep pit quarries have potential for significant impacts on the ground water if they extend below the water table. De-watering of the pit can create a cone of depression that can cause nearby wells to go dry, and in karst terrain, can induce the formation of collapse sinkholes. With increasing development in the vicinity of quarries and potential quarries, the State of Maryland has enacted legislation designed to protect property owners from damages resulting from limestone quarry de-watering. The legislation calls for delineation of "zones of de-watering influences" around certain quarries; the quarry operator is required to remedy certain damages within the zone.

The vast majority of minerals currently mined in Washington County are used in the construction industry. Transportation accounts for a substantial portion of the cost of these materials. Local demand for construction material will increase as the County becomes more developed. Demand for material to satisfy needs for areas outside the County will increase as the source for materials closer to those areas diminishes due to development.

Heavy truck traffic can have a significant impact on the roads serving mining operations. Condition of existing road network serving potential mineral resource areas, as well as the road network's relationship to existing residential areas, should be considered when evaluating new sites for extractive operations.

Protection of mineral resource areas and protection of neighboring residents from the impacts of mineral extraction must be balanced. Washington County strives to offer its citizens choices in where they wish to live. Along with having that choice is the responsibility of understanding and expecting that other uses may occur around those who wish to live in the rural

areas of the County. Industrial Mineral districts should be protected from encroachment by land uses, which would be incompatible with their continued operation or with future expansion of activities in the district. Review of applications or new development in the vicinity of existing Industrial Mineral districts should include notification of potential impacts by the existing extractive operations and possible future expansions.

Conversely, impact upon existing communities and areas of unique natural or cultural significance would be taken into consideration when evaluating applications for appropriateness of new or expanded Industrial Mineral Districts.

Even though most large quarry operations intend to extract materials for many years, eventually, mining will cease and some sort of reclamation must be achieved. Deep pit limestone quarries present unique challenges for reclamation. Consideration must be given to the safe re-use of these properties once mining has ceased.

C. RECOMMENDATIONS

1. Appropriate underlying zoning districts should be established for those lands zoned IM prior to the establishment of the IM floating zone.
2. Procedures should be established for the removal of the IM zoning classification once mining has ceased and lands reclaimed. Reclamation plans should be designed to provide for suitable and appropriate re-use related uses, which exist or are planned for the surrounding area.
3. The current definitions of Low and Moderate Volume Extraction should be reviewed with consideration given to establishment of time and expansion limits.
4. The County should study and develop procedures and regulations to discourage trespassing and maximize safety around deep pit extractive operations.

5. Studies between relationships of water supplies within new residential developments and already existing zone of influence.

CHAPTER 7

SENSITIVE AREAS

A. INTRODUCTION

“Sensitive areas” is a broad term that refers to spaces, systems or processes that maintain a delicate balance with, and within their surrounding environment. The balance in a sensitive area takes more energy to maintain, is more easily disturbed, and is more difficult to regain once upset. Sensitive Areas are usually environmental, but they can also be cultural or economic. They are often unable to recover from damaging natural forces and even less able to maintain their natural characteristics when affected by man-made changes in land use.

Sensitive areas frequently hold an important position in the ecological cycle. Their protection is necessary for many reasons. They perform functions such as preventing soil erosion or filtering water that may not be readily apparent to a casual observer. They appear minor when considered alone but become vital when natural forces take over and man-made intrusions cause disaster. As an example, consider development in the floodplain as merely a nuisance. It is when the infrequent flood occurs and the man-made improvements in the floodplain are destroyed, or there is a loss of life that the necessity of protection becomes clear.

The economics should be apparent. Allowing or not discouraging investment in improvements in an area known to be periodically inundated by water, no matter how infrequently, may seem attractive when considering the aesthetic aspects of that location. The cost of flood insurance and repairs or replacement indicate a non-flood prone area would be a better location for the long term. Examples such as these can be cited for many areas deemed to be sensitive to man’s influence.

The principles of ecology tell us that the loss of one portion of a natural process affects

the entire process. That process may be able to continue without a specific part or an acceptable substitute may develop. However, an entire system can break down for lack of one part.

Maryland's Economic Growth, Resource Protection, and Planning Act of 1992 provided a legislated opportunity and encouragement to formalize the recognition, definition and protection of Sensitive Areas in local Comprehensive Plans. It is not a new concept for Washington County. In all comprehensive planning efforts, including adopted in plans in 1971 and 1981, there is consideration of the importance of sensitive areas.

Subdivision and Zoning Ordinance amendments were adopted in 1996 to implement sensitive area protection required by the Maryland Planning Act. Washington County's commitment to the protection of those sensitive areas remains in place and is reinforced by the goals in this plan stated in Chapter 2.

The Planning Act, as it is often called, did not define sensitive areas other than to list them: streams and their buffers, 100 year floodplains, habitats of threatened and endangered species and steep slopes. The Special Planning Areas that were initially identified in the 1981 Comprehensive Plan and recognized as Sensitive Areas in 1996 subdivision and zoning amendments are retained. They are the Smithsburg and Edgemont Watersheds, the Appalachian Trail corridor and the Upper Beaver Creek Basin. (See Map 15.)

B. ANALYSIS

There are four sensitive areas mandated by the Economic Growth, Resource Protection and Planning Act of 1992. Each heading includes a dialogue on the needs, benefits and potential impacts of development on the sensitive area. In the simplest of terms, protection consists of identification and avoiding the disruption of the natural processes. When avoidance is not possible, minimization of impact is the next preference and may include special measures to

mitigate negative effects.

Whenever possible the use of existing ordinance or regulation to accomplish plan goals is the first priority. The County resisted the temptation to create new regulation when it implemented Sensitive Area ordinance amendments in 1996. This plan element recommends only enhancements of those methods to address the plan goal. There is an obvious economy in this approach.

Policy may be an acceptable means of sensitive area protection. However, the use of the land is governed by a group of existing County ordinances. These ordinances are the most likely and appropriate candidates for further amendment. They include the Subdivision, Zoning, Forest Conservation, Adequate Public Facilities, Floodplain Management and Storm water Management Ordinances.

100 Year Floodplains

Undisturbed floodplains serve a variety of functions having public benefits. These include moderating and storing floodwaters and reducing erosion and sedimentation. In addition, wetlands found within floodplains help maintain water quality, recharge ground water, protect fisheries and provide habitat and natural corridors for wildlife. The Antietam, Conococheague, Licking and Little Tonoloway Creeks, their runs and tributaries and the Potomac River all have extensive mapped 100 year floodplains. There are many other areas associated with unnamed streams that are also prone to flooding.

There are negative impacts when development is permitted in the floodplain. Increased insurance costs and the costs to repair or replace damaged property are all a reality. Floodwater can be contaminated by any manmade improvements in its path such as fuel storage tanks, septic systems, the endless variety of chemicals stored in homes, and garages and the erosion of

exposed soil. More damage occurs downstream, including the potential for loss of life, when floodwaters contain floating debris from manmade intrusions. Permitting construction or the placement of fill in the floodplain causes displacement of floodwaters to wider areas downstream.

The ideal method of protecting the sensitive floodplains would be their identification and subsequent prohibition of all manmade improvements. Washington County's current Floodplain Management Ordinance, effective July 1992, is not quite so stringent. It does, however, strike a balance. Most new construction is not permitted in the floodplain except for water dependent activities. Additions and renovations to existing structures are limited and must meet flood-proofing design specifications.

The Floodplain Management Ordinance defines a floodplain as "land typically adjacent to a body of water with ground surface elevations that are inundated by the base flood." The base flood is one that has a one percent chance of being equaled or exceeded in any one year. This land, as identified on the Federal Flood Insurance Maps (floodplain maps) or by field survey, is subject to the minimum requirements of the National Flood Insurance Program as described in the Washington County Floodplain Management Ordinance.

With conscientious administration and enforcement of the existing Floodplain Management Ordinance it does not appear that additional protection for floodplains is necessary at this time. (See Map 32.)

Streams and Their Buffers

Buffers are protection zones or areas located along streams to help preserve the biological and hydrologic integrity of the stream basin. Stream buffers act as runoff and groundwater pollution control systems by filtering pollutants through the soil and root zone.

Stream buffers are increasingly recognized as being valuable to people and vital to natural processes. Streams and their buffers are home to many species of plants and animals. The floodplains, wetlands and wooded slopes along streams are crucial parts of the stream ecosystem, and help to determine its health and diversity.

Buffers can help reduce sediment, nitrogen, phosphorous and other runoff pollutants by acting as a filter, thus minimizing damage to streams. This is a particular benefit in the more rural, agricultural areas of Washington County, where buffers exist and can be protected. A buffer's effectiveness depends on its width, the type of vegetation within the buffer and maintenance of the buffer. Each opportunity to improve water quality in an individual stream contributes to water quality improvements in the entire watershed.

Stream buffers in many cases can include adjoining wetlands, floodplains, forests and steep slopes. Apart from the valuable habitat in these sensitive areas, people also benefit from protecting buffers. Wetlands and floodplains can store and hold water, as well as slow storm flows and dissipate flood energy, allowing more of the flood waters to replenish the ground water. There is also less need for expensive flood control structures due to the decreased potential for flood damage. Buffers can provide infiltration areas for the increased runoff from roads, roofs and other impervious surfaces in developed areas.

Improvements to stream water quality that result from buffers also improves recreational opportunities. Most streams are candidates for buffer designation. Marsh Run and Beaver Creek are classified by the Maryland Water Resources Administration as Class III waters and are protected for the natural propagation of trout. The presence and health of fish can serve as a useful indicator of water quality.

The negative effect on stream buffers that needs to be minimized is the loss of plant

material that allows sediment and excess water to reach the stream. The lack of vegetation also exposes more ground surface to erosion. The solution is to establish or maintain vegetation in a specified area to mitigate the erosion and the flow of sediment. The terms must be defined and a method to minimize the loss or maximize retention should be developed.

The definition of a stream buffer is not open to much debate. The dictionary defines a buffer as “any person or thing that shields another or protects against danger, loss, despair or annoyance.” From that, an appropriate stream buffer definition could be an areas on both sides of a stream that is designated for the purpose of protecting, preserving or improving water quality by providing for filtration and/or dissipation of the energy of flowing water or the maintenance or stabilization of the stream bank to prevent erosion.

The definition of a stream is more subjective. Washington County’s definition should be comprehensive to provide the greatest protection for water resources. However, it should not be so broad as to include concentrations of surface waters that do not affect overall watershed or groundwater quality such as drainage ditches. Although existing maps are a currently a viable source of stream identification, experience shows that none are 100 percent accurate. A more reliable method would utilize a combination of maps and field verification.

Several map sources are available and commonly used to identify streams. Among them are a variety of U.S. Geological Survey topographic maps or Soil Conservation Service’s soil survey maps.

The matter of determining an appropriate width is not as straightforward. One width will not necessarily serve all buffering needs or fit into all development scenarios. There are different natural and manmade forces at work on each site that can affect streams. There is also differing availability of land and types of land uses to consider. New development is more likely in the

urban areas and is encouraged to be more compact. Storm water management systems are often required which assists the purpose of a buffer.

For these reasons, stream buffers need to be flexible to accommodate each site and the conditions found there. Primary factors in determining buffers should include the degree of slope and the existence, or lack of vegetative cover.

Simple delineation of a buffer provides no stream protection. Attention to the activities allowed within it is also a key to an effective buffer. The final aspect of buffering should include determination of appropriate allowable uses within the buffer. Some uses cause little or no ground disturbance and can be permitted without additional controls. Others can be acceptable with mitigation. Still others are inappropriate under any circumstances. Land uses should be evaluated and categorized accordingly.

For some time the agricultural community has voluntarily used a series of land treatment methods to minimize soil erosion and sedimentation known commonly as Best Management Practices. A customized plan combines the most effective methods for each operation. It is a system that has been in place for many years, generally accepted as effective, and recently made mandatory through State regulation known as Agricultural Sediment Pollution Control (COMAR 26.09.03). An effective stream buffer program can be created from existing map sources, and Best Management Practices already in use by the agricultural community. The methods will be familiar, previously tested and applied as determined necessary by the variables on each site. The availability of experienced personnel will ease implementation.

Stream buffer protections have been in place in Washington County since 1997 and are consistent with the preceding guidance. Requirements in the Subdivision and Zoning Ordinances provide definitions for streams and buffers. They are required to be identified on

development plans, have specific width requirements based on slope and must be maintained with vegetative cover at all times. Permanent structures and septic systems or reserve areas are prohibited in the buffer. Water quality improvement structures or access limitations are permitted. Stream buffers are also targeted by Washington County's Forest Conservation Fund program. There are priorities for permanent protection of existing forest using developer's payments in lieu of forest retention or planting.

Outside of the development process the Rural Legacy Program may also provide protections through stream buffers. It contains provisions for payments to landowners, in addition to the basic easement payments, for placing permanent 100-foot wide buffers adjacent to streams, rivers and springs. (See Map 33.)

Threatened and Endangered Species Habitats

The issue of extinction and loss of species, whether plant or animal is summarized in the phrase "extinction is forever". The ethical and cultural reasons for preserving species are increasingly accepted. Once a species is gone, it cannot be brought back. Ecological principles remind us that each species fulfills a specific role in a larger complex system. The loss of one link in the chain effects the entire system.

In addition, the materials and chemicals produced by some plants and animals are a largely unresearched storehouse of products beneficial to people. Over half of all medicines in use today can be traced to natural organisms. Yet only about 5% of the world's plants have been investigated for medicinal use. Agriculture also depends on wild relatives of crop species for cross breeding to develop new varieties of crops better able to fend off pests and diseases.

In Maryland, over 200 species have been documented as being extinguished over the past 350 years. Although large predators such as wolves and panthers were intentionally extirpated,

all human-caused disappearances in Maryland were incidental, due to habitat destruction.

According to the Department of Natural Resources, at least one ecosystem, the prairie-like grassland of the Hagerstown Valley has totally disappeared.

An essential criterion in protecting threatened and endangered species is protecting their habitat. Maintaining rare species in their natural habitats rather than in zoos or botanical gardens is much more cost effective and biologically sound. The results of research to determine an “acceptable” degree of human interference on habitat is unavailable.

The U.S. Department of Interior identifies three threatened or endangered species in Washington County; the Indiana bat and two plants. The Interior Department and the Maryland Natural Heritage Program within the Department of Natural Resources maintain the listings and guidance maps indicating potential habitat of these and other State listed threatened and endangered species. Washington County has a license agreement with the Maryland agency for limited use of some of the mapping data.

Since the federal and state government already have separate but similar existing programs to protect threatened and endangered species, it would appear to be unnecessary for Washington County to implement another layer of highly specialized regulation. Subdivision and Zoning Ordinance amendments adopted in 1997 utilize existing tools already in place. Development plans require the identification of any habitat of a threatened or endangered species as specified in a review under the federal program initiated by the applicant. Provisions for any additional setbacks or use limitations as required by the U.S. Fish and Wildlife service must also be shown on locally approved development plans. Efforts have been made to form a cooperative working relationship with the U.S. Department of the Interior and the Maryland Natural Heritage Program to access information those agencies maintain regarding threatened and endangered

species. Washington County can now identify an area that may contain species habitat at the earliest stages of development review and advise property owners of the necessary input from the U.S. Fish and Wildlife service or the Maryland Natural Heritage program.

At this time it is known that federally listed threatened or endangered species habitat appears to be limited to a few rural areas of western Washington County where large scale or large amounts of development are not encouraged. Large portions of what does exist are already protected by State government ownership. On the rare occasion when habitat may be found on private land proposed for development, additional options should be available to a landowner either from an approved list of choices or through negotiation and compromise. Options might include clustering, transferable development rights, inclusion in forest retention or reforestation areas, or acquisition through mutual agreement.

The Rural Legacy Program contains a provision for the protection of endangered species habitat also. Specific language targeted toward species protection can be included in the easement documents that restrict land development and are purchased from land owners in the 37,000 acre area that stretches from the Potomac River, through the Antietam Battlefield to South Mountain. (See Map 34.)

Steep Slopes

Minimizing the impact of development on steep slopes is justified for several reasons. Minimizing the effects of disturbance of steep slopes next to watercourses is particularly important because of the potential harm to water quality and aquatic habitat. The County, and ultimately the taxpayers, frequently pay the economic costs associated with the loss of water quality, flooding, landslides and other problems caused by disturbances to steep slopes.

The probability of landslides or soil movement can be influenced by a variety of factors.

Changes in slope by natural process such as a variation in water content due to rainfall is one factor. Another is human activity, such as excess loading from construction, filling or dumping, changes in vegetative cover or shocks and vibrations. Slopes barren from the removal of vegetation can expose soils to repeated erosion and movement from rainfall.

This soil frequently ends up in streams and watercourses where it can smother vegetation and animal life and cause siltation and flooding. Identifying and protecting steep slopes helps the local property owners as well as down stream communities avoid these hazards. It is particularly beneficial to protect steep slopes next to stream buffer areas. Protection can also sometimes provide open space and help maintain the local biodiversity found on the slopes.

Undisturbed slopes are often areas of high biodiversity compared with areas of the landscape, which have more uniform conditions. This is due to a variety of microhabitats that can be found in different areas of steeply sloped ground. Some of these unique microhabitats are the home of species that can exist nowhere else and therefore need protection.

Steep slope is also a limiting factor to the proper functioning of on-site septic disposal systems. The potential for lateral leakage or failure is real, and Maryland regulations governing these installations already limit them to areas of less than 25% slope. Equipment stability limitations are also a factor.

Steep slopes are located in the ridge and valley areas in the western part of the County as well as in the vicinity of major creeks such as the Conococheague, Licking and Antietam Creeks. There are also steeply sloped areas along South Mountain and Elk Ridge.

Maryland regulations governing the installation of septic systems limits them to areas of less than 25% slope. The Washington County Forest Conservation Ordinance defines steep slopes as greater than 25%, and slopes greater than 15% where the erodability coefficient (K

Value) is greater than 0.35. These areas are considered priorities for retention or planting of forest. The definition of steep slope should be consistent with those already in use as noted.

Restricting intense land use on steep slopes is often not necessary. Engineering factors perform the same function. The costs of elaborate design for stable structures often dictates a move to a more friendly terrain. Still there are uses that can overcome the limitations or occasions where the slope is an advantage for aesthetic reasons. These land uses should provide for the protection of the slope against damage during construction and continued site use. Strict enforcement of sediment and erosion control measures and the use of Best Management Practices should be required. Steeply sloped areas should be prioritized for the retention of vegetative cover as they currently are in the Forest Conservation Ordinance.

In 1996 amendments to the Subdivision and Zoning Ordinances were adopted to implement these provisions. Steep slopes are defined as greater than 25% or 15% when the soil erodability factor is 0.35 or greater. Septic reserve areas required by health regulations may not be located on steep slopes and the Planning Commission may impose appropriate Best Management practices where development is proposed on steep slopes. Steep slopes are also targeted by Washington County's Forest Conservation fund planting program for existing forest retention or new planting. (See Map 35.)

Special Planning Areas

The Maryland Planning Act permitted and encouraged local jurisdictions to identify additional sensitive areas that were unique and locally important. The Special Planning Areas were included in the 1981 Comprehensive Plan for Washington County and were recognized as Sensitive Areas in the 1996 amendment. They are geographic areas of unusual or significant importance for which definitions, special policies and land use techniques were proposed and

adopted in the 1996 amendments to the Subdivision and Zoning Ordinance. They are Sensitive Areas with special focus and are included here because they deserve the same special attention.

The Special Planning Areas in Washington County are:

- A. Edgemont and Smithsburg Reservoir watersheds
- B. Appalachian Trail Corridor
- C. Upper Beaver Creek Basin and Beaver Creek (Albert M. Powell) Trout Hatchery

At this time the proximity of any or all three must be indicated on new development proposals. Under certain conditions, hydrogeologic studies may be necessary for new development dependent upon ground water in the Upper Beaver Creek Basin and the Planning Commission may specify additional mitigation measures if negative impacts are expected. A 300-foot building setback or a planted buffer is now required to provide a buffer for the Appalachian Trail. Location within the Edgemont and Smithsburg Reservoir Watersheds triggers the ability to apply best management practices in new development to mitigate adverse effects on water quality. (See Map 36.)

Sensitive Areas in Washington County have benefited substantially from the 1996 amendments to the previous Comprehensive Plan, and subsequent implementation through the Subdivision and Zoning Ordinances. Future regulatory amendments that result from this Comprehensive Plan should retain and improve current sensitive area protections.

C. RECOMMENDATIONS

1. Continue to use various adopted ordinances, regulations and rules to implement the Sensitive Area Element.
2. Consider adding new sensitive area classification to areas delineated as wellhead protection areas as information is developed.

CHAPTER 8

ENVIRONMENTAL RESOURCE MANAGEMENT

A. INTRODUCTION

Primary goals of the Comprehensive Plan include the conservation of the County's natural resources, the preservation of its natural beauty and rural character, and the enhancement of its recreational amenities. These goals are reflected in land use policies that guide development to defined Growth Areas. Within the Growth Areas, policies that result in mitigation of development impacts on sensitive natural features or areas are encouraged.

However, the interrelationship of natural systems is complex. The effect of land development on the natural environment is not limited to the development site, but may have a direct or indirect impact on water supply and quality, air quality, wildlife populations, flooding, geologic stability, plant and timber resources, and agricultural production well beyond the immediate vicinity. It is often very difficult and expensive to trace the causative factors of pollution or environmental degradation after it has occurred. Corrective efforts may be equally difficult. Thus, mitigation of these problems must be addressed in public policies for environmental resource management.

B. ANALYSIS

1. Water Resources

a) Sources

Washington County lies entirely within the Potomac River Drainage Basin, which ultimately flows into the Chesapeake Bay. As shown on Map 4, there are nine major tributaries in the county that flow into the Potomac River: Sideling Hill Creek, Tonoloway Creek, Little Tonoloway Creek, Licking Creek, Conococheague Creek, Little Conococheague Creek, Marsh

Run, Antietam Creek and Israel Creek.

Major issues that arise in water resource management and planning are water quality, availability, and use. The Potomac River is probably the most widely used water resource used in the county. It is the primary source of public drinking water supply for the Hagerstown, Sharpsburg, Funkstown, Smithsburg and Williamsport areas. The smaller towns and villages in the county including Smithsburg, Highfield/Cascade, Boonsboro, Keedysville, Clear Spring, Hancock, Mt. Aetna, Elk Ridge, and Fort Ritchie, rely on springs and wells for their water supply.

The other main uses of water resources in the county are commercial, industrial, and recreational in nature. Therefore, it is imperative that the county institute policies that balance protection of the natural environment with meeting the demands of everyday public need.

b) Availability and Use

In areas of the county where community water facilities are available, about 13.1 million gallons of water are used per day (MGD). By the year 2010 the projected water use in these areas will be about 13.9 MGD. These figures account for about 70% of the population of the county. The remainder of the population utilizes private wells for their water service needs.

In the rural areas of the county, private wells are used primarily to provide the necessary water supply. Due to the underlying geology of the Great Valley (aka Hagerstown Valley) wells are usually very prolific. The limestone bedrock of the valley provides the most productive groundwater aquifer in the state. The private wells that are located to the west of the valley, in the Hancock area, are usually not as prolific but still sustain enough flow to support the limited water usage of private dwellings.

Currently, water resources for the county are sufficient in regards to current needs.

However, occasional extensive drought periods do cause water restrictions to be implemented, especially during the summer season.

Community water and sewer service areas are generally confined to the Urban and Town Growth Areas. Community water and sewer facility planning does not encourage either short or long-term plans to service areas outside the growth boundaries except for cases dealing with health related issues. For this reason, all major development is encouraged to take place within these boundaries. In areas of the county where public facilities are not available, less intensive land use development is encouraged.

All development that occurs in the county is reviewed by the County Health Department to ensure that water resources are available and of good quality. Any major subdivision of more than 10 lots that is not serviced by county water, must be approved through the Water Resources Administration to further ensure the availability of water resources. Hydrologic studies may also be used to determine the availability of water supply in areas where development is proposed .

c) Quality

The surface water quality in Washington County is generally classified as "Good". In a 1988 report to the EPA, the Maryland Department of the Environment concluded that the surface waters of the Upper Potomac River sub-basin were capable of supporting water contact recreation and aquatic life. However, the Maryland Water Resources Administration has also found some surface waters in Washington County to be, at times, high in coliform count due to agricultural and urban runoff, sewage treatment discharges, and failing septic systems. County waters have also been found to be slightly alkaline because of the underlying limestone bedrock. Due to these factors, surface water used as a public water supply must first be treated before being dispensed.

Groundwater quality throughout the county is variable. Depending on factors such as the age and depth of the well, the depth of the well casing, and proximity to septic systems, varying results appear when monitoring groundwater quality. Generally, ground water quality in the county is good with some localized occurrences of high iron and hardness. During surveys performed by R. E. Wright and Associates, Inc., groundwater quality tended to be poor in shale formations such as the Beekmantown Formation, as well as in metamorphic formations. Some wells have been found to be spoiled by natural coliforms with the contamination directly related to the age and depth of the well. Older wells that don't have very deep well casings are found to be contaminated more easily than newer wells with better standards. Contamination of natural coliforms tends to be periodic, and dependent on rainfall and soil types. In some cases, contaminated wells may be directly linked to septic system discharge and/or failure.

d) Total Maximum Daily Loads (TMDLs)

TMDLs were originally identified in the Clean Water Act of 1972. These standards were originally set to calculate the amount of pollutants from both point and non-point sources dispensed into local waterways, and to ensure that the amounts introduced meet the margin of safety for public water supply. At that time, Congress designated that each state should prepare a list of "impaired waters" that were not meeting the EPA's standards for water quality. The objective was to have each state determine the source of each pollutant, calculate the TMDL of each of those pollutants, and develop a plan that would address and resolve the problem.

Environmental considerations have again pushed TMDLs to the legislative forefront, and in August of 1999 the EPA issued a new set of proposed rules to help strengthen and enforce the current rules. Since each state will now have the flexibility to decide what pollution sources need to be controlled, and to what extent they need to be controlled, it is yet to be determined

how these new regulations may impact this county both now and in the future. Once the state decides upon new regulations, it will be necessary to enhance mitigation efforts to coincide with the state plans.

e) Storm water Management

Storm water Management has become an essential part of the planning process. With increased development comes more impervious land area generating increased stream flow rates, higher runoff volumes, water quality issues, erosion, and increased flooding. By integrating stormwater management into the planning process, these problems may be mitigated or prevented.

The County's primary approach to stormwater management has been to promote on-site absorption or quantity control through detention/retention structures. However, new national stormwater management regulations require addressing the issue of quality as well as quantity when designing stormwater management facilities. This has resulted in a more regional approach in locating stormwater management facilities so that they can be better monitored and maintained.

Most stormwater management issues occur in urban areas as a result of the intensive nature of the land use. Site development regulations have helped to lessen some of the effects of runoff by requiring landscaping and limiting impervious areas. The Forest Conservation Ordinance has also helped by promoting forest retention and regeneration especially in areas of high priority such as streambeds and steep slopes.

f) Wellhead Protection Areas

There is currently only one wellhead protection area designated in Washington County. It is located in the Boonsboro area and encompasses the four wells being used to supply the

water demands of the town. It is anticipated that additional wellhead protection area will be developed by the state for other areas of Washington County.

g) Wetlands

Historically, wetlands have been perceived as useless pools of water located in low lying areas for all or most of the year. However, this perception is inaccurate and ignorant to the true importance of wetland areas. It has been established through countless studies and exhaustive research that wetlands are a vital part of our natural ecosystem. Not only do they provide habitat for various plants and wildlife, but they also help protect against natural hazards such as erosion and flooding. Wetlands also help with water quality, acting as a filter system for pollutants.

There are three main characteristics used in conjunction with one another to help determine the potential of an area to be a wetland: plant life, soils, and hydrology. The hydrology of an area is the key characteristic in the determination of whether or not an area meets the definition of a wetland. Generally, any area that is saturated to the surface or inundated for at least one (1) week during all or part of the year is considered a potential wetland. To further verify whether the area is considered a true wetland, soils are analyzed along with vegetation.

There are two broad categories of wetlands, coastal or tidal wetlands and inland or non-tidal wetlands. Washington County only contains non-tidal wetland due to its distance from the ocean and the salinity values of the local water systems. According to the Maryland Department of Natural Resources, there are 2,110 acres of wetlands in the County. This accounts for about 0.7 % of the total County area.

Through legislation passed in 1989, states have gained authority to regulate permitting

and review development plans in areas where wetlands are thought to occur. With the help of the U.S. Fish and Wildlife Service, the Maryland DNR has produced Non-tidal Wetlands Guidance Maps for the state to help identify areas of potential wetlands. There are four government agencies that are responsible for identifying and delineating wetlands: the Army Corps of Engineers, Environmental Protection Agency, Fish and Wildlife Service, and Natural Resources Conservation Service.

h) Septic Systems

Septic systems are one of the most important components related to the development process. About 40% of the county's population use some sort of private sewage system. The most widely used system is the conventional septic system with the cement or fiberglass holding tank and a drainage field. Regular maintenance and repair, such as pumping, is required in these types of systems to insure that failure does not occur.

In areas where the depth to limiting zones, bedrock or high water tables, is evident other types of systems such as mound and sand filter systems may be appropriate. Effluent renovation is accomplished through the addition of soil and sand to the filtration system. One of the newest varieties of septic system is the denitrification system. Though not currently being extensively used in this area, recent environmental concerns over the high levels of nitrogen in local waters leading to the Chesapeake Bay have created a need to look at alternative methods of sewage disposal that address the nitrogen issue.

2. Recreational Waters

a) Classifications

Almost all of Washington County's water systems support some type of recreational use. The concentrated areas of usage are on the main branches of local creek systems and on the

Potomac River. Impounded waters such as lakes and ponds also create areas of recreation. The main recreational uses of the Washington County waterways are fishing, boating, canoeing, and various water sports such as jet skiing, water-skiing, and tubing.

According to the Maryland Department of the Environment, all of the water systems in the state are classified according to recreational use and potability of the water. These classifications (Uses) are listed below.

Use I: Water Contact Recreation and Protection of Aquatic Life. All waters in the state of Maryland are classified as “I” unless otherwise specified in COMAR 26.08.02.08.

Use II: Shellfish Harvesting waters. There are no Class II waters designated in Washington County.

Use III: Natural Trout Waters. These are areas of water in which trout propagation is self-sustaining.

Use IV: Recreational Trout Waters. These are areas of water that can support adult trout if the area is artificially enhanced through measures such as stocking.

There may be an additional classification of “P” added to the above classes. The additional classification simply indicates the ability of the water to also be used as a public water supply. All of the waters in Washington County are classified with the additional “P” rating. Map 37 shows the respective classifications for the water systems of Washington County.

b) Fishing

Fishing is a very popular recreational activity and almost all of the waterways in Washington County can support this activity. Most shore side fishing takes place on the smaller tributaries of the creeks and rivers of the area. These smaller tributaries provide a more conducive habitat for the game fish such as trout and bass. The main branches of the local creeks and the Potomac River tend to have more boat fishing but also support shore side fishing as well. The five main areas of impounded water in the county that either support a natural fish population or are stocked on a regular basis are: Little Pool, Big Pool, Blairs Valley Lake,

Greenbrier Lake, and Lake Royer. The bodies of water in the Fort Ritchie area commonly known as Upper and Lower Lake Royer are not currently open to the public but may become a public recreational area at some point in the future.

c) Canoeing/Kayaking

Most non-motorized boating related activities, such as canoeing and kayaking, are limited to the southern parts of local creek systems and the Potomac River. The most common reason for this limitation is the amount of water area suitable for these kinds of activities. Drought and flood seasons in Washington County can greatly affect the recreational capabilities of local water systems.

Another common problem is the lack of access points. A large portion of the access points along these waterways is located on private property. A few public access points do exist and are shown on Map 38.

Recreational kayaking is a minor activity on Washington County waterways. Some kayaking enthusiasts look for areas of fast moving waters, such as rapids, to add a challenge to their sport. The Potomac River, especially in the slack waters of local dams, and the southernmost extents of its tributaries seem to be the most conducive area to create these extreme conditions.

d) Boating/Water-skiing/Jet-skiing

Motorized boating activities in Washington County primarily consist of water-skiing, jetskiing, and motorboat fishing. The main area capable of handling motorized boating activities is the Potomac River. The River generally creates enough favorable usage areas even during low flow periods to support the intensive and extensive nature of these activities. In particular, backwater areas above dams are becoming prime spots for water-skiing and jetskiing activities.

The other water systems of the county are simply too small in area and do not produce enough flow to provide adequate space and water needed for such intensive activity.

e) Swimming

There are two main types of swimming offered by Washington County, beach side swimming and community swimming pools. Greenbrier State Park contains the only beach side swimming area in the county. There are several publicly and privately operated swimming pools in the area. The public swimming pools include: Hancock Municipal Pool, Williamsport Municipal Pool, Potterfield Pool, and the Martin "Marty" Snook County Park community pool. Most of the privately run swimming facilities in the county are contained in country clubs or other such membership organizations including the community facilities located at the YMCA.

3. Air Quality

The issue of air quality has become prominent in environmental discussions during the later half of the 20th Century. As many health issues become connected to environmental degradation, new rules and regulations have been promulgated to address known health risks. With the passage of the Clean Air Act, efforts to improve air quality took a giant step forward. Revisions to the regulations have been advanced as science has become more accurate in determining relationships between clean air and emission standards.

In 1970, the United States took significant steps in environmental legislation by passing the Clean Air Act (CAA) and establishing a regulatory agency known as the Environmental Protection Agency (EPA). Currently, the EPA's Office of Air and Radiation works in conjunction with state and local agencies to monitor and regulate air quality standards all over the country. One air quality monitoring station was established in Washington County in the late 1990s.

The Clean Air Act has gone through several evolutionary phases in trying to keep up with changing technology. Initially, the legislation designated the following six pollutants as "criteria pollutants": Carbon Monoxide (CO), Nitrogen Dioxide (NO²), Ozone (O³), Lead (Pb), Sulfur Dioxide (SO²), and Particulate Matter (PM). The EPA was also given the task of setting "National Ambient Air Quality Standards" for all six of the criteria pollutants. These standards were divided into primary and secondary standards. Primary standards were set to protect human health while the secondary standards were set to protect human welfare.

In the state of Maryland, the Department of the Environment is ultimately responsible for the monitoring and reporting of ambient air quality throughout the state. However, since air quality can not be confined to state boundary lines, there have been several multi-state air quality committees set up to help bordering states tackle air pollution problems together. Maryland is part of the EPA's Region III that consists of Delaware, Pennsylvania, West Virginia, Virginia and Maryland. Washington County is also located within the Northeast Ozone Transport Zone. It is this relationship with the Northeast Ozone Transport Zone that has generated implementation of a vehicle emissions testing program.

Since the inception of the Clean Air Act in 1970, this region has seen dramatic improvements in air quality. There has been a drop of 98% of lead, 79% of soot and other particulate matter, 41% of sulfur dioxide, 28% of carbon monoxide, and 25% of ozone levels in the region since 1970.

As of Fall 2000, both the EPA and the Maryland Department of the Environment delineate Washington County as being in attainment for all six criteria pollutants per the one-hour standard. It is anticipated that if a proposed new EPA eight-hour standard is implemented, Washington County will go into a non-attainment status for Ozone. This action may require

additional mitigation at both stationary and mobile sources. In addition, “Transportation Conformity” determinations would be required to be made through the Hagerstown/Eastern Panhandle Metropolitan Planning Organization as an independent region or in conjunction with the Washington DC metropolitan area.

4. Forest and Woodland Areas

a) Forest Location

At one time most of Washington County was covered with hardwood forests. The limestone bedrock areas of the valley had significant forests that included Oak, Hickory, Beech, Ash, and Basswood. Now, the major forested areas are on the mountains and in the western region of the County. Mountainous areas include the Blue Ridge (South Mountain), the Elk Ridge and Red Hill areas, the mountain land north and west of Clear Spring, and the forested ridges west of Hancock. Additional forested areas are in the Hagerstown Valley, primarily where the land is too rocky or steep for development or farming. Bottomland forests are found along the fertile floodplains of streams such as Conococheague and Antietam Creeks, and along the Potomac River. Forests provide a broad array of functions and benefits such as countless wood products, air quality, aesthetics and scenic beauty, wildlife habitats, and a wide variety of recreational opportunities.

b) Forest Inventory

Forested areas encompass approximately 107,193 acres (35.9%) of the total land area of Washington County, and provide an important recreational, environmental, and economical resource for the region (See Map 39). According to U.S. Forest Service data from 1986, the overwhelming majority of forested area in the county (75.2%) consists of Oak-Hickory type. Remaining forested areas are classified as Oak/Pine (12.5%), Elm/Ash/Red Maple (6.7%), and

northern hardwoods (5.6%).

As a result of the type and quality of forested area in the county, timber production is a significant industry. In order for a forested area to be considered timberland, it must by definition, be capable of producing wood at more than 20 cubic feet (ft³) per acre. Of the total forested area in the county 31% is considered timberland. Eighty six percent of the timberland in the County is privately owned, while 12.3 % is state owned.

Harvesting of this timber generally results in two products - saw timber and pole timber. Saw timber is processed to be used as regular lumber and comprises 91% of the overall cubic volume of harvested timber. The remaining 9% is processed as pole timber and is used for things such as utility poles.

c) Forest Conservation Program

In 1991, the Maryland General Assembly passed the Maryland Forest Conservation Act due to the perceived loss of forest cover to urbanized development. The Act required that all of the counties in the state with less than 200,000 acres of forest cover must adopt an ordinance to address the issue of forest conservation through identification and protection of existing forest, and establishment of new forest.

In February of 1993, the Forest Conservation Ordinance (FCO) for Washington County was adopted. Under this ordinance, subdivision of land or development that removes 40,000 ft² of forest area requires mitigation plans to be submitted to the Planning Commission for approval.

The Forest Conservation Ordinance establishes options for remediation which include: on-site retention or planting, off-site retention or planting, natural regeneration, and pay-in-lieu of planting or retention. Payment of a fee in place of afforestation or reforestation planting is a

frequently used option in Washington County. The County, in cooperation with the Washington County Soil Conservation District, has successfully developed a program where these funds are used for easement purchases and plantings in sensitive environmental areas. The collected funds provide the opportunity to plant and then protect, by easement, large contiguous areas of forest rather than promote small-scattered forested areas in order to enhance optimum benefit to the environment.

5. Soils and Geology

a) Soils

Soils are an important resource and the foundation of the County's agricultural industry. Problems with soils can include load bearing failure, slope instability, erosion and siltation of streams and creeks. Soil identification, therefore, is an important part of planning for appropriate land uses. Regardless of the kind of use, from agriculture to urban development, an understanding of soil suitabilities and limitations are vital to ensuring the highest and best use of the land.

A new Washington County Soil Survey provides updated soil maps to aid in more clearly locating and defining appropriate soil uses and limitations in different areas of the County. The digitized Soil Survey map data includes steep slopes and larger uniform soil groups with similar characteristics. The use of soil data in combination with other Geographic Information System data layers will enable quicker and more accurate analysis of land use development proposals and plans.

In addition to detailed agricultural and engineering suitability interpretations, the soil survey includes soil interpretations for forest and woodlands management and productivity, interpretations for building site development, construction material and septic system suitability,

and recreational development and wildlife habitat suitability.

Within Washington County the soil series or types are combined into 14 general soil map units. Each of these units are divided into similar soil series groupings, which help to better locate the series types within the units.

Soil Classes based on agricultural capability are extensively used to evaluate and rank farmland and its potential productivity. The soil classes established by the Natural Resource Conservation Service (NRCS) range from Class I to Class VII, with Class I, II and III soils having the highest capability, "suitable for annual or periodic cultivation of annual or short-lived crops." Class I and II soils are "Prime" soils, having the highest value for continued agricultural use, and have the priority for long term protection under the County Agricultural Land Preservation Program. An important local effort to help meet state goals of the Chesapeake Bay Agreement is the "Targeted Watershed Project". It includes the Little Antietam Creek # 1, Beaver Creek, and Marsh Run; all sub watersheds of Antietam Creek, a tributary of the Potomac River. The combined efforts of several state and federal agencies provide education to farmers in these targeted areas. Topics include Best Management Practices for fertilizer use, animal waste management, soil and water conservation, and sources of funding to provide assistance for installing eligible measures to protect water quality. Homeowners and developers are provided with information on septic system maintenance and stormwater management, and sediment and erosion control.

b) Geology

Washington County is primarily located in two physiographic regions, 1) the Blue Ridge region and 2) the Ridge and Valley region. The Blue Ridge region is located in the area of South Mountain along the eastern border of the county. It is composed mostly of metamorphic rocks

such as granite, slate, and quartz. The Ridge and Valley system encompasses the rest of Washington County and stretches from the foot of South Mountain to the western boundary of the county at Sideling Hill Creek. The Great Valley (a.k.a. the Hagerstown Valley) is the main section of the ridge and valley system in this area. It extends from the foot of South Mountain to the foot of Powell and Fairview Mountains and is underlain mainly by limestone and various forms of shale.

The Geologic Features Map (Map 40) shows the respective limestone and sedimentary/shale areas, and is useful in insuring that the underlying geology is in harmony with proposed building and other surface activities. The extensive limestone bedrock in Washington County is highly subject to weathering and the formation of solution channels and sinkholes. These channels can carry significant quantities of ground water that can be used for water supply purposes. They can also serve as conduits for ground-water contaminants. As a result, certain areas of limestone bedrock in the Hagerstown valley are considerably more environmentally sensitive than areas with other types of bedrock.

6. Agriculture

a) Prime Agricultural Soils

In its 2001 Soil Survey update the Natural Resources Conservation Service (NRCS) defines prime agricultural soils as farmland having an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable pH, acceptable salt content, contain few or no rocks, and are not excessively erodible or saturated with water for a long period of time.

According to NRCS, prime farmland with the above-mentioned characteristics has the best combination of physical and chemical components for producing food, feed, forage, fiber,

and oilseed crops. These soils have the quality to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods. For these reasons, prime farmlands should continue to receive priority in ranking applications for permanent protection measures by the county.

In 1984 the Washington County Commissioners approved an agricultural lands inventory map showing areas of the county with prime soils, as well as areas containing less productive soils. The Agricultural Land Preservation Advisory Board has used this map to assist in ranking and prioritizing applications for permanent easement protection on agricultural lands.

Efforts at the State level to promote the restoration of the Chesapeake Bay have also had an impact on agriculture. Environmental concerns regarding excess nutrient levels in the Bay, particularly nitrogen, have generated legislation requiring the development of nutrient management plans to regulate the amount of fertilizer placed on farm fields. At this point, the success of the program is still undetermined. However, its ultimate affect on both local streams as well as regional waterways may be critical in meeting future TMDL requirements.

b) Animal Husbandry

The number of farm animals in Washington County has been declining. However, the issue of contamination of streams and groundwater by animal manure remains a concern. The Washington County Soil Conservation District continues to work to educate landowners about measures needed to prevent the runoff of manure. Farmers in Washington County have been very cooperative and are implementing the measures needed for the protection of streams and tributaries. In addition, the Animal Husbandry section of the Washington County Zoning Ordinance requires additional scrutiny by government agencies for intensive operations such as dairy, beef, swine and poultry.

7. Hazards

There are many hazards that can be a potential threat to a community and its citizens. Not only can these events pose a threat to the citizens themselves; they can cause massive amounts of property damage. Fortunately, Washington County is in an area where hazards are not that frequent. Most of the hazards in this area are naturally occurring, however, some are man made.

Natural hazards

a) Floods

The yearly average rainfall for the county is between 37 and 39 inches. On average, Washington County experiences 1 to 2 major flood events every ten years. Most flooding events occur in either early spring due to spring rains and snow melting, or early fall during the hurricane season. The last major flood event in the county occurred in 1996. In January, the area had endured the worst snowstorm in history leaving 35 inches of snow on the ground. One week later a rapid warming trend occurred and caused major flooding from the meltdown. Later that same year in September, remnants of hurricane Fran added to the already saturated water table causing more flooding and damage in excess of \$1 million.

Floodplains are considered an environmental sensitive area in the Comprehensive and development and use is regulated under the County's Floodplain Management Ordinance.

b) Winter Storms

Winter storms are another common hazard in the county. On average, Washington County receives about 29.7" of snowfall per year. Generally, this area receives winter precipitation in the form of snow. The last and worst major winter storm to hit the area was the Blizzard of 1996 when 35 inches of snow fell in 33 hours.

c) Soil Erosion and Slope Hydraulic Failure

Washington County lies in an area that is highly susceptible to erosion and slope hydraulic failure. However, the occurrence of such hazards are low to moderate. As discussed in other sections of the plan, the soils in Washington County are generally well drained. This, combined with extensive efforts by federal, state, and local agencies to protect sensitive areas such as steep slopes and streambeds, has helped to limit potentially high-risk areas of erosion and slope instability.

d) Tornadoes and Severe Weather

Generally, the severe weather in this area occurs during the spring and summer months and takes the form of thunderstorms. However, there have been occasions when extremely severe thunderstorms have turned into tornado events. According to the National Weather Service, Washington County has experienced 12 tornado events in the past 110 years. Eight of these tornadoes have occurred in the last 5 years and were the product of single storms having several spouts. Most of the damage done by these storms have been property and crop related.

e) Hurricanes

Washington County generally does not feel the full effects of hurricanes. Located far enough inland, this area usually only receives the remnant rainfall and ,on occasion, gusty winds. Excessive rainfall tends to be the biggest problem, causing a moderate to high flood potential. The last major hurricane that affected this area was Hurricane Fran in 1996.

f) Extreme Temperatures

Extreme temperatures are usually thought of as more of an inconvenience rather than a hazard. However, extreme temperatures can, and are, very deadly especially for elderly people. In the years from 1995 to 1998, seventeen people in Maryland have died from exposure to

extreme temperatures and many more injuries occurred. Generally, during the summer months, this area will experience about 28 days of 90+ degree temperatures. During the winter months, this area will average about 17 days of below freezing temperatures.

g) Radon

Radon has just recently been thrust into the spotlight as a naturally occurring hazard. In 1992, the Surgeon General recognized radon gas as being the second leading cause of lung cancer. Because the gas is odorless and tasteless it is very difficult under normal circumstances to know if there is a radon problem in a given area.

Radon is produced through the radioactive decay of uranium and is therefore found in areas of large uranium deposits. Granites and other similar types of igneous and metamorphic rocks are generally where high amounts of uranium are found.

Washington County is mostly underlain by limestone and shale. According to the USGS and the EPA, areas that are underlain with these kinds of materials have a low to moderate chance of having measurable radon levels.

h) Drought

Over the past 100 years, this area has experienced a number of low precipitation years. According to the National Drought Mitigation center, this area has a low occurrence of severe and extreme drought conditions based upon data collected over a 100-year period. Since 1895 this region has experienced about 6 major droughts. The most extreme drought period in terms of average rainfall was from about 1957 to 1969. During this period, every year except for one was well below the normal rainfall average. The most recent drought that has occurred in this region was in 1999. Although this area was not as impaired as other parts of the region, low precipitation amounts caused local waterways to dip below their normal levels. Water bans were

also necessary in some parts of the County.

Man Made Hazards

a) Hazardous Material Transport

Washington County does not have any major national or state hazardous materials mitigation sites. However, transport of hazardous materials through the County via the interstate system as well as the rail network is not an unusual occurrence. Consequently, the possibility is always there that accidents involving hazardous materials can occur. Washington County has not had a great deal of problems with these transports. When an accident does occur involving a hazardous material, the county has a special team of certified professionals to contain, clean up, and monitor the area for negative impacts.

b) Landfills

Landfills in Washington County have been historically located in the non-limestone areas of the County. The current operating landfill is the new Forty-West landfill located west of Huyetts Crossroads and east of Clear Spring. Older non-operating landfills that exist include the Resh Road landfill along MD 63, the old City/County site along MD 63, the Rubblefill site along Kemp's Mill Road, the Pinesburg landfill along MD 68, and the Hancock landfill located off of Robinson Road.

There are three main issues generally associated with landfills: pests (rodents, insects, wild animals, etc.), leaching, and methane gas released from decomposition. The pest problem is addressed by capping the waste everyday that is transported into the landfill. Leaching and methane gas build up are mitigated by venting and diversion systems that are strategically placed during several stages of the development process.

Several of the non-operating facilities have leachate and venting systems. The Pinesburg

site has been reclaimed as ballfields and the Kemps Mill facility is eventually anticipated to be used as a recreational facility.

c) Superfund sites

There is currently one superfund site in Washington County. About 19 acres owned by the Central Chemical Corporation was added to the National Priority List of Superfund sites in 1996. It is located within the City of Hagerstown.

8. Noise

Noise has become a very common problem associated with urban areas. It tends to be one of the lesser thought about waste products that accompanies industrial and technological change. Sources of noise pollution include: highway (vehicular) traffic, aircraft, railroads, and residential, commercial, and industrial activities. This type of pollution has been shown to cause health problems such as stress, hypertension, hearing loss, and weight loss in fetuses. Noise tends to hinder communications between wildlife causing changes in mating, schooling, and migrating behaviors, as well as stress in animals similar to humans.

There are several factors that need to be considered when attempting to address noise. These include: frequency, duration, decibel level, location of noise source, ownership, and time of day or seasonal occurrence. These factors all play a role in the individual perception of noise, therefore making it difficult to develop regulations that accommodate all perceptions at all times.

Washington County has addressed the problem of noise pollution through requirements set forth in the Washington County Zoning Ordinance. Highway interchange zones, airport zones and strategic placing of business and industrial zones have all been used in try to mitigate noise problems.

Urban areas are generally more susceptible to noise pollution because of the close proximity of different land uses to each other. Efforts to direct industry inside the designated growth areas, but away from areas of residential development, have been able to address the effects of noise on most residential areas. Noise from the interstate highway system has not been a significant problem throughout the County at this time. However, infill development near local interstate and highway systems may create the need for noise regulations to be drafted and implemented at some point in the future.

In the rural areas of the County, agriculture and conservation zoning have helped limit the impacts of noise by requiring larger lot areas and encouraging land uses that support agriculture and open space priorities. Programs such as agricultural preservation and rural legacy have also been helpful in retaining areas of open space to act as noise buffers. Nevertheless, agricultural and mining operations may generate noise to a level that impacts adjacent residential development.

9. Solid Waste Disposal and Recycling

a) Solid Waste

Solid waste generated in Washington County is disposed at the new "40 West Landfill" and is accessible by a road from US 40 about one mile west of Huyetts Crossroads. The new "40 West Landfill" site will have an estimated 80+ year life, based on a total solid waste flow projected at 65,000 to 67,000 tons per year. It will serve County citizen solid waste management needs well into the next century with a "state-of-the-art" liner design, leachate collection system, and weighing house.

Four supervised "green box" convenience centers for depositing solid waste and recyclable materials are located in the rural areas of the County at: Greensburg, near Smithsburg;

Hancock, in the western part of the County; Dargan, in the southern part of the County, west of Elk Ridge, and at Kaetzel Road, off Route 67 south of Boonsboro.

b) Recycling

Recycling and waste reduction are important components of the County's solid waste management strategy. Washington County will continue to meet and exceed the state mandate of recycling a minimum of 15% of defined waste stream materials. The percentage of material recycled according to state criteria was 25% in 1998. Commercial cardboard collection will continue to be a significant percentage of material diverted for recycling. However, reporting of recycling activity by business and industry is voluntary.

The 17 County funded "Citizen Recycling Collection Site" drop off bins for steel and aluminum cans, clear, green and brown glass bottles and jars, plastic bottles, and newspapers will continue as the primary means of public funded recycling collection.

The County Solid Waste Collection Licensing Ordinance also requires private waste haulers to offer recycling collection service to their customers. The County has an office recycling program at all County government office locations, including recovery of old office paper, and glass and aluminum containers.

Leaves and yard waste are composted at the new landfill in an effort to provide for waste reduction.

c) Solid Waste Management and Recycling Plan

The Washington County Solid Waste Management and Recycling Plan describes solid waste management and recycling programs and activities occurring in Washington County, as well as solid waste management goals and objectives. The Plan will continue to be updated on a three-year cycle, as required to address current issues.

10. Visual Environment

a) Scenic vistas and routes

Scenic vistas are often associated with particular roads and highways, sections of streams or agricultural lands, mountainsides, and other features that, together, make up these views. With its meandering stream valleys, historic stone bridges and buildings, picturesque farms, and forested mountains, Washington County has the most scenic and pastoral landscapes in the mid-Atlantic region. The 20-mile wide Hagerstown Valley, located between the Ridge and Valley region and the Blue Ridge, provides many unique vistas and landforms. Pleasant Valley, at the southern end of the County, as well as the western Ridge and Valley region near Hancock have an abundance of scenic qualities.

Interspersed throughout the County, and adding significantly to its scenic beauty, is a rich and diverse "mosaic" of protected land and resources. These include national, state, county and municipal parks, state wildlife management areas, farmland having agricultural easements, streams, creeks, and stone bridges, as well as many historic private homes, mills, and other valuable heritage resources worthy of recognition.

Scenic view sheds and vistas of Red Hill from the Antietam Battlefield are protected in part by the Antietam Overlay Zones identified in the County Zoning Ordinance. Roadway approach zones along highways near the Battlefield are also mapped in the Ordinance. In these areas, a proposed activity that requires a building permit is subject to review of the Historic District Commission of Washington County. Federal, State and private agricultural preservation and scenic easements protect, in perpetuity, more than forty-six hundred acres of farmland surrounding the Battlefield. Adjacent to the C & O Canal National Historic Park, owners of some properties have provided scenic easements to the National Park Service limiting tree

cutting to maintain the view to and from the Park. The National Park Service and Maryland Department of Natural Resources are also obtaining several remaining sections of Appalachian Trail corridor lands on South Mountain.

The County is home to a number of other unique natural and scenic features. Those available to the public include: High Rock, a scenic overlook near Pen Mar Park; the Devil's Racecourse; Beaver Creek Spring, within the grounds of the Albert Powell trout Hatchery; Crystal Grottoes, the only commercially operated cave in Maryland; Weverton Cliffs, overlooking Harper's Ferry, WV; Elk Ridge, Mount Briar Wetland Preserve near Rohrsersville; Indian Springs and Fairview Mountain; Fort Frederick State Park; Conococheague Creek; Roundtop Natural Heritage Area; and, the Sidling Hill "cut" for I-68, west of Hancock.

The visual impact of telecommunications facilities is an issue likely to occur due to an increasing number of cellular towers and antennas provided as a result of new technology and expanding commercial service. Implementing recent Zoning ordinance amendments minimizing visual clutter by encouraging co-location of antennas and shared use and placement upon existing structures and towers will help manage the visual impact of those facilities.

b) Vistas and scenic road policies

The County has taken preliminary steps to identify and inventory scenic vistas, particularly where they are vital to the preservation of historic and cultural sites. Protecting qualities attractive to, or enhancing opportunities for heritage and recreational tourism, as well as promoting the County's rural heritage should be a priority.

Rural roads, as the spine of scenic or heritage corridors, could be designated as scenic byways by the County in order to promote the Civil War Heritage and Rural Legacy programs. Protecting these corridors from incompatible development and at the same time promoting their

assets will require careful balance. Identifying and designating scenic routes, corridors and byways based on defined criteria will be a challenge.

11. Best Management Practices

The Washington County Soil Conservation District continues to provide a comprehensive program of education, information, direct technical assistance and financial incentives to encourage the implementation of best management practices (BMPs) that conserves natural resources and prevent or reduce non-point source pollution from agricultural operations.

Best management practices, such as the establishment of forested or grass buffers along streams, construction of manure storage facilities, stream crossings for livestock, and various tillage or agronomic practices such as the planting of winter cover crops are installed by county farmers with the assistance of the Washington County Soil Conservation District (WCSCD). The establishment of these BMPs is key to protecting sensitive areas such as steep slopes, wetlands, and riparian areas in the County. Areas of special concern such as the Antietam Creek Watershed, have received additional attention and resources have been obtained by the WCSCD to work specifically in these areas.

The Forest Conservation Act provides additional opportunities to enhance water quality through the preservation of existing forest and mitigation of forest losses due to development activities.

C. RECOMMENDATIONS

Water Resources

1. Monitor water availability in different areas of the County through the State water withdrawal permitting process and adjust land use development guidelines to meet changing conditions.

2. Promote stormwater management regulations as a tool to enhance water quality.
3. Encourage the State to delineate wellhead and springhead protection areas for Hancock, Clear Spring, Keedysville, Pen Mar/Cascade, Mt. Aetna, Elk Ridge, Weverton, and St. James School community water systems.
4. Maintain current policy of restricting water and sanitary line extensions to areas outside of designated growth areas except to address health and safety concerns.
5. Continue to monitor watershed management regulations pertaining to TMDLs and adopt the necessary action plans required by the state.
6. Advocate support for state and federal “no net loss” wetland policy.
7. Continue to monitor the effectiveness of denitrification septic systems and adopt new standards as technology improves.

Recreational Waters

1. A need assessment should be done to see if more swimming facilities are needed in the western and southern portions of the County.
2. Assessments should be done along local waterways to determine the possibility of adding more boat launches along the smaller waterways for non-motorized boating.
3. Specific recommendations for recreational water facilities promoting swimming, boating and fishing should be incorporated in future Land Preservation and Recreation Plan updates.

Air Quality

1. Work with the Hagerstown Eastern Panhandle Metropolitan Planning Organization to develop an air quality mitigation standard.

Forest and Woodland Areas

1. Establish a minimum targeted threshold of the total land area of the County to remain in long

term forest cover.

2. Continue use of Forest Conservation Funds for the purpose of attaining easements around priority locations as identified in the Forest Conservation Ordinance.
3. Use Rural Legacy funding as another means of purchasing easements on forested land to support long-term forest cover retention goals.
4. Develop a program to inform private forest owners of the benefits of establishing forest management plans. Plans can aid in long-term forest, wildlife habitat, and watershed protection, and may assist property owners in qualifying for a lower agriculture use tax assessment.
5. Best management practices that promote native plants or animals, create or restore streamside habitats and hedgerows, and protect caves and wetlands should be encouraged to help improve the habitat and timber value of larger forest areas.

Soils and Geology

1. Integrate new soil and geologic data into the planning and development review process.
2. Promote cooperation with agencies such as the Washington County Soil Conservation District, the USDA Natural Resources Conservation Service, Cooperative Extension Service, and the County Health Department in informing and educating landowners, developers and farmers about techniques for controlling soil erosion and nutrient runoff that can contribute to water quality problems.

Agriculture

1. Establish a minimum target threshold of the total land area of the County to remain in agricultural production. Continue efforts to develop permanent funding sources that can sustain agricultural easement and development rights acquisition program.
2. Continue the Agricultural District program as an interim program to support agricultural preservation until agricultural easements can be acquired.
3. Develop setbacks, screening and buffering for residential development proposed adjacent to agricultural preservation districts or easements that would require mitigation to protect the integrity of the agricultural property and not the proposed residential development.
4. Work with the Washington County Soil Conservation District and the Agricultural Extension Agency to enhance current regulatory requirements that address animal waste collection and disposal processes to insure balance with environmental concerns.

Hazards

1. Work with the Fire and Rescue Department on development and maintenance of a County Disaster Response Plan.

Noise

1. Locate commercial and industrial zoned areas so that activities with higher noise levels can be directed away from residential areas, schools, hospitals, churches and open space areas. Already existing high noise level areas, should be buffered against future non-compatible uses such as residential development.
2. In particular, promote commercial or industrial use activities to be built around the airport. These types of activities are suitable for the restrictions imposed by airport safety standards while minimizing the impacts of FAA noise abatement regulations.

3. Noise abatement requirements should also be instituted where excessive noise levels could negatively impact heritage tourism efforts.

Solid Waste Management and Recycling

1. Develop specific site reuse plans for the Resh Road Landfill and the Rubble Landfill.
2. Continue to promote recycling as part of the site plan review process.
3. Implement future specific solid waste management and recycling recommendations through updates to the “Solid Waste Management and Recycling Plan”.

Visual Environment

1. Promote the designation of local County scenic byways as well as supporting recognition of State scenic byways such as the “Old National Pike”, now Alternate US 40. County designated scenic byways should have additional development regulations associated with them to promote compatible land use, size, scale, landscaping and promote historical integrity of an area similar to Antietam Overlay regulations.
2. Link to planned or existing heritage routes and byways in adjacent jurisdictions to help promote Washington County and the multi-state area as a regional tourist destination. Protect scenic resources at each of the "portals" into the County as well as along designated “Civil War Trails” to help insure a welcoming appearance to visitors.

Best Management Practices

1. Continue to work with the Soil Conservation District to implement “Best Management Practices” through the development review and building permitting processes.

CHAPTER 9

COMMUNITY FACILITIES AND SERVICES

A. INTRODUCTION

The provision of community facilities and services has historically been the primary purpose of local government. Community facilities and services affect the citizens of the County on a daily basis. As the County grows, the need for these facilities will grow. It is the purpose of this chapter to briefly describe the current community facilities and services available to the citizens of the County and to explore the future needs and methods for how those needs may be met. (See Map 41.)

The planning for future community facilities must be linked closely to the proposals within this plan for land use and regulation of growth. Policies for the provision of certain public facilities are directly related to urban and rural growth and development policies. Citizens of Washington County are provided a choice of living in a designated growth area or within the rural area, along with that choice is the understanding that some levels of services provided to the citizens of the growth area may not be appropriate or available to those who chose to live in the rural area. In some cases, municipalities provide essential public facilities and services to citizens of the County who live outside the corporate limits of the municipality. It is essential that policies for providing public facilities to these areas be coordinated between the municipalities and the County government.

B. ANALYSIS

1. Water & Sewerage Facilities

The provision of public water and sewer is an integral part of implementing many of the land use policies of the Comprehensive Plan. The Washington County Water and Sewerage Plan

prioritizes the provision of public water and sewer facilities to designated areas within the county. The Water and Sewerage Plan sets policies regarding the provisions of these services which are designed to implement, and be consistent with, the policies of the Comprehensive Plan. The Water and Sewerage Plan is also an inventory of existing service areas and those programmed to be served in the future.

In order to insure consistency with the land use policies of the Comprehensive Plan, the Water and Sewerage Plan establishes three types of services areas, Growth Area, Rural Village, and Restricted Use. The majority of the water and sewer systems in Washington County serve the Urban and Town Growth areas. Systems that are outside of the designated growth areas are classified in the Water and Sewerage Plan as either Restricted Use or Rural Village service areas.

The Comprehensive Plan identifies areas designated as Rural Villages. (See Map 7.) Existing or planned water and sewer facilities located within these areas are designated as Rural Village Service Areas. While primarily designed to serve the existing development in the village, a service area established for these villages may also allow for in-fill development on existing lots and new development that is considered consistent with Comprehensive Plan policy for Rural Villages.

Community water and sewer facilities that are located outside of a designated Growth Area and not within a Rural Village are considered Restricted Use facilities. These service areas are created to correct documented public health problems generally associated with contaminated wells and/or failing septic systems. In some cases, the facilities may have existed prior to the establishment of the Growth Area boundary. The provision of service to these areas is not designed to be a catalyst for new development and shall not be designed for or permitted to expand beyond their original service limits.

a) Water Service

Public water is currently provided to approximately seventy percent of all dwelling units in Washington County. Water service is provided via twelve public water systems within the County in addition to several small private and institutional community systems. Federal, state and county agencies as well as six incorporated towns including the City of Hagerstown own the public systems.

In addition to serving the City of Hagerstown, the Hagerstown Water Department also serves a portion of the Urban Growth Area around the City, within the County as well as the incorporated towns of Williamsport, Smithsburg, and Funkstown. Hagerstown City Water is surface water that is treated and filtered at one or both City owned treatment plants, depending on availability and other considerations. The main plant is the R.C. Wilson Water Treatment Plant near Williamsport with a capacity of 15 million gallons per day. The second plant is the William M. Breichner Water Treatment Plant, which produces a yearly average of 4.89 million gallons per day. The source of water for this facility is the Edgemont Reservoir near Smithsburg, and is fed by two mountain streams, the Warner Hollow and the Raven Rock.

The incorporated towns of Smithsburg, Boonsboro, Keedysville, Clear Spring and Hancock all have public water systems that serve the towns as well as some outlying areas in the County. The source of water for these systems are spring and wells with the exception of Smithsburg, which gets their water supply from the City of Hagerstown. The Washington County Division of Public Works owns and operates five public water systems in the County. These systems serve the Elkridge, Sharpsburg, Mt. Aetna, Martins Crossroads and Sandy Hook areas. The Town of Brunswick in Frederick County obtains its water from a spring located in the southern portion of Washington County. The line from this spring serves some existing

development in the vicinity of Weaverton under agreement with the Town. Map 42 shows the location of existing and planned water service areas and major facilities in the County.

As future development is guided to the growth areas, demand for public water will increase. If past trends are any indication of the future, any future deficiencies in the water treatment plans and storage facilities may be impacted as much by regulatory requirements as actual growth demands. Recent studies have indicated that the Hagerstown water treatment plan is capable of handling future population growth in the Urban Growth Area, which it serves for the foreseeable future.

b) Sewer Service and Facilities

Approximately sixty percent of all dwelling units in the County are served by public sewer service. Public sewerage service is primarily available to residents of the incorporated municipalities in the County, their associated growth areas and several rural villages within the County. Those residents that do not have public sewer service depend on on-site septic systems to meet their sewage disposal needs. There are also several small private and institutional community sewer systems at various locations throughout the County. These public systems are owned by State and County agencies as well as the City of Hagerstown and some of the incorporated towns. (See Map 43.)

Sewer service to the Hagerstown Urban Growth Area is divided between the City of Hagerstown, and the Washington County Water & Sewer Department. The City Water Pollution Control Department provides sewerage service both inside and outside of the corporate boundaries of the City. Service in some County areas is provided jointly by the City and the County. In areas of joint service, the County owns and operates the localized sewage collection system and the City provides additional collection and treatment. The Hagerstown Waste Water

Treatment Plant is located in the southern part of the City along the Antietam Creek. The Hagerstown plant provides high purity oxygen type wastewater treatment with a current design capacity of 8 million gallons per day (MGD). Future plans call for a plant rehabilitation that will result in an increased capacity to 10.5 MGD.

Within the boundary of the Urban Growth Area, the Washington County Water & Sewer Department provides sewer service to residents primarily to the west and south of the City including the Town of Williamsport. Treatment is provided at the Conococheague Waste Water Treatment Plant located north of Williamsport near the Conococheague Creek. The treatment process is activated sludge with a treatment capacity of 4.1 MGD. Adjacent to the Conococheague domestic treatment plant is the Conococheague Industrial Pretreatment Facility. In operation since 1994, this facility is designed to treat high strength organic and metal bearing industrial wastewater as well as treatment and disposal of oily water and waste oil. The facility has a capacity of 125,000 GPD and is an integral part of the County's industrial development infrastructure.

The County Water & Sewer Department also owns and/or operates sewerage treatment and collection facilities associated with the incorporated Towns of Clear Spring, Sharpsburg, Keedysville, and Smithsburg. In addition, the County also owns and operates facilities associated with the Sandy Hook and Highfield/Cascade areas as well as operating several small private or institutional systems. Service areas associated with these facilities are contained within the Growth Area associated with the towns. Those facilities that are not associated with a growth area have service area designations of Rural Village or Restricted Use.

The incorporated Towns of Hancock and Boonsboro each own and operate their own sewage collection and treatment facilities. Both of these towns have designated Growth Areas

associated with them, and each town has its own policies regarding the extension of facilities into segments of the growth area that are not within the Town boundaries.

If the goals of directing future growth to the designated growth areas are to be met, it is incumbent that sewage infrastructure be adequate to accommodate this growth. State and federal environmental regulations may affect future expansion capabilities of our water treatment plants. It will be necessary to optimize the flows into the City and County treatment plants in order to maximize the availability capacity of these plants and the waters that receive their discharge. Interconnection of the County and City systems has been proposed, and would allow for, the limited shifting of flows to address future growth.

While public sewer serves most existing development within the Growth Area, there are several areas, which rely on-site disposal systems (septic systems). The Washington County Health Department has identified many of these areas as having an unusually high number of repairs. For the most part these systems are located on small lots where replacement or additional repair is not possible. Failure of these systems could result in environmental degradation and present a threat to the public health. This situation is also occurring in some locations in the rural areas of the County; however, the approach to solving the problem is somewhat different. Within the rural area there are small villages consisting of compact concentrations of houses that have existed for over a hundred years. In many of these cases, the homes in these villages depend on-site sewage disposal systems that are far from meeting today's standards for environmentally sound disposal and are located miles from any existing public sewerage facilities. The challenge in these areas is to provide a means to correct these potential health and pollution problems in a way that is economically feasible and environmentally sound.

2. Parks and Recreation

County residents are fortunate to have a wide variety of public lands available for all types of outdoor recreation. In addition to a high quality County park system, large areas of state and federal parkland provide an array of choices unique in the state for residents seeking nearby relaxation and recreation.

a) Federal, State, and Local Areas

The "Washington County Parks Map" (Map 44) shows the location of County Parks as well as community, State and National parks and open space land in Washington County. As of 2001, approximately 33,440 acres of public lands are protected for open space or recreational use. This includes County and municipal parks with facilities for active use recreation, such as ball fields and tennis courts, as well as watersheds, forest land and wildlife areas for camping, hiking and hunting. Total federal, state and local recreation and park acreage is over 11.0% of the County's land area

Federally owned parklands total 8,840 acres, or 26% of public recreation land in Washington County. Seventy-nine miles of the 184-mile C & O Canal National Historical Park provide a scenic buffer along the Potomac River and the southern and western border of the County. The Park is a popular destination for walkers, bicyclists and equestrians, while also preserving and interpreting historic remnants of the old canal.

More than 1,300 acres are in federal ownership at Antietam National Battlefield; one of the nation's best preserved Civil War Battlefields. Approximately 1,500 acres of farmland in private ownership adjacent to the battlefield have development easements purchased by the National Park Service. Both parks provide outstanding opportunities for historical interpretation, outdoor recreation, and tourism for both residents and visitors, along with significant secondary

economic benefits to the County.

State owned Parks and Wildlife Management Areas are located in the eastern and western areas of the County and total 22,370 acres, or nearly 67% of public recreation lands. Much of the park's acreage is located along the crest of South Mountain, within South Mountain, Greenbrier, Washington Monument, and Gathland State Parks. South Mountain State Park also encompasses state owned forestland providing a corridor for the Appalachian Trail along the mountain. The newly established South Mountain Battlefield State Park includes Washington Monument and Gathland State Parks, and extends south to Brownsville Gap. The Western Maryland Rail Trail, a ten-foot wide paved pathway extending west from Big Pool, near Fort Frederick State Park to Hancock, is one of the states newest Greenway parks.

Wildlife Management areas are located at the Indian Springs Wildlife Management Area northwest of Clear Spring, and along Sidling Hill at the far western border of the County, beyond Hancock. These protected state lands provide large forest areas for watershed protection as well as hunting, wildlife habitat management and nature appreciation.

Local park and recreation land includes County and municipal active use parks and playgrounds, and a portion of Board of Education school grounds. Sixty percent of school site acreage is counted as public open space. All of these areas total more than 2,230 acres, or approximately 7% of public recreation land. These local open space and park facilities are primarily to serve the needs of County residents for picnic pavilions, athletic fields and recreation areas. They are a sometimes under-appreciated but are an important part of community and town "infrastructure". Parks can provide 'open-space' in developed areas, as well as public spaces for neighborhood and community events and activities.

Since 1981, over 180 acres of land for seven parks have been acquired and developed by

the County. Municipalities in Washington County have acquired 116 acres of additional parkland.

County parks range in size from small neighborhood areas and special parks (such as Woodland Way Park in Hagerstown, Wilson's Bridge, and the Agricultural Education Center) to athletic complexes that serve large areas of the County. Washington County Regional Park and the adjacent Black Rock Golf Course are the largest County park unit, encompassing over 336 acres east of Hagerstown. It provides a scenic and popular full service 18-hole course, as well as a heavily used community park. The County Parks and Recreation Department now manage 18 park facilities County wide consisting of 725 acres of open space and recreation land.

Recreation areas include a variety of facilities to serve the different recreational needs of the County's residents. Generally, these parks are classified as neighborhood, community, County and regional, and special use.

Neighborhood parks are small parks of two to five acres, usually within one half mile or less of potential users. They can include a play area or equipment for children and amenities for adults, such as benches, picnic tables and flower gardens.

Community Parks range in size from 10 acres in a rural village or town area to 50 or more acres in the Urban Growth Area, and serve the population of several neighborhoods within a distance of two or three miles. These parks are intensively developed and often provide both active and passive recreation opportunities. Facilities include regulation size athletic fields, tennis and basketball courts, and picnic pavilions, pathways, playgrounds and sitting areas.

County and Regional Parks vary in size, but generally offer facilities attractive or unique enough to serve people throughout the County. Examples include Pen Mar Park and the softball complex at Pinesburg Park, and Black Rock Golf Course.

Special Use Parks have individual or unique functions and include historic or natural sites, such as wetlands and stream access areas. They may be included as part of a larger County or Regional Park or may stand alone. Examples are Mount Briar Wetland, located near Rohrersville, and Wilson Bridge over Conococheague Creek.

Three additional areas are proposed for County recreational development. North County Park along MD 60 at Marsh Pike, will be developed in phases as an active use regional park. A part of the former Fort Ritchie base in Cascade is being evaluated to serve the community as an active use area, and County owned land along the Conococheague Creek will be open to passive, environmentally oriented uses.

b) Parks Acreage and Facility Goals

Washington County has continued to exceed its local parks and open space acreage goal of 15 acres of local parkland for every 1,000 residents. This goal is based on a Maryland Department of Planning guideline of 30 acres of parks and open space per 1,000 residents. Due to extensive state and federal parklands, a 15 acres per 1,000 people goal for local county and municipal parks was deemed appropriate. As the County develops and the population gradually increases, so will the need for diverse parks and recreation areas. The challenge is to continue to provide all citizens with a functional, attractive and accessible system of parks and open space by making improvements and additions to existing parks, and providing new facilities where they are appropriate and needed.

Neighborhood parks and schools are particularly valuable for greenspace, and neighborhood or community focus. Expansion of these existing areas, along with new greenway linkages should be a priority of any development program. The County and municipalities will continue to rely on Maryland's Program Open Space as the primary source for parkland purchase

and development funds. This innovative program has been a national model for funding of state and local park and open space protection.

Over the next 20 years, improvements and additions to existing parks, and any new facilities should be diversified to include Greenways, passive parks, environmental study areas, and historic parks.

c) Greenways

"Greenways" are linear open space corridors of various types that can be managed for conservation, recreation and alternative transportation. Examples include forestland, floodplain, and stream buffers along streams, open space along power and pipeline rights-of-way, and road and railroad rights-of-way. Some Greenways are publicly owned; some are private. Publicly owned greenways can often provide pedestrian access, safe transportation and recreation opportunities for bicycle users and walkers, and thereby offer an alternative to automobile travel. A Greenway can also have environmental goals and benefits.

They can provide and protect stream buffers, watersheds, and drainage basins, and increase and improve habitat for wildlife and waterfowl. Greenways often serve as connectors between neighborhoods and various community resources. These include schools, playgrounds, parks, historic sites, and streams, forests and wildlife areas. Linkages vary depending on the landscape and community preferences. Greenways can also serve as a buffer between incompatible land uses.

In summary, Greenways have many benefits, which include:

- Connecting people, communities, and countryside.
- Providing areas for walking, biking, picnicking, fishing, and other recreational activities.
- Providing important open space areas.

- Linking historic, cultural and other important community sites.
- Providing refuge and safe migration routes for wildlife.
- Creating alternative transportation routes for bicyclists and pedestrians.
- Softening urban and suburban landscapes by providing buffers to developed areas.
- Improving water quality by buffering streams and trapping pollutants.
- Increasing property values.
- Enhancing economic development and tourism.

As residential and commercial development continues in the Growth Area, planning for linear corridors that provide greenway buffer and pathway linkages will be an important community goal.

A suggested Greenway “vision” of a system of neighborhood connectors by means of floodplain greenways, “trails with rails” where feasible, walking paths and sidewalks, and forested buffers is illustrated on Map 29. The long-range goal will be to link Urban Growth Area neighborhoods to neighborhoods, to existing and proposed greenways in Hagerstown, and to bicycle friendly roads with paved shoulders extending into the rural areas of the county.

Linkages to planned or existing greenways in Hagerstown will be a component of the vision. Forested and landscaped stream buffers along the Antietam Creek, Hamilton Run and Marsh Run floodplain can provide stream protection as well as potential areas for trail development activities. Parks, recreation areas, and greenways are vital “Green Infrastructure” areas that can help to shape and connect neighborhoods and communities in and near Hagerstown and the Urban Growth Area.

The Greenways vision should also include establishing links to appropriate local Heritage tourism sites by means of designated connecting roads and trails. Heritage tourism is the fastest

growing segment of the tourism and recreation market, and Washington County has a wealth of historic and heritage resources to intrigue and interest the traveler.

A Greenways plan may also be linked to an expanded Countywide and regional transportation network of greenways and bicycle and pedestrian friendly roads. The C & O Canal Towpath could serve as a central north south “spine”, with linkages to various areas of the county, as well as to adjacent states.

Routes along roads could extend east to Hagerstown and to Smithsburg, to Sharpsburg and the Antietam Battlefield, and north to Clear Spring and on to Blair's Valley and the Mason Dixon Line. Links to the west are available at several Potomac River bridges.

Signed or mapped roads, and trails and greenways linking Federal, State, and County parks, historic bridges and buildings, railroad and Civil War heritage sites will help to broaden their appreciation by both citizens and visitors.

3. Educational Facilities

As of September 2000, the Washington County public school system operated and maintained 45 separate school buildings (including Administration Center). These buildings constitute 3,033,000 square feet and occupy 1,050 acres. Washington County Public Schools will see only moderate growth in the future. Some in-county migration has been seen in suburban schools in Williamsport, Smithsburg and the southeastern portion of the City of Hagerstown. Additional needed classroom space will be localized. No new schools are anticipated to be needed in the near future to address new growth in the County.

Between 1990 and 2001, only one new school has been constructed. The ongoing Capital Improvement Plan has prioritized renovating older schools in established neighborhoods and adding classroom space only when necessary. Portable classrooms have been used to

address space deficiencies on an interim basis.

In 1990, student enrollment for Washington County was approximately 17,469. As of September 2000, the County's total enrollment was 19,411 students. This is an additional 1,942 students, or an increase of 11%.

According to the Maryland Department of Planning and Washington County Public Schools, enrollment in the County is projected to stabilize and decrease over the next 10 years. Washington County Schools are projecting a one-tenth of one percent growth next year, virtually no growth for the following four years before a period of slowly declining enrollment through 2010.

Housing construction is another factor which is calculated to determine impact on the school system. The Planning Department as well as other municipalities in Washington County provide housing construction data. The yield of students derived from new housing construction throughout the County is part of the County's enrollment projections.

a) Elementary Schools

Washington County Public Schools currently operates 25 elementary schools. (See Map 45.) The enrollments at the elementary schools vary in size from 586 students at Eastern Elementary to 160 at Cascade Elementary. All but two elementary schools in the Washington County school system are organized in a kindergarten through Grade 5 format. In addition to core facility space (i.e., office, media center, gymnasium/cafeteria), each elementary school also contains a computer lab, art and music rooms, and a special education resource room. Some schools also have space devoted to special programs of various types. These special programs include such uses as pre-kindergarten, self-contained special education classrooms, gifted and

talented classrooms, and English as a second language program.

As of September 2000, elementary school capacity totaled 9,778 students according to state formulas. This formula includes 25 students per classroom for grades 1-5, 22 students per classroom for kindergarten, 20 per pre-kindergarten, and 10 students per classroom for self-contained special education classrooms. System wide, in September 2000, Washington County had 8450 equated elementary school children enrolled (Equated - defines kindergarten and pre-kindergarten students as half full-time equivalents). Therefore, when comparing September 2000 enrollments with current capacities, the school system is at 86% of capacity at the elementary school level.

b) Middle Schools

The middle school program includes grades 6,7,and 8. The middle school program is designed for students in transition between childhood and adolescence. Middle school programs also seek to expand course offerings by providing specialized facilities for fine arts, technology education, science, and physical education.

The Washington County Public School system operates 7 middle schools. One middle school, Western Heights, serves grades 5 through 8. Hancock Middle is located within the same facility as Hancock High School with grades 6 through 12 being served. (See Map 46.) These schools vary in size from 403 students at Clear Spring to 790 at Springfield Middle in Williamsport. Each middle school attendance area is generally contiguous with at least 3 to 4 elementary schools, supporting Board of Education feeder pattern policies. All but one are located on the same campus as high schools, thereby permitting some use of shared facilities and transportation.

System wide as of September 2000, Washington County has 4,725 middle school

students enrolled. This compares with a system-wide capacity of 5,981 students. Therefore, as of September 2000, the school system is at 79% capacity at the middle school level.

c) High Schools

Students in grades 9 through 12 attend one of eight Washington County high schools. (See Map 47.) Students in these grade levels are provided a wider range course of offerings than are available at the middle school level. School facilities are built so that this system-wide-ranging course curriculum can be provided. High schools also provide facilities, which are often unique and heavily used by the larger community. For example, high school buildings contain auditoriums, gymnasiums, and stadiums and the school system encourages use of these facilities by community groups when they are not needed for the school programs. The Washington County Recreation Department schedules use of many of these facilities.

High Schools in Washington County have attendance areas, which are contiguous with one or two middle schools. High schools vary in size from 435 students at Clear Spring to 1,234 students at North Hagerstown.

System wide as of September 2000, Washington County has 5,614 students enrolled in grades 9 to 12 with an overall capacity of 7,436 students. Therefore, as of September 2000, the school system is at 75% of high school capacity.

d) Other Washington County Schools

Board of Education figures indicate that over the last 10 years, an average of 87% of the population in the Kindergarten through 12th grade age group is enrolled in the public school system. This leaves approximately 11% of that population, or 2,200 students, who are enrolled in private schools. There are 25 private schools currently operating in Washington County. Also, approximately 525 students who are in K-12 age group are home schooled. This figure is

reflective of the 2000-01 school year.

e) Washington County Technical School

The Washington County Technical High School (WCTHS) is a comprehensive High school located in 106,000 square foot facility located on the campus of South Hagerstown High.

Students may enroll in grades 11 through 12. At the WCTHS, introductory training is offered in various occupations such as cosmetology, health services, auto repair, computer repair, early childhood education, and the construction trades. Some courses provide college credit through agreements with Hagerstown Community College and other two and four year institutions.

f) Marshall Street Center/Job Development Center

These two schools are located in a 50,000 square foot and 16,000 square foot building respectively which provides individualized special education programs for individuals from 3 to 21 years of age. An appropriate curriculum is offered in self-contained classrooms, as well as related services in such areas as adaptive physical education, physical therapy, pre-vocational training, and occupational therapy. Enrollment in September 2000 was 100 students.

g) Administrative Facilities

The Board of Education headquarters including the offices of the superintendent and curriculum staff are housed at 820 Commonwealth Avenue in Hagerstown, Maryland.

This staff currently totals 200 individuals, including professional and support staff. The support staff includes finance, purchasing, food service, maintenance, planning and transportation.

h) School Enrollment Projections and Facility Needs Analysis

Future educational facility needs are primarily a function of projected enrollment growth and the need for scheduled major maintenance and repair of existing buildings. In addition,

facility needs are affected by changes in the instructional program offered by the school system. These changes in instruction can be initiated locally or those mandated by state education officials.

i) System-Wide Enrollment Projections

Short-term 2001-2011

Enrollments in the Washington County public school system are expected to remain steady in the near term along with the general population. The Maryland Department of Planning develops enrollment projections in cooperation with the local Washington County Public School staff. In summary, these projections anticipate enrollment to remain constant or decrease slightly over the next 10 years. The County has not experienced significant growth from immigration from other Maryland counties or from neighboring Pennsylvania or West Virginia. Schools have experienced domestic migration within the County as some schools within the City of Hagerstown have seen decreasing enrollment while suburban schools of Eastern, Doub, Smithsburg, Williamsport and far south county (Sharpsburg, Pleasant Valley) have grown.

In the next five years we will see the present larger 4th, 8th and 10th grade classes move through the system being replaced with smaller sub-primary classes. Elementary enrollment will decline about 50 students per year, middle school enrollment will remain unchanged from present figures while high school enrollment will increase by 325 by 2005-06 then stabilize.

Long Term 2009-2020

Beyond the year 2010, enrollments will continue to remain steady with the projected stabilization in the County's population.

ii) System-Wide Facility Needs

Short Term 2001-2011

Washington County Public Schools intend to continue its Capital Improvement Plan of renovating its 40 year old schools, replacing mechanical systems in the 30 year old schools and addressing specific roof, carpet and window problems in the 20 year old schools. Washington County has not experienced the large enrollment growths that neighboring counties to the east have seen, however, there are pockets of increased enrollment, which need to be addressed. Two schools, with portions of the buildings built in the 1930's, are approaching their useful life and may need to be replaced over the next six (6) years.

Elementary Schools

Elementary school projections anticipate a decrease of 200 students in the next two years, then a slow growth of 300 students by 2010 (a ten-year period). Class size reduction initiatives at both the State and Federal level will increase the demand for classrooms even though our enrollment is declining. Additional Pre-K services, all day kindergarten and federal education goals of 18 to 1 classroom sizes may seriously affect elementary school classroom needs. Short term affect of these initiatives on building size or additions, is yet to be determined depending on legislative action.

Middle Schools

Middle school student population projections remain statistically unchanged. County Middle schools average 25 years in age and do not make the Boards capital improvement plan for another 20 years. The school district continues to spend maintenance dollars on middle schools to modify the open school construction of the 1970s to provide modern teaching spaces required in the 00s.

High Schools

High school projections anticipate a slight increase of 300 to 400 students between 2001 and 2005. Washington County has renovated North Hagerstown High School and South Hagerstown High School. Boonsboro High School is presently being renovated. Curriculum changes with the advent of the four period days allow students to schedule 32 classes in lieu of 28 during their high school career. This change has been implemented with no new classrooms.

4. Post Secondary Education

a) Hagerstown Community College

The mission of Hagerstown Community College (HCC) is to provide accessible and affordable quality education to the citizens of Washington County and the surrounding regions of Pennsylvania and West Virginia. The College provides instruction in the liberal arts, science and technology, continuing education, developmental education, and special certificates. HCC cooperates with community constituencies in accomplishing economic development objectives.

In 1998, the College changed its name from Hagerstown Junior College to Hagerstown Community College to better reflect its mission. The College fulfills many diverse needs within the community as the only comprehensive, integrated educational, cultural, and recreational center within the County. The absence of a comprehensive public four-year college or university nearby presents unique opportunities for the College. Telecommunications and distance learning capability permit four-year colleges and universities to deliver much needed upper division courses and graduate programs through HCC. These same technologies enable the College to expand its offerings into the remote areas of the service region. The Learning Resources Center allows full production and delivery capabilities.

The Center for Continuing Education provides an extensive and varied course offering to

the citizenry of the College's service area. Over 6,000 area residents annually enroll in non-credit programs that include trade and industrial education and training, business and management, technology, allied health, and construction trades.

The Advanced Technology Center (ATC) prepares students to meet technological complexities while developing the knowledge and skills necessary for academic and career efforts. The ATC, in conjunction with government and industry, plays a major role in economic development and manufacturing modernization, as well as in the training and upgrading the local workforce. The Technical Innovation Center provides developing companies the opportunity to lease space and have access to services in the ATC.

In 1999, Hagerstown Community College acquired approximately 125 acres of land as a buffer for the campus against the development along Robinwood Drive. At this time there is no timetable for development of this land.

Hagerstown Community College offers an Associate of Arts, Associate of Science, and Associate of Applied Science degrees. The College offers a variety of transfer programs, career programs, and certificate programs. HCC projects the addition of programs based upon the needs of its citizenry.

Approximately 60% of the student body attend part-time and are predominately female. The average age of all students is 27.8 while the average age of full-time students is 24.1. Approximately 70% of the credit hours generated each semester are held before 5:00p.m. and are on campus.

Approximately 70% of the student population at HCC reside in Washington County. Five percent are from other Maryland Counties. Due to the College's presence as a regional post-secondary institution, approximately 20-25% of all students live in surrounding areas in

Pennsylvania and West Virginia.

b) Hagerstown Business College

Hagerstown Business College, established in 1938, is a private junior college which specializes in training individuals for careers in business, medicine law and information technology. The College, which has classes scheduled during day and evening hours, offers associate degree and certificate programs. Upon completion of their program, students may take advantage of the college's no-cost job placement assistance service. The most recent graduating class has a 98% placement rate.

The college has been steadily increasing enrollments over the past several years. Due to this growth, HBC will be adding a Career Technology Center on its 7.5 acre campus. This facility, which is slated to be completed by mid-summer 2001, will house state of the art computer labs, a video/graphic design studio, classrooms, and faculty offices.

c) Frostburg State University Center at Hagerstown

The Frostburg State University Center at Hagerstown opened in August 1988 with 114 students. The Center has grown steadily to its present enrollment of 464 students for the Fall 2000 semester. It currently offers degrees in Masters of Business Administration and Masters of Education. Undergraduate majors include: Accounting, Business Administration, Justice Studies, and Sociology. In addition, there are enrollments in the UMAB Master of Social Work program and the University of Maryland Nursing Program. Additional enrollments are anticipated in the Criminal Justice Program offered collaboratively with the University of Baltimore and Hagerstown Community College.

Located in an historic 1870's building on the Public Square, the Center's facilities include 8 regular classrooms, a PC lab, a MAC lab, an inter-active fiber-optic television classroom, a

small library, 10 faculty offices, a 100 person community meeting room, and a 30 person executive conference room.

The Center currently offers 50-60 courses each semester, with a faculty composed of approximately one-third based full time in Hagerstown, one third local part time adjuncts, and one third commuters based full time in Frostburg (who commute in person or via TV system). The administrative staff consists of a director, an assistant to the director, office manager, secretary and part time evening clerical assistant.

d) University System of Maryland Hagerstown Education Center

The State of Maryland has budgeted \$13.3 million to renovate the Baldwin House Complex in downtown Hagerstown for the new University System of Maryland Hagerstown Education Center. With the opening of this new education facility in Washington County, students from the region will be able to take classes in Hagerstown from a variety of degree programs offered by the participating universities in the University System of Maryland. This facility is anticipated to provide learning opportunities for 3rd and 4th year undergraduate students as well as graduate programs. It is projected that the new 80,000± square foot facility initially will serve 750 students and 30 faculty and staff members. Plans call for the facility to be occupied in the fall of 2003.

e) Antietam Bible College

Antietam Bible College, founded in 1976, is located on Broadfording Church Road northwest of Hagerstown. The college and seminary train people as pastors, missionaries, church workers of various kinds, as well as teachers for Christian schools. The school offers Associate of Arts, Bachelors, Masters, and Doctorate degrees in several fields. Present enrollment in the school is approximately 20 students.

5. Law Enforcement

a) Washington County Sheriff's Department

The Washington County Sheriff's Department, Hagerstown Police Department, and the Maryland State Police and municipal law enforcement agencies provide a wide variety of services to County residents.

The Washington County Sheriff's Department is located at 500 Western Maryland Parkway, Hagerstown, on 10.6 acres. Located on the site are an area patrol officer facility and a detention center.

The Washington County Sheriff's Department provides police service to the County as well as courtroom security and operation of the correctional center. In addition, five municipalities have contracted for resident deputies.

b) Maryland State Police

The Maryland State Police has a facility located at the I-70 and MD-65 intersection. The Maryland State Police provide police service throughout the County.

c) City of Hagerstown Police Department

The Hagerstown Police Department is located at 50 North Burhans Boulevard, Hagerstown, in the former train station. The service area is within the corporate boundary of the City of Hagerstown.

The department also has in house the Western Maryland crime lab, drug analysis unit, two forensic chemists, and one canine unit.

d) State Correctional Facilities

The Maryland Correctional Institution - Hagerstown is one of three state prisons located on some 880 acres of land located just south of Hagerstown off Sharpsburg Pike (Route 65) on

Roxbury Road. This facility today houses approximately 1,974 convicted adult male felons and is classified as a “medium” security institution. One of its nearby neighbors, the Maryland Correctional Training Center (MCTC) is home for 2,903 prisoners, and the other, Roxbury Correctional Institution (RCI), houses another 1,909 inmates. Some 1,800 employees staff these facilities. A collective budget of \$90,000,000 makes this an important industry for Washington County and nearby communities.

6. County Fire and Rescue

Washington County has a total of fourteen (14) volunteer fire companies and ten (10) volunteer ambulance companies. (See Map 48 & Map 49.) One (1) volunteer fire company provides ambulance service, and two (2) of the volunteer fire companies have substations. Those substations are part of the Boonsboro and Smithburg Fire companies.

The Boonsboro substation is located in the Rohrsersville area of Washington County. The Smithsburg substation is located in the Cascade area of Washington County at Fort Ritchie. Out-of-county fire and ambulance companies in certain areas also provide service. Four (4) specialty companies serve the County, they include: the County Air Unit, Special Operation (Hazmat), County Emergency Rehabilitation Unit, and Civil Defense. Washington County also operates an emergency communication facility that handles the 911 calls. In addition, the Washington County Volunteer Fire and Rescue Association supports Advance Life Support (ALS) Program.

Fire and Rescue facilities are manned and operated primarily by volunteers. There are approximately 722 current active responding volunteers for Fire and EMS departments (fall 2000).

The Washington County house numbering project was begun in 1986 and completed in 1993. The purpose of the project was to provide 5 digit numbers to residences and

commercial/industrial establishments and eliminate road name duplications. This increased the efficiency of fire and rescue personnel when responding to emergencies. The County's Planning Department coordinated with the Fire and Rescue Communications Department fire and rescue companies, and the post office to accomplish this project. The County Planning Department coordinates issuing addresses and road names in order to ensure consistency with house numbering policies.

The following is a list of fire and ambulance service organizations in the county:

Boonsboro Volunteer Fire	Clear Spring Volunteer Fire
Fairplay Volunteer Fire	Funkstown Volunteer Fire
Halfway Volunteer Fire & Ambulance	Hancock Volunteer Fire
Leitersburg Volunteer Fire	Longmeadow Volunteer Fire
Maugansville Volunteer Fire	Mt. Aetna Volunteer Fire
Potomac Valley Volunteer Fire	Sharpsburg Volunteer Fire
Smithsburg Volunteer Fire	Williamsport Volunteer Fire
Boonsboro Volunteer Ambulance	Clear Spring Volunteer Ambulance
Community Rescue	Hancock Volunteer Ambulance
Highfield Ambulance	Sandy Hook Ambulance
Sharpsburg Volunteer Ambulance	Smithsburg Volunteer Ambulance
Williamsport Volunteer Ambulance	County Air Unit
Special Operations (Hazmat)	County Emergency Rehabilitation Unit
Emergency Management Agency	

The Hagerstown Fire Department consists of six companies located throughout the City and include: First Hagerstown Hose, Antietam, Independent Junior, Pioneer Hook and Ladder, Western Enterprise, and South Hagerstown. The City is serviced by a combination fire department, which consists of 60 career firefighters and approximately 30 active volunteers.

7. Libraries

The Washington County Free Library system provides educational and information services designed to enhance career and business opportunities, productivity, personal decision making, and the quality of life for Washington County citizens throughout their careers and

lifetimes. The Central Library facility is located in Hagerstown with branches located in Boonsboro, Clear Spring, Keedysville, Sharpsburg, Smithsburg, Williamsport and Hancock.

The Washington County Free Library was established by an act of the Maryland Legislature on April 9, 1898 and opened its doors for service in August 1901. The library became widely known as the first in the world to carry its books directly to the homes of the remote sections of the county through a book wagon. This service, first started in April 1905, with horse drawn carriage and later carried on with book trucks, was one of the important functions of the library.

The Washington County Public Libraries Board of Trustees operates the public libraries in the County. Funding sources are from the County Commissioners and the State of Maryland.

The library currently serves the county through a main building, six branches, two bookmobiles and houses the Western Maryland Public Libraries, the regional resource center for libraries in three counties - Allegany, Garrett and Washington. It maintains a collection of over 327,000 print and electronically stored items, supplemented by over 55,000 specialized items in the regional resource center. The library system also offers free Internet connectivity at the main library and each branch. In FY 1999, it circulated over 926,602 items to over 73,627 borrowers. Approximately 58% of the county population are registered borrowers. There is a staff of 85, of which 12 are professional librarians, certified to work in Maryland.

The main library, located in downtown Hagerstown, is the hub for the entire system. Materials are selected, ordered, cataloged and processed at Central after which they are distributed to the branches and bookmobiles.

The library has two special libraries located in the central branch, the Government Reference Department and the Western Maryland Room. The Government Reference

Department was established in 1977. Its main function is to serve the elected and appointed officials of the county and city with government reports and publications as well as print and non-print census data.

The Western Maryland Room contains material covering the Cumberland and Shenandoah Valleys, all of Western Maryland, including Washington, Allegany and Garrett counties plus Frederick and Carroll counties in central Maryland. Material is also included for all counties adjacent to those five Maryland counties in the three surrounding states of Pennsylvania, Virginia, and West Virginia. Highlighted in the collection is a large Civil War research collection, a large family research (genealogy) section, plus material on canals, railroads, local culture along with yearbooks and directories.

The bookmobiles circulates approximately 100,000 items and provides services to citizens and various organizations such as day care centers, nursing homes, home schoolers.

Also located at the central library in downtown Hagerstown are the Western Maryland Public Libraries, a regional library for Allegany, Garrett, and Washington Counties. It is the mission of WMPL to improve the quality of library service to Western Maryland residents by adding to the services given by the local libraries.

8. Commercial Communications Facilities

The advancement of wireless communications technology has increased dramatically since the adoption of the Washington County Zoning Ordinance in 1973. The Federal Communications Act of 1996 (Section 704) set up a comprehensive framework for the exercise of state and local zoning authority over the construction, modification and placement of facilities such as towers for cellular, personal communications service, and specialized radio service transmitters. Section 704 preserves the local government's authority over making decisions

regarding tower siting requests.

On April 5, 1999, the Board of County Commissioners amended the Zoning Ordinance to allow commercial communications towers as a principle permitted use in the Industrial Restricted (IR), Industrial General (IG), and Planned Industrial (PI) zoning districts. It permits them as a special exception use in the Agriculture (A), Conservation (C), Industrial Mineral (IM), Industrial Transitional (IT), Business General (BG), Business Local (BL), Business Transitional (BT), Highway Interchange 1 (HI-1), Highway Interchange 2 (HI-2) and Airport (AP) zoning districts. The amendment also changed the designation of a non-essential public utility building or structure from a special exception use to a principle permitted use in the IR and IG districts. Commercial communications towers are not permitted in any of the Residential zoning districts.

These regulations were devised to minimize the visual impact of towers, to minimize the number of towers through shared use and co-location, to encourage utilization of designs that either eliminate or reduce the need for new towers, and to insure that all towers are compatible with surrounding natural and man made land uses. The amendment also gives special attention to the siting of towers along the Appalachian Trail, Antietam Overlay zones, and Historic Preservation zoning districts.

9. Airport

The Hagerstown Regional Airport - Richard A. Henson Field is owned and operated by the Board of County Commissioners. It is a fully instrumented commercial facility located adjacent to Interstate 81 about four miles north of the City of Hagerstown. The airport has regularly scheduled passenger service and also supports general aviation and corporate services, with capabilities up to and including 727 sized jets. Major maintenance, repair and painting

facilities, including avionics, are also available.

The airport serves the Tri-State area of western Maryland, south central Pennsylvania and northeastern West Virginia with a regional population of over 500,000 people. Interstate 81 runs north and south by the airport and provides excellent ground access to the region it serves. The airport is the centerpiece of major office/industrial park with an Enterprise Zone designation.

As the County grows, the need for air transportation will grow. Consideration must be given to insuring that land uses in the vicinity of the airport are compatible with the existing facility and future plans for expansion of the facility. Future airport expansions should take into consideration the existing development patterns in the area and the impact that such expansions may have on these areas. Aircraft noise impacts should be taken into consideration when reviewing proposals for new residential development within the immediate vicinity of the airport. Airport noise contour maps can be used to determine expected noise levels, and potential impacts within certain distances from the runways and approach paths. Land within the designated clear zone shall be utilized in such a way as to prevent the creation of obstructions or hazards to air navigation at the airport.

10. Social Services

a) Washington County Hospital

The Washington County Hospital is a private, nonprofit facility licensed as a 341 bed general hospital. It is located at 251 East Antietam Street in Hagerstown. The hospital was first incorporated in 1905 to operate a health care facility located on Potomac Avenue in northern Hagerstown having a complement of ten beds and a medical staff of six members. Washington County Hospital moved to its present campus in 1912 after purchasing the site and original buildings from Kee Mar College. Washington County Hospital is part of Washington County

Health System, Inc. It also serves as the Regional Trauma Center for the State of Maryland and is the designated hospital for Camp David.

b) Robinwood Medical Campus

In 1991, the Washington County Hospital Endowment Development Corporation acquired 120 acres of land located 2.5 miles from Washington County Hospital on Robinwood Drive, near Mt. Aetna Road. The property is being developed as a secondary campus and to support the development of a broad range of convenient, patient-oriented ambulatory healthcare services; specialty care facilities which would allow for the creation of centers of care; synergistic community and allied health education and training programs; and non-acute facilities oriented to the aging population. The Robinwood Medical Center was constructed on approximately 25 acres of the property and comprises approximately 373,000 square feet. The Robinwood Medical Campus is also home to the John R. Marsh Cancer Center, a Cardiac Diagnostic Center, a Regional Laboratory, a Conference Center and Administrative offices.

The Village at Robinwood is also being constructed on the property across the street from the Center. When completed, it will comprise an Assisted Living Facility with a capacity for 70 residents as well as 70 independent living cottages in 29.5 acres of land.

Other Health System Properties include: Surrey Child Care Center, Smithsburg Family Medical Center, Northern Avenue Medical Center, Boonsboro Professional Building, Walnut Street Community Health Center, Williamsport Family Medical Center, Howell Road Medical Center, and Kenly Avenue Medical Center.

c) Western Maryland Hospital Center

Western Maryland Hospital Center, located at 1500 Pennsylvania Avenue in Hagerstown, has served the western and central counties of Maryland since 1957. Owned and operated by the

State of Maryland, WMHC is full licensed and accredited for both chronic hospital patients and comprehensive care (long-term care) residents by the State and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The total capacity is 123 beds with 60 hospital and 63 comprehensive care.

Also located at the Center is the Hagerstown Veterans Clinic, a division of the Martinsburg Veterans Affairs Medical Center. The purpose of the Hagerstown Clinic is to provide selected outpatient services to eligible veterans in the local area.

d) Brook Lane Health Services

Brook Lane Health Services is a not-for-profit, continuum of mental health services treating people of all ages from children to elder adults. Brook Lane's main campus is located along the Leitersburg- Smithsburg Road near Leitersburg, Maryland. This is where most of the programs are offered. The Meadowbrook Office is located in the North Village Shopping Center on Long Meadow Road in Hagerstown. This location provides outpatient care.

e) Washington County Health Department

The Washington County Health Department is a Maryland Department of Health and Mental Hygiene agency as well as an agency of the County Government.

The Washington County Commissioners serve as the official Board of Health; in addition, a Health Advisory Commission, whose members are appointed by the County Commissioners, provides oversight to public health endeavors. Funding is a combination of Federal, State and Local monies, plus third-party and self-pay reimbursements.

Important achievements in public health in Washington County involve both health department programs and partnerships with the community and other agencies and organizations.

Within the Health Department major efforts involve extending services and presence in

the community with additional “wellness” programs, expanding community (lay) health worker programs, increasing community health nursing time in the community, and strengthening and increasing our community health education and promotion activities. A comprehensive school health program is in place in all schools. Following an adolescent health needs assessment, pilot school-based wellness centers are proposed for selected school campuses. The major program areas of the Health Department encompass addictions and mental health services; environmental health; communicable disease control, including HIV/AIDS, TB, STDs, child and adult immunizations; women’s health; child and adolescent health, including specialty medical services for children; maternal health; family planning; school health; dental health; home health care; community health education and outreach services; nutrition; cancer prevention, screening and treatment; adult evaluation services; HealthChoice (medical assistance) programs; vision and hearing and tobacco use prevention and cessation programs.

Under the leadership of the Washington County Health System, the development of the Walnut Street Community Health Center was completed in 1999. The expanded community health center is located in downtown Hagerstown. Also associated with the Health Department are the Little Antietam Community Center Health Clinic in Keedysville, Maryland and the Hancock Community Center Health Clinic.

An additional health facility center serving Washington County is the Community Free Clinic located at 18 West Franklin Street in downtown Hagerstown. Doctors volunteer their services at this center, which provides care for uninsured citizens of the County. (See Map 18.)

f) Environmental Health Division - County Health Department

The Environmental Health Division is responsible for administering programs and regulations that originate in two different cabinet level departments of the State government - the

Department of Health and Mental Hygiene and the Department of the Environment. Within Washington County, the Division is most often associated with the Planning, Building Permits and Inspections, and the Water and Sewer Departments. Within the Washington County Health Department, the Division with which Environmental Health works most closely is the Nursing Division, especially in the investigation of communicable disease outbreaks.

Programs administered for the Department of the Environment include: private water and sewer systems, subdivision review, investigation of reported lead poisonings, sewage sludge disposal, public bathing beaches, open burning and air quality regulation, and medical waste disposal.

Programs originating within the Department of Health and Mental Hygiene and administered by the Environmental Health Division include: permitted food service facilities, temporary food service operations, foodborne and other communicable disease outbreaks, rabies control and vaccination clinics, swimming pools, trailer parks, camps and tattoo parlors.

C. RECOMMENDATIONS

Water Service

1. Deficiencies in existing areas of public water systems such as fire flow and areas where pressure is below standard acceptable levels, should be identified and steps taken to correct these problem areas.
2. Water treatment facilities should be upgraded and equipment replaced in order to achieve maximum treatment capacity and insure that the facilities are operating at their peak efficiency in order to meet the demands for future growth.
3. Existing gaps in public water service within developed sections of the growth area should be identified and options explored for provisions of service to these areas.

4. Efforts to reduce water waste should be identified and public educational programs developed to promote the wise use of public water supply.
5. Develop policies for oversizing lines to address future capacity needs when new lines are installed to serve a new development.

Sewer Service and Facilities

1. The County and City of Hagerstown should continue to cooperate in developing a means to interconnect existing City/County systems in order to allow for utilization of all infrastructure to support new planned growth within the Urban Growth Area.
2. The implementation of plans to rehabilitate and upgrade existing sewer infrastructure to accommodate growth within the Urban Growth Area should be of high priority in the County Capital Improvement Program.
3. The extension of new sewage facilities by private interests into newly developing areas of the Growth Area should give consideration to the design of the facilities and their ability to accommodate the needs of future development on nearby property. Options should be explored to provide for fair and equitable sharing of costs involved in such extensions including the oversizing of lines.
4. Steps should be taken to facilitate the extension of public sewerage facilities to the developed areas within the Growth Area which are not currently served and where existing on-site systems may be failing.
5. Rural Villages not served by public sewer and having the possibility of creating a public health and environmental concern due substandard on-site disposal systems should be identified and options explored for providing an alternative means of sewage disposal.

Parks and Recreation

1. Interconnectivity, accessibility, and safety should be foremost among the guiding principles for the detailed study necessary to establish specific greenway trail locations.
2. A variety of recreation facilities and programs should be offered to citizens in the county, regardless of sex, age, or race. Both public and private recreation service providers should coordinate to the extent possible so as to insure efficiency of services and to avoid duplication.

Education

1. Review schools for appropriate size and locations.

Law Enforcement

1. Need to study general upgrades of facilities and equipment to meet future needs of the County.

Libraries

1. Upgrading library service in Smithsburg and Boonsboro as well as renovations and expansion of the Central Library may be needed to address future growth needs.

CHAPTER 10

HISTORIC AND CULTURAL RESOURCES

A. INTRODUCTION

In the beginning it was the Native Americans and Europeans. The former's stewardship of resources as a prerequisite for survival was confronted by the latter's motivations for freedom and prosperity in a land seemingly meant for that purpose. It is not until the unique set of circumstances that created the United States occurred and the embedded philosophies regarding consumption of resources and endless opportunity spread across the nation have the ideas regarding preservation developed. It is a natural part of the maturing of a culture and its multiple levels of government. Today there are more intersecting and overlapping issues, interests and concerns than ever before.

Physical, social and financial mobility brings people's needs and aspirations to mingle with history in Washington County. The balancing of past and future, urban and rural, stability and change are once again and still the task. The challenge is balancing the protection of heritage and cultural traditions while preserving property rights and accommodating development to meet the needs of an increasing population.

This chapter of the Comprehensive Plan will devote itself to presenting and sorting through the issues and formulating recommendations for implementation in land use philosophy, policy and regulation. It will attempt to balance the needs of an expanding population and economy with the preservation, improvement and continued use of historic and cultural resources. This will be done through the integration of the knowledge of their value into everyday and long-term activities. It is expected that this balance will produce benefits for the entire population and economy. Historic and cultural resources will enjoy a heightened

awareness and respect for their value in turn leading to their increased retention and rehabilitation.

Land use activities will run more smoothly and produce results more closely resembling the needs and desires of all the citizenry. Having its needs met with less conflict or loss of tradition improves comfort with inevitable change. The recognition of the value and the integration of methods to address them in daily land use activities will improve operations. The Comprehensive Plan must make the effort to show that preservation policies can meet the needs of the entire citizenry without unreasonably limiting their choices. The end result of a good plan should be the ability of citizens to make choices to meet their needs. Many choices must be available.

The goals stated at the beginning of this document will be met through implementation of recommendations provided at the end of this chapter for the inclusion of historic and cultural tradition issues in land use regulation and other programs. It is the goal of this chapter to fully integrate consideration for the preservation of historic and cultural resources into Washington County government's daily activities, both in the use or expansion of county facilities and infrastructure and the governance of private sector land use decisions. Recommendations will be made for retention or modification of current land use practices where appropriate. The addition of new guidelines will result in a predictable system of recognition, analysis and appropriate treatment of historic and cultural resources. These will concurrently meet the expressed desire of the community to retain them as visual reminders of the past, physical interpretations of our collective culture and resources with remaining utility as well as meet the needs of individual property owners for use and economic benefit with a minimum amount of conflict, compromise or expense. It is the County's desire to have historic and cultural resources remain accessible,

literally and figuratively, to those who desire them without infringing on the property rights of others.

The Plan attempts to achieve a balance between preservation and growth by:

1. Clearly explaining the value of historic and cultural resources to individuals and the community through a variety of forums.
2. Clearly illuminating the links between historic resource protection and the benefits to the Washington County economy and individuals, specifically highlighting economic development and tourism.
3. Dispel common myths about preservation and its effect on the community.
4. Provide recommendations for land use controls that will promote preservation and preserve property rights.

B. ANALYSIS

Washington County's history has been documented and told to varying degrees of detail on many occasions. Washington County prepared its own summary analysis of its history in 1975 called Historical Perspectives, a background study prepared for and prior to development of the 1981 Comprehensive Plan. It is also a resource for the reader who desires the detail that will not be presented here. The County's history is summarized in the introduction to Chapter 1.

Our history and that of the community tells us who we are and where we came from. It's like our parents. It's where you came from or what gave birth to you. Just as we are biological products of each of our parents we are also cultural products of our parental buildings sites, cultural traditions, ethnic backgrounds and the times that we were born into. They bear us and then teach us how to become part of the society.

Activities to Date

Valuable guidance for determining Washington County's future land use patterns comes from evaluation of historic resources and past activities that document the County's history and the existence, location and age of resources. Because of the length of County history, now close to 300 years in addition to the Native American presence, one would expect there to be a wealth of resources and evidence of that past.

Informal and non-institutionalized preservation has been practiced in Washington County since Native Americans inhabited the area. Some practices continued even after European settlement. At that time, the philosophy was different. In the beginning, a structure's form and function were dictated by necessity and limited resources. They were constructed to accommodate immediate needs with locally available materials. It was common to assume that when needs and resources were available, structures would be improved or expanded as needed. The existing structure had to retain its utility over time. Those hard earned resources did not allow for careless or premature disposal. This informal preservation ethic has surely contributed to the retention of a pool of resources from the County's history.

Formal or institutionalized efforts at historic resource preservation in Washington County date to the late 1960's. Maryland created the Maryland Historical Trust to address preservation issues at the State level in 1961. The National Historic Preservation Act was enacted in 1966.

Survey

The County began its formal survey and identification efforts in the mid 1970's when a consultant was hired with joint County and State funding for the specific purpose of identifying and documenting historic resources. Over five years it identified many, but not necessarily all, pre 1860 resources. It is only an inventory and a source of information. This initial survey

identified and catalogued 1316 individual sites throughout the county.

In 1983, what is frequently referred to as the Getty survey was completed. The survey identified an additional 82 properties, many which date to the early 20th century. In 1989 Washington County began a comprehensive effort in cooperation with and on behalf of the eight incorporated municipalities (minus Hagerstown) to identify and evaluate resources and the potential for historic districts in each of the incorporated towns. Each town's survey includes a contextual history noting specific factors that lead to its development, lists of contributing resources and a proposed historic district boundary. Historic, for survey purposes, is generally defined as 50 years old or older, the professionally and nationally accepted guideline.

Hancock was the first town to have its survey completed in 1989. It identified 348 contributing resources. Williamsport was surveyed in 1990 and produced 381 identified resources. Smithsburg and Sharpsburg were completed in 1991 and identified 161 and 218 resources respectively. In 1992, 142 sites were documented in Clear Spring and 249 were noted as contributing to a potential district in Boonsboro. Keedysville's survey was completed in 1993 with a different source of contributing funds from the Maryland Department of Planning and listed 124 contributing sites within a potential district boundary. After a brief hiatus due to the shortage of funding, Funkstown was the final town to be surveyed in 1996 where 162 contributing resources were identified. The City of Hagerstown has 1,653 contributing resources located within six national register districts, which overlap with its four locally designated preservation design districts.

Site surveys continue on an individual basis and are added to existing survey work. Occasionally they are initiated by the property owner but more often it is triggered by use of Federal and State funding or permits that require analysis of their effects on historic resources.

Affected sites not previously done are analyzed and documented.

Most recently survey work has been completed as a joint funding effort between Washington County and the State of Maryland through the Certified Local Government program, status which Washington County achieved on August 28, 1991. Two phases of this Rural Community Survey have been completed with several more to be completed.

Each community contains multiple properties. Some may have significance to local history on their own. Most, however, will have more importance as a contributing resource to assist in understanding and interpreting the history of the whole community and Washington County. To date, the communities that have had their surveys completed and the number of resources identified include Maugansville (101 resources), Rohrersville (42), Pen Mar (53), Fairplay (23), and Tilghmanton (72). The Highfield/Cascade community has been preliminarily evaluated but a resource count was delayed to a future phase of the project. In all, the resources that contribute to the understanding of the past development of rural communities and therefore to the therefore to the County's history, number 291.

Almost 25 years of historic sites survey has identified 5,127 sites in Washington County and it's municipalities, most of them being dwellings. The 1990 census counted 47,448 housing units in Washington County. 13,570 of them were reported to be constructed before 1939. 8,592 of those pre-1939 structures are located in the incorporated municipalities, 6,761 in Hagerstown alone. The remaining pre-1939 structures in towns, 1,831 corresponds favorably with the total number surveyed in the municipalities of 1,785. With 1,689 sites surveyed in the county since the 1970's and the Census indication of 4,978 pre-1939 dwelling units in the County there is some merit in the thought that there are still many potentially historic sites, over 3200, unevaluated, waiting to be discovered and documented.

A map showing the distribution and concentration of the identified sites is included as Map 17.

Historic Advisory Committee

Washington County adopted its one and only zoning ordinance in 1973. Prior to that there was significant study of many variables including the treatment of historic structures. Records indicate that Washington County has expressed concern for these issues since at least the late 1960's. On October 3, 1967 the then Planning and Zoning Commission recommended to the Board of County Commissioners that a Commission be appointed with the responsibility “to select and rank according to importance the major and minor historic areas and recommend...the type and extent of development and the desired requirements for protection of the historic areas within the County.” The County Commissioners responded by appointing the Advisory Committee on Historical Sites on November 21, 1967. The committee submitted its final report to the Planning and Zoning Commission approximately a year later. It contained broad recommendations for several general categories of historic sites focused around the most visible such as battlefields, stone bridges and various trails. The Committee has remained in existence since that time in an advisory role to the County Commissioners. The Historical Advisory Committee’s initial efforts and report are the seeds of the original HP zoning designation that wound up in the 1973 Zoning Ordinance.

Zoning

When the Zoning Ordinance was adopted in 1973 it contained a Historic Preservation zone. Although it was applied to over 500 acres of land area, that text was unable to provide any significant guidance or protection for privately owned historic sites. Washington County at least considered a new Ordinance for preservation of historic structures in 1977. A draft of the

Ordinance remains as well as a record of at least one hearing. It was not adopted.

The 1981 Comprehensive Plan contained recommendations to develop a voluntary zoning designation that would protect, enhance and perpetuate those structures and areas in Washington County which are of historic, architectural, archeological or cultural merit. The County accomplished that goal in 1986 by adopting a completely new text for the Historic Preservation District with corresponding map amendments. It replaced the original and ineffective 1973 version. The text followed the Comprehensive Plan guidelines by being voluntary and includes provisions for review of building permit applications with an eye toward keeping changes to the exterior of buildings in the zone consistent with the historic appearance. New construction in the zone is also subject to plan review and compliance with design standards. The text created a Historic District Commission with specific responsibilities for administration of permit review within the zone.

At the time of its adoption it was consistent with existing State legislation that delegated the authority for Historic Preservation zoning to counties, Section 8 of Article 66B. Since then Article 66B has been revised and there is a need to revise the County's Historic Preservation zoning to incorporate those changes.

At the present time there are 43 sites in Washington County with the Historic Preservation zoning overlay. 19 are privately owned and almost all of those are residential properties. A small handful of properties were added voluntarily at the owner's request after the zone guidelines were amended and provided with significant protective authority. Another 18 are bridges, the majority being stone arch bridges in government ownership. The remaining 6 sites are also publicly owned and of a park or open space nature such as the C & O Canal, Washington Monument and the like.

In 1989 Washington County created a zoning designation known as the Antietam Overlay zone, similar in effect, intent and mechanics to the Historic Preservation zone. The zone was created in response to the perception that the southern portion of Washington County and especially the area around Sharpsburg and the Antietam Battlefield was in imminent danger of rampant development. The Antietam Overlay text and map amendments were adopted in 1989 but a proposed density reduction effort was rejected.

The Antietam Overlay has three subcategories tied to distinct geographical areas with different priorities for protection. The AO-1 zone is also known as the Battlefield Buffer zone, which includes all public and private lands within the legislative boundary of the Antietam National Battlefield, over 3500 acres. Permits for construction of new residential, commercial or industrial uses must be reviewed by the Historic District Commission using the same design guidelines employed in the Historic Preservation zone to insure compatibility with the historic appearance of the area. The AO-2 zone, also known as the Approach Zone, requires the same construction permit review for non-residential construction. These “approach” zones are designed to present an appropriate appearance to visitors arriving in the historic battlefield area via several major highways. They radiate from the edge of the AO-1 zone along major highway routes that provide access to the area. They extend 1000' on either side of the highway.

The final portion of the trilogy is the AO-3 or Red Hill zone. It is intended to regulate and limit the removal of tree cover on Red Hill, which provides the background for views from a significant portion of the Battlefield park. It is designed to retain as much forest coverage as possible when development occurs. It is meant to enhance the visitor’s experience at Antietam by providing a historically correct viewshed.

Together, the three Antietam Overlay zoning designations cover over 4,000 acres of

south central Washington County. Of the hundreds of existing dwelling units in the AO-1 and AO-2 zones, 35 are currently identified in existing inventory materials. Two are listed in the National Register of Historic Places.

In 1987 the City of Hagerstown adopted a preservation ordinance, which allows design review by the preservation design district commission within the city's preservation districts. All other municipalities may implement similar design review procedures by virtue of authority delegated by article 66B of the Annotated Code of Maryland.

Tax Credits

As an incentive for rehabilitation and continued use or re-use, Washington County has adopted an ordinance that provides property tax credits for rehabilitation of historic structures. The first eligibility criterion is location of the building in one of the County's two preservation zones, the HP or AO overlay. Properties in similarly created and regulated districts in Hagerstown and the other incorporated towns are also eligible to apply for the credits on their County property tax bills. Credits are calculated on 10% of the total spent on preservation, rehabilitation, restoration or improvements to the exterior of the structure. The Ordinance was adopted in 1991. \$ 45,077.04 worth of property tax credits has been approved based on \$476,052.19 spent by the property owners to preserve or restore the buildings.

National Register of Historic Places

The National Register of Historic Places is the official list of the Nation's cultural resources worthy of preservation. The determination is a cooperative process that includes nomination by owners or other interested parties and a multi step evaluation against national standards including experts and National, State and local government officials and substantial opportunity for public input. In Maryland, listing results in multiple benefits that assist in

preserving historic resources such as:

- Recognition that a property is of significance to the Nation, the State or the Community.
- Consideration in the Planning for Federal, federally or state funded, licensed and assisted projects.
- Eligibility for federal and Maryland tax benefits.
- Consideration in the decision to issue surface coal mining permits.
- Eligibility to apply for federal and state grants and low interest loans

National Register listing can govern the treatment of a structure, insuring compatible rehabilitation and design of new additions through the use of nationally and professionally accepted Secretary of the Interiors Standards for Rehabilitation when those changes are financed or require permits from federal or state agencies. Contrary to popular belief the National Register does not regulate land use or provide the ultimate protection against inappropriate changes or demolition of historic sites when private funds are used.

In addition to the prestige of formal acknowledgment that a site bears significance in American history, architecture, archeology, engineering and culture, the Register is a tool to assist federal and state agencies in using taxpayer funds wisely. Listing creates a mechanism to insure that federal and state governments do not spend public resources in ways that negatively impact historic resources that have value to or benefits for the general public. Listing carries no County land use regulations.

Washington County's first listings in the National Register of Historic Places occurred in 1966 when the Antietam National Battlefield and the C&O Canal were entered. The most recent listings of the private property known as Hills, Dales and the Vineyard and a historic district within the town of Funkstown in 2000 brings the County's National Register listings to a total of

84. 19 of the National Register sites are within the City of Hagerstown and 6 of those are multiple property districts. Also included in the total is 1 site each in the municipalities of Boonsboro and Sharpsburg. Washington County and its Historic District Commission is now an official participant in the nomination and review process by virtue of its Certified Local Government responsibilities and privileges. (See Map 50.)

Certified Local Government

Washington County earned the Certified Local Government designation on August 28, 1991 after a lengthy application review process. CLG status indicates recognition by the National Park Service of a local government's expertise and appropriate procedures in place to participate and further the national policy of preservation. It allows the County to participate in several joint reviews and funding partnership arrangements to address historic and cultural resources issues.

In addition to earning an official position in the National Register review process, Washington County is also eligible to apply for funds to conduct projects, which promote preservation. Since achieving the CLG status, Washington County has participated officially in 14 National Register applications, all ultimately successful to the federal level. The County has also successfully completed 4 CLG projects using \$ 42,000 in State funding and resulting in many of the additional surveyed sites mentioned previously. The Historic District Commission must compete each year for funding.

The City of Hagerstown was designated a certified local government by the national park service in 1988. With the assistance of CLG grants and other local initiatives, the city has taken action over the years to document various aspects of Hagerstown's cultural heritage. To promote preservation activity and local heritage in Hagerstown, the city has an annual preservation

awards ceremony, creates a preservation week poster each year and periodically sponsors walking tours of the historic districts.

Inclusion in the Comprehensive Plan

Frequent comments from citizens and a series of public input meetings indicate that preservation of historic and cultural resources is a concern of the Washington County population. Opinions indicate that historic resources contribute to a higher quality of life through the appearance, vitality or available opportunities in their community. Some believe it is a way to moderate or compensate for change, which may be unsettling. Some assign value to resources because of the history embodied in them. Others believe there is still great utility in the often sound structures. Federal and state governments have predictable and clearly defined procedures, which induce the citizenry to assume that the County does also, or should. Land use matters, which typically include the treatment of historic resources, are traditionally a local jurisdiction.

A subject is included in a Comprehensive Plan in order to present the relationships it has to land use and to weigh the need, benefits and disadvantages to controlling it, or not, in some manner. Even if it is decided that the governing body wishes not to become involved in managing the issue, those conclusions must be based on analysis of facts, true relationships and public input rather than assumptions based on emotional or personal interest.

One of the main goals of planning and a Comprehensive Plan is to integrate or link many diverse issues that have effects on how land is used and subsequently make recommendations to mitigate the negatives and encourage desirable effects. At a minimum, land use must acknowledge the existence of historic resources in the broader category of existing development before it can do anything about it. The Plan, reflecting the jurisdiction's philosophy, will then

clearly state how it plans to treat historic resources during the direction, and approval of land development. Having a clear and well publicized philosophy is as important as the philosophy itself.

Planning and Comprehensive Plans are concerned with how land is used, the physical and spatial relationships between those uses and the timing of their establishment. Existing structures are a component of land use and often define or limit the land use and become the subject of debate about changes in land use and therefore compatibility among them. Most often the historic resources are existing structures on the land.

Land use guidance is the legitimate purview of government. The U.S. Supreme Court has made numerous landmark decisions in that regard. As a component of land use, governments of all levels have stated that attention to historic and cultural resources is a public purpose and responsibility. The National Historic Preservation Act of 1966 states clearly that “The Congress finds and declares that ... the historical and cultural foundations of the Nation should be preserved as a living part of our community life” ... and “ the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic and energy benefits will be maintained and enriched for future generations of Americans...”

The State of Maryland also states it very clearly in Section 8.01 of Article 66B, the legislation that delegates land use authority to the various political subdivisions of the state. “The preservation of sites, structures and districts of historical, archeological or architectural value together with their appurtenances and environmental settings is a public purpose in this State.” It is determined to have benefits for the greater community.

Washington County has taken some definitive steps to promote preservation of the

opportunities. The Historical Advisory Committee, the original and revised Historic Preservation overlay zoning, the Historic District Commission, CLG status, tax credits and the previous Comprehensive Plan are all positive steps that indicate County support. Inclusion in this plan is a continuum of the past position that it is in fact a public purpose in Washington County. There are 1,689 inventoried resources in Washington County, outside of the municipalities. The sheer numbers of identified and potential historic resources require that they be acknowledged and addressed in some way. Based on 1990 Census figures there are over 3200 remaining pre-1939 structures, certainly some with the potential to have historic significance.

The comprehensive planning process and document allows a community to periodically check and assess its progress towards previously set goals and to determine if it is still on track toward those goals. It should even determine if those goals are still valid. Washington County has completed recommendations from its previous Comprehensive Plan regarding preservation of historic resources. Community needs and desires can change over time. In recent years Washington County has received much more than normal input, positive and negative, about what it should or should not do regarding preservation. Dramatic increases in development activity have created the greater likelihood that potential resources are encountered in development and therefore the greater occurrence of conflict between development and potential resources. The Washington County needs to create a plan to provide a predictable and fair routine so the matter can be addressed in a fair and equitable manner instead of on a crisis basis.

Not every site or building will have monumental importance to the entire nation. But individuals with the desire to retain their own small portion for whatever reason need direction to attempt to maintain their availability for future interested parties. There is also a need to be

selective about what will be preserved determined in part by who will be responsible for the preservation. There are resources of such profound importance that their retention and protection would benefit and be demanded by a majority in the community. But there will also be many resources that will have only one champion. They deserve attention as well to the degree that there is no burden to the rest of the population.

It is likely that the individual restoration projects performed by committed private property owners will still occur. Those owners preserve and restore for a multitude of personal reasons and would still do it if there were no inventories, design guidelines, grants, loans or tax credits. They do it because they appreciate the craftsmanship of the design and construction, because they view these buildings and sites as classrooms that teach about the past and prepare for the future, because they hold some familial importance, they gain personal rewards from completion of the restoration task or saving the building or believe they still have useful lives. Whether government participates or not these types of restorations and “savings” will continue by private property owners and organizations. Most occurred without government assistance, guidance or regulation and will continue without it. In fact the lack of formalized programs in the infancy of preservation helped plant the seed of the movement in the private sector.

While private property owners have made significant strides in the retention of historic properties government must assist in creating the opportunity for it to happen. Without abridging private property rights a system can be installed to at least alert interested parties to the potential and allow them to negotiate with the owners.

Historical and cultural resource protection has been and continues to be a difficult, controversial and emotional issue on personal and institutional levels. The terms historic resource and preservation mean different things to individuals and organizations depending on

their point of view, goals, motivation or means. The increases in knowledge, ability and successes over time have also changed and refined the nature and focus of the preservation movement. Age alone would make decisions easy but qualitative analysis must be part of the equation. Value or significance as a resource can be relative and must also be considered in light of the purpose of the preservation.

Most anything has the potential to be a historic resource if it is representative of historical experience or can convey information about the past. The most common and obvious are buildings. They are real and tangible evidence and very effective in conveying truth about the past. There will be buildings and sites that have unquestionable significance and will generate virtually no disagreement about the need for preservation.

Others may be so common, ordinary or ill conceived and built, that retention would serve no public purpose. Still, even the most plain or common farmhouse has the potential to provide information about the past or can have a practical reuse use with a moderate investment.

Aiming preservation policies or efforts at buildings alone will miss many other important resources.

Many other features, tangible or not, have the potential to convey information and a sense of heritage that ought to be included in the category of historical resources. Examples in Washington County include The National Road, the C & O Canal, a multitude of stone bridges, cemeteries, rural villages, stone fences, and archeological sites. Sites or locations also have value and abilities to convey information about the past. The Antietam Battlefield is an example.

Archaeological resources present special challenges. Archaeology requires attention because those artifacts can easily exist on the site of proposed development and may be disturbed, destroyed or have their future access seriously limited without consideration of their

existence included in a project's design. When development occurs and artifacts are encountered unexpectedly, a host of issues arise almost guaranteeing some delay in the project.

The preferred hierarchy by jurisdictions that do regulate the treatment of archeological resources is avoidance and protection in place, minimizing or mitigating impact, recovery including a plan for analysis and curation and finally, acceptance of loss as the last resort. Washington County needs to give consideration to their existence and the effects on land use for several reasons.

The State and federal governments have distinct and well entrenched procedures that require attention to the treatment and disposition of archaeological resources when encountered during projects that utilize federal or state funds or require federal or state licenses or permits. The fact that federal and state procedures exist heightens the disappointment of some when it is discovered that there are no established County criteria or procedures. It also creates inconsistency and uncertainty in the development process. Aside from the ideological preservation issues it is simply more efficient to have a standard and well understood procedure.

Known archaeological resources are of course much easier to deal with. Although not publicized for fear of damage or pilfering there are inventories available that identify known archaeological sites in Washington County. At the present time it is not a routine part of the project development criteria.

Scattered about Washington County are 337 plots of approximately 121 acres each that have been identified as having at least one occurrence of a recorded archaeological site. A level of significance is not attached to that inventory. Almost 14% of the County's land area is included within these indicator blocks although it does not mean that 14% of the County's land area contains known archeological resources.

The remaining 86% of the County is the area of most concern because the existence of resources is unknown. The likelihood can be predicted by certain factors such as topography, vegetation, water, records of historical use and maps to name a few.

Issues arising out of archeological considerations include: whether artifacts even exist at a particular location, speculation about value and worth for recovery, and the issue of delaying a development project to accommodate the recovery phase. The contention can become even more heated when resources are discovered in the midst of a development project. If they are even acknowledged, decisions must be made under the pressure of pre existing development schedules. These types of decisions are difficult and highlight the need for a standard procedure to guide the decisions and determine methods to adequately evaluate them for their interpretive value and comparison with other previously known resources. The debate over the value of the archaeological resources is complicated by the fact that much of the debate occurs before they are uncovered.

It would be irresponsible to eliminate the opportunity to discover valuable archeological resources by not attempting to protect them through land use guidelines but it may also be overly burdensome to property owners who are restricted due only to potential. If archeological resources are to be afforded attention as historic resources then some middle ground and standard predictable procedure needs to be developed in Washington County. Awareness of the potential for resources to exist on sites and having options to address them ahead of time greatly enhances the ability to deal with them when they are encountered and greatly reduces the potential for unreasonable extra costs.

In trying to determine items to be considered historic resources we must also consider the nature of the geography. Policy must be tailored to address the widely scattered nature of the

County's existing and potential resources.

In the final analysis almost anything or place has the potential to be considered an historic resource depending on the multitude of factors one might choose to use in the determination. As the resource becomes less tangible the ability and desire for protection diminishes.

Defining Preservation

There is a diversity of opinion about what preservation means. A definition is guided by the situation, the resource and whether it applies to an individual's activities or what his neighbor should be doing. Preservation is the term most frequently used by the masses but may also mean restoration, rehabilitation or reconstruction. Each one has its distinct definition and a specific place in the profession.

The Secretary of the Interior's Standards for Rehabilitation and The Secretary of the Interior's Standards for the Treatment of Historic Properties, widely accepted benchmarks against which preservation activities are measured and guided, have distinct definitions and guidelines for the restoration, preservation, rehabilitation and reconstruction of a resource depending on the "property's historical significance, physical condition, proposed use and intended interpretation." Rehabilitation includes repair, alteration and addition in preparation for a new use while retaining features , which convey historical, cultural or architectural significance. Rehabilitation may be the most commonly intended but often misunderstood treatment. It is intended to prepare a building for continued or new use but still aims to retain its historic features. Preservation focuses on the maintenance and repair of existing historic materials or preserving the structure in its current form with little or no replacement or new addition. Restoration aims to return a building to a specific period, acknowledging the need to

remove changes since that time and recreate previous aspects that have been removed.

Reconstruction seeks to recreate missing features or whole structures from reliable documentation when necessary for understanding a property's historic value. Perhaps stabilization should also be included in this discussion. It has come to be known as the minimum treatment needed to prevent further deterioration but does not include repair.

It is impossible to reduce the multitude of opinion and needs to one universally accepted definition of what a historic or cultural resource is and how it should be treated. Each structure and individual circumstance is different and needs to be treated according to its physical nature and the desired outcome. Many other land use issues are that way to insure that all interests and rights are addressed and a decision that provides the greatest good for the greatest number can be determined. This plan will recommend a framework and attitude to address both ends of the spectrum and all other variations in the middle.

Identification of Resources

The point in time when a resources is identified as historic, or not, can have a great effect on its retention, the success of a reuse proposal and the reputation of the County's effort at Historic Preservation.

Ideally, identification would occur at the earliest stages of the decision making phase in order for the full significance of the resource to be determined, given maximum consideration in site development plans and for the proposed treatment of the historic resource to become a real and effective part of the overall proposal allowing retention of the valuable historic fabric at the same time producing an asset to the resulting land use.

Consideration at any later time in the decision making process means decisions on treatment may be made in an atmosphere of urgency and tension. They may result in only a half-

hearted proposal with little real commitment to preserving the resource. This urgency is not likely to allow full resource analysis or consideration or even discovery of all the options or possibilities. Being required to determine previously unknown historic significance will allow the owner to focus on the delay in his project rather than any interpretive value in his historic building. The costs of the delay will be relatively greater. The ability and willingness to discover alternatives, much less implement them, is much lower.

It is almost impossible for the County to regulate this decision making phase of project development. It can only educate property owners and developers about the potential for these sites to exist and be vigilant about educating them about the benefits in the development process and making retention of historic resources an integral and highly visible part of preservation efforts rather than treating preservation of historic and cultural resources as an afterthought.

The alternate approach would be a comprehensive sites survey completed prior to and independently from any development proposal. A great deal of comfort would be derived by government, property owners and developers in knowing that the inventory information is comprehensive, complete and easily accessible. A minimal investment of time and effort would be required to determine the existence of historic resources on a project site. The sites are much more likely to be discovered in the initial project planning stages along with such other basics as zoning, storm water management requirements and adequate facilities. With full knowledge and clear guidelines, the resource can be fully integrated into the final design or can be determined to not fit. Knowledge of their existence from the start allows developers to plan with them from the start or even to not pursue a project if the requirements are perceived to be too great.

Links and Benefits to Economic Development

There are links and mutual benefits between a program of historic and cultural resource

protection and economic development. The act of preservation includes the actual rehabilitation and restoration of buildings as well as all those who design them, finance them and advocate for and educate about their value. All can be viewed as part of a specialized industry. It provides jobs and services as well as investment in the local economy. The results of those activities produce marked improvements in many aspects of the community such as a larger inventory of useful structures, improved physical appearance and an improved tax base. These all create a more desirable community to live in and therefore an attractive location to expand or locate new business. In an area experiencing development, preservation and economic development often meet and spark conflict when a desirable location for new business is occupied by historic structures. Through false perception, lack of desire or effort and occasionally, real incompatibility, the two are not able to coexist.

Economic Development is a planned and coordinated effort by the local government, private businesses or a combination of both, to maintain and improve the economy of a jurisdiction by improving and increasing employment opportunities for its residents or prevent the loss of existing jobs. Employment is usually the main target of economic development efforts because it typically increases the flow of money into and around the local economy. The extent of an economic development program can be broad or narrow, depending on the condition of the economy, the available financial resources and the philosophy of the governing body concerning the extent to which it believes the government and the private sector should be intermingled.

Governments may also invest in other types of community improvements viewed to improve the community as a whole with the intent of creating a more desirable location for new business.

The variables that lead a company to relocate or remain and expand can be as varied as the many locations vying for their new business and the incentives that might be offered. These decisions are rarely made on only one factor. Some decision making criteria are specific to the businesses needs. Others are less tangible and difficult to quantify.

By virtue of geography, political boundaries and the unique transportation network, Washington County competes with Pennsylvania, West Virginia and several other Maryland counties for many of the same economic development prospects. Many factors are comparable. Each jurisdiction must make a conscious effort to identify special or unique features or incentives that will set it apart from the competition in order to entice the prospect. The availability of a huge inventory of historic resources and a positive, encouraging atmosphere to retain and honor them, by itself is not likely to be a deciding factor. But when many other factors are equal, business decisions may be made on the secondary issues such as the special or unique characteristics of the location that the business wants to be associated with or that will be perceived as beneficial to its employees.

Anything that Washington County can do to distinguish itself from the ordinary or to create some special attractive force will help in the highly competitive economic development market. As part of a larger economic development strategy and philosophy that requires a relatively small investment, the results of historic and cultural resource protection illustrates more about a communities priorities than only a desire to improve its economy.

Locally it would be difficult to assess the capital contributions of those engaged in the business of the preservation and restoration of historic buildings. An available indicator of local activity might be the property tax credits that Washington County has granted for restoration and improvement to structures located in the Historic Preservation and Antietam Overlay zoning

districts. Between 1991 and 1998 Washington County has granted property tax credits for over \$500,000 worth of restoration on 13 properties.

Figures for the State of Maryland from studies commissioned by the Maryland Association of Historic District Commissions are even more enlightening. The report, The Economic and Fiscal Impacts of Local Historic Districts in Maryland analyzed six representative and long standing historic districts across the State and examined the issues of public investment, private investment, tourism and property values. In addition to documenting the level of public investment in the six districts at over \$200 million, the report emphasizes the importance of public investment as the seed money to provide adequate infrastructure which supports and encourages the private investment. It also notes that the entire community receives benefits from the public investment, not just the historic district. The study found that private investment, defined as the direct spending on construction and rehabilitation by private and institutional property owners in the historic districts averaged over \$24 million per year and created 434 local jobs annually. The study estimates 3.4 million heritage tourism visitors annually to the districts spending close to \$55 million and creating 800 jobs collecting \$14 million in wages. Property values also show positive benefits from historic district designation. In 5 of the 6 districts, property values increased 28% faster than in the rest of the jurisdiction as a whole in 18-22 years studied. This Maryland based analysis concludes that preservation and restoration of historic properties has significant positive economic effects in local communities.

A second study titled The Value of Preservation in Maryland claims that for every 1 million spent rehabilitating historic buildings in Maryland there are 16 construction jobs created, 15 additional jobs created in other segments of the economy and a \$760,000 increase in household income. That \$1 million creates 3 more jobs in the restoration activity than the same

million would if spent in new construction. In a little more than 20 years Maryland has seen rehabilitation, restoration and reuse investments exceed \$500 million dollars as measured by Federal tax credits. The investment is surely larger due to many projects that are not tax credit eligible or are government restoration activities.

The study goes on to document the benefits of preservation to the tourism industry, the close ties with museums and the arts, Maryland's emerging reputation as a film location, and the creation of desirable and stable housing stock. The report claims a total economic impact on the economy of Maryland of over \$1 billion. The study also concludes that district designation attracts investment for rehabilitation and new construction and that contrary to popular belief, property values rose, not fell.

These recent studies in Maryland confirm and support similar studies in North and South Carolina, Virginia, Indiana, New Jersey, Kentucky and Ohio. They document real contributions to economic development from the preservation, restoration and reuse of historic buildings. The preservation returns unused or underused property to productivity and the tax rolls, generates income for the locality and improved property values for the owners. Improvements to one property in a neighborhood can encourage further investment in adjacent properties. It also creates jobs. Restoration construction jobs often pay wages better than the average construction job because of the skilled nature and labor intensive aspect of that task. The projects also require materials, often the same as new construction.

The recent study titled Preservation and Property Values in Indiana produced conclusions related specifically to housing and property values as they are affected by local historic district designations. Without exception in the designated and undesignated residential districts in cities in Indiana the study found a rise in property values in the regulated districts that equaled or

surpassed that of the unregulated neighborhoods again dispelling the myth that designation has a negative effect on property values. In one of the cities included in the study it was determined that among affordable neighborhoods, buyers could purchase houses that were well over 50% larger in the historic districts than in comparable new subdivisions. There was a wider range of prices in the designated districts than in newer development allowing and encouraging greater diversity in the community. In fact, the historic districts were found to be more reflective of an entire community's diversity than other neighborhoods. The available housing stock was also found to be more diverse not only in price but also in size and style. Historic districts in the study have more long term residents, owners and renters. District designation promotes home ownership for many reasons including the investment protection of the districts design guidelines, Commission oversight and affordability.

Huge segments of the nation's economy are devoted to do it yourself home improvement and repair. Preservation is a distinct subcategory. It includes the sale of reproduction parts such as lighting and plumbing fixtures, wallpaper and floor coverings to restore old houses or to give new ones more character. It even includes the sale and resale of salvaged house parts for restoring other old houses or installation in new ones. There are books, magazines and videos, national organizations with huge dues paying memberships and numerous media forums all dedicated to the "how to" or to showcasing the already done. Even the sale of restored or restorable homes occupy a special status in the economy and can command premium prices beyond market averages. There are even businesses made out of packaging the many incentives of building restoration to make profits. Educating more people about the profit making aspects may promote more takers. There are financial incentives at every level of government. There are even businesses that move old houses to new locations. If for no other reason than a healthy

position in the free market economy, the preservation of historic resources deserves attention for the potential economic benefits. It is a distinct and growing segment of the economy that generates income for practitioners, taxes and fees for government and improved property value and personal satisfaction for property owners.

The final link between preservation of historic resources and economic development is the all too frequent scenario of an existing historic property, development or redevelopment. The existing historic structures are often not given consideration for retention in the future use of the parcel. In many cases it doesn't happen because it is not required or not even required to be considered. Other times it is assumed to be incompatible without any real consideration of how it might be retained and reused. There are continuing misconceptions that retention always means higher costs and added difficulty in the development process.

It is in fact easier and most often at least marginally and initially less expensive to proceed in this manner. There are plenty of examples in existence and more innovative and creative solutions being thought of everyday to resolve the issue of promoting and allowing new development while retaining valuable historic resources. All may not overcome the burden of proving their continued worth for reuse in an economic development scenario but requiring a sincere effort may retain a few at reduced costs and improved returns for development.

When presented with opposition to retention, Washington County should be prepared to provide a package of convincing information to show that there are workable reuse alternatives for a variety of building types. Reuse proposals that match the endangered building with the prospect's business needs are most likely to succeed. Houses can be reused for single or multi-family housing. Houses are also ideal for small office space, unique or specialty commercial uses, quarters for visiting executives, training, product display, employee recreation, lounge,

dining, daycare or storage. Sensitive additions need not be prohibited in order to allow for greater reuse potential. Larger structures can be sensitively subdivided into smaller individual spaces for office, commercial uses or housing of all economic levels. There are too many examples of success in reuse of all types of buildings by all types of industry and business and too many incentives and other types of assistance today to make what may seem an unfeasible preservation project feasible.

Links and Benefits to Heritage Tourism

Tourism is a specialized form of economic activity and of special interest to local governments because it is seen to be a segment of the economy that does not cost the local government money in demand for services.

In Maryland, tourism is a \$7 billion per year industry. In Washington County tourism is estimated to contribute more than \$40 million to the local economy. 3.0 percent of the County's labor force worked in the tourism industry in 1998. Related taxes made up 3.9% of Washington County's total tax revenues in 1998. In 21 out of Maryland's 23 counties, tourism contributed from 1% to 12% of the total taxes collected in 1998.

The positive view of tourism is accurate but caution should be exercised in viewing it as all benefit with no costs. High demand for certain types of attractions may create the need for improved infrastructure to handle the influx of visitors.

Several recent studies show that there is a large segment of the population nationwide that have a strong interest in visiting historic sites and areas. It is a growing segment and will continue to grow as an opportunity to combine education and family activities. These types of visitors in Maryland are shown to stay longer, spend more money per day and more money per visit than other types of visitors

An increased and successful effort to encourage citizens and government to preserve the remaining historical resources increases and improves the County's overall appearance and reinforces its historical background and character. Increased individual site retention maintains the pool of potential sites that can be further developed as specific visitor destinations, obviously increasing financial benefits for property owners and operators.

Washington County is fortunate to have such a large pool of historic resources upon which to build new tourism opportunities. The fact that the pool is so large also increases the ability to convey to visitors the impression of historicity simply by their prominence on the landscape. Driving through Washington County, either on the interstate or on a secondary route, presents a great tourism promotion opportunity to impart the impression that there is a wealth of history still available for casual observation or focused visitation. Secondly, as long as they are in good repair, they convey a positive impression that the community as a whole and many individual property owners care about the history they represent.

If the County is to continue to be attractive to heritage visitors we must retain the physical evidence of that heritage and the atmosphere or ambiance that their continued existence on the landscape creates.

If we subscribe to the concept of heritage tourism then we must also accept the need to protect and restore historic resources and that intangible atmosphere and rural landscape.

Washington County's participation in the Maryland's Heritage Area Program is a major step developing and promoting heritage tourism opportunities. Washington County has received recognition of its Civil War Heritage Areas and Civil War Heritage Routes. (See Map 54.) They encompass a significant area of the County including all of the municipalities. The next step is certification of the heritage areas, which will create eligibility to receive funding for

development of a specific plan to increase heritage tourism and preservation opportunities.

Incentives include matching grants and technical assistance, tax credits for job creation and other business activities and tax credits for rehabilitation of heritage structures. The progress toward Civil War Heritage Area certification is a positive influence on historical and cultural resources related to the Civil War event. The many other significant historical and cultural features that are not related to the Civil War history of Washington County must also be promoted.

Demolition by Neglect

The issue of demolition by neglect is an especially difficult matter to address. It appears to be among the largest deterrents to the retention of historic resources. Demolition by neglect can be further divided into two categories, willful and unintentional.

The willful variety of demolition by neglect occurs with at least the property owners knowledge if not active involvement. Property owners at some point in their ownership and maintenance regime make a conscious decision that the structures is no longer worth the effort to take care of and simply ignores any further maintenance requirements. If there is some perception by the owner that there will be resistance or opposition to demolition in the normal fashion demolition by neglect can give the appearance that there is a need to have it removed and in fact the community would benefit from its removal.

A variation on the willful demolition theme is associated with the acquisition of the property. The owners are not concerned with the condition of the structures at the time of neither acquisition nor its continued deterioration because there are no plans to use or reuse them. There will be little effort to maintain the buildings in good repair if there is no intention to use them and they quickly deteriorate through lack of attention to the most basic maintenance and security issues.

The other variety of demolition by neglect is more subtle yet often more dangerous and damaging than any intentional one. It does not discriminate between historic or more recent construction. Many structures suffer through a long period of neglect or minimal or inadequate repairs often due to an aging or inexperienced property owner's inability, physically or financially to properly maintain the building. This, coupled with the lack of knowledge or inability to periodically inspect the structure can let minor but critical repairs go unattended for years to the point where advanced deterioration in hidden portions of the structure, more likely structural rather than cosmetic, cause serious damage and threaten safety. The same causative forces, inability or financial need prevent the repairs from occurring in a timely manner. When occupants move out because the needed repairs become overwhelming or, in the case of the frequent elderly owners, because they can no longer care for themselves much less the building, the structure sits unattended for an additional period and the demolition due to neglect worsens to the point where demolition may be warranted. The building is beyond repair to all but the most dedicated or enthusiastic preservationist.

Neither form of demolition by neglect is necessary or desirable. Both are avoidable.

Many jurisdictions have regulations and other programs to monitor the matter in an attempt to prevent it and deal with it when it does occur. State enabling legislation provides a standard definition and requires that the matter be dealt with in local legislation. The purposeful type is more likely to be solved with monitoring and regulation which may encourage uninterested property owners to maintain or sell rather neglect when they are no longer interested. The unintended variety, usually caused by finances, inability or lack of knowledge, can be solved with education and possibly a variety of minor assistance programs. Properties worthy of restoration could be maintained in a minimum state of repair or secured and monitored

until a responsive owner can be found. The goal should be to prevent demolition by neglect of all varieties instead of trying to fix it after it has occurred. Periodic maintenance on an as needed basis should be less expensive, prevents damage and extends the useful life of a structure well beyond the cost of routine maintenance.

Housing

Among the recipients of benefits from an active historic and cultural resource preservation program, houses, housing and homeowners receive the largest share. Housing is also a prominent adaptive reuse choice for historic structures. Retention and rehabilitation of existing housing stock lessens the need for building new ones on virgin land, reducing unnecessary sprawl or loss of open space. Depending on the circumstances it is highly possible to rehabilitate existing structures more economically than constructing new ones. This results in part from much of the necessary infrastructure already being in place.

Restorations of historic homes can have multiple positive effects in older neighborhoods. It is important to note that deteriorated historic properties are not usually the cause of neighborhood decline, but its result. The downward trend is more likely to start due to social issues such as safety, education, employment and upward or downward mobility. Traditional programs aimed at increasing homeownership can be linked with targeted historic areas to return those neighborhoods to vitality. Ownership greatly improves the likelihood of long term maintenance and preservation of historic features not to mention long term stability and increases in property values. Improved property values lead to greater revenue for the governing body. Ownership is also traditionally viewed as healthy for a local economy beyond taxes to purchasing of goods and services and increases in individual financial worth.

The best part of preserving historic homes is that many financial and technical assistance

programs aimed specifically at homeowners are already in place. There is an entire industry that is easily accessible and is built around home improvement with a subcategory aimed at historic buildings. Homeownership is beneficial and supportive of preservation. Preservation encourages homeownership. In Washington County there is a ready supply of historic residential properties in need of the preservation treatment.

Improvements to community pride and appearance, property values, home ownership and housing supply and the reduction of development in inappropriate areas are all by-products of having an active program of historic resource protection. A policy encouraging and supporting preservation of historic resources can have dramatic affects on housing options and inventory.

Observations of Public Opinion and Dispelling Myths

There are many specific and personal reasons offered by individuals in favor of the retention of historic sites and structures.

The availability of historic resources provides current and future property owners the opportunity to purchase homes with unique architectural styles and features. There is at least a perception of a higher level of construction quality that may not normally be available in the new home market in the average price range. Many people willingly purchase these types of buildings, usually dwellings, knowing that a sweat equity investment in restoring or rehabilitating a property will produce multiple returns well beyond that investment.

Others find that history is uniquely and much more clearly illuminated for them through the actual physical remnants than it can ever be through books, lectures or other second hand forms of interpretation. Walking across the Antietam Battlefield, viewing the operation of a restored lock on the C&O Canal or visiting John Brown's hideout makes the historical event or its significance much clearer.

Residents may not consciously pronounce their support of the preservation of historic structures but their actions often accomplish its goals. Included in their search for a preferred lifestyle is often older and larger homes, more space and security for their families and relief from urban pressures. Owning, living in or operating a business from a restored building immediately attaches a set of descriptive labels to the individual, all positive and most attributed to the structure. It creates the expectation of a certain level of service and performance that is not available from franchise architecture.

Longtime residents may not fully appreciate the unique situation and opportunity in Washington County. The familiarity with longstanding landmarks leads to a degree of comfort that those resources will remain as they always have been. Time and again this complacency has lead to the loss of many valuable resources because retention efforts are too little too late.

Part of the education process occasionally includes the need to correct persistent misunderstandings, myths or faulty assumptions about historic preservation. Objections may be linked to the larger fear of the loss of private property rights. A district designation does not carry an automatic prohibition on a standard set of activities. It should be understood that design guidelines offer a level of protection for owners against the insensitivity of other property owners in the district. Property owners can and should have a large say in the authority of Historic Commissions by participating early and often in the formation of these types of districts and guidelines. They are always developed and implemented with substantial public input. Participation insures fairness, support and appropriate controls for the district.

Just as historic districts and commissions are, most other land use regulation is some type of limitation on individuals for the benefit of the larger community. Contrary to popular rhetoric additional or higher standards that might be found in a historic district do not scare investors and

other buyers away or discourage development or redevelopment or negatively affect property values. The opposite has been found to be true. Studies indicate that owners in the historic districts evaluated, like the design guidelines because it gives them comfort that adjacent properties will have to meet a similar standard. The stability encourages investment.

Possibly the most frequently presented objection is cost. It costs more to preserve or restore than to build new or to use new designs and materials. In the past when skilled workers, materials and knowledge were limited, the higher cost argument was more likely to be true. Those resources are now readily available including an endless supply of guidance materials for professionals and do-it-yourselfers. The free market system has created an entire and thriving industry based on consumer demand for restoration products and services. There are also a multitude of special programs such as tax credits, abatements, assessment freezes, grants and loans that can lessen preservation costs significantly.

It is difficult to overcome the long standing and often dubious assumptions that new construction will always be less expensive and better than rehabilitation. Some high rehabilitation costs come from practitioners who are inexperienced at estimating or performing that variety of work. Excessive cost estimates may also have been based on only superficial or inexperienced analysis. Each restoration must be evaluated on its own merits by experienced professionals and considering the specific conditions. The value of the end result, new construction versus restored must also be weighed.

Meeting current building code requirements is another often cited objection to restoration by property owners and government building code officials. It is related to the cost issue but also draws in safety to encourage or allow historically inappropriate construction and modification. It is difficult to argue against standards that are designed with occupant safety and structural

integrity at their core. Those concerns may limit the owner or officials willingness to consider anything except the code. However, creativity and flexibility have more than once allowed a historically correct and accurate restoration to proceed while still meeting code requirements. During the 2000 legislative session, Maryland adopted a rehabilitation building code to address this issue. It is designed specifically to encourage the retention of the older building stock by not applying some new construction standards to existing structures. It should allow certain modifications in historic buildings to retain historic integrity without compromising safety and function.

Finally, the claim that maintenance costs are so much higher on historic structures is often offered as a deterrent to retaining them in favor of a new, maintenance free structure. While true that many building materials used today require little attention once applied, buildings, historic or modern, need to be monitored on a regular basis. Maintenance is a necessity and guaranteed requirement for any property owner.

American Planning Association Guidance

The matter of historic preservation is still emerging in Washington County. It can often be valuable to study the activities of other communities to gauge the community's relative position and to see how the available options work in achieving a specific goal. The American Planning Association has studied communities across the United States at all stages of implementing historic resource protection programs. It offers 14 Policy Guide Principles that it recommends be incorporated into an organizations plans for preserving historic and cultural resources. They are condensed and summarized below.

- Preservation and planning practice should be fully integrated.
- Planners should take greater responsibility to increase awareness at the earliest stages of the

planning process and encourage the recognition of the contributions of historic resources to the quality of life, community and economic vitality.

- Support funding programs that include ongoing survey and evaluation, clear and reasonable protections based on expert analysis, incentives, long range planning, education, adequate and reliable funding, interdisciplinary participation, implementation to insure long term results, adequate time for analysis and decision making and adaptive reuse policies.
- Equal application of analysis, incentives and regulation without regard for ownership, economic or cultural status.
- Comprehensive in all aspects including involving all elements of the community, interpreting history in the most inclusive sense and protecting resources within their context.
- Strategies should respect the dynamic nature of neighborhoods and communities.
- Coordinate all levels of government and include and encourage the private sector.

Having a clear, comprehensive and well-promoted program will allow all citizens to know what to expect in the land use process. Predictability contributes to acceptance and success. The preservation of historic and cultural resources is a public purpose of State government clearly stated in Article 66B and of the Federal government by virtue of the National Historic Preservation Act of 1966. Significant sources of funding and technical assistance as well as regulatory requirements are available or required that have clear implications for Washington County. The economic benefits are varied, far reaching and clearly positive. Not only is there a growing industry aimed at preservation from technical information, materials, services and training but the act of preservation has positive effects on property values, community pride, housing availability and growth management. These create a more desirable community for the retention of business and are attractive for new business and heritage tourism.

Finally, there is the most subjective and intangible yet possibly most important aspect of retention of the history itself, whether it is for the purpose of reminding us of our past or to use in educating future generations or the personal comfort from some knowledge of personal history.

C. RECOMMENDATIONS

Recommendations to promote the preservation of historic and cultural resources are grouped into four broad categories: Education, Survey and Identification, Regulation and Incentives.

There are many issues that affect historic sites and structures that are not directly related to land use controls. They are included because their end results are designed to contribute to the retention, improvement and reuse of sites and structures that are subsequently governed by land use regulation and policy. EDUCATION recommendations provide accurate information about available resources and sites as well as the truth about the benefits of restoration and appropriate treatment. SURVEY AND IDENTIFICATION is specifically focused at identifying resources. A comprehensive and cohesive preservation plan cannot be effective without the base of site knowledge provided by a complete survey. REGULATION is a necessary component of a larger program to implement the community's goals consistently and fairly. Finally, INCENTIVES are an important part of a successful preservation strategy and are needed balance the cost/benefit/profit ratios. Recommendations can easily have multiple category applications and benefits.

Educate and Organize

1. Washington County Government should assume a leadership role in the preservation partnership by adopting a highly visible, proactive and assistive position towards the preservation of historic resources.

2. Assess the County government system to identify and modify, where possible and appropriate, regulation and policy that guide government's activity to incorporate the new role of leadership in preservation.
3. As an alternative to new construction Washington County should consider seeking out historic resources for rehabilitation and reuse for government purposes and encourage other public entities to do the same.
4. Promote and pursue the concept of a centralized and comprehensive preservation resources library or network.
5. Initiate and/or reactivate umbrella organizations for preservation related organizations to promote information exchange, education and coordinated activities.
6. Work cooperatively with the Washington County Board of Education, Hagerstown Community College and other interested public and private education organizations to add or expand curriculum on historic and cultural resource issues such as preservation, local history and hands-on technical training in related trades and archeology.
7. Encourage adoption of sites and structures "in need" by corporate entities, professional and community service organizations and even schools with the intent to stabilize, rehabilitate and reuse for purposes related to their goals.
8. Develop and sponsor technical preservation, rehabilitation and historic structure maintenance training including actual sites as field laboratories. Give priority to Washington County's French Lane property as a long term training laboratory.
9. Develop or promote a heritage tourism business incubator and umbrella organization of current site owners to offer training and technical guidance in the unique aspects of historic resource development, ownership and operation.
10. If an opportunity arises, consider development of a County park with historical aspects or theme or incorporate historic resources into an existing park where available and appropriate.
11. Evaluate the costs and benefits of training current or future County staff in historic resource analysis to provide in house preservation expertise during the development and execution of County projects.

Survey

1. Complete the Washington County Historic Sites Inventory
2. Prioritize historic sites in preparation for implementation of land use guidelines.

3. As an alternative to large scale survey completion, include requirement in land use and development guidelines that the owner/developer be required to perform the necessary research to determine age and significance of structures impacted by development proposals.
4. Improve access and availability of historic site survey information.

Regulation

1. Evaluate existing land use regulations and procedures to determine appropriate measures to implement Comprehensive Plan goals. In general, land use regulation and procedure should be proactive, promote retention, rehabilitation and reuse of identified historic sites, remove obstacles that discourage retention and rehabilitation and identify and delete bias toward removal or demolition by neglect, including use separation. A level of significance based on previously completed prioritization should determine level of effort required of applicant and County to preserve structures and sites. Where applicant desires to retain, rehabilitate and reuse historic resources voluntarily, all incentives should be available even at the lowest level of historical significance.
2. Use the authority enabled by Article 66B to further define and address the specific concerns regarding demolition by neglect.
3. In the existing Historic Preservation zone:
 - a) Amend existing Historic Preservation overlay zones to comply with current requirements of enabling Article 66B.
 - b) Create and adopt design guidelines tailored to the specific character of Washington County's historic resources.
 - c) Amend Historic District Commission review and approval authority to be triggered by changes to the exterior appearance as opposed to only those that require building permits.
4. Consider transferable development rights as a means to preserve historic resources.
5. Evaluate the recently adopted Maryland Building Rehabilitation Code and consider adoption of a local version to encourage rehabilitation of existing historic structures.
6. Strengthen the current policy of referring demolitions to the Historic District Commission.
7. For regulatory and funding purposes, comprehensively define historic resources to include all types of buildings, structures, stone fences, man-made or natural landscape features and settings and archaeological features with the primary goal of protecting historic significance regardless of the physical nature of the resource.

Incentives

1. Investigate and adopt where determined to promote the goals of the Comprehensive Plan, a full range of financial incentives to assist property owners in the retention or acquisition and rehabilitation and reuse of historic resources.
2. Develop methods to identify and mitigate impending demolition by neglect.
3. Recognize successful rehabilitation projects through awards, publicity and other financial incentives.
4. Increase resources such as funding, training, outreach materials, staff and commitment to implement Comprehensive Plan recommendations.
5. In cooperation with State government, further investigate the effectiveness of a property tax assessment freeze following significant improvements to historic resources as an incentive.
6. Offer incentives to developers to incorporate existing historic structures into new development.
7. Determine if a local version of a curatorship program modeled after the existing Maryland program could produce significant increases in the retention of historic resources.
8. Determine if there is a significant need and market for salvaged materials from demolished historic structures and develop a program for collection and distribution of salvage material. Consider the French Lane Property as a potential location.
9. Adjust Economic Development recruiting efforts to include expert assistance to prospects in determining appropriate reuse alternatives for existing historic resources on potential development sites.
10. Create incentives and education for the development community to reduce the number of premature demolitions that result from the fear of State and federal funding regulations associated with historic preservation mitigation.
11. Create and implement a fully integrated preservation demonstration program to include acquisition of endangered sites, rehabilitation, training, linkage to public and trade education programs, and resale along with the requisite publicity to insure awareness of success.

CHAPTER 11

HOUSING

A. INTRODUCTION

Quality housing for all Washington County residents has always been an important issue. Families tend to move upward in the housing market over time as incomes rise, family size increases, or newer and more modern homes enter the market place. This mobility tends to leave behind affordable and habitable units for the next generation entering the housing markets. The effect is to provide families with the ability to occupy housing units that meet their income and lifestyle choices. This process also gives people who want to leave the rental market the opportunity to now become purchasers. Providing opportunities to rehabilitate and reuse existing housing stock is a critical component in meeting future housing demand.

Washington County has always maintained a large home ownership ratio to rental units. Historically, most of the rental units in the County have been located in the municipalities with most of the owner occupied structures being located outside of any corporate limits. In many cases owner occupied structures have transitioned to rental units. For example, the City of Hagerstown has a large stock of moderately priced town homes many of which have transitioned to rental units while others remain owner occupied providing a large quantity of affordably priced units in the County. New development throughout the County has attempted to address housing market needs through the creation of both single and multi-family units. In particular, housing for senior citizens has seen considerable expansion in an effort to meet the demands of an aging population.

B. ANALYSIS

1. General Characteristics

The 1990 Census indicated that Washington County had 47,448 dwelling units. Estimates indicate that number has risen to approximately 52,972 units by the year 2000 and will rise to 62,800 by 2020 or an increase of approximately 19% over a 20 year period or 32% in a 30 year period. During this same time period it is estimated that persons per unit will drop from 2.53 in 1990 to 2.34 in 2020. The trend toward smaller household size is attributed to fewer children per family, more single parent families, the rise in the elderly population and more non-traditional households.

At the same time the group quarters population is expected to rise by approximately 1/3 from 8,000 to 11,000. A large portion of that population is associated with the prison system as well as with a growing number of elderly and nursing home facilities that have been built in the County.

Home ownership rates in Washington County are approximately 66% for owner-occupied properties and 34% for renters. These ratios tend to be consistent with the State as a whole but are in marked contrast to the City of Hagerstown where they are nearly reversed.

As economic development expansion continues along the I-81 and I-70 corridors the need for housing for all income ranges will continue to be in demand. In 1990, Washington County commissioned the completion of a housing needs assessment. The study identified that location of existing and projected employment centers, competitive housing prices in neighboring jurisdictions, and regional growth as the main factors impacting demand for future housing. In addition, to these factors strong growth management initiatives at the State level will also play a key roll in determining future housing options and development patterns.

2. Housing Development Patterns

Housing in the urban areas of the County tend to be expansion of existing neighborhoods or development of new subdivision neighborhoods. Major older neighborhoods in the Urban Growth Area are primarily associated with major roads such as US 40 or US 11 and include Halfway, Maugansville, and Huyetts. Over the years major residential subdivision development has also occurred along the major transportation corridors radiating from Hagerstown giving rise to communities such as: St. James, Van Lear/ Tammany Manor, Fountain Head, Cedar Lawn, Jefferson Heights, and Robinwood. Except for the Robinwood area, these neighborhoods generally are made up of owner occupied units typical of Washington County.

In the rural areas of the County development has primarily taken two forms. The first is the rural village form (See Map 7) where a cluster of residential units evolved around a node along a transportation corridor. In some cases small residential subdivision development has occurred but this type of growth has been limited in the rural areas because of the lack of public water and sewer facilities. The second form is strip residential development along existing roads. This type of development is often characterized as sprawl as houses are scattered throughout the countryside. Again except for scattered instances these units are primarily made up of owner occupant units.

3. Public Housing Programs

The Washington County Housing Authority administers the Section 8 rental assistance program in areas of Washington County outside the corporate limits of the City of Hagerstown. Approximately 350 lower income families benefit from this program. In addition to the rental housing assistance program, the Housing Authority owns 24 single-family homes scattered throughout Washington County. These homes are made available for rent to lower income

families who require three and four bedroom units.

The Housing Authority also owns and operates several senior rental housing facilities throughout Washington County that provide rental housing opportunities for lower income seniors. Schoolhouse Manor in Boonsboro, provides 32 units, Parkview Knolls in Williamsport has 28 one bedroom units with construction of 36 additional units proposed for 2002. Blue Mountain Estates in Smithsburg, provides 28 units as well. Monterey House in Hancock provides 25 units for apartment style living.

The Hagerstown Housing Authority manages and operates low income housing for families and seniors at several locations within the Hagerstown City limits. Senior housing facilities include 476 units at three locations. In addition, there are 1,180 units of public housing in 9 locations in the City. These units comprise one, two, three, and four bedroom apartments. The Hagerstown Housing Authority also operates the Section 8 rental assistance program in the City administering 660 certificates and vouchers.

4. Housing Rehabilitation

More than 500 homes have been rehabilitated from substandard to standard condition since the initiation of the housing rehabilitation programs in 1974. Special financing terms and funds from both federal, state and local sources have been the catalyst to help alleviate many of the substandard conditions that plague the older housing stock. These programs have proved to be a valuable tool to encourage home improvement and neighborhood stabilization in the older areas of the County.

The County provides assistance to make home repairs and stabilize the housing stock in neighborhoods through four different loan programs. These are: Housing Preservation Grant Program, Maryland Housing Rehabilitation Program, Revolving Loan Fund, and Emergency

Grant Repair Program. Rehabilitation assistance under these programs expands the community's tax base, extends the economic value of the housing stock and stimulates additional construction activities.

a) Housing Preservation Grant Program

This program of the Rural Development Administration provides assistance to low and very low-income homeowners in the County. Funds are primarily targeted to the elderly who have a fixed income and no affordability to support conventional loan terms. Loans are available to help with property repairs that are primarily health and safety related.

b) Maryland Housing Rehabilitation Program

The Maryland Department of Housing and Community development offers this program for the rehabilitation of homes and rental properties that serve income eligible occupants. Projects that address health, safety, structural and code violations are given top priority.

c) Revolving Loan Fund

Utilizing the repayments from previous loans, the County continues to assist eligible households with rehabilitation efforts. This program is more flexible in the use of its funds and can be used for residential, business and public renovations.

d) Emergency Grant Repair Program

The County operates an emergency repair program for qualified homeowners. An 'emergency repair' is a life threatening situation which prohibits someone from living in a safe or sanitary condition.

5. Affordable Housing

'Affordable Housing' has been defined as housing which could be rented or purchased by low and moderate-income families. Low income is usually defined as below 50% of the median

income. Moderate income is normally considered between 50% to 80% of median income. The median family income for Washington County was estimated at \$42,400 in 1999.

Historically, market demand for affordable housing has been largely met by the private sector through the availability of lots in older subdivisions and existing housing in the municipalities. New subdivisions focusing on single-family detached housing units tend to target families within a very narrow middle to upper income range. Multiple family housing unit developments particularly in the Robinwood area of the County have addressed some of the need for affordable housing in the County.

Most affordable housing solutions not involving heavy public subsidy are geared toward reducing land and development costs. Density bonuses for commitments to develop a certain percentage of new units as affordable housing, allowing accessory apartments on single-family lots or apartment clusters are methods which can be used to address affordable housing demand. However, any of these solutions must be closely tied to market demand.

C. RECOMMENDATIONS

1. Complete a detailed housing assessment study for the County that would look at whether or not the type and cost of new housing units being built is meeting the needs of various age groups, family sizes, and incomes of County residents. In particular, consideration should be given to evaluating affordable housing availability and making recommendations as to policy considerations to address any shortfall.
2. Continue to work with the Town of Clear Spring on development of a senior citizen housing project as well as with other towns and areas that have expressed an interest in senior citizen housing to meet the needs of an aging population.
3. Locate subsidized or affordable housing projects in a manner that does not concentrate these

types of projects in a particular neighborhood or school district. Within zoning parameters, encourage a mix of family income ranges and a variety of housing types within new communities.

4. Continue to develop programs that encourage the rehabilitation or upgrading of substandard housing through the use of private or public resources.

CHAPTER 12

LAND USE PLAN

A. INTRODUCTION

The Land Use Plan is the core element of the Comprehensive Plan. It is the portion of the document where the policies, strategies and recommendations articulated in the other chapters are interwoven to form a detailed plan of how the community should develop in the future. The Land Use Plan is also the instrument through which growth management policies are primarily implemented and establishes the framework for defining various zoning classifications as well as their location.

This Comprehensive Plan's Land Use Plan is markedly different from the Land Use Plan used in the previous Comprehensive Plan. The previous Comprehensive Plan's Land Use Plan basically established growth (urban) and non-growth (rural) areas and articulated policies accordingly. This Land Use Plan, while still identifying growth and non-growth areas, recommends specific land use policy for specific areas. In addition, it identifies through the use of overlays, specific areas of the County that may need additional development coordination or regulation because of environmental, cultural or economic development sensitivity. (See Map 51 & Map 52.)

Thirteen (13) different land use policy classifications are blended together with three (3) policy overlay classifications and six (6) special program areas to create the Land Use Plan. Future land use decision locations should be based on how well a land use fits into a policy area. Rezoning applications, comprehensive rezoning proposals, Water and Sewerage Plan revisions as well as other land use planning actions should take these policies into consideration. Many of the land use policy area classifications presented in the Land Use Plan parallel zoning ordinance

classifications. However, the policy areas are not zoning districts as used in the Zoning Ordinance. The policy areas should be used as a guide to help formulate an overall structure to the community.

The Land Use Plan re-establishes the “Urban Growth Area” boundary around the City of Hagerstown and the Towns of Williamsport and Funkstown. “Town Growth Area” boundaries are also re-established around Boonsboro, Hancock and Smithsburg. A new Town Growth Area has been designed for the Town of Clear Spring and mirrors the area established by the comprehensive rezoning of the highway interchange area.

The areas not inside a growth boundary constitute the non-growth or “rural” areas. Development policy associated with the rural areas is primarily focused on maintaining the rural-agricultural and historical heritage of the area. In addition, consideration has been given to the need to balance environmental sensitivity with the agricultural, mineral removal and tourism industries as well as residential development.

While the previous Comprehensive Plan incorporated the growth area boundary concept no effort was made to identify specific land use development areas within the urban and rural areas. Land use relationships were left to articulation through the Zoning Ordinance. Many of the zoning classifications were developed prior to designation of growth areas. This has generated problems in coordinating land use policy. In particular, comprehensive rezonings and individual map amendments have had to be evaluated without the benefit of coordination with a specific land use plan. This void is addressed through the creation and designation of specific policy areas in this Comprehensive Plan.

B. ANALYSIS

The Land Use Plan illustrates how development consistent with the goals and objectives

for the County can be achieved. To be effective, a land use plan should be based on the assumption that there will be growth and therefore planning for it should be on an integrated, comprehensive manner.

In addition, the Land Use Plan must fit the community's needs by preserving its unique character, protecting the environment and enhancing economic opportunities. Recognition of the key role that public facilities play in determining the pattern of development is a significant factor in the development of the plan. Projections of population and housing growth, as well as allocation of space for economic development, are all factors that played a significant role in development of the Land Use Plan.

Housing unit projections were based on the analysis done previously for the fiscal impact study by Tischler & Associates and the study for designation of Priority Funding Areas. Land consumption calculations use methodology employed in the Priority Funding Area study, as well as procedures and assumptions developed to account for new land use scenarios. Taken together, they were used to analyze the impact of potential residential growth.

Four primary housing unit projection scenarios were analyzed for potential impact on available land area: current trends, State planning projection, County composite (between current trends and State Planning), and "Wave" which depicts substantial development above current trends. In addition, a fifth scenario, "Super Wave", was reviewed to insure that adequate area for residential development existed if massive amounts of new residents poured over South Mountain. The County Composite scenario along with the Wave scenario are the two cases that are basically used to analyze residential growth impact. The Composite scenario is the primary scenario used for planning purposes. The Composite scenario anticipates 9,925 residential units being added to the housing stock in the County over the next 20 years while the Wave scenario

anticipates 14,888 housing units. Portions of these units have been allocated to the urban and rural areas, including the municipalities, based on historic development trends. With the institution of the policy areas it is anticipated that the 80/20 urban versus rural development ratio should gradual move toward a target ratio of 90/10 toward the end of the twenty-year horizon period as existing lots in the rural area are used up and fewer new lots are plated in the rural area. The Land Use Plan is designed to have enough capacity available to address the needs of both the County composite projection and Wave scenarios without major revisions to the policy areas.

Housing Unit Projection					
Additional New Housing Units 2000 to 2020	State Projection	Composite Projection	Trend Projection	Wave Projection	Super Wave Projection
	7,794	9,925	12,000	14,888	18,000

(See Graph 9.)

The County contains approximately 298,851 acres. The breakdown of acreage for each policy area and the municipalities from largest to smallest is as follows:

Environmental Conservation	90,930	30.43%
Agriculture	84,596	28.31%
Preservation	67,635	22.63%
Low Density	16,877	5.65%
Municipal	11,864	3.97%
Rural Village	8,219	2.75%
Industrial Flex	8,015	2.68%
Industrial	2,796	.94%
Commercial	2,582	.86%
Community Facility	1,681	.56%
High Density	1,411	.47%
Urban Open Space	1,027	.34%
Special Economic Development	611	.20%
Mixed Use	609	.20%

TOTAL	298,851	100.00%
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(See Graph 10.)

Within these policy areas, a large portion of the land area has been improved through development has designations (park area, preservation easements, etc.) associated with it that preclude future development, or contain vacant building lots and undeveloped acreage. The vacant building lots and undeveloped acreage constitute land available for development, while the improved, or land with development restrictions associated with it, is considered unavailable for development. The following table shows the amount of available land for each policy area.

	Improved or Development Restrictions	Available for Development	Total Acreage Policy Area
Environ. Conservation	31,514	59,416	90,930
Agriculture	10,708	73,888	84,596
Preservation	41,095	26,540	67,635
Low Density	8,026	8,851	16,877
Municipal	9,848	2,016	11,864
Rural Village	7,329	890	8,219
Industrial Flex	2,789	5,226	8,015
Industrial	1,400	1,396	2,796
Commercial	1,222	1,360	2,582
Community Facility	1,666	15	1,681
High Density	581	830	1,411
Special Economic Dev.	611	0	611
Mixed Use	213	396	609
Urban Open Space	641	386	1027
Total	117,643	181,208	298,851

These numbers indicate that approximately 1/3 of the County has either building improvements or designations, activities, or building restrictions that preclude future development. Leaving approximately 2/3 of the County as theoretically available for growth and development. However, that value is considerably skewed because of the 159,844 acres or 88.2% of the total available land being associated with the rural area where only limited growth is encouraged.

Based on historical trends, location of platted subdivision lots, and projected land use

development patterns; the anticipated location of new residential units relative to different policy areas is as follows: Low Density 44%, Municipal 21%, Mixed Use 13%, Agriculture 11%, High Density 8%, Environmental Conservation 2%, Rural Village 1%, and Preservation less than 1%. (See Graph 11.)

The following chart illustrates the projected number of new units for each land use policy area based on the Composite (9,925 units) and Wave (14,888 units) scenarios. (See Graph 12.)

	Low Density	Municipal	Mixed Use	Agriculture	High Density	Environ. Conser.	Rural Village	Preservation
Composite	4,297	2,060	1,319	1,115	785	180	132	37
Wave	6,446	3,090	1,979	1,671	1,178	270	198	56

If the projected number of residential units are converted to acreage based on current development patterns and densities it produces the following results.

	Total Available Land	<u>Composite</u> Land Consumed	<u>Composite</u> Land Remaining	<u>Wave</u> Land Consumed	<u>Wave</u> Land Remaining
Environ. Cons.	59,416	540	58,876	810	58,606
Agriculture	73,888	1,672	72,216	2,510	71,378
Preservation	26,540	111	26,429	168	26,372
Low Density	8,851	3,932	4,919	6,165	2,686
High Density	830	188	642	246	584
Rural Village	890	125	765	282	608
Mixed Use	396	249	147	264	132
TOTAL	170,811	6,817	163,994	10,445	160,366

(Note: In the rural area where a house may be built on a large parcel of land but only a small amount of land is actually consumed by development, a value of 3 acres per housing unit was used for Preservation and Environmental Conservation Areas along with 1.5 acres per housing unit for Agricultural Areas in the analysis.)

Incorporation of these values with those associated with parcels of property with improvements or that have land use activities related to them that restrict development, provides an illustration of the impact of new residential development on policy areas over the next twenty years. The following table illustrates this impact.

Policy Area	Total Area In Acres	Improved or Restricted	Composite	Remaining Area	Wave Additional Area	Remaining Area with Wave
Envir. Con.	90,930	31,514	540	58,876	270	58,606
Agriculture	84,596	10,708	1672	72,216	838	71,378
Preservation	67,635	41,095	111	26,429	57	26,372
Low Density	16,877	8,026	3,932	4,919	2,233	2,686
Rural Village	8,219	7,329	125	765	157	608
High Density	1,411	581	188	642	58	584
Mixed Use	609	213	249	147	15	132
Total	270,277	99,466	6,817	163,994	3,628	160,366

(See Graph 13.)

From the completed analysis it can be seen that based on current and anticipated development patterns that the bulk of the area converted to development will be in the designated growth areas. Under the Composite scenario that ratio of area developed inside versus outside the growth areas is 64% to 36%.

The “Super Wave” scenario adds an additional 3,110 units to the projections. When distributed over the various policy areas, the additional development can be adequately accommodated. However, available land for future development in the low density policy area is reduced to approximately 14%.

The analysis indicates that if massive residential development would materialize in the next twenty years the land use plan adequately provides for future development needs. This is accomplished by directing growth to designated growth areas and limiting the creation of new lots in the rural area.

A detailed evaluation of land for non-residential growth was not conducted because of the difficulty of correlating new job creation with acreage requirements. A warehouse distribution center with 100 jobs may take up twice the acreage an office building with 1,000 jobs may consume. In addition, technological changes have significantly altered the

environment of the work place and all indications are that these changes will continue with new technological advances.

The Land Use Plan designates four policy areas primarily associated with economic development: Industrial Flex, Industrial, Commercial, and Special Economic Development. Together these policy areas encompass approximately 4.8% of the total area and breakdown as follows: Industrial Flex 2.7%, Industrial 1%, Commercial .9% and Special Economic Development .2%. By any benchmark these percentages would not be considered an unreasonable allocation of space in a land use plan for economic development. In addition, when existing developed land is considered, the amount of land available for future development drops to: Industrial Flex 1.6% Industrial .5% and Commercial .46 %. The Special Economic Development Area is associated with development of the Lakeside Corporate Center or reuse of the majority of the existing built environment at Fort Ritchie so it is considered built out for purposes of this analysis. These percentages though small would appear to adequately meet the needs for the 20 year horizon period of the Land Use Plan particularly when redevelopment and reuse of existing sites is considered as well as potential space within the municipalities. The limited amount of commercial space should be mitigated by the large amount of commercial development that took place in the County in the late 1990s.

C. RECOMMENDATIONS

The Land Use Plan should be viewed as a dynamic, not static document. However, updates and modifications to policy areas should only be considered after completion of detailed studies or analysis.

1. Urban/Town Growth Areas and Boundaries

The purpose for establishing growth areas is to identify areas within the County where

development is to be encouraged. These areas surround urban locations where the required infrastructure to support intensive development is in existence or planned. They contain the centers of gravity for human activity with future investments in public utilities, facilities and transportation linkages being the most cost effective in these areas. The proposed Urban and Town Growth areas total approximately 45,452 acres or approximately 6% less than the previous Comprehensive Plan. (See Map 53.)

a) Urban Growth Area

The “Urban Growth Area” concept as set forth in the 1980 Comprehensive Plan is continued in this plan. The boundary of the Urban Growth Area that encompasses the City of Hagerstown and the Towns of Funkstown and Williamsport, was defined in 1982 and adopted in 1983. It is located in the center of the County and contains the bulk of development. The Urban Growth Area contains approximately 37,666 acres, including the municipalities, and is approximately a 1% decrease from the Urban Growth Area in the previous Comprehensive Plan.

Considerable experience has been accumulated regarding the application of the Urban Growth Area boundary since its adoption as a land-planning tool. During this time it has been demonstrated that the establishment of the boundary was indeed a useful endeavor. The trends of development activity have become clear with 75 to 80% of the development occurring throughout the County being located in the designated Urban and Town Growth Areas.

The boundary between the Urban Growth Area and the Rural Area reflects a variety of factors given consideration in the process of redefinition of the boundary. Those factors included: existing growth area boundary, availability of public water and sewer, efficiency of expansion of water and sewer facilities, existing land use, zoning, environmental constraints, permanent easements, development trends, and a parcel’s potential

for development.

The existing Urban Growth Area boundary was used as the starting point for the revision process. State policies regarding growth boundaries have been evolving since the original definition. They encourage smaller areas and greater protection of rural lands. The boundary was examined for areas where it could be reduced in size through the redesignation of parcels that were found not to be under strong influence to develop in an urbanized manner. Also, property that is anticipated to develop in an urban character was added in. The effort was not to reconfigure the entire Urban Growth Area but to refine the boundary based on updated information.

Though a significant portion of the new boundary follows property lines, a great deal does not. Environmental factors such as floodplains were used where possible to place the boundary at a natural break between developed land and required buffering of the flood zone. Areas currently zoned for intensive development were used where possible to form the edge of the growth area. The line was drawn to purposely exclude land zoned for mineral extraction and land in agricultural preservation easements. In some areas the boundary was adjusted to follow an existing physical feature such as a road or railroad. A comparison of the original Urban Growth Area boundary and the new boundary shows there are few areas where the line is unchanged.

Like the original boundary, the new line should not be considered as a 100% fixed line. Though demarcation considerations were built into the formation of the boundary to provide clarity in determining if a parcel should be associated or not associated with the growth area, the boundary is not designed to be configured based on property lines. Instead a sphere of influence should be considered in association with the boundary. Adjacent parcels either depicted as

within or outside the growth area should be examined on a case-by-case basis to determine their appropriate development potential. The Urban Growth Area is subdivided into urban policy areas for land development coordination.

b) Town Growth Areas

“Town Growth Areas” have been established to provide miniature Urban Growth Areas corresponding to the smaller sphere of influence that the town’s project. The first town growth areas were defined in 1986 for Boonsboro and Smithsburg, and in 1990 for Hancock. The Land Use Plan associates approximately 7,786 acres with the town growth areas a decrease of 24% from the previous Comprehensive Plan. Specifically, the Hancock Growth Area decreases by 44% to 2,855 acres, Boonsboro by 10% to 2,371 acres and Smithsburg by 14% to 2,115 acres. (See Map 54.) Town growth areas were originally developed with general and specific goals and objectives that are essentially carried over into this plan update. This Land Use Plan also establishes a town growth area boundary for the Town of Clear Spring around the zoning classifications that support higher density development and have potential access to public water and sewer facilities. These zoning classifications are consistent with zoning classifications associated with other town growth areas.

The Town Growth Areas have a different character from the Urban Growth Area. Each of the small towns has a defined growth area with a unique set of characteristics and neighborhoods. The original town growth studies defined the growth line to encompass the area immediately adjacent to the incorporated town boundary and that portion of the County rural area that would come under the influence of development pressure. Like the Urban Growth Area boundary, the Town Growth Area boundaries were developed after consideration of many factors linked to growth and development. Town Growth Areas were reduced where possible

using similar criteria as the Urban Growth Area. Development trends were used in evaluating the original line and refining it to provide a logical location in light of conditions, as they exist today.

The Town Growth Areas function like satellite growth centers in that they provide most of the services and choices residents want, with the Urban Growth Area being the dominate center for employment, retail, entertainment, government and transportation activities. Consequently, the Town Growth Areas contain the same land use policy area as the Urban Growth Area with the main distinction being that the Town Growth Areas do not contain the more intensive land use policy areas.

2. Urban Policy Areas

The Urban and Town Growth Areas are divided into eight (8) specific policy areas. They are: Industrial, Industrial/Flex, Commercial, Mixed Use Developments, High Density Residential, Low Density Residential, Community Facilities and Urban Open Space. These policy areas reflect existing and recommended future land development patterns.

a) Industrial

This classification includes most of the areas zoned Industrial General as well as some of the area zoned Planned Industrial. Most of the major industrial parks in the County are located in the industrial area as well as Mack Truck and a large area along Western Maryland Parkway. It is intended for the most intensive industrial uses in the County. Existing uses located in these policy areas are manufacturing, recycling, food and material processing, warehouse distribution facilities and transportation industries.

b) Industrial/Flex

This classification reflects a hybrid policy area comprised of different types of economic

development associated land uses. It is an outgrowth of the change taking place in the workplace as more and more jobs move from manufacturing, to the hi-tech and service sectors of the economy. Most of the land zoned Industrial Restricted, Planned Industrial, and Airport, as well as a large portion of the Highway Interchange One zoned area not developed or anticipated to be developed as commercial are located in this policy area. Existing and anticipated land uses associated with this policy area include, light industrial parks, office parks, research and development facilities, hi-tech communication and technology facilities, trucking and distribution facilities, and minor commercial uses that support job centers. These policy areas are located around the interchanges on I-81 and I-70 in the Urban Growth area and include a variety of employment centers such as: Citicorp, First Data and Tru-Serv; as well as a large area around the Airport, a major portion of the Hopewell Valley Economic Development Area and the Friendship Business Park. Because of the variety of potential land uses in this policy area, compatibility issues are a concern. Development of a specific zoning classification for office and business parks is recommended. Portions of the area around the Airport and the Friendship Technology Park are prime candidates for this new zoning classification.

c) Commercial

This classification encompasses all types of commercial uses. The areas zoned Business Local, Business General and the Highway Interchange One areas primarily devoted to commercial land uses make up this policy area. Existing and anticipated land uses include retail shopping from malls down to neighborhood shopping centers, as well as restaurants, specialty stores and offices. Major policy areas are located around Valley Mall, Prime Outlets and the I-70 & MD 65 Interchange, along the Dual Highway and I-70 & US 40 Interchange, Pennsylvania Avenue, Virginia Avenue, and the I-81 and Maugan's Avenue Interchange.

Several zoning changes are recommended for the commercial policy areas. It is recommended that Planned Business and Business Transitional classifications be eliminated. Both classifications have deficiencies in their application and their purposes can be better addressed through other business classification. It is also recommended that the Business Local classification be revised with the number of potential uses restricted. This new classification would support neighborhood commercial needs as well as acting in the capacity of a transitional zoning district. A new commercial district called Highway Commercial is also recommended. This new district would be located in the Highway Interchange areas that are devoted to commercial development. It would replace the Highway Interchange One classification in those areas.

d) Mixed Development

The Mixed Development policy area is associated with previously approved Planned Unit Developments or PUDs. These developments exhibit both single-family as well as multi-family housing characteristics, and in some cases incorporate commercial areas within the development plan. Typical densities range from four to eight units per acre. The policy areas include the following PUDs: St. James Village North along MD 65, South Pointe along East Oak Ridge Drive, Fountainview along Pennsylvania Avenue, and Woodbridge and Rosewood Developments in the Robinwood area.

The PUD zoning district is an overlay type district that is permitted in any residential and highway interchange districts within the Urban Growth Area. It is recommended that the PUD zoning provisions be amended to create two different types of PUDs with only one allowing commercial development. In both cases a minimum lot acreage requirement would be established before a PUD could be considered. That would ensure that adequate buffering and

screening from adjacent uses that may have compatibility issues could be accomplished. The second major revision would be to limit commercial development to only those PUDs that met specific thresholds for number of units to be developed in order to insure that the commercial area being proposed will be primarily limited to providing service to the residential development it is purporting to serve and not be used as a basis to create a regional commercial area. The commercial uses allowed in a PUD would also be limited to insure that the commercial uses were consistent with the size and scale of the housing development.

e) High Density Residential

The High Density Residential policy area is primarily associated multi-family type residential development. Principal zoning districts related to the policy area include the Residential - Multi-Family, Highway Interchange Two, and Residential Urban districts. The majority of the types of housing either existing or anticipated to be proposed for the policy areas are apartments, townhouses, and group homes, as well as duplexes and single-family homes on small lots. Typical housing developments would have densities in excess of 8 units per acre for multi-family developments and 6 units per acre for single-family developments.

Existing or proposed development associated with this classification is primarily located around the I-70 & MD 65 Interchange, Robinwood Drive area, Londontowne area, the I-81 & US 11 Interchange, Oak Ridge Drive, and the I-81 & Maugan's Avenue Interchange. Given the similarity between the Highway Interchange Two zoning district and the Residential Multi-family zoning district, it is recommended that consideration be given to eliminating the HI-2 district and replacing the zoning with either the Residential Multi-family or Residential Urban zoning classifications as appropriate.

f) Low Density Residential

This policy area designation would be primarily associated with single-family and to a lesser degree two-family or duplex development. It is the largest policy area proposed for the Urban Growth Area and becomes the main transitional classification from the urban to rural areas. Major existing residential development in Fountainhead, Halfway, St. James, Van Lear/Tammany, Maugansville, and along Mt.Aetna Road would be included in the Low Density policy area. The two zoning classifications most associated with this policy area are Rural Residential and Residential Suburban. A considerable amount of land in this policy area is also currently zoned Agricultural. Typical densities in this policy area range from two to four units per acre unless the property is approved for a planned residential or mixed use development. If the property is approved for a high density development the maximum density should be 12 units per acre.

The Land Use Plan proposes the elimination of the Agricultural Zoning classification within the Urban Growth Area by replacing it with the most appropriate zoning classification consistent with the designated policy area. It is also recommended that the at least one of the zoning designations associated with the Low Density policy area be limited to single-family housing units only. Currently no zoning classification has that distinction.

g) Community Facilities

The Community Facilities policy area is primarily associated with government facilities and public institutions. It includes schools, colleges, government facilities and medical centers. These types of facilities are typically allowed under a variety of zoning classifications and are scattered over the entire Urban Growth Area. Future development in the Community Facilities policy area would be limited to that type of development. No major zoning changes are recommended for this policy area.

h) Urban Open Space

This policy area is primarily associated with existing parks, golf courses, and cemeteries. It also may include areas that exhibit extreme environmental sensitivity. These uses are allowed under a variety of zoning classifications and are scattered over the Urban Growth Area. Development would be limited to similar type land uses in these policy areas. No major zoning changes are recommended for this policy area.

3. Rural Policy Area

The “Rural Area” of Washington County is characterized by farms, forests, historical sites, villages and scattered residential development. It is also the primary location for the mineral resource, agricultural and tourism industries in the County. The challenge for the portion of the Land Use Plan dealing with the Rural Area is to preserve the rural character through policies that will not promote significant development but will maintain a productive environment for the existing industries located there.

The Land Use Plan uses five basic policy areas, as well as four overlay policy areas to meet this challenge. In some cases the policy overlay areas may overlap with the Urban Growth Area. The five basic policy areas are: Preservation, Environmental Conservation, Agriculture, Rural Village, and Special Economic Development Area. The four overlay policy areas are: Special Planning Areas, Rural Villages, Antietam Battlefield and Airport.

With the previous adoption of growth areas and the continuation of that policy in this document, the growth management provision of limiting the expansion of public facilities in order to direct growth to areas where public facilities exist is well established. In particular, the principal of not encouraging growth in the rural area through the extension of public water and sewer facilities is a fundamental tenet in the development policy for the rural section of the

County. Without the necessary infrastructure in the rural areas to support increased development, residential development at densities that may require public facilities to address health and safety issues, should be limited. Avoidance of taxpayer provision of public facilities to address health and safety issues is a priority.

Limiting development intensity or density to minimize individual or cumulative impacts on environmental sensitive areas as well as historic and cultural resources is another priority. Restricting residential development to densities where compatibility issues with existing rural industries can be avoided, and is also considered a priority.

The Land Use Plan for the Rural Area of the County attempts to address these priorities through: the reduction of the number of potential building lots, more closely controlling the location and types of new businesses, providing an environment that will sustain existing industries, and giving priority to maintaining farmland, forests, historic resources and environmentally sensitive areas.

a) Preservation

This policy area will become the foundation upon which land preservation efforts in the Rural Area will be anchored. It is proposed to include the County's designated Rural Legacy Area, federal lands, state parks, state wildlife management areas, county parks, Edgemont Watershed, and most of the mountaintops as well as the Potomac River. Purchase of development easements to support preservation efforts in this area is encouraged. Limited development to support the goals and objectives of preserving the resources of this area is a priority.

It is anticipated that a new Preservation Zoning District coinciding with the Preservation Policy Area will be implemented through the Zoning Ordinance. This district would focus on

substantially limiting both residential and non-residential development. To further support the goals of this policy area, it is recommended that commercial communication facilities be required to use stealth technology when locating new facilities in this policy area. Residential development would be recommended at a density of one dwelling unit per 30 acres. An agricultural land conservation provision that would allow development at the same density but permit smaller lot areas for an individual lot on an active farm is recommended. Clustering of residential development would be permitted as a development option. Rural businesses would be limited by right but would be permitted through an overlay zoning process.

b) Environmental Conservation

This policy area is associated with locations in the County where environmental sensitivity issues are prominent enough to warrant constraints on development. It includes steep slopes and forested areas on mountainsides as well as the steep slopes, flood plains, and forested areas along the Potomac River, Conococheague Creek, lower Antietam Creek and Beaver Creek. All areas south of the Rural Legacy Area and west of Fairview Mountain, which are not in the Preservation category are included as well as the Beaver Creek Watershed north of the fish hatchery to the Edgemont Watershed.

Because of environmental sensitivity these areas warrant special consideration regarding development and construction. Lack of coordination can easily cause environmental degradation to occur. It is anticipated that an Environmental Conservation Zoning District coinciding with the Environmental Conservation Policy Area will be implemented through the Zoning Ordinance. Residential development would be recommended at a density of one dwelling unit per 20 acres. An agricultural land conservation provision that would allow development at the same density but require smaller lot areas for an individual lot on an active farm is

recommended. Clustering of residential development would be permitted as a development option. Rural businesses would be limited by right but would be permitted through an overlay zoning process.

c) Agriculture

This policy area is primarily associated with sections of the County in the Great Hagerstown Valley. It extends around most of the Urban Growth Area and south to Boonsboro to meet the Preservation Area, and east to the foot of South Mountain. Another area of the County is from the Conococheague Creek west to the foot of Fairview Mountain. The Agricultural policy area has been purposely drawn to enclose large blocks of the best soils for intensive agricultural production as well as gently rolling topography for farming. Most of the operating farms as well as the largest block of farmland preserved through the Agricultural Preservation Program is located in this area.

It is anticipated that an Agricultural Zoning District coinciding with the Agricultural Policy Area will be implemented through the Zoning Ordinance. Residential development would be recommended at a density of one dwelling unit per 5. An agricultural land conservation provision that would allow development at the same density but require smaller lot areas for an individual lot on an active farm is recommended. Clustering of residential development would be permitted as a development option. Rural businesses would be limited by right but would be permitted through an overlay zoning process.

d) Rural Villages

The formal designation of “Rural Villages” is an outgrowth of Maryland’s Smart Growth Act of 1997. By law, a designated Rural Village is considered a “Priority Funding Area” (PFA). Many such villages have existed in Washington County since colonial times while newer urban

settlements at junctions in roads or along creeks and railroads have evolved in the recent past. Rural Villages are defined by something other than incorporation or governing structure. They are definable on the landscape and contribute to the unique character of Washington County. They usually include a small core of a residential neighborhood associated with a retail establishment or an institution such as a post office, elementary school, church or fire station. Most are located in the rural areas some distance from other towns or facilities. A few are close enough to an urban center to be associated with the Urban Growth Area or a Town Growth Area. Many have vacant lots that are suitable for infill development. No new Rural Villages are being recommended at this time, however, it is recommended that the villages be reviewed for their historical potential so that “historical sub-areas” may be delineated within the boundary of the villages. The intent is to create historical sub-areas within the rural villages so that additional emphasis can be placed on design criteria so that the historical nature of the area may be preserved in terms of scale and compatibility. The following are the designated “Rural Villages” for Washington County:

Antietam	Downsville	Maugansville
Bagtown	Eakle’s Mill	Mercersville
Bakersville	Edgemont	Middleburg
Beaver Creek	Ernestville	Mt. Aetna
Big Pool	Fairplay	Mt. Briar
Big Spring	Fairview	Mt. Lena
Bostetter	Fiddlesburg/Security	Pecktonville
Breathedsville	Gapland	Pen Mar
Bridgeport	Garrett’s Mill	Pinesburg
Brownsville	Greensburg	Pondsville
Cascade	Highfield	Reid
Cavetown	Huyett	Ringgold
Cearfoss	Indian Springs	Rohrersville
Cedar Lawn	Jugtown	Sandy Hook
Charlton	Kemps	St. James (Lydia)
Chewsville	Lappans	Tilghmanton
Conococheague/Wilson	Leitersburg	Trego-Rohrersville Station
Dargan	Mapleville	Williamsport Station

Yarrowsburg

Major public investment by the County in public facilities and services to encourage substantial new development should not be made in Rural Villages. Priority should be given to correcting existing public health and safety problems that result from failing septic systems or contaminated wells.

It is anticipated that a Rural Village Zoning District classification coinciding with the designated Rural Villages located in the Rural Area will be implemented through the Zoning Ordinance. Residential development density for a Rural Village classification is anticipated to be in the one dwelling unit per acre range unless specific environmental problems have been identified or where existing public facilities can permit a higher density. Development should be limited to infill development in accordance with the defined boundaries for the Rural Village. Additional regulations addressing size, scale and architectural considerations are anticipated to insure new development compatibility with existing development. No new Rural Villages are being recommended at this time.

e) Special Economic Development Area

The closing of the Fort Ritchie Military Base was the basis for the creation of a “Special Planning Area” for the Fort Ritchie/Cascade Area. The primary purpose of this Special Planning Area was to establish policies to guide the development and reuse of the Fort Ritchie facility. A zoning classification designated as “Special Economic Development Area” was established and the 617 acres associated with the former military base zoned accordingly. Provisions of this mixed-use type zoning classification were developed to address the existing built environment as well as to accommodate the reuse plan that would transform the site from a military base into the Lakeside Corporate Center. It is recommended that the Special Economic Development zoning

classification remain in place. Revisions to the zoning classification to facilitate implementation of the reuse plan may be required in the future.

f) Rural Residential Development

Rural residential development outside of Rural Villages is common along many of the major roads throughout the rural area. Most of the residential development takes the characteristics of classical strip development along roadways or in small nodes. (See Map 55.) This is an outgrowth of the original Agricultural and Conservation zoning classifications that allowed one dwelling unit on one acre or three acre parcels respectively.

No specific policy area is recommended to address this existing residential development. In areas where the concentration of residential development is significant consideration may be warranted for the establishment of a Rural Village. This should only be done where the designation of a Rural Village would act as a catalyst in generating a sense of community or place that would enhance the provision of public services. It is not recommended that undeveloped land be zoned or rezoned to a Rural Village classification to encourage development in the rural areas. Undeveloped land in the Rural Area, except for that associated with Rural Villages, should be zoned Preservation, Environmental Conservation or Agriculture in accordance with the recommended policy areas.

Provisions should be incorporated in the Preservation, Environmental Conservation and Agricultural zoning districts to insure that the large number of lots not meeting the recommended density for the appropriate rural zoning district do not become designated with a non-conforming status that would impact their occupancy. This would apply to both developed as well as undeveloped platted lots.

g) Rural Business Development

No specific policy area is recommended to be created to address rural business development. It is recommended that few businesses be allowed, by right, in the rural policy areas. Most of the businesses that should be allowed by right would be associated with or support the agricultural industry.

A new zoning classification called Rural Business is recommended to address business development in the rural policy area. This classification is recommended as an overlay district and not a Euclidean zone. The Rural Business Overlay District would be permitted to be located anywhere in the Rural District not prohibited by other constraints in the Zoning Ordinance. Uses should be limited to those supporting tourism development or needed to provide services to the residential population.

Procedures for implementation of a Rural Business overlay would include participation in a public hearing process as a rezoning request. Public institutions such as churches, schools, or nursing care facilities would be handled through the special exception process associated with the appropriate zoning district classification in the zoning ordinance.

4. Overlay Policy Areas

Four overlay policy areas have been incorporated into the Land Use Plan. These overlay policy areas are not meant to replace the underlying policy area but instead to supplement it through additional land use recommendations. The Overlay Policy areas are: Airport, Antietam Battlefield, Economic Reserve, and Special Planning Areas. Each of the overlay policy areas is related to specific geographical area of the County as well a to a specific topic.

a) Airport Overlay Area

The Airport Overlay Area is located within the immediate vicinity of the Hagerstown Regional Airport. It corresponds to the flight lines airplanes use when circling the runway to

align their approach. The policy area includes land within and outside of the Urban Growth Area. Policies that limit residential development because of compatibility issues are the focus of this Airport Overlay Area.

The underlying policy areas are Agriculture in the Rural Area and a combination of policy areas within the Urban Growth Area with industrial flex being the most prominent. The agricultural policy area recommends a density of one dwelling unit for ten (10) acres. The Airport Overlay Area would limit the density to one dwelling unit per fifty (50) acres. This would substantially reduce the prospects for residential development in the flight area. Within the Urban Growth Area the primary residential policy area is that associated with low density development though some existing high density development is located south of the airport.

A Planned Unit Development is a high-density development that is permitted to locate as a floating zoning district within any residential zoning district within the Urban Growth Area. Planned Unit Developments would not be permitted in residential districts overlaid by the Airport Overlay Area.

b) Special Planning Areas

The Land Use Plan recommends the continuation of the four Special Planning Areas previously established in the Rural Area. These Special Planning Areas act as overlay policy areas and to not displace the underlying policy areas. They are: the Edgemont and Smithsburg Reservoir Watersheds, Appalachian Trail Corridor, Upper Beaver Creek Basin and Beaver Creek (Albert M. Powell) Trout Hatchery, and the Lakeside Corporate Center/Cascade Area. The three Special Planning Areas: Edgemont and Smithsburg Reservoir Watersheds, Appalachian Trail Corridor, and Upper Beaver Creek Basin/Beaver Creek were established to address environmental sensitivity in those areas. The Lakeside Corporate Center/Cascade Special

Planning Area was established to coordinate economic development efforts associated with the reuse of the Fort Ritchie Military Facility with the surrounding area.

Edgemont and Smithsburg Reservoir Watersheds

The Edgemont and Smithsburg Watershed area provides a vital contribution to the water supply needs of a substantial number of people in Washington County. This source generally provides water service to areas in Smithsburg and the eastern portion of Hagerstown, which are located above the topographic limits of the Potomac River supply. This water supply system depends heavily on the natural processes in the watershed. Therefore, it is vital that the balance between man and nature in these areas be maintained and where possible enhanced. Special attention needs to be given to maintaining and improving the watershed as a source of high quality water while minimizing public expenditures on costly treatment processes and facilities.

Residential development in the watershed should be subject to the density policies associated with the appropriate rural policy area. Proposed residential development should take into account the importance of limiting the extent of land development to preserve the vital natural functioning of the hydrologic system. All new residential development not on public sewer systems shall be required to use advanced denitrofication septic systems as approved by the County Health Department. Programs to purchase development rights from properties in the watershed should be pursued.

Appalachian Trail

The Appalachian Trail is a recreational and scenic foot trail, 2,000 miles in length, extending from Mt. Katahdin, Maine to Springer Mountain, Georgia. The Trail traverses Washington County from Pen Mar to the Potomac River near Harper's Ferry, generally following the crest of South Mountain near the boundary of Frederick and Washington Counties.

The importance of the Trail requires special attention be given to preserving and protecting the scenic, environmental, recreational and historic character of the Appalachian Trail and its immediate environs, through the minimizing of potential future incompatible land use activities in the vicinity of the Trail. In particular, consideration needs to be given to limiting the impact that the location of communication towers near the Trail may have.

Integration of the Appalachian Trail within the greenway plan for Washington County should provide opportunities for expanding access and use of this valuable recreational amenity.

Upper Beaver Creek Basin /Beaver Creek

The Upper Beaver Creek Basin consists of 10+ square miles and extends from near the I-70/MD 66 Interchange north to MD 64 and the Town of Smithsburg. It is bounded on the east by the ridge of South Mountain and on the west by a natural drainage divide in the valley, which parallels MD 66 approximately one mile to the west. The Upper Beaver Creek Basin overlaps with the Smithsburg Reservoir Watershed.

The Beaver Creek Trout Hatchery that is owned and operated by the State of Maryland is located along Beaver Creek in the upper basin. Trout from this facility are used to stock trout waters all over the State of Maryland. The protection of water in the Upper Beaver Creek Basin from pollution is necessary to maintain the water quality of the springs that supply the trout hatchery.

New development in the basin should be limited to those uses for which environmental compatibility can be demonstrated. Residential development should be limited to the density associated with the appropriate policy area. All new residential development not served by

public sewer facilities shall be required to use advanced denitrification systems as approved by the County Health Department. Intensive non-residential land uses shall present geohydrological testing and analysis data on potential water resource impacts and compatibility with the environmental preservation goals for the basin.

Within the Upper Beaver Creek Basin, a number of geohydrologic features may have a direct relationship to groundwater quality. These features include: contact between different limestone formations, caves, sinkholes, double terminating drainage reaches, and springs. These features should be preserved in their natural states and any proposed land uses that may affect them should be subject to stringent water quality impact testing requirements that provide evidence of sustainability of water quality.

Whenever possible, existing point and non-point sources of water degradation in the basin should be mitigated. This may be accomplished through the elimination of direct subsurface or surface domestic waste discharge to the waters of the basin. Providing education and guidance to the farm community as well as homeowners on the use of pesticides should be a priority for the basin area. Close monitoring of the relationship between active quarrying in the basin and potential seismic impacts on ground-water flow and quality is equally important. Promoting strict control of commercial storage of chemicals, petroleum and other potentially contaminating substances as well as prohibiting new point source discharges of waste in the Upper Beaver Creek mainstream or tributaries should be a goal of future regulation efforts.

Programs to purchase development rights shall be encouraged in the Upper Beaver Creek Basin.

Lakeside Corporate Center/Cascade Area

The Lakeside Corporate Center/Cascade Special Planning Area consists of approximately

1,655 acres located in the northeast corner of Washington County. The area borders on Franklin County in Pennsylvania and Frederick County in Maryland and includes the area associated with the Former Fort Ritchie Military Base now known as Lakeside Corporate Center, the unincorporated Villages of: Cascade, Highfield and Pen Mar and the area associated with Pen Mar Park. The Special Planning Area is primarily defined by the sanitary sewer sub-district developed for this area.

Unlike the other special planning areas which have been developed primarily because of environmental sensitivity concerns, this special planning area was developed with a view toward fostering economic development of the former military base facility and revitalization of the surrounding area.

Development policy for the Lakeside Corporate Center/ Cascade Special Planning Area is defined by the following guidelines:

1. The Lakeside Corporate Center/Cascade Special Planning Area shall be viewed as a growth area for development purposes.

2. All development initiatives need to recognize the environmental issues and sensitivity in the area and to address them accordingly.

- a) Historic Sites: There are several sites designated on the County Historical Sites Inventory located outside of Lakeside Corporate Center as well as sites identified within the Lakeside Corporate Center which deserve special historic consideration. In addition, other sites both on and off the military base may qualify for historical designation. Any development proposal, which may negatively impact a historical site, should include mitigation options.

- b) Streams: Falls Creek flows through the middle of the Special Planning Area in a looping manner generally from east to west. Buffering of development in accordance with the

“sensitive area provisions” should occur. If the existing lakes are proposed to be used for stormwater mitigation purposes then consideration should be given to water quality as well as water quantity and potential for recreation use.

c) Wetlands: The Non-Tidal Wetlands Guidance Maps identify Palustrine Wetlands within the Cascade area associated with the Falls Creek drainage area. In addition, both Palustrine and Lacustrine wetlands have been identified as associated with the lakes.

d) Steep Slopes: The Lakeside Corporate Center/Cascade Special Planning Area exhibits relief normally associated with a mountain top plateau. A steep slope area can be found running in a northerly direction from the Lakeside Corporate Center to Pen Mar Park through Camp Louise. Any development in this area would have to be accomplished in accordance with the steep slope sensitive area provisions.

e) Endangered Species: No endangered species, in accordance with the Washington County Sensitive Area requirements have been identified in the special planning area. However, two areas associated with the State list of endangered species were identified as adjacent to or overlapping the special planning area. Any developments near the endangered species habitat areas will require additional review with the State Heritage Program for possible habitat encroachment.

3. Reuse and redevelopment of the Fort Ritchie Military Base into the Lakeside Corporate Center is the impetus and focus for the creation of the Special Planning Area with the four primary goals for the reuse of the military base being:

- a) promote economic stability of the area,
- b) provide quality employment opportunities,
- c) generate property taxes, and

d) create a quality built environment.

4. The Special Economic Development District zoning classification adopted for Lakeside Corporate Center should be continued and modified as necessary to address reuse requirements.

5. Reuse alternatives should be integrated with the surrounding residential, recreation and open space areas in such a manner as to minimize potential land use conflicts while unifying the new inhabitants with the surrounding area into a community.

Within the special planning area, public facilities in the form of roads, public sanitary sewer facilities, public water facilities, parks and recreational facilities and an elementary school currently exist. With the closure of the military base the infrastructure associated with its operation, including: public water, sanitary sewer, recreation, stormwater management, roads, fire and rescue facilities will become incorporated with exiting public facilities. Development of maintenance and financial programs to address their sustainability and integration within the public infrastructure system must be a priority consideration in any reuse plan.

c) Antietam Battlefield Overlay Policy Area

The Antietam Battlefield Overlay Policy Area is designed to coincide with the Antietam Overlay Zoning District. (See Map 56.) The purpose of the Antietam Battlefield Overlay Policy Area is to provide recognition through the Land Use Plan of the need to provide special protection to the environment around the Antietam National Battlefield.

The Antietam Overlay Zoning District provides mechanisms for the protection of significant historic structures and land areas by requiring development and land subdivision to occur in a manner that preserves the existing quality of the viewshed of the Antietam Battlefield, and ensures that development of lands adjacent to the major roads

providing public access to the Antietam Battlefield (i.e. MD 34 & 65) is compatible with the agricultural and historic character of the area.

The Antietam Overlay Zoning District is comprised of three sub-districts: the Battlefield Buffer (AO-1), the Approach Zones (AO-2), and the Red Hill Area (AO-3). Lands zoned AO-1 (Battlefield Buffer) and AO-3 (Red Hill Area) are situated within the Battlefield Foreground and Red Hill Middleground, respectively, of the Antietam Viewshed, as determined by the National Park Service. Land zoned AO-2 (Approach Zones) is situated within 1,000 feet of the centerline of certain road segments.

The Antietam Battlefield Overlay Policy Area is not meant to be a substitute for underlying rural policy areas but in addition to them. In addition, commercial development associated with the Rural Business floating zone should be further restricted in the Antietam Battlefield Policy Area. It is also recommended that no new commercial communication facilities be allowed to develop within the overlay area, in order to minimize modern intrusions in the historically significant area.

With the creation by the State of Maryland of the South Mountain Battlefield Park it is recommended that a South Mountain Battlefield Policy Area and South Mountain Battlefield Overlay Zoning District similar to the Antietam Overlay Zoning District be created. These efforts should be coordinated with Frederick County since the South Mountain Battlefield extends across County boundary lines.

d) Rural Village Overlay in Urban Growth Area

In several instances a designated Rural Village may be located within the Urban Growth Area. In those cases the underlying urban policy area and not the rural village overlay will be used to determine development policy. In general, the rural villages are viewed as

neighborhoods within the Urban Growth Area.

5. Special Program Areas

Special Program Areas are areas in the County where the federal, state or local governments have established rules or regulations to support specific programs, preservation projects or policies. In these special program areas additional land use or development restrictions may be encountered. In some cases direct reference within the Comprehensive Plan is required for participation in a program. Six (6) special program areas have been identified and included as part of the elements of the Land Use Plan. They are: Civil War Heritage Area, National Scenic Road, and American Heritage River, Greenways, Rail to Trails, and Watershed Areas.

a) Civil War Heritage Area

The Civil War Heritage Area takes in all of the southern part of the County from Hagerstown to Sandy Hook. It includes all the municipalities in the County as well as the Greencastle Pike and Leitersburg Pike corridors. The Civil War Heritage Area is a portion of a larger program being developed in cooperation with Carroll and Frederick Counties as part of the State Heritage Areas Program. The Heritage Areas Program is designed to promote preservation of historic and cultural resources and to encourage heritage tourism. A requirement for certification as a heritage area is inclusion of recommendations from the Management Plan for the Heritage Area in the Comprehensive Plan. A Management Plan for the Civil War Heritage Area is in the process of being developed. After completion additional amendments to the Comprehensive Plan may be needed to incorporate specific recommendations.

b) National Road Scenic Road Designation

The State of Maryland has undertaken a study of the National Road or Alternate 40 east

of Hagerstown and US 40 west of Hagerstown for designation as a National Scenic Road. Upon completion of the study recommendations regarding land use policies along the National Road corridor may be forthcoming. As part of the designation process amendments to the Comprehensive Plan may be required.

c) American Heritage River Program

The American Heritage River Program is a Federal program and designation. The Potomac River has the distinction of being designated as one of the first American Heritage Rivers. The designation generates the potential for funding for various economic development, environmental and preservation projects. Since Federal law locates the river within Maryland, it is under control of Washington County land use policies. The American Heritage River designation does not require any action by the County. However, pursuit of funding under the American Heritage River Program may affect future land use policies associated with the Potomac River.

d) Greenways and Blueways

There are three different types of greenways associated with the Land Use Plan; federal, state, and local. The major federal greenways associated with the Plan are the C&O Canal on the western side of the County and the Appalachian Trail located on the eastern side of the County. The State has designated various greenways in the western part of the County that connect into the C&O Canal. The County has also identified a series of greenways that are designed to connect into state greenways, the C&O Canal or the Appalachian Trail. The County greenways also are designed to provide non-vehicle links between different neighborhoods and recreational facilities in the Urban Growth Area. The County designated greenways generally attempt to follow streams, flood plains, forested areas and property lines where appropriate. However,

exact locations have not been determined and detailed studies would need to be completed on the various segments of the greenways. The federal, state and local greenways are also linked to various rail-to-trail corridors in the County.

Blueways are a State designation for portions of two creeks in the County, the Antietam and Conococheague. The State has determined that they have the potential for a water based recreational trail in the designated locations. The Blueways are linked to, and coincide with, other greenways.

e) Rail-to-Trails

Both the State and the County have identified rail-to-trail corridors that have been included in the Land Use Plan. The State Rail-to-Trail corridors include the Western Maryland Rail Trail that runs from approximately Fort Fredrick through Hancock to the Sideling Greenway and the Weverton to Roxbury Rail Corridor in the southern part of the County.

The County Rail-to-Trail corridors tend to follow active rail lines where some service track has been removed and are linked extensively to the County designated greenways. They are envisioned to link areas as far away as the Appalachian Trail near Fort Ritchie with the C&O Canal at Williamsport as well as acting as major connectors in linking neighborhoods in the Urban Growth Area. With the intersection of the rail lines in the City of Hagerstown, the City becomes a hub in development of the rail-to-trail and greenway network.

Both the greenway plan and the rail trail plan are long-term projects that need careful and detailed analysis. A completed network is not envisioned within the horizon period of the Comprehensive Plan. However, it is hoped that at least some segments may be built during this horizon period.

f) Watersheds

Washington County has three (3) Class III Watersheds and six (6) Class IV Watersheds. These designations reflect the most pristine stream conditions in the County. They are primarily located in the rural area and tend to be associated with the Preservation and Environmental Conservation policy areas.

Though the Classifications themselves do not generate significant land use considerations, the designation of Total Maximum Daily Loads (TMDL) for the watersheds could significantly affect development patterns within watersheds and the County as a whole. As the State identifies TMDL limits for the streams additional land use regulations to implement the TMDL limits may be required.

CHAPTER 13

IMPLEMENTATION

A. INTRODUCTION

The implementation of the Comprehensive Plan is accomplished through regulations, financing of infrastructure improvements, and inter-jurisdictional coordination. Streamlining of regulations to implement growth management is an element required by State law.

Recommendations included in the Plan will be put in place by actions of both the public and private sectors.

The type, location and timing of development is regulated through County laws and ordinances such as the Zoning Ordinance, as well as guidance through functional plans such as the Water and Sewerage Plan. In particular, the Zoning Ordinance, Subdivision Ordinance, Forest Conservation Ordinance, Adequate Public Facilities Ordinance, Floodplain Ordinance, Historic Preservation Plan, Sensitive Area Plan, and Building Codes are critical to the overall regulatory implementation of the Comprehensive Plan.

Policy guidance is built into the planning process through the Water and Sewerage Plan, Solid Waste and Recycling Plan, and the Recreation and Open Space Plan. In addition, the Capital Improvement Program implements infrastructure development based on guidance from the functional plans.

These plans, regulations and programs have evolved over time and have influenced the County's past growth, its current trends, and how the County anticipates growing in the future. They have the function of guiding, or controlling private or public actions in connection with growth and development, and influence the character of a community. Character makes an area unique, creates a sense of place and is expressed through community design.

Community design is the relationship between land use, circulation, site planning, architecture and landscaping. It is concerned with the location of activity areas and the linkage between homes, shopping, services and employment opportunities. Both functional aspects and aesthetics must be considered if a sense of place is to be achieved through management of land use activity, development intensity, spatial relationships and visual character. Design principles should promote a built environment sensitive to overall community needs, neighborhood compatibility and sensitivity to the natural environment.

Regulatory Streamlining is required by the Planning Act of 1992 so that compliance with the original “Seven Visions” can be achieved. The Planning Act of 1992 directs local governments to streamline regulations to assure achievement of certain growth management and resource protection goals.

Identification of funding mechanisms and financial strategies to carry out recommendations in the Plan, is critical to the implementation of the plan. The Smart Growth Areas Act requires the designation of “Priority Funding Areas” for the purpose of taking advantage of State funding intended for both growth and resource protection.

Inter-jurisdictional coordination assures consistency between different jurisdictions’ comprehensive plans as well as optimization of limited resources. It also provides an opportunity to coordinate with State and Federal growth management and environmental protection initiatives.

B. ANALYSIS

1. Zoning Classifications and regulations

Zoning relates to the delineation of districts and the establishment of regulations governing the use, placement, spacing, and size of land and buildings. The Washington County

Zoning Ordinance was adopted in 1972 and has been amended continuously since that time. Because of continuous amendment, the Ordinance can be difficult to interpret and a major rewrite to correct deficiencies and implement recommendations of this Comprehensive Plan is needed. A comprehensive rezoning of the entire County will be required to address the incorporation of new zoning districts and the replacement or modification of existing districts. Text amendments to clarify inconsistencies and definitions, as well as to support the new zoning district classifications, will be required.

The Urban and Rural Policy Areas are supported by distinct zoning districts of a fixed (Euclidean), floating or overlay zone classification. The Planned Unit Development and Rural Business classifications are floating zones, while the Antietam Overlay District is an overlay zoning classification. In general, residential densities vary from a maximum of 12 units per acre in the urban area, to minimum of 1 unit per 30 acres in the rural. Non-residential policy areas are designed to address employment, service and environmental considerations. Compatibility issues and the need to minimize the competition of various land uses for the same space, were major considerations in the elimination, modification and creation of new zoning district classifications.

The following chart relates policy areas with zoning districts and anticipated residential densities.

Policy Areas and Zoning Districts					
Policy Areas	Zoning Districts			Policy Area Locations	Residential Densities
Industrial	Industrial General	Planned Industrial		Urban	N/A
Industrial Flex	Industrial Restricted	Office and Business Park	Airport	Urban	N/A
Commercial	Highway Commercial	Business General	Business Local	Urban	N/A
Mixed Use	Mixed Use	PRD w/o Commercial		Urban	8 Units per Acre
High Density Residential	Residential Multi-Family	Residential Urban		Urban	12 Units per Acre
Low Density Residential	Residential Suburban	Residential Transition		Urban	4 Units per Acre*
Community Facilities	All Urban Zoning Districts			Urban	N/A
Urban Open Space	All Urban Zoning Districts			Urban	N/A
Agriculture	Agriculture	Rural Business	Industrial Mineral	Rural	1 Unit per 5 Acres
Environmental Conservation	Conservation	Rural Business	Industrial Mineral	Rural	1 Unit per 20 Acres
Preservation	Preservation	Rural Business	Industrial Mineral	Rural	1 Unit per 30 Acres
Rural Village	Rural Village	Rural Business		Rural	1 Unit per Acre unless public water and sewer.
Special Economic Development	Special Economic Development			Rural	4 to 10 Units per Acre
Overlay Areas					
Airport	Agriculture	All Urban Zoning Districts		Rural & Urban	Varies, 1 Unit per 50 acres Rural
Antietam	Antietam Overlay			Rural	1 unit per 30 Acres
Special Planning	Agriculture	Conservation	Preservation	Rural	Varies

*Higher density may be achieved by attaining approval of a Planned Residential or Mixed Use Development.

The anticipated changes to the Zoning Ordinance are numerous with many of the changes directly relating to design standards. Design standards generally fall into several categories. First among them are the zones themselves. The Plan anticipates that some existing zones are to be eliminated either because the types of uses have become obsolete over time or that there are conflicts among permitted uses. Some will be consolidated with others, some will be divided into more distinct categories and still others will be entirely new. These changes are being made to accommodate the growing list of new technology and services, residential options, or needs or requirements for protection of the environment.

2. Subdivision Ordinance

Subdivision means the division of a lot, tract, or parcel of land into two or more lots for the immediate or future purposes of selling the land or of building development. Subdivision regulations have been around in one form or another in Washington County since the late 1950's. The current Subdivision Ordinance was adopted in 1981 has been amended as needed since then. The Subdivision Ordinance addresses procedure for division of property, design standards, and infrastructure requirements needed to support new development. Administration of the Subdivision Ordinance is through the Planning Commission.

3. Historic Preservation Regulations

The preservation of historic and cultural resources has received considerable mention in this Comprehensive Plan. Current mechanisms designed to advance the preservation of historic resources include "Historic Preservation" and "Antietam Overlay" zoning designations, which require adherence to certain design guidelines during the rehabilitation of existing structures and new construction, located in the zones. The Historic District Commission administers those guidelines, as well as the property tax credits for preservation and restoration that are created by

a separate ordinance but linked to the same zoning designations. Washington County has “Certified Local Government” status that makes it eligible to participate in National Register review and special preservation planning funding. There is also a review and advisory policy applicable to demolition permits.

Chapter 10’s recommendations are extensive and far-reaching, intending to elevate the consideration of historic resources to equal footing with design and environmental matters in the review and approval of development proposals. Regulation is needed to set minimum standards and procedures and to create opportunities for evaluation and decisions throughout the land use process. Adjustments in subdivision and zoning design guidelines and use separations, may be appropriate as one of the many regulatory changes pursued to retain historic resources.

4. Forest Conservation Ordinance

Washington County adopted its Forest Conservation Ordinance in 1993 as required by Maryland’s Forest Conservation Act of 1991. The Ordinance is designed to slow the loss of valuable forest cover and, in certain cases, create new forest. Forest cover is a renewable resource that has multiple water quality protection and improvement benefits, as well as wildlife habitat implications. The ordinance is administered concurrently with subdivision and zoning requirements during the review and approval of development proposals. It requires evaluation of existing forest on the development site and permanent retention of a certain percentage depending on the type of development. New planting is required when no forest exists, when there is less than a specified minimum, or when clearing exceeds predetermined thresholds. Payment of a fee in lieu of planting is also permitted. Those fees are utilized in a program that plants new forest or acquires permanent protective easements on existing forest on private lands.

The Act was amended to allow the creation of forest mitigation banks, and has provided

specific guidance and minimum standards if local governments wish to pursue them. The Forest Conservation Ordinance appears to be accomplishing its goals.

5. Adequate Public Facilities Ordinance

The Adequate Public Facilities Ordinance (APFO) was adopted on October 16, 1990 and has been amended three times since then. The APFO relates to having public facilities and services needed to support new development available concurrently with the impacts of new development. The APFO tests roads, sewerage disposal systems, water supply, schools and interim fire protection to establish minimum standards.

The Adequate Public Facilities Ordinance works closely with the document “A Policy to Determine Adequacy of Existing Roadways for Additional Development”, to determine road adequacy. Schools are analyzed on a semi-annual basis for available student capacity and are rated as adequate or inadequate for the next six-month period based on 105% of permanent and portable building capacity.

6. Floodplain Management Ordinance

Floodplains are an important asset to a community. They perform vital natural functions such as temporary storage of floodwaters, moderation of peak flows, maintenance of water quality, groundwater recharge, prevention of erosion, provision of habitat for diverse natural wildlife populations, recreational opportunities, and they promote aesthetic qualities.

The Floodplain Management Ordinance was adopted on July 1, 1992 and replaced the Ordinance adopted in 1988. The Ordinance provides a comprehensive approach to floodplain management and supports the National Flood Insurance Program and the State’s Waterway Construction Permit Program for nontidal floodplains.

The purpose of the Ordinance is to minimize property damage, encourage appropriate

construction practices to minimize future damage, and to protect water supply, sanitary sewage disposal, and natural drainage courses. The prevention of unwise development in areas subject to flooding reduces financial burdens to the community and prevents displacement and hardship to the residents. This protection is achieved through the review of all activities proposed within identified floodplains and by the issuance of permits for those activities that comply with the objectives of the Ordinance.

7. Sensitive Area Regulations

The Sensitive Area regulations were adopted as part of the Comprehensive Plan on November 5, 1996. Five specific areas are addressed under the regulations: floodplains, streams and their buffers, threatened and endangered species habitats, steep slopes, and special planning areas. See Chapter 7 for a detailed review of the Sensitive Area Regulations.

8. Building Codes

Washington County employs the 1996 version of the BOCA Basic Building Code as its major guideline for insuring the protection of public health, safety and welfare through the issuing of building permits for new non-residential and multi-family construction. Permits are also issued for plumbing under the International Plumbing Code; heating, air conditioning, and ventilation under the International Mechanical Code; and for electrical construction under the National Electrical Code. Code requirements to address provisions of the American Disabilities Act are addressed under the Maryland Accessibility Code. Life safety issues pertaining to fire protection are addressed through the National Fire Protection Association's Life Safety Code.

Most houses in Washington County are single-family in nature with building permits being issued under the Council of American Building Officials One and Two Family Building Code. In addition, Washington County has adopted the Washington County Livability Code

which deals with establishing minimum standards for basic equipment and facilities used for light, ventilation, heating, sanitation, ingress and egress, fire protection and maintenance responsibilities for residential rental units. The codes are revised periodically to reflect advances in the building and materials industries. Building codes generally have no jurisdiction in determining when or where specific land uses should or should not be located.

An analysis of issues concerning the preservation of historic and cultural resources indicate that some building code requirements may not always be sensitive to historic construction design materials when rehabilitation for new uses is proposed, and may discourage rehabilitation. Consequently, the State of Maryland adopted legislation creating the Maryland Building Rehabilitation Code Program. This program created a building code designed specifically for existing structures with the intent of encouraging the rehabilitation and reuse of existing buildings.

9. Functional Plans

Functional Plans are documents required to be prepared and submitted to the state on a periodic basis to coordinate specific actions and policies relating to: water and sewer service, solid waste and recycling, and land preservation and recreation.

a) Water and Sewerage Plan

The Water and Sewerage Plan designates the future provision of public water and sewer facilities to prioritized areas within the County. It is also an inventory of existing service areas, and those programmed to be served in the future. State law requires that the Water and Sewerage Plan be updated on a periodic basis. It is also critical to insure the Water and Sewerage Plan is coordinated with the Land Use Plan.

b) Solid Waste and Recycling Plan

The Solid Waste and Recycling Plan provides a statement of the County's solid waste and recycling policies, goals and objectives. The plan recommends specific solid waste policies, identifies solid waste disposal facilities whether private or public, provides information on the long term financial and operations planning for landfills, and describes plans for the closure and maintenance of old landfills. The Solid Waste Plan is updated on a three-year cycle.

c) Land Preservation and Recreation Plan

The Land Preservation and Recreation Plan is a five-year plan for local parks, open space and recreation. It summarizes the land preservation programs in the County, and provides information on local, state and federal parks, including acreage and facilities. Projected local park and open space needs during the planning period are given, as well as recommendations for satisfying those needs. Recent updates have included an emphasis on protection of stream tributaries and their floodplains. Some of these areas may also be suitable for recreational links. In the future, identifying greenways, trails and linkages between parks, other community facilities, and residential areas is likely to be an ongoing part of the comprehensive planning process.

10. Community Design Standards

The Zoning Ordinance will be the location of a majority of changes to implement the policies and recommendations relating to community design standards. It is the primary controller of land use by grouping similar uses into specific zoning designations, assigning those designations to individual parcels with consideration given to each sites ability and appropriateness for those uses, and arranging those locations in such a way as to maximize compatibility among different uses. In addition to spatial arrangement, there will be considerations within each zoning category in the form of design guidelines such as setbacks,

buffering, height and impervious area limitations and others to maximize harmony among individual sites.

a) Urban Standards

Within the text of new or modified zoning designations associated with the urban area, substantial recommendations for design guideline changes will be made. The theme will be to seek a higher level of design for improved function, compatibility and aesthetics. It is the desire to develop design standards in the urban area that will promote a high quality living environment, personal and community fulfillment, accessibility of public services, cost effective public improvements, and environmental protection.

Since the vast majority of future development is anticipated in the urban area, the critical development issues that need to be addressed through new or revised design standards, at a minimum, should address the following significant issues:

New Interior Streets – In some situations it is appropriate for new lots or development to take advantage of existing road frontage to establish access. In many more situations it is desirable for new development to include construction of new streets to provide immediate access to multiple new lots and uses and limit direct access to existing streets. In most situations this control can maintain safe and efficient operation of the existing highways when mixing new site users with existing traffic. Individual access for each new lot or use could result in many additional access points in a short distance that can decrease the ability of through traffic to move smoothly and safely, and increases the points of potential conflict. These concerns apply to all types of land use.

Current Subdivision and Zoning Ordinance regulations provide no clear guidelines to determine when or where new interior streets must be constructed. In most situations it is a

developer initiated event, although the Planning Commission may exercise its judgement and recommend them. Access spacing, driveways and new streets are referenced in the County's Highway Plan Standards. Depending on the road classification, a minimum distance between access points is defined but there is no guidance on the number of new access points associated with a development plan that should be permitted. In particular this is a critical issue at times on existing roads.

Lighting – Site lighting takes many forms and has multiple purposes. Lighting is provided on poles, buildings, on the ground and as part of signs. For sites that are used at night, obviously lighting is necessary for the safety and convenience of patrons and employees.

Lighting can also generate problems when used excessively or without consideration to adjacent land uses. The most common example would be lighting from commercial areas invading adjacent residential properties. It also has the potential of generating unsafe conditions along roads as well as adversely impacting public areas.

Street lighting is not addressed or required in any of Washington County's land use regulations. Although it exists in a few scattered locations it is not generally available in much of the growth area. Where it does exist, the costs are born by the property owners within a specially created lighting district.

Currently there are few lighting design standards employed in the Zoning Ordinance. Sites receiving night use must have lighting, and residential parking areas in multi-family developments must be lit. There are no standards that provide a minimum or maximum level, spacing of fixtures or measurement criteria to allow objective evaluation of proposed lighting plans. General judgement is employed during plan review to focus lighting where it's needed and to keep it from places where it isn't. There is also little guidance or mechanisms available to

prevent or correct off-site intrusions.

Street lighting is most often desirable as a deterrent to crime but it also has an aesthetic aspect and may extend and promote pedestrian travel as an alternative to the automobile for short distances. The guiding consideration for implementing street lighting should be safety.

Buffers – Buffers is a “catch all” term that most often refers to a required minimum space between two uses. There is an assumption that one of the uses, usually the one required to provide the buffering space, has objectionable aspects that must be shielded from other uses. Buffers often include visual screening or additional barriers within the required space such as planting, fences or other physical barriers depending on the specific item to be prevented from impacting an adjacent site. The buffer concept is extensively employed in zoning standards with minimum distances along with planting and screening requirements.

Noise – Washington County has no specific criterion that regulates noise. Buffers are offered in many districts as a method of shielding adjacent properties from noise. Development proposals must also specify hours of operation that provides information that may be used to mitigate noise impacts on adjacent land uses.

Noise associated with highways, particularly the interstate system, is another critical area of concern. Encroachment by residential development can lead to requests for noise barriers. Noise barriers are very expensive and provide limited mitigation.

Outside Storage – Outside storage is addressed by the Zoning Ordinance only from the perspective of material that has the potential to be carried off-site by precipitation or wind, or is attractive to rodents. The Zoning Ordinance currently addresses the matter with a patchwork of provisions. In some zones, outside storage is not mentioned at all and may be permitted or regulated as a use customarily and incidental to any principal or special exception

use. Other zones mention the need to screen refuse storage only. Only the Business General zone has very specific and extensive design standards regarding outside storage.

Signage – Signage is a necessary aspect of urban development with location and aesthetics being major issues. Washington County has extensive sign control guidelines in the Zoning Ordinance that have been amended over the years to accommodate changing approaches to commercial advertising, as well as directional signage. Regulations should promote advertising and directional benefits to meet the needs of business, and the public with a minimum amount of intrusion on the visual landscape.

Scale and Compatibility – Scale and compatibility refer to the relationship between buildings and other structures in different zoning districts that may be located on adjacent parcels. A major issue arises when the structures or land use in one district can be physically inconsistent either in size or appearance with structures or land uses on adjacent parcels in another district.

Washington County’s land use regulations contain no consideration for the effects of a particular building’s design on an adjacent on structures on adjacent parcels. Even in a historic preservation district that is designed specifically to regulate changes in building appearance, there are no controls that extend to structures on adjacent parcels.

Highway Visibility – There is concern for the appearance of development along highways and the collective effect it has on the image of Washington County to the traveling public. It is especially important to Washington County because of our substantial interstate visibility and the County’s desire and ability to promote itself as a desirable location for business and industry. Land use categories that have the potential to be seen from the interstate highway, whether from an urban or rural area, should present as attractive an appearance as possible. In

the rural areas this control may only extend to requiring certain types of uses be screened. In the urban area, interstate frontage should be considered for equal or greater attention to presenting a physical appearance is done to secondary roads that provide direct access to properties.

Landscaping – Landscaping is a significant element of any urban development. It is mandatory in some form in most urban zones except for single-family developments. Existing guidelines have been improved over the years but are still lacking in specific guidance.

Pedestrian Systems – Implementation of a cohesive pedestrian system in the Urban Growth Area can have a positive effect on the goal of producing a highly desirable urban living environment. Pedestrian systems incorporated into new developments can promote multiple benefits from reduced auto usage to an improved sense of community. Little guidance beyond linking multi-family buildings with parking areas exists in current regulations.

Traffic Circulation – Traffic circulation within and among individual developments is a significant issue. Good traffic circulation design can promote a reduction in vehicle movement within a site, as well as ingress and egress to and from public streets to get to nearby sites. Safety and efficiency are benefits of good traffic design for property owners and the general public. Current development standards provide little guidance for addressing this issue.

Architectural Design – Architectural design choices to meet business, industrial or residential needs and control costs, is a significant decision by all property owners and developers. Physical appearance makes the first, and many cases, a lasting impression. It also has the effect of defining or developing a portrait of a community. Limiting construction materials as a way to promote compatibility between land uses and improve community appearance, may be accomplished through the use of architectural design standards.

Height Limitations – Height limitations promote compatibility between adjacent uses by

insuring access to light and visibility. Special attention to height limitations is especially warranted around the Hagerstown Regional Airport. The limiting of intrusions into Airport airspace is a priority in order to maintain the integrity of airport operations.

Homeowners Associations – Homeowners associations are usually associated with residential development but can be desirable and effective in commercial and industrial areas as well. Homeowners associations are a form of self-government that may implement development restrictions beyond those offered by local government regulations. Washington County regulations do not require homeowners associations or establish minimum standards for their creation.

Dedication of Open Space and Community Facility Sites – Local governments inherently require the dedication of land for open space or community facilities to support the future needs of new development. Dedication of land is similar in philosophy to impact fees in addressing future capacity needs. At this time, Washington County employs the philosophy when requiring the dedication of right-of-way for possible future widening of public roads. The dedication requirement may be expanded to cover other public facilities such as schools, parks, libraries, fire stations or rescue services.

Neo-Traditional Design – Neo-traditional design is the term used to describe a set of guidelines designed to produce development reminiscent of villages that developed naturally out of community needs in the past. Neo-traditional design usually calls for compact development with moderate density, a grid street pattern, central common open space and community facilities, small scale commercial activities mixed with residential uses, a conscious effort to promote pedestrian activity instead of vehicular use and strong architectural controls. Neo-traditional developments are intended to recapture a greater feeling of community that has been

lost in newer style developments by re-establishing a human scale and personal interaction among residents.

Transferable Development Rights (TDR) – Transferring development rights is a method of land use preservation employing the free market system to buy and sell the right to develop. It designates areas where preservation is desired and transfers development to areas where it is encouraged. To be effective, they require market conditions that produce a need for higher density development in the receiving area than allowed under zoning regulations. Based on projected development patterns and trends, it would appear that there would be a limited market for the purchase of development rights in Washington County.

Transit Considerations – A goal of the Comprehensive Plan is to encourage concentrated development in the Urban Growth Area. With denser development, the efficiency of public transit can be improved and it is anticipated that the provision of public transit services will continue to expand. All major new developments within the Urban Growth Area should be considered for linkage to the transit system. It is important to incorporate safe locations to pick up and drop passengers in development plans.

Off Street Parking – The requirement of providing off street parking is among the most basic design requirements in any land use regulation. Current regulations have been in place for twenty-five years and deserve examination to insure adequacy in light of trends in residential and commercial development and environmental issues.

Linkage – A portion of the Land Use Plan proposes a comprehensive system of linkages throughout the Urban Growth Area. Natural and man made corridors are identified for their potential to link residential, commercial and employment centers to recreation and other community facilities. Based on specific criteria, the issue of linkage to this system should be

considered in the review of all new development proposals.

b) Rural Standards

Many of the issues discussed for the urban area are applicable to the rural area. However, unlike the urban area where the goal is to encourage development, the primary goals for the rural area of the County are the preservation of agriculture, open space, historic resources, and environmentally sensitive areas. There is existing cultural development in these areas and a certain amount of new development can be expected to occur including: residential development, support services for the agricultural industry, mineral extraction, as well as rural businesses to support the rural population and tourism. Because of potential future development, design standards tailored to the unique characteristics of the rural area should be formulated to insure that the human impact on the rural landscape is harmonious with the natural environment.

Implementation of design standards would be expected to occur within the zoning and subdivision regulations of the County and generally would be focused towards rural residential development, rural village development, and rural business development.

In order to implement the recommended residential development density standards outlined in the Land Use Plan, design standards will need to address conventional large lot residential subdivisions, cluster subdivisions, and immediate family member subdivisions. The rural villages located within the rural area of the County present an opportunity to provide a means for absorbing a substantial amount of growth in the rural area through the use of infill development and utilization of existing infrastructure, however, specific design standards will be needed in order to insure that the fabric of the existing rural village is maintained with any new development.

It is expected that a certain amount of commercial development will occur in the rural

area in addition to what is already in place. This type of development is necessary to support the needs of the rural population, tourist, and the various industries located within the rural areas including agriculture. Thoughtful site planning and design based on the traditional rural character should provide for the commercial needs of the rural area in a manor that better reflects the rural area's unique and special character. Standards should be considered that promote the thoughtful design of the total site that is in harmony with the scale and character of the surrounding rural landscape. Particular attention should be given to commercial development in the Preservation Policy Area and the Antietam Overlay Area.

11. Streamlining Provisions

The Streamlining Element of the Comprehensive Plan is designed to streamline the review and approval of development projects in areas designated for growth in the Plan, consistent with the protection of sensitive areas and other public interests.

In particular, the Regulatory and Streamlining section shall encourage the following: 1) streamlined review of applications for development, including permit review and subdivision plat review within the areas designated for growth in the plan; 2) the use of flexible development regulations to promote innovative and cost saving site design while protecting the environment; and 3) encourage economic development in areas designated for growth in the plan through the use of innovative techniques.

This approach should convey to the development community, that within the area designated for growth; that policies fostering reasonable accommodation and facilities consistent with the goals of the Comprehensive Plan shall be the objective. However, for streamlining to be a reality all agencies or jurisdictions with a vested interest must cooperate with inter-jurisdictional issues resolved in a timely manner.

12. Financing

Implementation of the Comprehensive Plan can have significant financial implications. Sound fiscal policies concerning investment of public money, taxation, debt affordability, and financial reserves are key to long term fiscal stability. Financial resources necessary to meet infrastructure and service needs of today's community should not overburden future generations. To accomplish this, new development must pay its fair share of the costs associated with growth.

The Tischler Fiscal Analysis Study analyzed five different growth scenarios from a cost of service perspective for new development. This analysis showed a positive financial correlation with all five growth scenarios giving the County a considerable amount of leeway in how it can grow in the future. The Comprehensive Plan is based on the current "composite" scenario. This scenario taken together with sound fiscal policies should position Washington County to sustain a strong financial position over the horizon period of this plan.

Washington County has introduced several major fiscal policies that should help insure a sound financial position in the future. In accordance with sound fiscal practices the County has established financial cash reserves or unreserved fund balance to meet unexpected budget demands as well as strong program of investment to maximize interest earnings on these funds. It has also adopted a policy on debt affordability, which establishes an annual range of borrowing based on long term debt amortization and estimates revenues. The County has traditionally maintained an overall tax posture that is very favorable when compared to other Counties in the State of Maryland. These actions have established an excellent bond rating which is significant in financing infrastructure improvements. The following are existing or potential financial mechanisms available for financing of infrastructure improvements.

Capital Improvement Program - The Capital Improvement Program or CIP is a 6-year

program that is updated annually. It is the primary mechanism for prioritizing and funding infrastructure expansion or improvements. Major sources of funding are state and federal grants, general obligation bond issues, revenue bond issues, general fund contributions and developer contributions.

Developer Agreements - Through the application of the Adequate Public Facilities Ordinance improvements may be identified as needed to support future growth. Contributions by developers to an identified needed improvement are normally associated with a developer's agreement. As part of the agreement for development plan approval, a developer may be required to make an improvement or contribute to an identified Capital Improvement Program project.

Special Taxing District - A special taxing district is a device by which a specific area contributes additional property tax dollars to a special fund to offset the cost of infrastructure improvements for a specific area. The Tischler Study completed an analysis for the creation of a special taxing district in the Hopewell Economic Development Area for the purpose of financing infrastructure improvements in that area.

Impact Fees - Impact fees are fees paid by new development to assure that adequate capacity is available to service the needs of the new development. The Tischler Study identified three possible impact fees, schools, road equipment and police services for adoption by the County.

User Fees - User fees are costs associated with a particular service or activity for which a fee is paid for the right to use that service. Public water and sewer services normally charge a user fee to access those services.

Priority Funding Area - The "Smart Growth Act" required the County to establish

“Priority Funding Areas” or “PFA’s”. They are areas where State funding would be targeted to support State growth management policies. The criterion for designation of PFA’s is included in the “Smart Growth Act” with the counties completing the designations. In many instances state policy and program guidelines restrict funding to designated PFA’s. In accordance with the “Smart Growth Act”, Washington County has adopted a PFA map designating PFA’s. (See Map 57.) It is anticipated that in the future, changes will be needed to the PFA map to better reflect development patterns associated with the Land Use Plan.

13. Inter-jurisdictional Coordination

The Comprehensive Plan for Washington County is primary associated with the non-incorporated areas of the County. The municipalities and the City of Hagerstown have their own Comprehensive Plans. However, the importance of coordination is underlined by the fact that we are influenced by decisions of neighboring jurisdictions and we in turn influence them. Inter-jurisdictional coordination also relates to coordination with state and other county governments, public agencies and quasi-public agencies. Inter-jurisdictional coordination enables the identification of many issues at the earliest possible stage, thus providing opportunities to achieve long term solutions in the best interest of the community or region.

Within the County, it has the potential to minimize land use conflicts between incorporated towns and the County through: review of proposed developments that are adjacent to or near municipal borders, coordination of capital improvement programs, provision of services associated with function plans, and review of annexations for consistency with the County Comprehensive Plan. Outside the County, coordination is necessary to ensure that adjoining counties and regional agencies regulations permit compatible development along boundaries.

C. RECOMMENDATIONS

Zoning

1. The following Zoning District classifications be eliminated: Business Transitional (BT), Industrial Transitional (IT), Planned Business (PB), and Highway Interchange–Two (HI-2), since there is no need for these classifications in their current form.
2. Add the following new Zoning District Classifications: Office and Business Park (OBP), Preservation (P), Rural Village (RV) and Rural Business (RB) Overlay.
3. Redesignate the Highway Interchange-One (HI-1) District as the Highway Commercial District (HC) with the main difference being the elimination of Industrial Restricted (IR) uses as principal permitted uses in the zone.
4. Subdivide and replace the Planned Unit Development Overlay District with two revised overlay classifications: Mixed Use (MU) which would allow both residential and non-residential uses and Planned Residential which would just allow residential uses. Both of the new overlay classifications would have minimum acreage requirements before use would be permitted. In addition, the Mixed Use classification would require a minimum number of residential units prior to permitting non-residential development.
5. Reconstruct the Business Local (BL) classification so that it acts as a neighborhood business and/or business transitional classification and not a specialty shop commercial classification.
6. Rename the Residential Rural (RR) classification Rural Transition (RT) to eliminate confusion since this is an urban area classification and not a rural area classification.
7. Update the entire Zoning Ordinance to better reflect current development techniques and administrative procedure as well as to incorporate recommendations in the Comprehensive Plan.

Subdivision Regulations

1. Eliminate exemptions for immediate family members except for those cases that are directly related to active operating family farms.
2. Update the Subdivisions Ordinance to better reflect current development techniques and administrative procedure as well as to incorporate recommendations in the Comprehensive Plan.

Historic Preservation Regulations

1. Update Historic Preservation regulations to incorporate the recommendations in the Comprehensive Plan.

Forest Conservation Ordinance

1. Eliminate exemptions for immediate family members except for those cases that are directly related to active operating family farms.
2. Update the Forest Conservation Ordinance to incorporate recommendations in the Comprehensive Plan.

Adequate Public Facilities Ordinance

1. Develop better fair share methodology to allocate road improvement costs to various development projects.
2. Revise adequacy testing procedure to take into consideration accumulative impact of approved but not built units on school capacity.
3. Eliminate exemptions for immediate family members except for those cases that are directly related to active operating family farms.

Floodplain Management Ordinance

1. Update as necessary to incorporate recommendations in the Comprehensive Plan.

Sensitive Area Regulations

1. Update as necessary to incorporate recommendations in the Comprehensive Plan.

Building Codes

1. Update as necessary to incorporate recommendations in the Comprehensive Plan.

Water and Sewerage Plans

1. Planned water and sewer service area should be adjusted to accommodate the changes to the Urban and Town Growth Area boundaries.
2. In order to facilitate the clustering of residential development where appropriate in the rural areas, the Plan should be amended to provide for community systems as an environmentally sound alternative to conventional individual lot systems.
3. The Water and Sewerage Plan should be amended to identify all of the Rural Villages identified by the Comprehensive Plan and where practical provide a framework for the provision of public facilities to those Rural Villages that are not currently served.
4. Revise as necessary to develop consistency with the Comprehensive Plan.

Solid Waste and Recycling Plan

1. Revise as necessary to develop consistency with the Comprehensive Plan.

Land Preservation and Recreation Plan

1. Revise as necessary to develop consistency with the Comprehensive Plan.

Community Design Standards (Urban Area)

1. Develop specific criteria in the Zoning and Subdivision Ordinance with regard to when new streets will be required and include as part of the street design criteria: lighting, pedestrian

accommodations, signage, parking and access to adjacent properties.

2. Development specific criteria for lighting commercial parking lots and buildings that will discourage spillover onto adjacent properties.
3. Develop criteria for street lighting to determine where and when to be installed as well as design standards for lighting fixtures and poles.
4. All existing buffering requirements be evaluated to determine their effectiveness and site design standards developed that encourage the location of loading areas, trash storage, outside storage, parking areas, etc. away from adjacent properties that may not adequately be protected through buffering.
5. Specific criteria to evaluate noise impact should be developed along with regulations requiring the escrowing of funds by developers for noise abatement along the interstate systems.
6. Upgrade the regulations pertaining to outside storage in all zoning classifications to include guidelines that establish minimum standards for location requirements to minimize visibility and noise.
7. Update current signage regulations dealing with number, height, size and aesthetic quality, with the end goal being regulations that provide the necessary advertising and directional benefits with the minimum intrusion on the visual landscape.
8. Incorporate scale and compatibility criteria in the Zoning Ordinance, which addresses design aspects such as building mass, setbacks, height, window and door patterns, site orientation, and materials.
9. Develop guidelines that would limit the types of building materials permitted along interstate highways as well as requiring site design that would locate trash collection areas, loading

areas and outside storage away from direct visibility from the interstate system.

10. Develop specific minimum landscaping requirements as well as incentives to exceed the minimum standards.
11. Develop guidelines based on zoning classification and development density that would require installation of pedestrian systems and linkage to adjacent commercial, employment, recreation or institutional uses.
12. Develop guidelines with regard to traffic circulation with emphasis on interconnecting individual developments while discouraging unnecessary through traffic, and excessive speed. Also develop parking lot design standards to improve traffic circulation and pedestrian movement.
13. Develop general architectural design standards that promote architectural compatibility in areas with historical architecture as well as residential neighborhoods.
14. Develop minimum standards as to what should be included in homeowners association documents and procedure for review of those documents.
15. Develop criteria that would trigger the dedication of land for future public uses such as open space, parks, schools, libraries and public safety facilities.
16. Incorporate neo-traditional development standards as a design alternative in the Mixed Use and Planned Residential floating zones.
17. Develop criteria for when and where transit stops should be located. Residential development criteria should also consider the location of school bus stops.
18. Develop guidelines for linking proposed developments to the rail-trail and greenway corridor system outlined in the Land Use Plan.

Community Design Standards (Rural Area)

1. Develop minimum access spacing requirements along rural roads for residential subdivisions.
2. Require use of clustering of development to preserve agricultural land and open space in the rural policy areas unless restricted by environmental conditions.
3. Develop criteria that would require all lots in a cluster subdivision to be accessed from internal road(s).
4. Develop criteria to protect the agricultural industry from future residential development by requiring additional setbacks and/or buffering for new residential development adjacent to farms having an agricultural preservation easement. Also amend Forest Conservation Ordinance to list as a priority forest retention and afforestation areas to act as buffers between residential and agricultural land uses.
5. Develop criteria that would require residential developments on hillsides to utilize existing tree cover on order to restrict deforestation and screen development from views from the valleys.
6. Develop incentives for rural businesses to reuse or expand existing buildings instead of locating on previous undeveloped land.
7. Develop design standards to insure that new commercial structures in the rural area blend with the scale and character of the surrounding rural landscape through the use of traditional or natural building materials, design of roof lines, placement of window and door patterns, etc. and do not create large out of scale or character masses. Design standards should address the total impact on the site on the surrounding area including lighting, parking, buffering, landscaping and signage.
8. Develop regulations prohibiting commercial development such as fast food restaurants,

multi-faceted convenience stores, motels and wireless communication towers within the Antietam Overlay Area.

9. Develop regulations requiring new development adjacent to Historic Preservation zoning districts and/or places listed on the National Register of Historic Places to be designed to compliment the adjacent historic resource and not detract from the existing landscape.
10. If in the future the County designates scenic roads in the rural area, develop regulations that would provide for additional design and buffer requirements to maintain the integrity of the scenic road corridors.
11. When possible, direct development in the rural area to rural villages and strive to reinforce the sense of place by establishing flexible standards for: setbacks, road frontage, and lot areas to encourage compact design as well as a style and scale of development that makes the new development blend in with the old.
12. Require development on the edge of a Rural Village to be designed to extend the fabric of the existing development and insure that the natural edge between the village and the adjacent agricultural or opens space area is maintained.

Streamlining Provisions

1. To the extent feasible, one department or agency should coordinate interdepartmental and interagency reviews to keep projects moving through the approval processes.
2. Procedures for routine waivers and exemptions from development regulations should be continued to be developed in order to facilitate decisions administratively rather than by boards of commissions.
3. Continue to develop easy to read information packets, checklists and procedural guidelines to advise applicants about information they must provide and procedures they must follow in

the review process.

4. The Preliminary Consultation pre-application conference should continue to be held between agencies and developers to discuss development concepts, agency information requirements, procedure and other development issues.
5. To the extent feasible, up-front developer costs should be deferred for project phases that are not ready for construction for projects within designated growth areas.
6. Computer capabilities associated with application acceptance, tracking, review, approval/issuance and archiving of permits, subdivision and development applications should be enhanced with technology innovations.
7. Educational training and outreach sessions concerning development regulations should be promoted for better understanding by the public, developers, real estate sales professionals and consultants. Education and training of elected officials, appointed commission/board members and staff should be encouraged to better understand new planning or land use concepts, techniques, processes and policies.
8. Revise zoning regulations to provide for more flexible setbacks and bulk area requirements in designated growth areas.
9. Encourage the use of mixed use and planned residential developments within the designated growth areas and cluster developments in the rural area through the facilitation of the review process.
10. To the extent feasible, develop methods to facilitate environmental and historic mitigation efforts inside growth areas.
11. Continue to develop GIS Mapping capabilities in order to better identify environmental, cultural, and historical sensitivities as well as land use relationships and development trends.

12. Continue development of the transportation model as a tool for quickly analyzing land use/transportation development pattern relationships.
13. To the extent feasible, encourage and pre-plan regional storm water management facilities for large tracts of commercial, industrial and residential development.
14. An abbreviated review process for subdivisions and site plans for business or industrial parks where utilities and roads have been preplanned or constructed should be developed.
15. Explore opportunities for developing differential standards between the designated growth areas and the rural area for mitigating environmental, historic and infrastructure issues.

Financial

1. The County should update the fiscal analysis study completed by Tischler & Associates or complete new studies on a periodic basis to maintain an understanding of the impact of new development has on the cost of providing services in Washington County.
2. The County needs to develop a process in the application of the Adequate Public Facilities Ordinance that more easily quantifies developer contributions.
3. Because of the large cost of road improvements in the Hopewell Economic Development Area, consideration should be given to implementation of the Special Taxing District. In addition, special taxing districts should be considered for other areas of the County where major infrastructure improvements will require a sustained source of revenue to pay of bond indebtedness.
4. The impact fee analysis should be updated to determine if other services such as libraries and parks could be candidates for assessment of impact fees. An analysis should be completed to specifically analyze and develop a road impact fee.
5. Update the Priority Funding Area map as needed to reflect development patterns anticipated

in the Land Use Plan.

Inter-jurisdictional Coordination

1. Continue to submit development projects along municipal boundaries for review and comment.
2. Continue meetings with municipal and other county planning agencies to discuss common problems and solutions.
3. Continue coordination of transportation planning with all appropriate local, regional, or state agencies.
4. Continue to provide planning assistance to local municipalities as needed under the Town Planner Assistance Program.
5. Continue to encourage municipal adoption and coordination of Adequate Public Facilities Ordinance's.