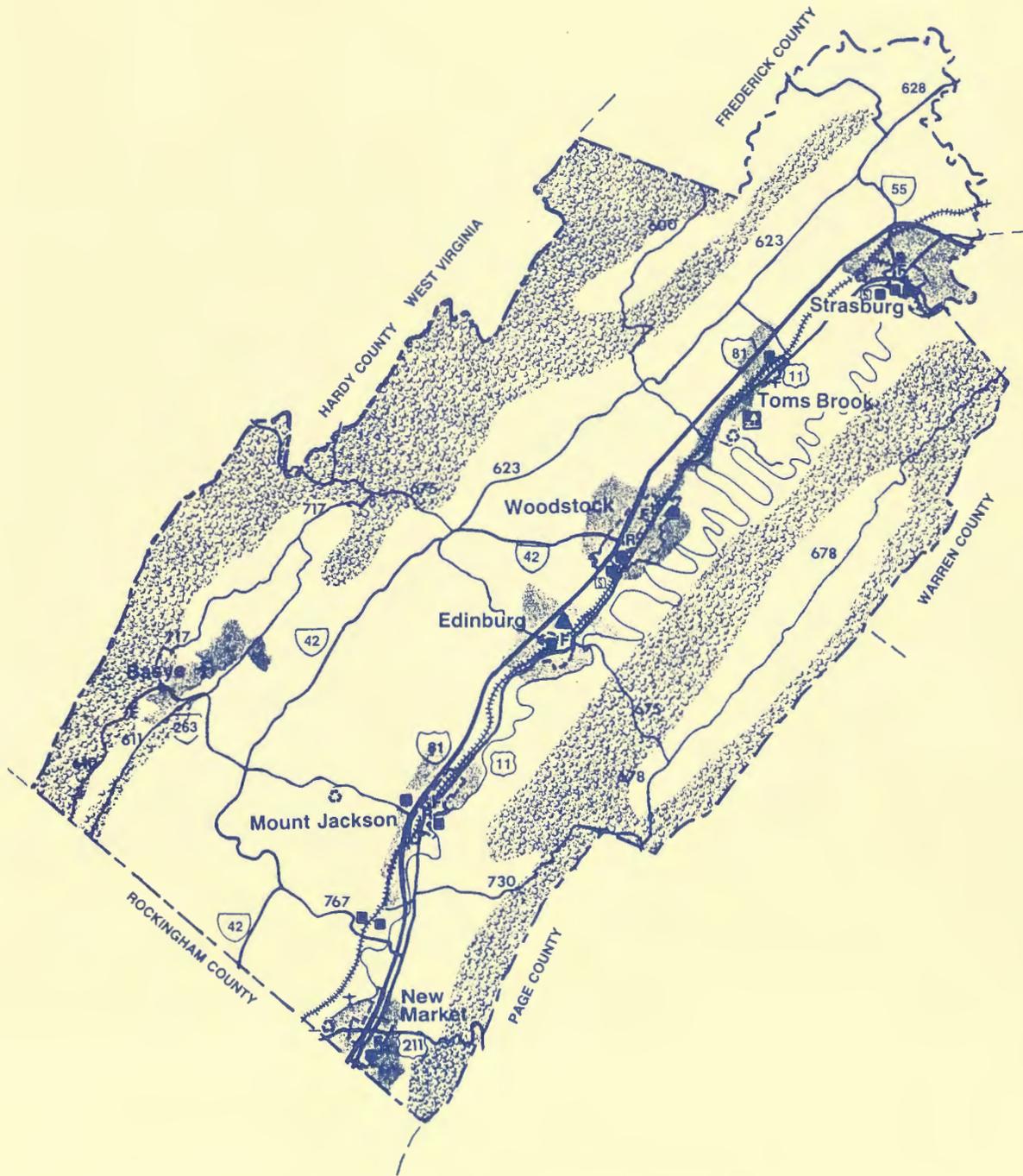


SHENANDOAH COUNTY COMPREHENSIVE PLAN: 2010



DECEMBER 1991

**SHENANDOAH COUNTY
COMPREHENSIVE PLAN: 2010**

DECEMBER 1991

ACKNOWLEDGEMENTS

This plan was prepared with the assistance of numerous individuals and organizations, as explained in the Introduction. The County would like to express its deep appreciation to all the citizens and community officials of Shenandoah County and its towns who contributed their time and knowledge to the development of the plan.

SHENANDOAH COUNTY COMPREHENSIVE PLAN COMMITTEE

Board of Supervisors Representatives

W. William Ortt, Committee Chairman
Cynthia G. Dellinger

Planning Commission Representatives

Cletus Fauber
Charles S. Gochenour
C. M. Hunt

Economic Development Council Representatives

March O. Dellinger
Art McClintock

Shenandoah County Staff

John D. Cutlip, County Administrator
Vincent E. Poling, Director of Planning and Code Enforcement

SHENANDOAH COUNTY PLANNING COMMISSION

Robert L. Dunn, Chairman
Gordon C. Bayles
Charles S. Gochenour
C. M. Hunt
Harry W. Murray
Wade H. Pence, Jr.

SHENANDOAH COUNTY BOARD OF SUPERVISORS

W. William Ortt, Chairman
Cynthia G. Dellinger
March O. Dellinger
Dennis M. Morris
John N. Neese
William L. Stover, Sr.

SHENANDOAH COUNTY CITIZENS REVIEW COMMITTEE

Terrell E. Arnold
Gordon C. Bayles
J. Michael Beasley
Cynthia G. Dellinger
Gilbert Davidson
Robert L. Dunn
Patricia Fansler
Orrin L. French
William M. Gaidos
Charles S. Gochenour
C. M. Hunt
Robert H. Kranich
Laura Long
C. E. Maddox
George P. Mason
Ronald F. Miller
Dennis M. Morris
Harry W. Murray
Helen B. Neese
W. William Ortt
Allen H. Peer
Wade H. Pence, Jr.
Rick Poland
John M. Richman
D. Coiner Rosen
Donald E. Sager
Philip Stickley
Richard L. Thornton
James P. Weissenborn
Joe B. Wightman
Rex M. Wightman
Joseph Wilkins
Henry M. Zimmerman
James E. Zerkle

Technical resources provided by

LORD FAIRFAX PLANNING DISTRICT COMMISSION

Thomas J. Christoffel, AICP, Executive Director
Robert E. Kinsley, Jr., Associate Director
Mark Duceman, Associate Planner
Ronald Lilley, Associate Planner (Resigned 11/30/89)
Alan Raflo, Associate Planner (Resigned 4/30/90)
Garland Miller, Planning Technician
Marie Weaver, Administrative Assistant
Maria Bolton, Secretary

VIRGINIA COOPERATIVE EXTENSION OFFICE

E. M. "Ned" Conklin, Unit Director
Carol L. Baird, Extension Agent
Karen L. Kolb, Extension Agent
Scott G. Harmon, Extension Agent

CONTENTS

Acknowledgements	ii
Contents	iv
List of Tables	vi
List of Figures	viii
Introduction	ix
1. Regional Setting & History	
Introduction	1-1
Regional Setting	1-1
History	1-3
Summary & Recommendations	1-11
2. Natural Resources	
Introduction	2-1
Land Resources	2-1
Topography	2-1
Geology	2-2
Soils	2-4
Forests and Agriculture	2-10
Water Resources	2-11
Summary of Resources and Uses	2-12
Problem Identification	2-15
Water Resources Recommendations	2-18
Natural Resource Limitations	2-20
Summary	2-23
3. Land Use	
Introduction	3-1
Land Use Patterns	3-2
Development Trends	3-8
Land Use Analysis by Watershed	3-11
Zoning	3-14
Land Use Concerns	3-17
Land Use Policy Recommendations	3-23
4. Economy	
Introduction	4-1
Labor Analysis	4-1
Work Source Analysis	4-9
Economic Base Analysis	4-15
Agricultural Economy	4-17
Income Analysis	4-22
Summary	4-28

5. Population	
Introduction	5-1
Population Growth	5-1
Characteristics of the Population	5-2
Components of Change	5-6
Future Population Growth	5-12
Summary	5-16
6. Housing	
Introduction	6-1
Housing Market	6-1
Housing Need	6-5
Summary	6-12
7. Community Facilities	
Introduction	7-1
Schools	7-2
Libraries	7-5
Parks & Recreation	7-7
Law Enforcement	7-9
Emergency Services	7-9
Water & Sewer Facilities	7-13
Solid Waste Facilities	7-16
Recommendations	7-17
8. Transportation	
Introduction	8-1
Road Network	8-1
Local Public Transportation	8-15
Bus Service	8-15
Air Transportation	8-16
Rail Transportation	8-16
Summary & Recommendations	8-17
9. Growth Management Policies	
Introduction	9-1
Shenandoah County 2010 - The Vision	9-1
Planning Policies	9-2
General Development Goals	9-3
General Development Objectives	9-3
Goals, Objectives & Strategies	9-4
10. Implementation	
Introduction	10-1
Specific Implementation Actions	10-1

LIST OF TABLES

1-A	Virginia Department of Historic Resources Survey	1-5
2-A	Major Soils Association	2-4
2-B	Forestry in Shenandoah County	2-10
3-A	Developed Land Use Categories - 1973 and 1988	3-3
3-B	Existing Land Uses - 1988 (Acres)	3-5
3-C	Population and Land Areas, 1990	3-7
3-D	Population and Housing Growth 1970-1990	3-8
3-E	Percent of Urbanized Land Uses	3-12
3-F	Land Use by Zoning Classification Unincorporated County	3-16
3-G	Rural Density Scale	3-18
4-A	Labor Force Data	4-2
4-B	Industry of Employed Residents	4-3
4-C	Occupation of Employed Residents	4-5
4-D	Unemployment Rates	4-7
4-E	1990 Regional Labor Pool	4-8
4-F	Employment and Income by Industry: 1980 & 1989	4-10
4-G	Commuting Patterns	4-14
4-H	Basic vs. Supporting Employment	4-16
4-I	Market Value of Agriculture Products Sold	4-18
4-J	Farm Income In Shenandoah County	4-19
4-K	Farm Income vs. Total Personal Income by Place of Residence	4-20
4-L	Farm Employment vs. Total Employment by Place of Work	4-21
4-M	Farm Employment in Shenandoah County	4-21
4-N	Median Adjusted Gross Income on Married Couple Returns	4-23
4-O	Adjusted Gross Income	4-24
4-P	Average Weekly Wages Paid In Shenandoah County Covered Employment for 1st Quarter 1970, 1980, 1985, 1990	4-25
4-Q	Average Weekly Wages: 3rd Quarter, 1990	4-26
4-R	Components of Personal Income	4-27

5-A	Decennial Census Population	5-1
5-B	Summary Demographic Characteristics for 1990	5-2
5-C	Age Distribution 1960, 1970, 1980, and 1990	5-3
5-D	Educational Attainment - 1980	5-4
5-E	Land Area and Population Density	5-5
5-F	Town Populations	5-5
5-G	Comparative Natural Increase and Net Migration, 1980-1990	5-7
5-H	Birth and Death Rates Per Thousand Population: 1960-1989	5-8
5-I	Population Change Factors, Shenandoah County and Virginia, 1980-1990	5-8
5-J	1975 Residence of 1980 Population	5-9
5-K	Shenandoah County Residents Place of Birth 1970 and 1980	5-10
5-L	Male/Female Distribution 1980, 1990	5-11
5-M	Median Age 1960-1990	5-11
5-N	Racial Composition: 1980, 1990	5-12
5-O	Population Counts and Projections	5-13
5-P	Average Annual Increase and Net Population Increase Shenandoah County	5-14
5-Q	Average Household Size	5-15
5-R	Projections of Households	5-15
6-A	Projections of Households	6-2
6-B	Distribution of New Households by Affordable Housing Costs	6-4
6-C	Shenandoah County Housing Stock - Historical, Current Estimate	6-7
6-D	Vacant Dwelling Units 1980 - 1990	6-9
6-E	Dwelling Units Projections by Decade	6-11
7-A	Shenandoah County Schools	7-4
7-B	Shenandoah County Fire Departments	7-10
7-C	Shenandoah County Rescue Squads	7-11
8-A	Shenandoah County Road Mileages, 1988	8-1
8-B	Major Change Indicators 1980 - 1988	8-4
8-C	Primary and Interstate Traffic Volumes 1980 and 1988	8-6
8-D	Selected Secondary Traffic Volumes 1981 and 1987	8-9

LIST OF FIGURES

1-A	Regional Location Map	1-2
1-B	Historic Sites Within Likely Development Areas	1-10
1-C	Cedar Creek Battlefield Study Area	1-12
1-D	Fishers Hill Battlefield Study Area	1-13
1-E	Toms Brook Battlefield Study Area	1-14
1-F	New Market Battlefield Study Area	1-15
2-A	General Geology	2-3
2-B	General Soils	2-5
2-C	Hydrogeologic Survey	2-13
2-D	Generalized Development Limitations	2-22
3-A	Existing Land Use: 1988	3-4
3-B	Generalized Existing Land Use	3-6
3-C	1980-1989 Building Permits	3-10
3-D	Urbanized Land Uses by Watershed	3-13
3-E	1980, 1990 and Build-out Dwelling Unit Density Change	3-19
3-F	County Land Use by Rural Zoning District and Incorporated Towns	3-21
3-G	Small Area Rural Zoning District Land Uses	3-22
3-H	Alternative Development Concepts	3-25
4-A	Grouped Resident Employment	4-6
4-B	Employment By Industry	4-11
4-C	Income By Industry Shenandoah County 1980, 1987	4-12
4-D	Median Family Income in 1979	4-22
4-E	Per Capita Personal Income	4-25
7-A	Public School System	7-3
7-B	Community Facilities	7-6
7-C	Parks and Recreation Facilities	7-8
7-D	Emergency Services	7-12
7-E	Potential Water & Sewer Service Areas	7-15
8-A	Transportation	8-2
8-B	Major Change Indicators	8-4
8-C	Functional Classification	8-12
8-D	Improvement Needs on Primary & Major Secondary Roads	8-14
9-A	Generalized Future Land Use Map	9-13

INTRODUCTION

LEGAL BASIS FOR COMPREHENSIVE PLANNING

Authority for local government planning in the Commonwealth of Virginia is contained in the Code of Virginia, 1950, as amended, Title 15.1 Counties, Cities and Towns, Chapter 11. As a Dillon Rule state, local government authority is limited to that provided for in the Code. Therefore the tools available to local governments to carry out planning vary from those in other states and can vary within the Commonwealth. Some of the major points are presented here, but the reader may wish to review the complete code. Section 15.1-427 begins with the General Assembly's declaration of legislative intent relative to establishing laws for planning, subdivision of land and zoning:

This chapter is intended to encourage local governments to improve public health, safety, convenience and welfare of its citizens and to plan for the future development of communities to the end that transportation systems be carefully planned; that new community centers be developed with adequate highway, utility, health, educational, and recreational facilities; that the needs of agriculture, industry and business be recognized in future growth; that residential areas be provided with healthy surrounding for family life; that agricultural and forestal land be preserved; and that the growth of the community be consonant with the efficient and economical use of public funds.

Local planning commissions were required for every county and municipality as of July 1, 1976. Section 15.1-446.1 states: "The local commission shall prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction." As of July 1, 1980, every governing body in the Commonwealth was required to adopt a comprehensive plan.

The purpose of the comprehensive plan, as set forth in Section 15.1-446.1, is to "guide and accomplish a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants."

The format of a comprehensive plan is not specified in the Code, that is left up to the localities.

The Plan, "...with the accompanying maps, plats, charts, and descriptive matter, shows the commission's long-range recommendations for the general development of the territory covered by the plan, including the location of proposed recycling centers." In accordance with the Code, it may include, but need not be limited to:

1. The designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, conservation, recreation, public service, flood plain and drainage, and other areas;
2. The designation of a system of transportation facilities such as streets, roads, highways, parkways, railways, bridges, viaducts, waterways, airports, terminals, and other like facilities;
3. The designation of a system of community service facilities such as parks, forests, schools, playgrounds, public buildings and institutions, hospitals, community centers, waterworks, sewage disposal or waste disposal areas and the like;
4. The designation of historical areas and areas for urban renewal or other treatment;
5. The designation of areas for the implementation of reasonable groundwater protection measures;
6. An official map, a capital improvements program, a subdivision ordinance, and a zoning ordinance and zoning district maps; and
7. The designation of areas for the implementation of measures to promote construction and maintenance of affordable housing.

Once adopted, the comprehensive plan is to be reviewed by the planning commission at least once every five years to determine whether it is advisable to amend the plan.

The legal status of a plan, once approved and adopted by the governing body, is that "...it shall control the general or approximate location, character and extent of each feature shown on the plan." Section 15.1-456

BACKGROUND

The Shenandoah County Comprehensive Plan 1990 was prepared in the early 1970's by staff of the then Division of State Planning and Community Affairs for the recently formed County Planning Commission. It was adopted November 13, 1973 with little public input or comment. Growth and development was relatively new for the County. From 1950 to 1965, less than 100 lots per year were added in the rural county, but between 1966 and 1970 4,280 lots were created on 3,344 acres. Another 1,505 lots were added between 1970 and 1975. Development of the interstate highway system opened the County to retirement and second home development from Washington, D.C. and other metropolitan areas of Virginia. The comprehensive planning process and implementing ordinances offered the County a way to deal with growth.

Although a subdivision ordinance was passed in 1972 prior to adoption of the plan, a zoning ordinance, as recommended by the plan, failed in its first attempt. In 1977, due to faster population growth than anticipated, a plan review was prepared by the staff of the Lord Fairfax Planning District Commission and published as a supplement to the plan. Although additional growth of 5,300 population by 1990 was projected, it was concluded that "Even with greater land needs based on the expected increased population, the areas shown on the land use plan map ... still exceed the newest estimates of need in each land use category." Commission staff also began working with the Planning Commission on a zoning ordinance.

In 1978, the County Zoning Ordinance was adopted, implementing with the designation of the zoning districts, areas of the future land use map. Because a conservative approach was taken in the designation of land, the County did not create a legacy of vested rights as many counties did in their initial zoning. Wide areas of other counties were put in three-acre residential zoning because of optimistic growth projections in the 1960's and 1970's. The technology of package treatment plants and the cost of private water supplies were relatively low, giving the impression housing development could go anywhere. Groundwater protection and soil limitations for septic systems were not issues at that time. The 1990 plan included 12 rural development centers outside the towns, each having 500 to 1000 residents on package treatment plants.

During the next ten years County planning focused on economic issues and administration of existing ordinances. The Towns, with the exception of Toms Brook, developed their own plans and implementing ordinances. Due to increasing environmental regulations and the limitations of County soils for septic systems, the importance of the Towns as suppliers of central services increased. The multi-center concept of growth proposed in the 1973 plan was proving valid for the towns, but rural development did not concentrate around rural centers because there were no public facilities.

COMPREHENSIVE PLAN UPDATE PROCESS

In this environment, the work of updating the information base for the comprehensive plan was undertaken by the Lord Fairfax Planning District Commission staff. An analysis was made of the six existing comprehensive plans (county and towns) and available data sources.

The 1990 Plan consisted of two parts with five sections each. The content easily converted to a ten section format compatible with the town and regional plans. Natural Resources, Housing and Implementation were kept as individual sections. Alternative Development Concepts was added to Land Use. Sections "1. Population and Economy" and "2. Community Facilities and Transportation Facilities" were divided into four separate sections. A "Growth Management Policies" sections combined the "Goals and Objectives" and "The Plan" sections. The "Estimation of Future Space Needs" was not updated, since the original methodology was not effective in actually projecting what might happen.

A major problem with local government comprehensive plans is that they are bound documents which can not easily be updated section by section as data becomes available. A looseleaf format, such as developed for the County marketing book, was chosen. Using individually numbered sections allows topics to be expanded upon and be inserted as updates, without affecting the structure of any other plan sections. By extension and reference, the plan can utilize other supporting documents. To extend the plan, a second 20 year horizon was picked, the year 2010. To the extent possible, information and mapping developed for the Virginia Community Certification Program was used in preparation of the plan analyses.

The Shenandoah County Comprehensive Plan Committee was organized from members of the Planning Commission, Economic Development Council, and Board of Supervisors as an ad hoc group. They reviewed the plan sections: Regional Setting & History; Natural Resources; Land Use; Economy; Population; Housing; Community Facilities; and Transportation. The goals of the 1973 plan were reviewed along with examples from Clarke County and Front Royal. It was recognized that the key to a successful community planning effort is agreement on the long-term goals which represent the vision for the future of the County. Proposed goal statements were developed for the Planning Commission and the Board of Supervisors to apply for guidance in decisions affecting the County's growth through the year 2010.

The Shenandoah County Comprehensive Plan Committee used the data and projections of plan sections 1 through 8 to identify issues and draft recommended growth management policy options as a means of achieving the goals. A citizen participation process was developed and implemented. Beginning in December, 1989, meetings were held with representatives from each incorporated town in the County. The Extension Service was asked to summarize the elements of the draft comprehensive plan for a series of six advertised public meetings. These were held throughout the County in February and March, 1990. The presentations were made to explain the planning process to date; to present the proposed growth management policies prepared by the Committee; and to stimulate public comment on the issues. After this process was completed, Section 10, Implementation was prepared as part of the May, 1990 draft.

An advertised Public Hearing was held on the draft plan on June 19, 1990. The Comprehensive Plan Committee, having completed the task of proposing the 2010 Plan was ended and the Planning Commission took responsibility for completing the plan. A citizens review committee process was developed and comments about the May, 1990 draft were incorporated into a November 1990 draft as proposed amendments to amend the 1990 Plan to become the 2010 Plan.

The Citizens Review Committee consisted of persons appointed from each district by the Planning Commissioners, the Planning Commission, and three members of the Board of Supervisors. An organizational meeting of the committee was held and complete copies of the draft plan distributed. The committee was divided into three groups so that each group could concentrate its review on specific plan sections. Three additional meetings were held, and all of the comments and questions of the committee were incorporated into the draft plan sections. Individual meetings were then held with each group to review those specific sections and to be sure that all comments and concerns were addressed.

As a part of the committee's work, a subsection to the draft plan was developed which describes Shenandoah County twenty years from now, based on a concensus of aspirations and projection of trends.

SHENANDOAH COUNTY 2010 - "THE VISION"

Shenandoah County, Virginia lies at the heart of the I-81 growth corridor between Hagerstown, Maryland and Staunton, Virginia. It offers a unique alternative life style to the megalopolis that characterizes much of the Mid-Atlantic section of the United States today. Over the last twenty-five years it has experienced steady, moderate population growth, yet has generally maintained its traditional rural landscape. At least 85 percent of the County is forested or in agricultural usages. Seven compact towns and villages lie along the historic Valley Turnpike (U.S. Route 11). A diverse and thriving economic base and predominantly middle class population have ameliorated many of the socio-economic ills that plague several other parts of the Mid-Atlantic. Shenandoah County residents and visitors alike have always appreciated their quality of life. Today, it is obvious that this quality of life is better than ever.

The landscape of Shenandoah County is highly influenced by Mother Nature, traditional Germanic settlement patterns and historical transportation routes. The mountain ridges and primary roads all run in a northeast-southwest direction. Two sparsely populated valleys--Cedar Creek and Fort--define the western and eastern flanks of the County, respectively. The Little North and Massanutten mountain ranges are almost entirely forested. The central Shenandoah River Valley (North Fork) has a relatively high rural population density for Virginia because of the Germanic origins of its settlers, but still has a very open, agricultural feeling.

The towns and villages are compact and focus on historic districts which contain two hundred year old plus architecture. Seven of these towns and villages cluster in a line along U.S. Route 11 and Interstate 81. Much of the northern top of the County is within the Shenandoah County National Battlefield Park, but is protected by an overlay zone, not public ownership. The New Market Battlefield, in the southern tip of the County, is owned by the Virginia Military Institute. A water conservation-open space system created by an overlay zone over the County's river, streams, and wetlands ties the north-south axis of the Shenandoah River with the east-west axis of its tributary streams.

Over the last twenty years, the citizens have utilized the capital and energy created by steady population and economic growth to improve on their heritage. Agriculture--in particular capital-intensive specialized agriculture--was encouraged and actively promoted by government and the general public. Shenandoah County is now a nationally recognized location for farmstead gourmet food/beverage production. Poultry and fish farming are extremely important economic activities. New residents who were not interested in agricultural life styles have tended to locate in urbanized areas, either in restored historic buildings or in compact developments which have urban utilities and services. Only non-polluting industries are recruited into the County. Strict water and air pollution regulations have been enforced with

new and old industry alike. Several community facilities such as libraries, schools, and teen centers have been constructed to correct past deficiencies. All of these are networked with activities at the Shenandoah Armory, which functions as a county-wide civic center. The "good life" enjoyed by Shenandoah Valley residents for two hundred and fifty years continues on into the Twenty-first Century.

The general goals were re-worded in accordance with committee recommendations, and follow below. The entire draft plan was then re-printed so that the committee could review it in its entirety.

GENERAL DEVELOPMENT GOALS

- GOAL 1 - Retain the rural and open-space character of the unincorporated area of the County.
- GOAL 2 - Preserve and enhance the environmental quality and historic features of the County and its quality of life.
- GOAL 3 - Guide, and direct growth into and around the towns and areas served by the road network and other public facilities, while preserving the rural and open space character of those areas outside of public service areas.
- GOAL 4 - Encourage the concentration of economic development within the public service areas.
- GOAL 5 - Promote affordable housing for all segments of the population, particularly for semi-skilled and unskilled workers.
- GOAL 6 - Provide for the improvement of the road network and other public facilities and for the delivery of necessary public services consistent with these goals.
- GOAL 7 - Integrate transportation planning with land use planning.

Following the citizens review committee meeting, another advertised public hearing was held on November 25th. Several suggestions were made in the format and contents of Sections 9 and 10, and they were incorporated.

After the Planning Commission recommended approval of the Plan at its meeting of December 5, 1991, it was adopted by the Board of Supervisors on December 10, 1991.