Amendment to Comprehensive Plan Adopted By Board of Supervisors 7-25-23

Chapter 3: Community Facilities, Services and Utilities, Subsection I

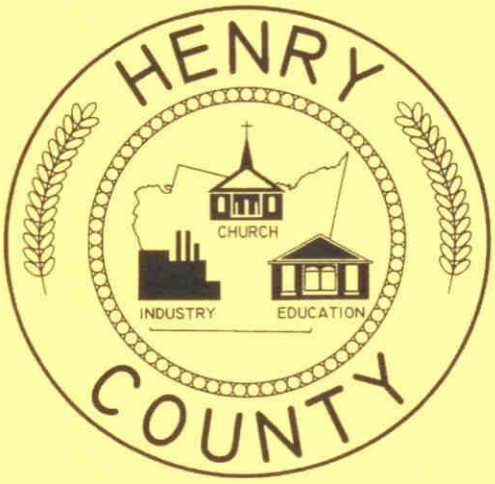
Renewable Energy

Renewable energy sources are becoming a prominent factor in America's future energy plans. Henry County, alongside Southside Virginia, has become prime real estate for future utility-scale solar projects. Given the proliferation of utility-scale solar projects in Henry County, it's become apparent that good planning practices are becoming more important in the siting of these facilities. It's in Henry County's best interest to plan for these facilities and how they can best be integrated into our land uses with the least impact possible.

Objective: Encourage the use of residential, commercial, and utility-scale renewable energy projects while also minimizing the impact on Henry County's view shed, natural resources, and rural character. It's not the County's intention to affect local industries ability to produce solar energy for their own consumption.

Strategy: Reduce the impact of solar and wind facilities through fair planning practices: such as proper siting, buffering, screening, density limits, and setbacks. In conjunction with these planning practices, overall limiting of the acreage allowed for utility-scale renewable energy sources should be considered.

County of Henry



Comprehensive Plan
1995-2010

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ACKNOWLEDGEMENTS

County of Henry

Comprehensive Plan 1995-2010

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This document was developed by the Henry County Planning Commission in coordination with the Henry County Department of Planning and Community Development and the citizens of Henry County for adoption by the Board of Supervisors

Adopted by Board of Supervisors on June 26, 1995

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INTRODUCTION

Purpose

In simple terms, the comprehensive plan represents an attempt by local governments to answer the following questions: *"How have we come to where we are?"*; *"Where do we want to go?"*; and *"How will we get there?"*. In so doing, it serves as a general guide for growth and development for localities. As the overriding policy statement for the County, the plan will be used as the basis for the various functional plans prepared by the County departments and will therefore help reduce duplication of effort between the departments.

PLANNING BRIDGES THE GAP FROM WHERE WE ARE TO WHERE WE WANT TO GO.

Increasing costs involved in providing governmental services are another reason for comprehensive planning. By determining the most likely locations for future development, the County can plan for increasing service needs for those areas and ensure that these services are provided efficiently and cost-effectively. The Plan also attempts to form some consensus among opposing interests regarding the County's future. In sum, the plan is an attempt by the local government of Henry County to avoid simply "muddling through" the present by anticipating future events, planning for them, and avoiding problems before they begin.

Legal Basis/Authority to Plan

Local governments in Virginia derive their authority to plan from State law. The Code of Virginia outlines the State's directives for local comprehensive planning. Section 15.1-446.1 states:

> "In the preparation of a comprehensive plan, the (Planning) commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and

> accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources best promote the health, safety, morals, order, convenience, and prosperity and general welfare of the inhabitants.
>
> The comprehensive plan shall be general in nature" and "shall show the commission's long-range recommendations for the general development of the territory covered by the plan."

§15.1-456 states that the plan "shall control the general or approximate location, character and extent of each feature shown on the plan". It also requires that

> no street or connection to an existing street, park or other public area, public building or public structure, public utility facility or public service corporation facility other than railroad facility, whether publicly or privately owned, shall be constructed, established, or authorized, unless and until the general location or approximate location, character, and extent thereof has been submitted to and approved by the local commission as being substantially in accord with the adopted comprehensive plan or part thereof.

Virginia law also prescribes that, at least once every five years, the local planning commission review its comprehensive plan to determine if it requires revision.

Past Comprehensive Planning Efforts

Henry County adopted its first comprehensive plan in 1972. It updated the plan in 1978 and again in 1986. Therefore, this plan represents the County's fourth comprehensive planning effort.

Over the years, the County's plans have reflected a shift in focus. Whereas former plans consisted mainly of descriptions and inventories of existing conditions, the County now realizes that comprehensive planning should more aggressively address future growth and development issues. Accordingly, this plan places

increased emphasis on the *implementation* of the strategies outlined in this document. Plan strategies are discussed further in the following section.

Process for Plan Development and Adoption

The Henry County Planning Commission initiated the planning process by identifying two time frames for use in this document. The Commission deemed the years 2000 and 2010 appropriate target dates for short and long-term planning analyses, respectively. Consequently, the preparation of this plan essentially involved the following four activities:

- compiling an inventory of existing conditions in the County;
- analyzing these conditions to determine trends;
- preparing projections of future growth; and
- preparing goals, objectives, and strategies.

Physical, economic, social, and demographic information were collected from a number of data sources for use in the Plan. From this information and subsequent analyses, the Planning Commission identified general goals for the County. Practical and achievable objectives were established to help realize these goals. The Commission then outlined a number of strategies to serve as the foundation for future policy-making in the County. These strategies are intended to bridge the gap between the broad goals outlined in the Plan and the ordinances, resolutions, and decision-making which serve as the vehicles for achievement of these goals.

Since the purpose of the Comprehensive Plan is to protect and advance the public interest, it is essential that it be based on the desires and wishes of the general community. To help assure that the Plan's policies reflect public wants, the

PLANNING IS DEFENDING THE COMMON INTEREST AGAINST THE ONSLAUGHT OF SELF INTEREST.

Planning Commission aggressively sought public input during the plan's creation via a series of workshops and public meetings.

After completing a first draft, the Commission hosted six workshops focusing on the plan's main elements. For each workshop, the Commission invited ten to sixteen person having experience or expertise in that particular subject. Participants engaged in "visioning" exercises that focused on the year 2010, the end-date for the planning horizon. Using the results of this exercise as a basis for decision making, the participants then evaluated the plan element to determine if it served as an appropriate planning document to take the County into the next century.

After incorporating the workshop results into the plan, the Planning Commission held public meetings in each of the County's six magisterial districts. These meetings were used to introduce the plan to the public and to receive comments. The County also sought public input during the required public hearings for the Plan.

The Commission recognizes that the future's uncertainty limits its ability to plan. To account for yearly, unforeseeable events that may alter some of the plan's goals and objectives, the Commission will prepare a "Status of the Plan" report annually. This report will provide amendments to the Plan as needed, and highlight its use in day-to-day decision making. This plan should therefore be considered somewhat flexible, in that changing conditions may warrant periodic revisions.

Organization of this Document

This plan consists of six chapters that address a wide range of growth issues in Henry County. Chapter One, *Natural and Historic Resources*, describes the physical characteristics of the County and discusses environmental, ecological, and resource issues. The chapter also provides a brief County history and mentions several notable historic sites. Chapter Two, *Growth and Development*, provides analysis concerning population and demographics, the economy, and housing. Chapter Three, *Community Services, Facilities, and Utilities*, reviews the various services and utilities that are provided to County constituents. Chapter Four,

Transportation, overviews existing and planned road systems, traffic counts, accident rates, and alternate means of transit. Chapter Five, *Land Use*, identifies "growth areas" which will serve as target areas for future development. In turn, the chapter delineates rural areas which, due to physical characteristics or locale, are well suited for low density land uses. Goals, objectives, and strategies are located throughout the Plan.

Vision Statement for Henry County: 2010

A locality has many options available to it when deciding how to manage its growth. The easiest option involves doing very little and becoming subject to the prevailing winds of change--growth would be unplanned and occur haphazardly. In such a scenario, residential and commercial development would likely continue linearly, along major and secondary roadways. This "strip" development would likely cause traffic conditions to worsen and accidents to increase. The dispersed nature of the County would reduce the efficiency of service provision. For example, water, sewer, and other utility lines would extend farther to serve this scattered development. Costs would rise as a result. Also, greater tax dollars would be required to build and maintain a more diffuse road network. Transporting school children would involve greater costs, and emergency vehicles responding to dispatches would have farther to travel. This sprawl development would also be land-consumptive. Areas once valued for their agricultural and timber production, scenic beauty, and wildlife habitat would be developed and lost forever.

As stated previously, the comprehensive plan represents an attempt by a locality to retain some element of control over the location, type, and amount of its growth. As such, the policies, objectives, and strategies outlined in this plan symbolize an attempt to guide change toward a desired end or outcome. If the policies in this plan are adopted and implemented, the following description might apply to Henry County in 2010.

> *Henry County has continued its transition from a rural to an urban-suburban community. Manufacturing remains the basis of the local economy, as the County continues to be an attractive location for new industries or those wishing to relocate. The economy has*

diversified, however, and the County is home to more service and other non-manufacturing businesses. This expanded economic base has stabilized the local economy, making it less vulnerable to market fluctuations and less dependent on national and state economies. Increased employment opportunities allow young people to remain in the area and start families. An improved highway system affords local businesses easy access to outside markets.

The development that has occurred has been concentrated in several growth areas. Citizens in these areas enjoy a wide range of services that are provided at lower costs. Commercial development located in compact, centralized nodes is favored over traditional patterns of strip development. Various planning tools are used to reduce incompatible land uses and promote the orderly layout of the land.

County residents understand the benefits involved in protection of sensitive environmental areas and appropriate ordinances ensure that these areas remain undisturbed. The County continues to protect its drinking water supply, ensuring the resource's permanence for future generations. Residents are knowledgeable about issues relative to solid waste disposal and are conscientious about solid waste reduction and recycling.

In conclusion, the two local governments serving this community have recognized that their fates are intertwined. Many cooperative ventures have been initiated between the County and City of Martinsville to address mutual concerns and jointly provide the services needed by the localities' residents.

Natural and Historic Resources

Not only do natural and historic resources remind us of our past, they help influence our future. An area that preserves these resources maintains a high quality of life and becomes an attractive place for future growth. Also, physical characteristics play an important part in determining the type and location of future development.

Historical Setting and Resources

In 1756, Fort Trial was built near present-day Martinsville--one of a line of forts built along the Allegheny Mountains to protect western settlers from a hostile environment. The last of these forts was Fort Mayo, located in the southwest corner of present-day Henry County. Henry County was later formed from a part of Pittslyvania County when the area's settlers decided to establish a new jurisdiction named after Patrick Henry. Mr. Henry, who built his home "Leatherwood" in the eastern portion of the County, served as the first governor of Virginia.

Martinsville, originally known as Henry County Courthouse, Martinsville was named after Henry County pioneer and Revolutionary War General Joseph Martin. In 1793 the county seat was moved to Martinsville. It was incorporated as a town in 1873 and became a city in 1929.

The County has changed considerably since its creation. Rapid industrial expansion brought extensive residential and commercial development to the area. As the industrial sector of the economy has expanded, the County has established itself as one of the world's largest manufacturers of wood furniture and pre-manufactured homes. County textile products include print cloth, towels and toweling, and a wide variety of knitwear.

The County has many visible legacies from its past. A number of historic places are on the Virginia Landmarks Register, a listing and program operated by the Division of Historic Resources. Among the County's more notable historic locations are Belleview, Stoneleigh, and the Martinsville Fish Dam, located in the

southern part of the County. The dam, one of a few of its type in the state, was used by Native Americans to trap fish.

Geographic and Geologic Setting

The County lies within the upper Piedmont Plateau. Its topography varies from gentle to severe slopes with most flat land found along the river and stream floodplains. Altitudes generally range from 600 to 1,000 feet, with a few points reaching 1,800 feet. Turkeycock Mountain is the largest topographic feature, standing at 1850 feet.

The County lies entirely within the Roanoke River Basin. The Smith River, which drains approximately 75% of the county's 385 square miles, flows through the area in a southeasterly direction.

Located in the Piedmont Physiographic Province, the County is underlain by igneous and metamorphic rock, mostly of the precambrian crystalline variety. Granite, gneiss, hornblende, gabbro, and greenstone serve as the most common examples. Map 1 shows the geologic make-up of the County. (Note: Final document will have color geologic map.)

Slope

Slope refers to the grade or topography of the land. It has importance in land use planning for several reasons. First, land disturbance on steep slopes will increase the potential for soil erosion, sedimentation, and land slides to occur. As discussed in the *Erosion and Sediment Control* section, this has many environmental negatives, as well as adverse aesthetic consequences. Also, steep slopes increase the costs of building and utilities construction.

This plan uses four slope classifications to differentiate areas by slope. The following table lists these classifications and suggests appropriate land uses. Map 2 shows general slopes for the County. Several areas have critical slopes, including Turkeycock Mountain, northeast and northwest portions of the County, and an area extending from the Philpott Reservoir to the south of Bassett.

Map 1

Henry County Geologic Map

Unedited draft of the geologic map of Henry County. October, 1994.
Geology mapped by James F. Conley, William S. Henika, John R. Algor, R. G. Piepul, Van Price, Paul C. Ragland, G. R. Robinson, P. A. Thayer, E. Clayton Toewe, and William E. Workma
Department of Mines, Minerals and Energy-Division of Mineral Resources
Digital version coordinated by Elizabeth V. M. Campbell, DMME-DMR; Grant Woodwell, Mary Washington College; and Russell Ambroziak, USGS.

Legend

HENRY COUNTY VIRGINIA

- al — Alluvium
- td — Terrace deposits
- cd — Colluvial deposits
- d — Diabase dike
- p — Pegmatite dike
- f — Felsic dike

Triassic sedimentary rocks

- cg — western conglomerate
- ts — Stoneville Fm-sandstone facies
- tsm — Stoneville Fm-mudrock facies
- tc — Cow Branch Fm
- tpm — Pine Hall Fm-mudrock facies
- tp — Pine Hall Fm-sandstone facies
- mc — Microbreccia and cataclacite

BLUE RIDGE ANTICLINORIUM

Candler Fm

- cp — phyllite
- cs — cataclastically deformed phyllites

Lynchburg Grp: Alligator Back Fm

- agw — metagraywacke
- mr — marble
- qbg — quartzite
- um — ultramafic
- ag — metagabbro
- gs — graphite schist
- ab — metabasalt
- chs — chlorite schist
- ms — muscovite-sericite & muscovite-biotite schist
- t — talc-chlorite-dolomite & tremolite chlorite schist
- gd — metadiabase
- qd — quartz diorite
- a — actinolite gneiss&schist (possibly in top of Ashe Fm)

Lynchburg Grp: Ashe Fm

- agp — biotite-plagioclase gneiss
- aq — quartzite: Ashe Fm
- cc — calc-gneiss & calc-schist

SMITH RIVER ALLOCHTHON

Leatherwood Granite

- lw — rapakivi granite
- pg — pegmatite
- lwak — alaskite
- lg — leucogranite

Rich Acres Fm

- n — norite
- ra — diorite-gabbro
- rad — quartz-diorite and diorite
- rag — gabbro and metagabbro

Fork Mountain Fm

- fs — staurolite-garnet-mica schist
- fs — sillimanite-quartz-mica shist
- fg — biotite gneiss
- fq — quartzite
- fas — amphibolite

Bassett Fm

- ba — amphibolite
- ba — altered ultramafic pods
- bg — biotite gneiss
- gba — metagabbro
- bq — quartzite

SAURATOWN MOUNTAINS

- ak — Alaskite

Lynchburg Grp: Alligator Back Fm

- ms — mica schist
- gau — garnetiferous amphibolite
- ag — hornblende granite gneiss
- cas — chlorite amphibole schist
- gq — garnetiferous quartzite

Lynchburg Grp: Ashe Fm

- abg — biotite gneiss
- [illegible] — garnetiferous amphibolite

- sc — Stuart Creek Gneiss

- water — Rivers, Lakes, Ponds

Table 1

Slope Classifications

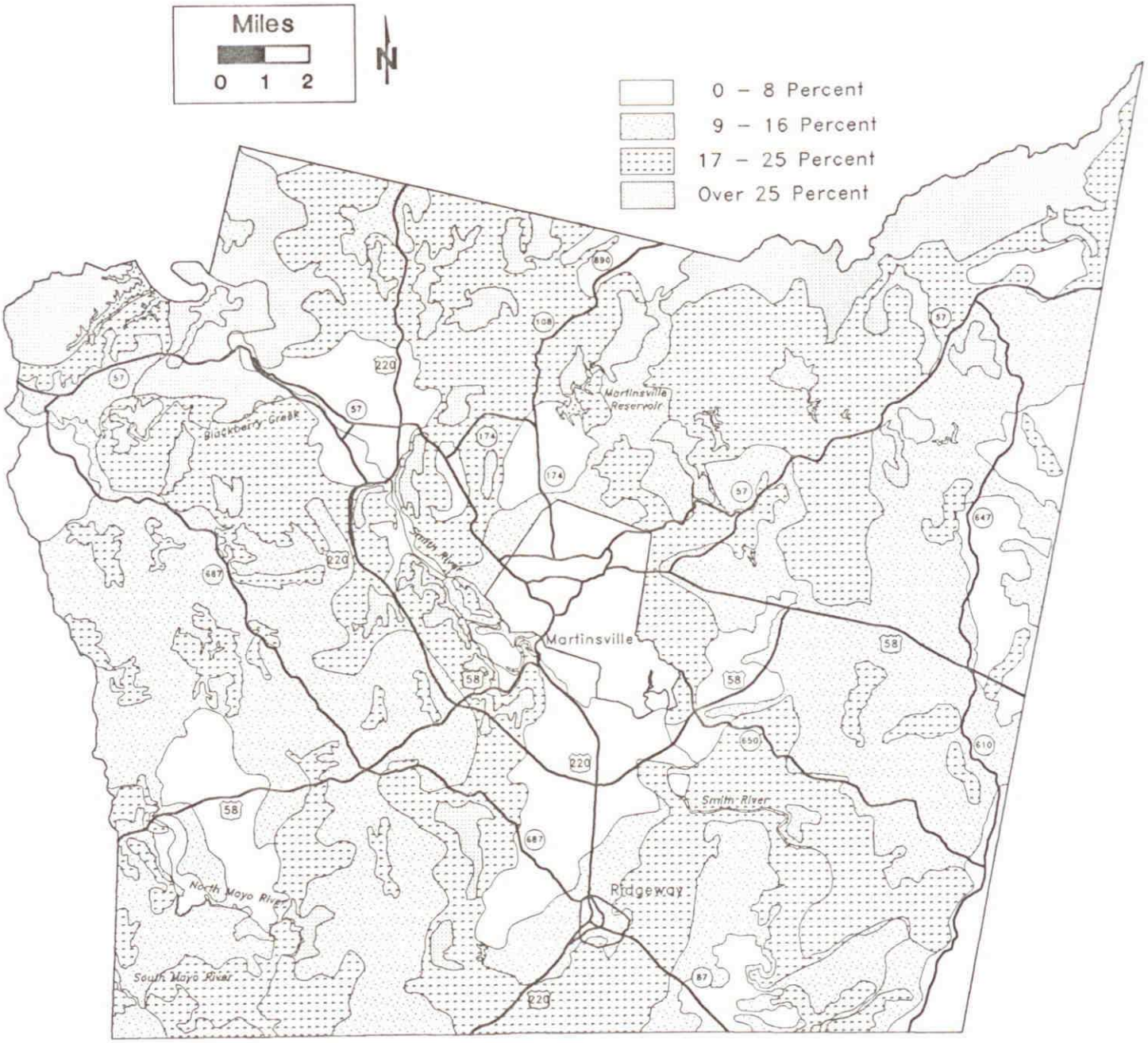
Slope (%)	Description	Suggested land uses
0-7	Level to Moderately Sloped	Appropriate for many types of development--low areas may be susceptible to periodic flooding and poor drainage. Well suited for all types of crop and forest production.
8-16	Hillside	Appropriate for small residential, commercial, and industrial "nodes" not requiring large amounts of level ground. Large-scale development may be costly. Well suited to pasture, forage crops, forest land, and orchards.
17-24	Steep Hillside	Suitable for residential uses if site development accounts for topography. Construction of water and sewer facilities generally cost-prohibitive. Agricultural uses typically limited to pastures and orchards. Well suited to forest production.
25+	Extremely Steep or Critical Slopes	Unsuitable for any type of intensive development or cultivation. Conservation practices should be enforced in these areas, and a permanent vegetative cover should be established. Recommended land uses include outdoor recreation, wildlife management, and watershed protection.

Soils

Simply stated, different soils allow for different types of land uses. Land use plans should, therefore, consider soils information in order to promote the wisest and best use of land. Unfortunately, only very general soils information are currently available for Henry County. However, the Soil Conservation Service (SCS), the federal agency responsible for soils mapping, will publish a County-wide *Soil Survey* in several years. The field work phase for this project, which is approximately 75% complete, will be completed in roughly six months, at which time the County will have access to this information. This new data will greatly increase our knowledge of the County's different soils types and their locations.

Map 3 is a general soils map for the County, with soils information organized into eight general soil types, called *associations*. Table 2 corresponds with the soils map. Together, they provide information regarding the type, characteristics, and locations of the County's different soils.

Henry County
Slope Map



Source: Henry County Dept. of Planning & Community Development

Table 2

Soil Types

Association	Description/Characteristics
1 Madison-Cecil	Very deep, well drained, gently sloping to very steep soils that have clayey subsoils; formed in residuum from mica schist, mica gneiss, or granite gneiss.
2 Wilkes-Enon-Cullen	Shallow to very deep, well drained, gently sloping to very steep soils that have loamy to clayey subsoils; formed in residuum from mafic rocks or mixed acidic and mafic rocks.
3 Toccoa-Chewacla	Very deep, well drained to somewhat poorly drained, nearly level to gently sloping soils that have loamy subsoils; formed in alluvial deposits.
4 Bethlehem-Cecil-Madison	Moderately deep to very deep, well drained, gently sloping to very steep soils that have clayey subsoils; formed in residuum from sillimanite schist, mica schist, mica gneiss, or granite gneiss.
5 Hiwassee-Toccoa-State	Very deep, well drained, gently sloping to moderately steep soils that have loamy to clayey subsoils; formed in terrace and flood plain alluvial deposits.
6 Cullen-Madison	Very deep, well drained, gently sloping to very steep soils that have clayey subsoils; formed in residuum from mafic or mixed acidic and mafic rocks.
7 Tatum-Nason-Manteo	Shallow to deep, excessively to well drained, gently sloping to very steep soils that have clayey or loamy subsoils; formed in residuum from graphite schist, sericite schist or mica schist.
8 Mayodan	Very deep, well drained, gently sloping to steep soils that have clayey subsoils; formed in residuum from triassic-age shale and sandstone, or acidic rock.

Source: U.S. Soil Conservation Service

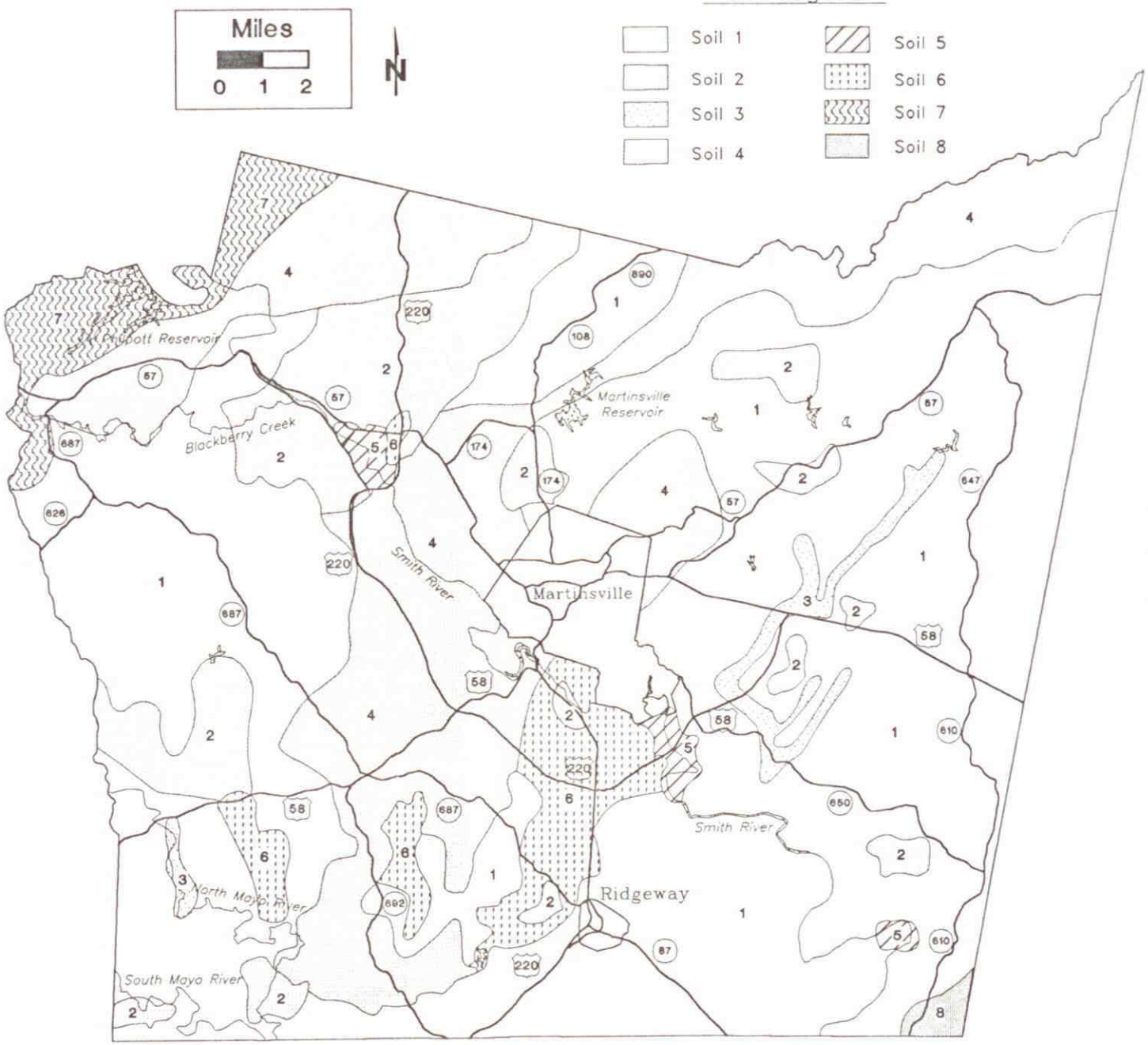
Minerals

Economically productive minerals in the County presently include gneiss for road stone and concrete aggregate, dimension stone, sand, and railroad ballast. Although there are no major areas of sand, gravel, or diatomite within the County, there are two stone quarries. These quarries primarily serve the local demands of Henry County.

Map 3

Henry County

General Soil Types



Source: US Department of Agriculture, Soil Conservation Service

In the past, soapstone, mica, feldspar, and kaolin have been quarried at several locations. Magnetite is present in the County, and some mining and prospecting for that mineral has taken place. Prospectors have found vermiculite in the western part of the County. Although drilling and trenching operations were conducted, commercial production was not established. Monazite, a phosphate of rare earths, exists in granite rocks found near Mountain Falls and Fieldale. Staurolite, more commonly known as "fairystones," can also be found in the County. Due to their cross-like shape, these crystals have gained nationwide distinction as charms. In general, the economic potential of the County's minerals remains small, making extensive mineral development unlikely.

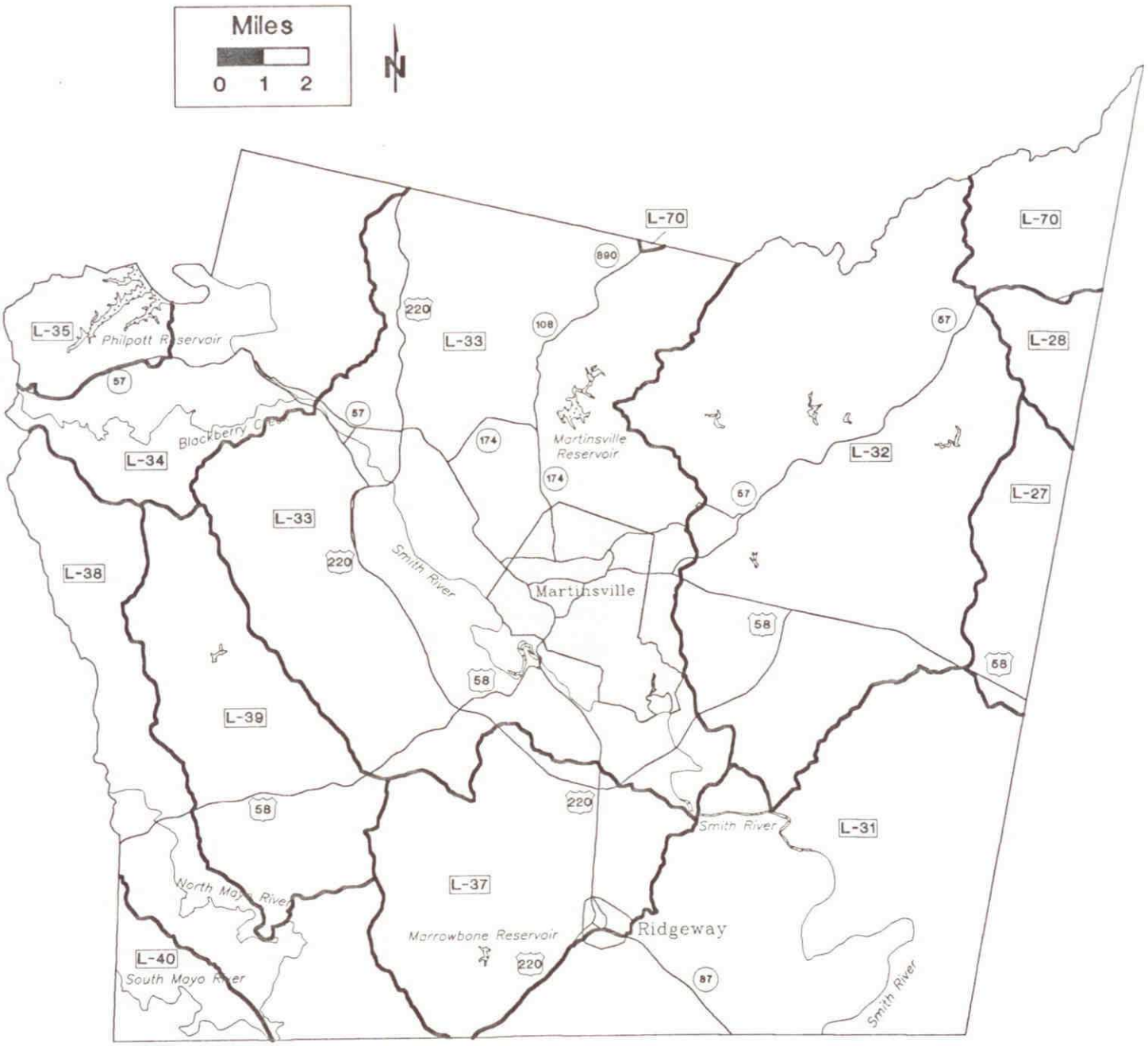
Water Resources

Surface Water

The County's many surface water bodies provide drinking and industrial process water, fish and wildlife habitat, recreational opportunities, and scenic benefits. The County lies entirely within the Roanoke River Basin--one of the major drainage basins in Virginia. A tributary of the Dan River, the Smith River drains approximately 75% of the County's 385 square miles and flows through the area in a southeasterly direction. It is considered to be an exceptional trout fishing river. The river is dammed in the County's northwestern corner by Philpott Dam, an Army Corps of Engineers' flood control project completed in 1954. This dam forms the 2,280-acre Philpott Reservoir. The Mayo River drains the west-central and southwestern portions of the County, while minor tributaries to the Dan and Pigg Rivers drain the remaining northeastern and south-central sections. Many small streams feed into these rivers, such as the Leatherwood, Horsepasture, Marrowbone, Reed, and Beaver Creeks. Map 4 shows the County's main watersheds.

Although there are no natural lakes in the County (the entire state has only two), numerous man-made lakes and water impoundments exist. The largest of these is the aforementioned Philpott Reservoir. Also, the City of Martinsville owns a 175-acre reservoir, located in the County on Beaver Creek. Eight minor Soil Conservation Service (SCS) impoundments have been constructed on the

Henry County
Water Resources/Drainage Basins



Hydrologic Units/Names

L-33	Smith River/Reed Creek
L-32	Leatherwood Creek
L-31	Lower Smith River/Cascade Creek
L-38	North Mayo River/Koger Creek
L-34	Town Creek/Blackberry Creek
L-37	Marrowbone Creek
L-39	Horsepasture Creek
L-70	Turkeycock Creek/Snow Creek
L-27	Sandy River/Mann Creek
L-35	Smith River/Tributaries Smith River/ Mill Creek
L-40	Lower South Mayo River
L-28	Upper Sandy River

SOURCE: U.S. Dept of Agriculture, Soil Conservation Service

Leatherwood, Marrowbone, and Horsepasture Creeks for the purpose of flood control. These basins are designed based on a 500-year flood capacity.

The United States Geological Survey (USGS) currently maintains three regular stream gauging stations on the Smith River and one on the North Mayo River. The data collected from these stations indicates that large amounts of surface water travel through the County's drainage systems. High daily discharges average slightly above 1.0 cubic feet per second (cfs) per square mile of drainage area, which is equal to approximately two-thirds of a million gallons per day per square mile of the Smith River drainage area. The following table presents sample discharge data for the four gauging stations located in the County.

Table 3

Stream Flows

Stream	Gaging Station	Period of Record	Drainage Area (sq. miles)	Average Flow (cfs)*	Average Flow (cfs/sq.mile)
Smith	Near Philpott	1946-Present	216	278	1.287
Smith	Bassett	1939-Present	259	329	1.27
Smith	Martinsville	1929-Present	380	451	1.186
N. Mayo	Near Spencer	1928-Present	108	125	1.157

*cubic feet per second

Source: Roanoke River Basin Water Supply Plan. State Water Control Board, March 1988

Groundwater

The availability of groundwater resources in an area relates to its geology. As mentioned previously, the County lies within the Piedmont Physiographic Province. Generally speaking, this geologic formation does not allow for good subsurface water supply since rock types are not porous and therefore do not hold groundwater. However, fractured zones in the upper levels of the rock contain groundwater within reach of water wells. These groundwater "pockets" are simply gaps between the various rock strata or are created from faults (or other subsurface movements). Due to the extremely limited supply of water in shattered rock

formations, heavy pumping of wells often results in dramatically fluctuating water levels.

In 1980, William C. Overman Associates performed a groundwater study as part of its Comprehensive Water and Sewer Study for the County. Records on 140 wells drilled in the County indicate that, although total depths ranged from 40 to 900 feet, in 90% of the cases water was reached at depths of less than 200 feet. Although 80% of these wells has yields less than 20 gallons per minute, a few have yields in excess of 100 GPM. In general, the yields of wells in the lowlands usually doubled those of wells on ridges. The well water was generally hard and tended to be corrosive in some areas.

In 1979, the State Water Control Board prepared a document entitled Groundwater Resources of Henry County, Virginia. This document seemed to reach different conclusions on the County's potential for groundwater development, stating that the resource was both abundant and of fairly high quality. However, the County has traditionally disregarded groundwater as a reliable drinking water source and opted to develop surface water resources instead (see *Water and Sewer* Section). Officials from the Henry County Public Service Authority (PSA) state that this is due partially to groundwater *availability*, but mainly to groundwater *quality* problems. Complaints from water well users often center around high iron content in groundwater, attributable to the County's pervasive red clay soils. (Although not a health hazard, iron in groundwater can reduce water clarity, stain laundry, etc.)

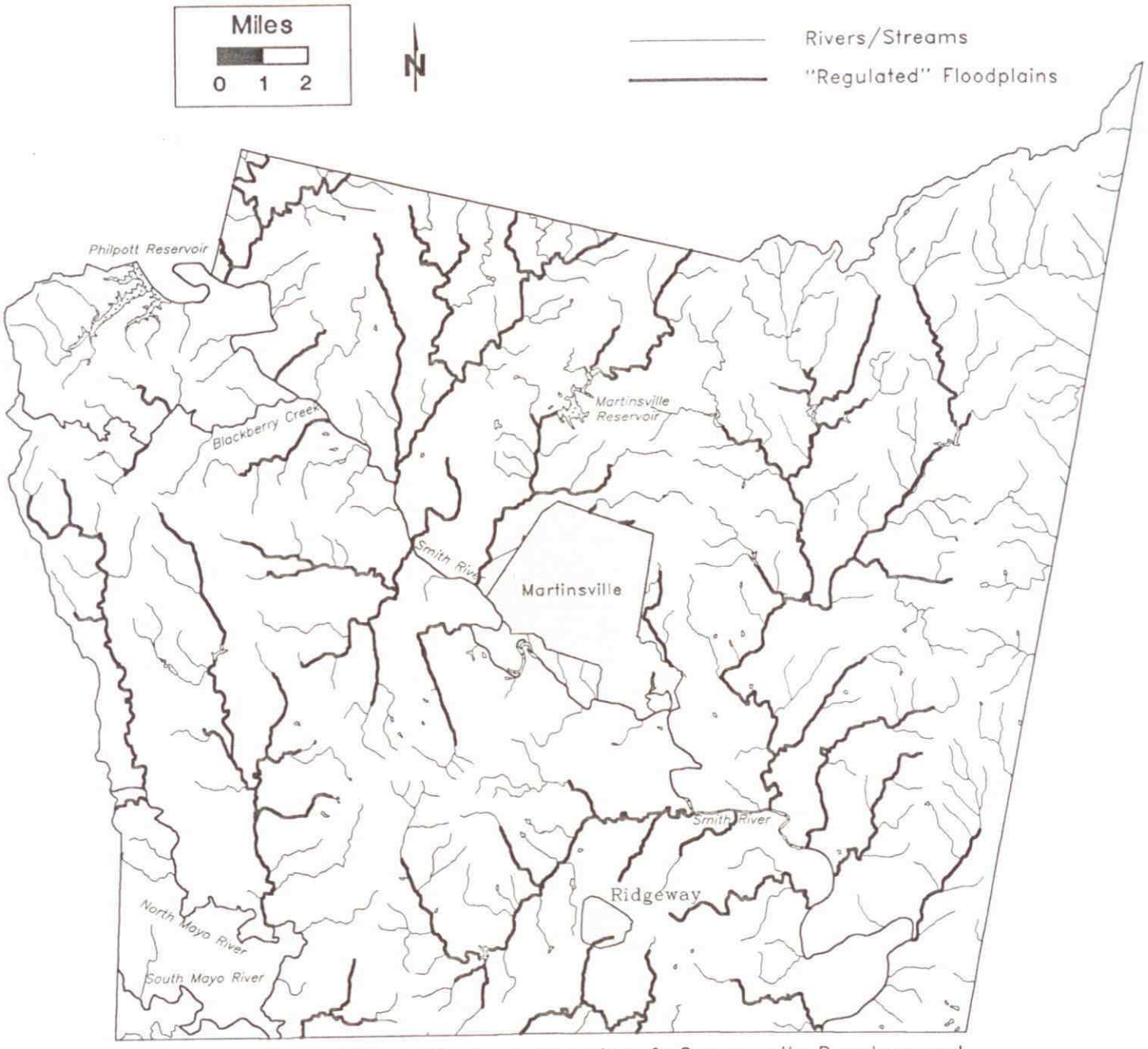
Flooding and Floodplains

For several reasons, many areas in the County are susceptible to flooding during heavy or prolonged rain events. First, the County often has severe storm events, especially during the summer months. Secondly, urbanization in the County has subjected certain areas to greater amounts of stormwater runoff and, therefore, increased their potential to flood.

Urbanization covers natural land surfaces with impervious, paved surfaces which do not allow infiltration of rainwater. Rainwater runs quickly over these smooth surfaces, often into constructed storm sewers or conveyances. These

Map 5

Henry County
100 Year Floodplains Map



Source: Henry County Dept. of Planning & Community Development

conveyances usually only perpetuate downstream flooding by increasing stormwater speed and volume as it travels down the watershed. In addition to flooding problems, this rainfall "runoff" carries pollution into natural waterways (see Water Quality).

Obviously, people living in flood-prone areas risk the loss of their property, and even their lives. This plan encourages appropriate land uses in flood-prone areas, such as agricultural and recreational uses. Not only will further development result in more people at risk, but can create a floodwater *surcharge* that will enlarge the area susceptible to flooding. (The term surcharge refers to the disturbance of the normal flow of the water, or any water displacement occurring as the result of cut and fill operations.)

To address these problems (and qualify its citizens for federal insurance monies) the County adopted a Floodplain Ordinance in 1981. The implementation of the ordinance was made possible by the completion of a Flood Insurance Study for Henry County in 1980. As a part of this study, the Federal Emergency Management Agency prepared Flood Boundary and Floodway Maps for the County. These maps show flood insurance zones and base flood evaluation lines for a *100-year* flood. A product of probabilities, a 100-year flood is the worst flood that will occur over a 100 year period. The maps establish flood*ways* (where development is prohibited) and flood*plains* (where development can occur with certain structural modifications). Map 5 shows floodplains regulated by the County ordinance.

Wetlands

At one time, the term "wetlands" had only negative connotations attached to it--wetlands were merely swamps or lowlands infested with mosquitos, biting flies, and snakes. Largely because of this negative view, wetlands were regarded as potential sites for development or as convenient sites for waste disposal. In agricultural areas, many wetlands were drained, cleared, and put into crop production. In urban areas, they were filled for construction of houses, industrial facilities, office buildings, and landfills. Consequently, less than half of America's original wetlands currently remain. The Virginia Non-Tidal Wetlands Inventory,

prepared by the Department of Conservation and Recreation, classifies approximately 921 acres of the County (0.4%) as wetlands.

Today, scientists have a much better understanding of wetlands and their vital role in ecosystems. For example, wetlands improve water quality by filtering sediment and other types of pollution from water runoff. They also serve as biological "hotspots", providing breeding, nesting, and feeding habitat for waterfowl, birds, fish, and other wildlife. In fact, the majority of threatened and endangered plant species and many endangered animals depend on wetlands for survival. Finally, wetlands help prevent flooding and serve as groundwater recharge areas.

Wetlands are regulated under Section 404 of the Clean Water Act. The act authorizes the Corps of Engineers to require permits for the discharge of dredged and/or fill material into waters of the United States and/or their adjacent wetlands. These activities include, but are not limited to, ditching and/or clearing wetlands, pond/lake construction impounding wetlands, filling wetlands, stream alteration and/or channelization, culverted road crossings, and submerged utility line crossings.

Water Quality

- Point-Source Pollution

Since the adoption of the Clean Water Act over two decades ago, tremendous progress has been made in caring for the nation's water resources. Initially, these efforts took the form of regulations to curtail *point-source* water pollution. This term refers to pollution coming from easily located and recognizable sources, such as discharges from industries or wastewater treatment facilities. These types of discharges into waterways require permits from the Department of Environmental Quality (DEQ).

Due to amendments to the Clean Water Act, in 1990 the EPA re-classified several types of stormwater discharges as point sources. Consequently, certain storm sewer discharges (from large municipalities, industries, etc.) also require permits from the DEQ. Many local industry leaders have complained about the

confusion and difficulty involved in complying with these new stormwater requirements.

- Non-Point Source Pollution

The success in reducing pollution from point sources, coupled with a better understanding in the scientific community of the relationship between land uses and pollution, have increased the attention given to *non-point source* (NPS) pollution.

As its name implies, NPS pollution essentially refers to any type of pollution not coming from point sources. In terms of water pollution, it most commonly takes the form of urban or agricultural runoff. Some examples of pollutants carried in water runoff include organic wastes, inorganic nutrients, toxic substances, and suspended particles of eroded soil. Other types of NPS pollution include automobile emissions, pollution carried by rain or snowfall, and many forms of groundwater contamination.

Historically, raw sewage discharges have also been major sources of NPS pollution in the County. Over the past twenty years, however, these discharges have been nearly eliminated. Malfunctioning or improperly maintained septic systems remain more of a problem. If not properly maintained, septic drainfields may fill with solid materials and clog, leaving the drainfield unable to infiltrate the wastewaters. These systems should be pumped-out at least every five years to prevent contamination of surface and ground waters.

Today, researchers attribute 50-75% of the nation's water quality impairment to nonpoint sources of pollution. Nonetheless, it remains largely unregulated, since its diffuse nature makes it extremely difficult to monitor and control. Proposed amendments to the federal Clean Water Act would create new regulations addressing NPS pollution. Examples include requirements for local governments to establish watershed management and NPS programs, and a proposal requiring localities with populations over 50,000 to have stormwater management programs.

The Clean Water Act amendments may have particular implications for the County, since a recent report cited much of Henry County as a "high priority" urban NPS pollution area. The Virginia Nonpoint Source Pollution Watershed Assessment Report, published by the Department of Conservation and Recreation in March 1993, used very cursory research methods to rank the Commonwealth's watersheds for their NPS pollution potential. The Smith River-Reed Creek sub-basin (shown as L33 on Map 4) ranked in the top 5% of all watersheds for urban NPS pollution potential.

In 1993, the Virginia Department of Environmental Quality (DEQ) published a 40(B) Plan which assessed the State's water bodies for water quality impairment. In doing so, the DEQ used standards established by Congress, referred to as *fishable* and *swimmable* goals. These standards are site-specific, and are particular to the water bodies where they are applied. Appendix A summarizes results from this study relevant to the County.

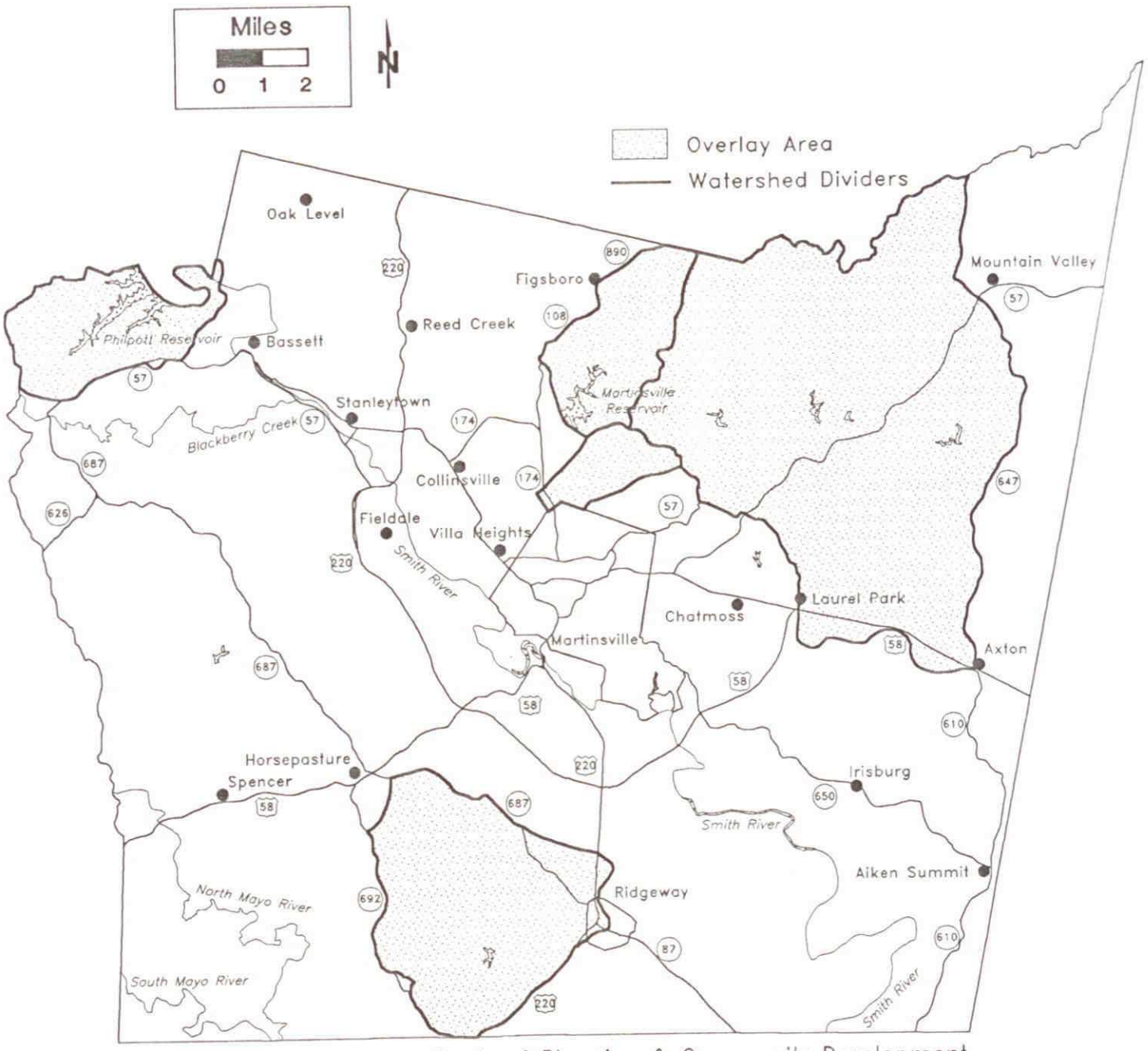
Water Resource Protection

Due to what is known as *assimilative capacity*, water bodies have a natural ability to accept and cleanse a certain amount of pollutants. Pollution entering the water body in excess of this capacity or threshold threatens the water resource and the life it supports. Once contaminated, expensive attempts at remediation usually only produce marginal benefits. Also, as discussed in the *Water Supply Planning* section of the Community Services and Utilities Chapter, new sources of raw water are increasingly difficult to obtain.

The Conservation Overlay

For these reasons, the County attempts to be proactive in protecting valuable water resources. In so doing, it adopted the *Conservation Overlay* (Map 6) in early 1992 as an amendment to the Henry County Zoning ordinance. The Overlay protects existing and possible drinking water supplies from a number of ground and surface water threats. As a zoning overlay, properties within the Conservation

Henry County
Conservation Overlay District



Source: Henry County Dept. of Planning & Community Development

Overlay are subject to the restrictions of both its conventional zoning and the Overlay restrictions.

The Overlay establishes a 50 foot buffer from any "live" stream or reservoir. Many localities also use vegetative buffer strips to protect their water resources. In essence, these buffers slow water runoff as it enters waterways and filters out much of the nonpoint source pollutants that the runoff carries.

The Overlay also prohibits certain land uses that pose threats to water bodies. Some of these restricted land uses include:

- the storage, production, or disposal of hazardous waste;
- transmission pipelines (local pipelines excluded);
- landfills, dumps, etc.; and
- bulk storage of petroleum products except under certain conditions.

Most agricultural and forestal operations are exempt from the Conservation Overlay requirements.

Erosion and Sediment Control

The County also protects its water resources through its *Erosion and Sediment Control* Ordinance. This ordinance, required by State law, attempts to minimize the negative impacts associated with land disturbance from development.

In its natural, undisturbed state, land accepts and accommodates almost all rainfall. Vegetation acts to buffer the underlying soils against rainfall's erosive capability, but development practices remove this vegetative cover and expose soils to these erosive processes. Erosion, in turn, causes sedimentation which occurs as runoff carrying eroded soil enters waterways or is deposited on land areas. Sedimentation adversely affects water bodies by clouding water and reducing the

amount of sunlight reaching aquatic vegetation. Furthermore, silt deposited in streambeds may smother underwater organisms and plantlife.

The Ordinance, which has been in effect since 1972, ensures that certain erosion and sediment control measures are incorporated into the land development process. Recent changes to the state laws have increased the ability of inspectors to enforce its requirements.

Wildlife/Endangered Species

A variety of wildlife exists in the County, with management efforts concentrating on deer and turkey. The Virginia Department of Game and Inland Fisheries is currently trying to stabilize an increasing deer population. Over the past ten to twenty years, the County's turkey population has also been increasing. However, the turkey growth rate remains low compared to other nearby localities. Bear sitings are incidental, with most of the sitings involving bears that are moving through the area.

The Department of Game and Inland Fisheries has not reported any endangered or threatened animal species in the County. However, several species have been reported in adjacent localities and could be present in the County. The orangefin madtom, a candidate species, and the Roanoke logperch, with federal endangered status, are found in medium to large streams of the Dan and Roanoke River drainages. The loggerhead shrike, a state endangered species, is known to nest in eastern Franklin County and may exist elsewhere in the region if appropriate habitat is present. Also, the eastern woodrat, a candidate species, has not recently been recorded but may exist in areas of suitable habitat. Another candidate species, the pygmy shrew, has been recorded in Pittsylvania County and likely exists through the region. The Virginia Department of Agriculture and Consumer Services notes that neither endangered insects nor endangered plants have been recorded in the County.

Forestal and Agricultural Resources

In addition to being important components of the local economy, forestal and agricultural resources provide many other benefits to the County. For instance, these resources (with appropriate conservation practices) help protect the integrity of the local watersheds and, therefore, drinking water supplies. They also provide scenic resources, open space, wildlife habitat and help preserve the area's traditional rural character. Finally, preservation of these industries will help slow their conversion to low density residential uses, and therefore help stem rising service delivery costs to outlying residential areas.

Agriculture

The County's east-central, southeastern, and southwestern sections contain its more concentrated agricultural activity. Despite a marked decline in popular interest in farming as a full-time means of livelihood, agriculture continues to occupy a significant place in the county's economy. Statistics from the following table document this agricultural decline.

From 1982 to 1992, total farmland has decreased by about 15,000 acres, while the number of farms has decreased by 137 farms. Average farm size continues to increase, however. In general, small to mid-size farms have decreased in number, while larger farms has remained steady. In a related fashion, from 1982 to 1992, the number of part-time farmers has decreased from 291 to 166, while the number of full-time farmers have remained steady. Increases in costs for modern farming techniques may have caused the decline in smaller farms. Despite agricultural decline, the annual market value of County agricultural products sold has increased, from roughly $3.4 million in 1987 to $4 million in 1992. (Note: These figures have not been adjusted to account for inflation.)

With regard to harvested crops, farmers grew more traditional "feed" crops, such as hay-alfalfa and silage than any other crop. Corn and tobacco also remain popular. However, from 1987 to 1992, tobacco farms reportedly decreased from 52 to 24. Federal tax increases on tobacco as a part of proposed health care reform measures threaten to further reduce tobacco production.

Table 4

Selected Data on Agriculture

	1982	1987	1992
Land in Farms (Acres)	63,259	53,814	48,968
Percent of County Area in Farms	25.1	21.4	19.4
Number of Farms	342	342	287
Average Size of Farms (Acres)	149	157	171
Cropland (Acres)	23,619	22,299	25,518
Principal Sources of Farm Income			
Crops (incl. nursery and greenhouse crops)	$2,502,000	$1,701,000	$1,719,000
Livestock, Poultry, and their products	$1,936,000	$1,727,000	$2,272,000
Selected Crops Harvested			
Corn for grain or seed (Acres)	1,656	556	810
Tobacco (Acres)	792	508	335
Hay-alfalfa, other, wild, silage (Acres)	6,974	6,939	6,193

Source: U.S. Census of Agriculture

Area farmers raise more beef cows than any other type of livestock and poultry, with hogs and pigs being the second most popular. Also, from 1987 to 1992, the County's modest orchard industry grew, with the number of orchard acres doubling from 53 to 111.

The smaller numbers of County farmers is often attributed to general aging of the farmer population. The general perception is that many farmers are retiring, and their children do not seem interested in continuing family farm operations. Another possible reason for recent agricultural decline concerns the growing market value of agricultural land. From 1987 to 1992, average value for an acre of farmland increased from $729 to $1034. The popularity of rural residential lots (and inflation) have led to this increase, as farmers continue to sell their land for conversion to other land uses. To address this issue, the County adopted a Land Use Taxation Program in 1981, based on the premise that agricultural land should be taxed based on its current *use* rather that at its market value. Consequently,

persons with land in agricultural use receive a significant tax break. However, it is estimated that currently only 15,000 acres, or 30% of total agricultural acres, are currently enrolled in the land use program.

Despite agricultural decline in the County, many physical factors encourage continued and expanded agricultural activity. These factors include large areas of gently rolling terrain, fertile soils and an abundance of surface water for irrigation.

Agricultural Conservation Practices

Non-point source pollution from agricultural runoff accounts for an estimated 68% of the stream pollution in the United States. Several federal government agencies, such as the Agricultural Stabilization and Conservation Service (ASCS) and Soil Conservation Service (SCS), work to mitigate this pollution through several programs. Both agencies manage and oversee the Agricultural Conservation Program by providing technical support and funding to farmers implementing conservation practices. The Conservation Reserve Program takes a different approach to soil conservation, providing compensation to farmers who elect to retire highly erodible farmland for a period of ten years. The decline in farming activity in the County has led to significant staff reductions in both of these agencies' local offices.

Farmers in the County can also receive technical assistance in pesticide management from the Virginia Cooperative Extension Service. The Service serves as a clearinghouse for pesticide management information. It also provides training in pesticide application for farmers and qualifying businesses.

Forestal Resources

As of 1992, timberland covered 176,780 acres, or approximately 70%, of the County. This represents a very slight increase from total timberland in 1985. Private entities currently own most of the commercial forest land, with the forest industry controlling 20,199 acres in 1991. During the same time, farmers and individual private owners held 31,762 and 95,287 acres, respectively. From 1985

to 1992, the amount of timberland in corporate ownership increased from 16,001 to 27,792 acres--an increase of 74%.

Table 5

Forest-type group

Forest-Type (in acres)	1985	1991
Va. Pine, Loblolly pine, Shortleaf Pine	59,748*	55,891
Oak-Pine, Gum, Hickory, Poplar	26,686	33,251
Oak-Hickory, Poplar, Red Maple	73,332	71,756
Sycamore, Maple, Ash	8,002	7,941
White Pine-Hemlock	8,001	7,941
Stand-size Group		
Sawtimber	72,511	61,526
Poletimber	51,419	51,730
Sapling-Seedling	51,839	59,553

Source: Forest Statistics for Virginia: 1992

*All units in acres

In recent years, there has been an increase in the forest industry's activity, as evidenced by the reduction in trees of sawtimber size. Consequently, the forest industry now occupies a larger position in the local economy. A total of 18,574 thousand board feet of sawtimber was cut in 1993, a 53% increase from the 12,140 amount cut in 1985. This growth is mostly attributable to increases in "annual removals" of pine sawtimber, amounting to 52% of the total sawtimber volume. Since almost 63% of the forest land is pole size or seedling and sapling size, the forest industry appears to have good potential for continued expansion. Woodland owners realized a combined income of approximately 1.5 million dollars in 1993, providing a major contribution to the County's economy.

Forestry Conservation Practices

Soil conservation practices are extremely important in the County since the area is characterized by a highly erodible soil structure and an extensive surface drainage system. Until July 1993, foresters could choose to implement voluntary Best Management Practices (BMPs) to reduce erosion and sedimentation caused by their actions. However, new state legislation now *requires* that loggers use BMPs to protect water quality in logging areas. The State Department of Forestry has two local staff persons to provide technical assistance to loggers and to enforce this legislation. To private landowners considering having their property logged, the department also provides technical and financial assistance in replanting the land. Despite this assistance, only approximately 20% of the harvested land is "artificially reforested". The remainder is either developed or left to natural means of revegetation.

Climate

The County enjoys a relatively temperate climate, as the following selected climactic data illustrates. Data from January and July is used since they are the coldest and warmest months.

Average January Temperature (degrees) 34.9F
Average July Temperature (degrees) 75.1F

Highest Temperature of Record (degrees) 104F
Lowest Temperature of Record (degrees) . . . . . -7F

Average Maximum (degrees):
- January 46.5F
- July 87.3F

Average Minimum (degrees):
- January 22.8F
- July 62.4F

Average Humidity	67.7%
Average Annual Precipitation	45.15"
Average Annual Snowfall	12.0"
Average Growing Season	158 days

Source: Va. State Climatology Office--Univ. of Virginia

Air Quality

The County enjoys good air quality and was determined to be an *attainment* area by the Virginia DEQ. (Pursuant to the recently revised Federal Clean Air Act, *non-attainment* areas are required to submit plans to the Environmental Protection Agency outlining strategies to address air pollution.) As an attainment area, industrial development can occur in the County as long as it does not cause "significant deterioration" of existing air quality.

Due to the nature of existing industries, the County-City area does not have major facilities that emit criteria and toxic air pollutants. All emissions are reported to and monitored by the DEQ, which has indicated that it has no information indicating that emissions are creating conditions injurious to public health.

As indicated in the *Slopes* section, the County's terrain varies significantly. In such areas, the rate at which air pollution disperses depends largely on both topography and meteorological conditions. In certain instances, short-term temperature inversions may inhibit dispersion and "trap" pollutants in a certain area. However, the DEQ does not consider the County to have a dispersion problem.

POPULATION

A study of demographic characteristics helps to *define* an area, establishing its composition and peculiarities relative to other areas. Inasmuch, an analysis of population serves as a solid point-of-departure for comprehensive planning. Information from this chapter can be used to:

- define county-wide development trends for use in land use planning;
- help indicate where needs exist for public and human services, housing, education, recreation, health care, and utilities;
- point to future needs for business or commercial services and therefore assist private sector interests in future marketing efforts; and
- illustrate changing characteristics of the labor force--useful for industries wishing to expand or locate in the Henry County market area.

The 1986 Plan relied heavily on data from the 1970 and 1980 U.S. Censuses. Similarly, this plan benefits from more current 1990 Census data, which can be compared with past Census data to show population changes and trends.

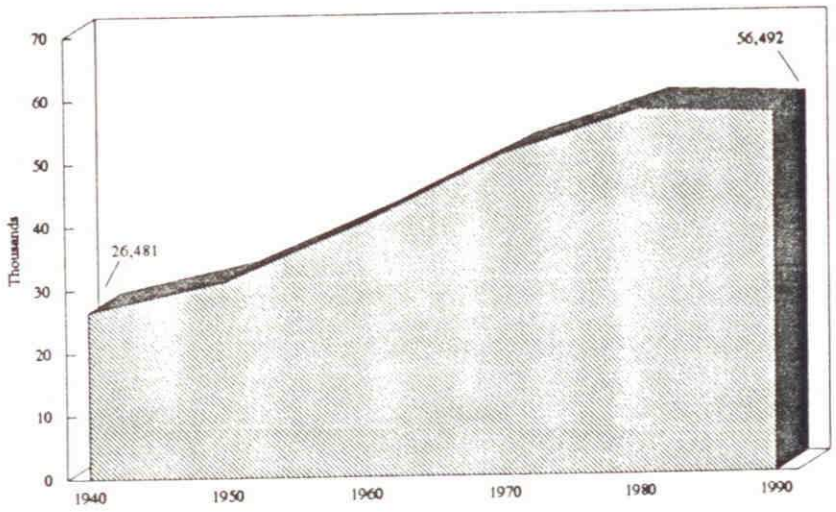
General Population Trends

Since the 1940's, Henry County has evolved from a rural to a largely urban/suburban county. The County grew slowly during the first thirty years of the century, from a 1900 population of 19,625 to 20,088 in 1930. The second thirty years saw rapid growth, as the County's population grew to 40,335 in 1960. This represented a population increase of 100.8 percent, despite the loss of approximately 5,200 persons through several annexations by Martinsville. Between 1960 and 1970, the County experienced a 26% increase--larger than any of the surrounding localities and bringing the total population to 50,901. Population increased between 1970 and 1980 by 13.3% to 57,654. The following decade was

unique in that the County's population decreased by 1.2%. The following graphic illustrates the County's population changes since 1940.

Figure 1

Henry County Population (1940-1990)



Source: U.S. Bureau of the Census

The following table illustrates these changing demographics compared to those of the Commonwealth and the City of Martinsville.

Table 6

Population Change

	1970	1980	% Change	1990	% Change
Henry County	50,901	57,654	13.3	56,942	-1.2
Martinsville	19,653	18,149	-7.7	16,162	-10.9
Virginia	4,648,494	5,346,618	15.0	6,187,358	15.7

Source: U.S. Bureau of the Census

As the table shows, the County's population loss has come at a time of high growth in the Commonwealth. The vast majority of the State's growth has occurred in the "Golden Crescent," the urban corridor that stretches from Northern Virginia to Richmond and Hampton Roads.

The table also illustrates the continuing decline in the City of Martinsville's population. The losses suffered by both the City and County is part of a larger, regional trend. For instance, cumulative population in the West Piedmont Planning District, (comprising the Counties of Henry, Franklin, Patrick, and Pittsylvania and the Cities of Martinsville and Danville) declined 0.9% between 1980 and 1990. Each of these localities, except Franklin County and Danville, experienced population loss in the past decade, with Danville's growth attributable to annexation of portions of Pittsylvania County.

Age-Sex Distribution

Changes in the composition of the County's population help explain this recent population loss. The following population pyramids portray the County's population according to age and sex.

The differences in the pyramids reveal several trends, foremost being the general aging of the County's population over the past several decades. Since 1970, each of the older age groups, beginning at age twenty-five, have grown both in numbers and in percentage of total population. Conversely, each of the younger age groups has declined in proportion to total population (these age groups experienced numerical increases between 1970 and 1980, due to the large increase in total population). Because of these changes, the 1990 pyramid appears more "top heavy" than both the 1970 and 1980 pyramids.

This trend becomes more apparent when considering the significant increases in median (or average) age over the years. The County's median age, which was 26.3 years in 1970, rose to 30.6 in 1980 and again to 35.3 in 1990.

SINCE 1970, EACH OF THE OLDER AGE GROUPS, BEGINNING AT AGE TWENTY FIVE, HAVE GROWN BOTH IN NUMBERS AND IN PERCENTAGE OF TOTAL POPULATION.

Several inferences can be made from this population data. First, an out-migration of younger, working age persons exists, resulting in reduced populations

Figure 2

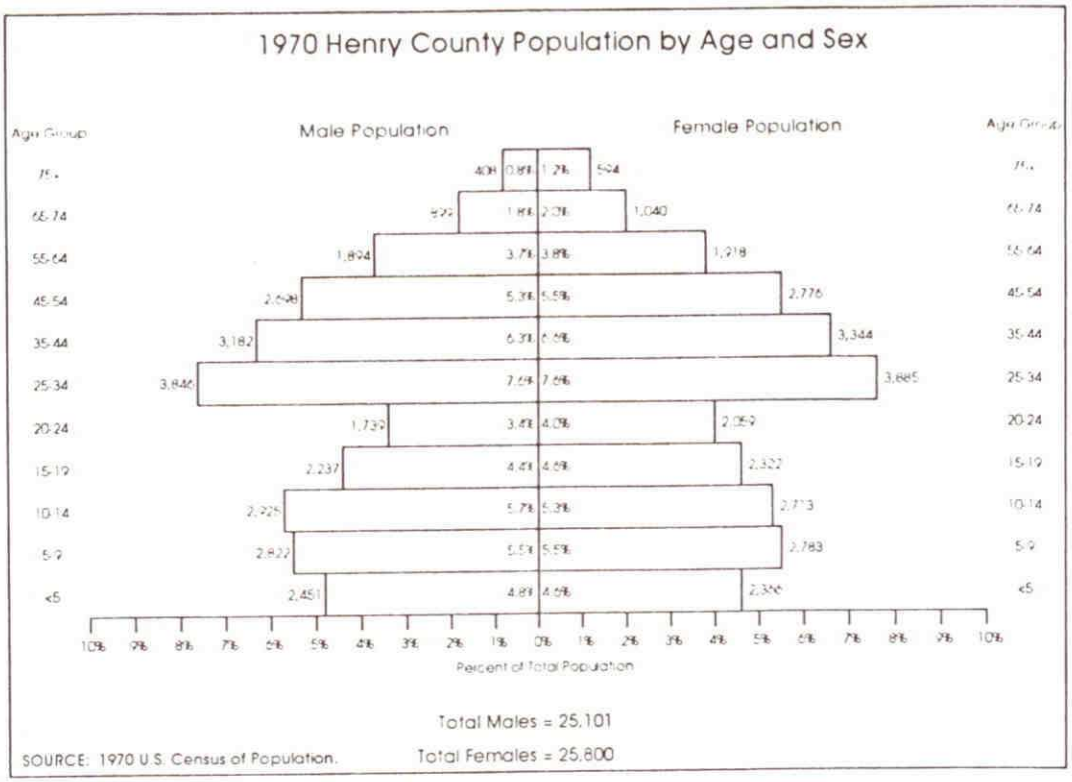


Figure 3

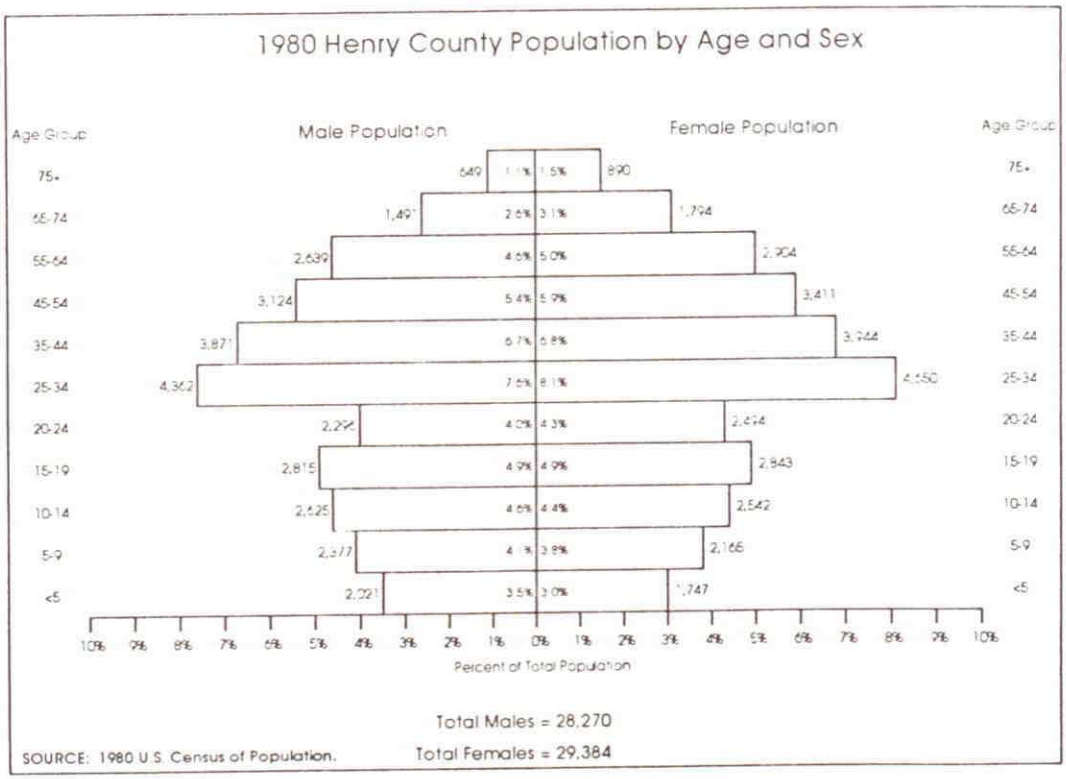


Figure 4

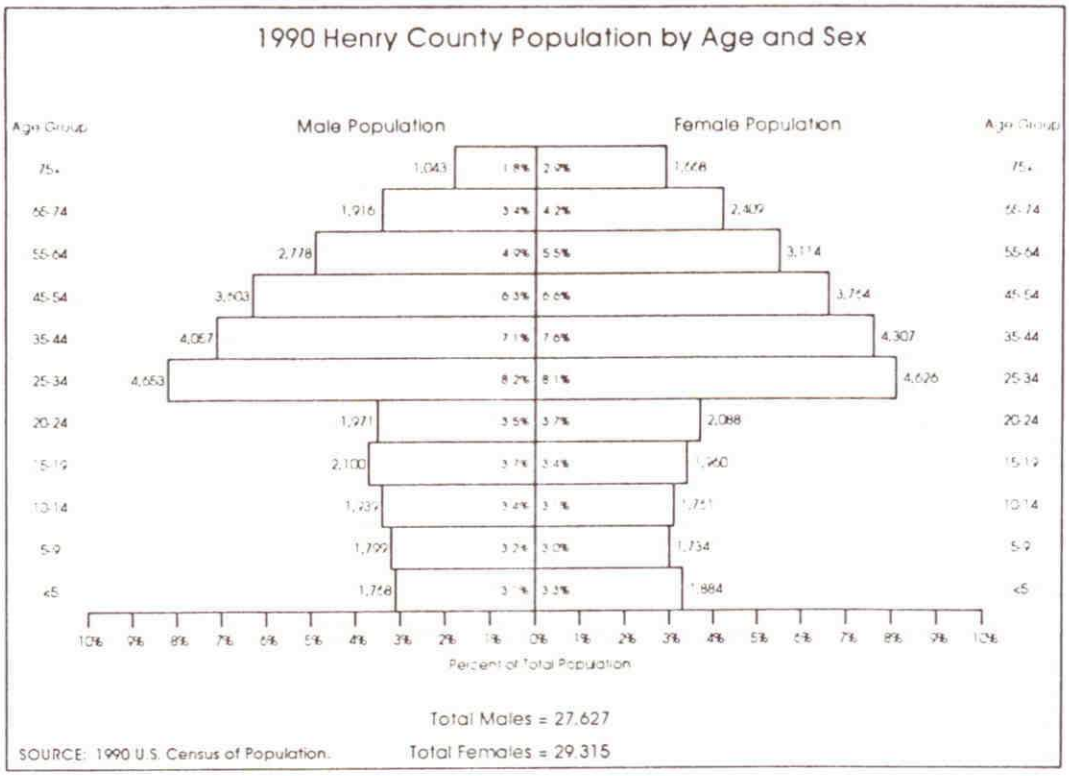
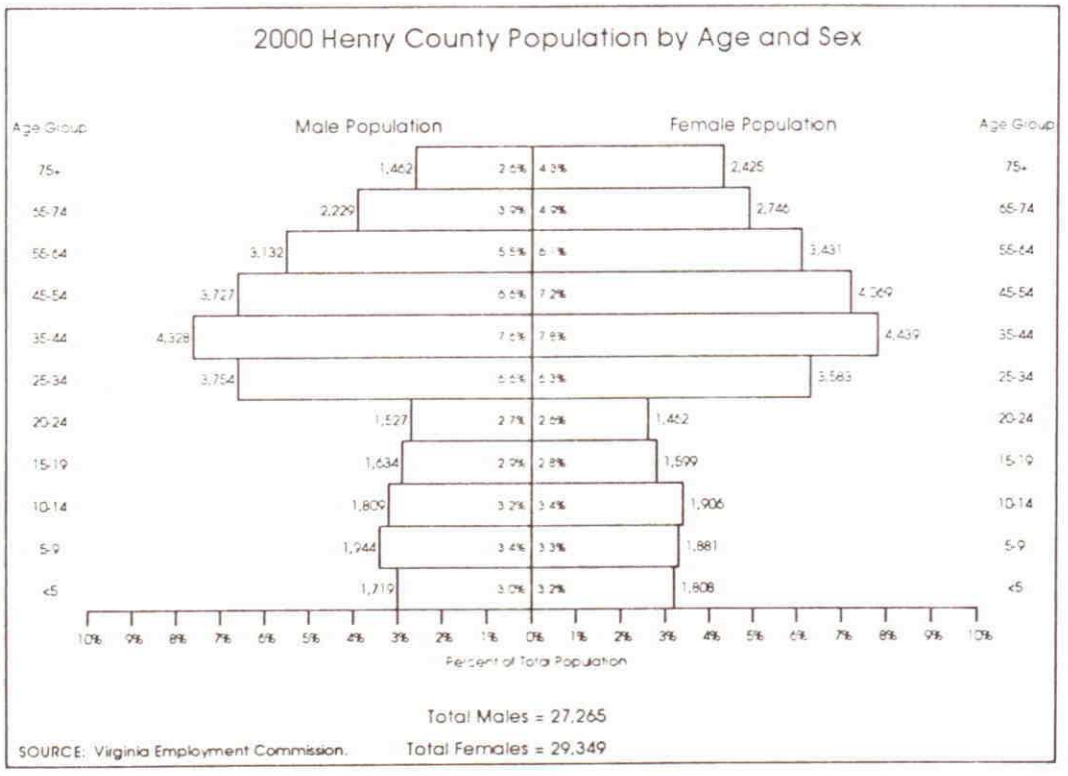


Figure 5



for these groups. Consequently, the number of women in childbearing years has also decreased, resulting in lower birth rates. Although younger people have left, older people have remained in the area. Also, many retired-age persons are moving into the area, attracted by the County's rural setting, mild climate, and proximity to major urban areas.

Although tremendous differences exist between the various age groups, there is little variation based on gender. Total female population is slightly greater than the total male population, largely attributable to the natural fact that females have a greater life expectancy than their male conterparts. The projection for the year 2000 pyramid contains the most noticeable differential due to the longer lives of females. Although the pyramid as a whole does not differ markedly from the 1990 pyramid, there is a noticeable increase in females over the age of sixty-five. This projection indicates a much smaller increase for males of this group, suggesting a future increase in the number of widows. The following section discusses population projections in greater detail.

Population Projections

The trends mentioned above are useful in planning efforts in many ways. For example, the population of the age group under five years provides insight into future needs for elementary education. This age group may also have special health care needs. The population from five to fourteen years comprises most of the persons in the educational system. Its size serves as a good predictor of the local labor force requiring jobs in the future. A large number of females in the child-rearing age group may increase birth rates, which influence future school enrollments and social service needs. Finally, the size of the pre-retirement/elderly population group can help in needs assessments for special facilities and programs needed by older persons, such as those relating to health, recreation, transportation, and housing.

The table shows that the number of children under five years of age is declining, and will likely continue to do so in coming years. This will result in a reduced demand for preschool services. School age population (5-14) has also

decreased since 1980, but at the much greater rate of 25.3%. This plan does not anticipate this trend to continue and projects a slight increase by the year 2000.

Table 7

Population by Age--Henry County

Age Group	1980 Pop.	1990 Pop.	% Change	2000 Projected	% Proj. Change	2010 Projected	% Proj. Change
Under 5	9687	7233	-25.3	7540	4.2	6785	-10
-9	3781	3,652	-3.4	3,527	-3.4	3.273	-7.2
15-44	27275	25762	-5.5	22326	-13.3	20199	-9.5
45-59	9683	10360	6.9	11399	10	12157	6.6
60-64	2333	2899	24.3	2960	2.1	3512	18.6
65 +	4895	7036	43.7	8862	25.9	10529	18.8

Source: U.S. Bureau of the Census

The high school and younger-working age group decreased over the past decade, a distinct change from that age group's increase between 1980 and 1990. This group is projected to decline further, as the table indicates. The second working-age group, consisting of persons aged between forty-five and fifty-nine, has grown in the past decade by 6.9%. This group should continue to grow in coming years.

The pre-retirement age group (ages 55-64) increased by 24.3% during the eighties. This group's growth suggests that a large segment of the population will soon leave the workforce to retire. This group is projected to increase by a slight 2.1% by the year 2000, and rise to 3,512 (a 28.6% increase) by 2010.

The largest percentage increase among all the selected age groups occurred in the retired-elderly group, which grew by 43.7% by 1990. According to projections, this trend will continue until the year 2010, but at a reduced rate of growth. These figures portend an obvious and immediate need for increased services and facilities catering to the elderly.

Racial Characteristics

The following table illustrates the composition of the County's population according to race. The "Indians" category refers to American Indians, Aleuts, and Eskimos; the category "Asians" includes subcategories such as Chinese, Japanese, and Pacific Islanders. "Others" encompasses races not accounted for in the four categories, as well as persons not specifying their race on census forms.

Table 8

Population Count by Race

	Total Pop.	White	Black	Indian	Asian	Other
1970	50,901	39,802	11,035	17	47	31
% of Total	1.00	78.2	21.7	0.02	0.08	0.06
1980	57,654	44,068	13,478	25	83	16
% of Total	100%	76.4	23.4	0.05	0.15	.03
% Change (1970-1980)	13.3	10.7	22.1	47.1	76.6	-48.4
1990	56,942	43,529	13,155	63	110	85
% of Total	100%	76.4	23.2	0.1	0.2	0.1
% Change (1980-1990)	-1.2	-1.2	-2.4	152.0	32.5	431.2

Source: U.S. Bureau of the Census

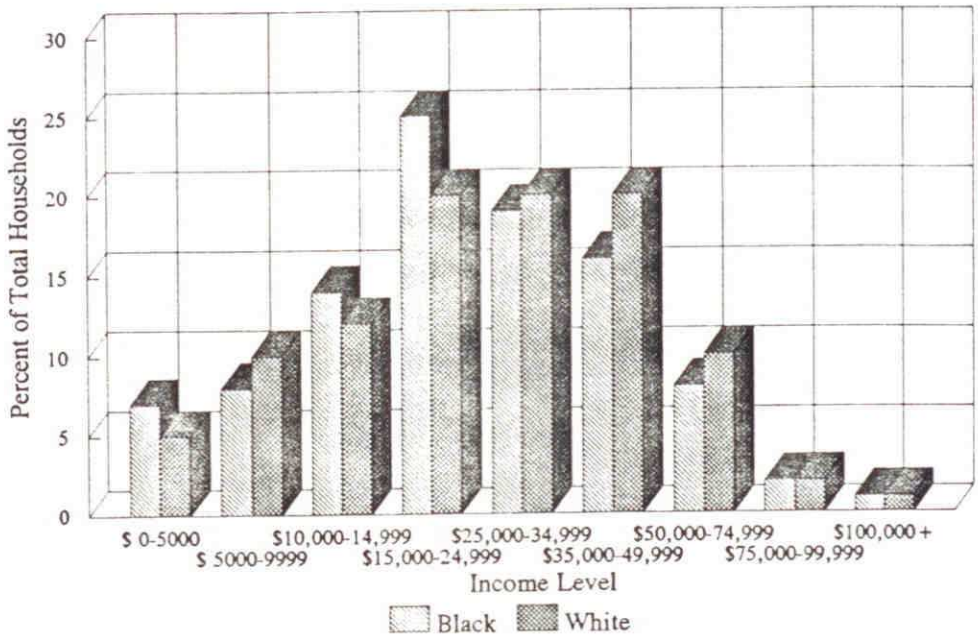
Over the past two decades the ratio of Whites to Blacks has remained constant (3 to 1) and together they comprise 99.6% of the 1990 population. There has been a slight increase in the numbers of Asians and Indians in recent years.

Income by Race

The graphic of the following page shows household income according to race. Despite some minor differences, household incomes are similar for Blacks and Whites. The bar graph shows that complete equity exists at the extreme income levels, both high and low. Fifteen percent of both groups earn below $10,000 annually, while 3% earn more than $75,000 per year. The lower-middle to middle income bracket reveals the most noticeable discrepancies. Approximately 25% of all Black households earned $15,000-$24,999, compared to only 20% of White households. The two brackets that comprise the middle class ($25,000 to $49,999)

show combined differences of 5% between races--40% White and 35% Black. These differences are quite small relative to other localities and continue to get smaller.

Figure 6
Household Income by Race
Henry County: 1990



Source: U.S. Bureau of the Census

Educational Attainment

The table on the following page shows that the County continues to trail the State in terms of educational attainment. However, the County has shown improvement in certain areas. For example, the number of persons over the age of twenty five with high school diplomas rose by roughly 24% from 1980 to 1990 (see table). However, persons with 4-year college degrees only increased by 8.03%, from 6.23% to 6.73%. This increase is considerably lower than the State's increase of 28.23%. The tendency for young people to not return to the area after receiving college degrees partially explains this statistic.

An encouraging trend not shown in the table involves the percentage of County residents who received *some* college education. This figure rose from 4.98% in 1970 to 9.05% in 1989, then jumped to 17.50% in 1990. These increases are partially attributable to County residents taking courses and often receiving associate degrees at Patrick Henry Community College.

Table 9

Educational Attainment (1970-1990)

	% High School Diplomas				% 4-Year College Degrees			
	1970	1980	1990	% Change (80/90)	1970	1980	1990	% Change (80/90)
Henry Co.	32.63	43.45	53.89	24.02	4.14	6.23	6.73	8.03
Virginia	47.78	62.43	75.16	20.39	12.30	19.09	24.48	28.23

Source: Bureau of the Census

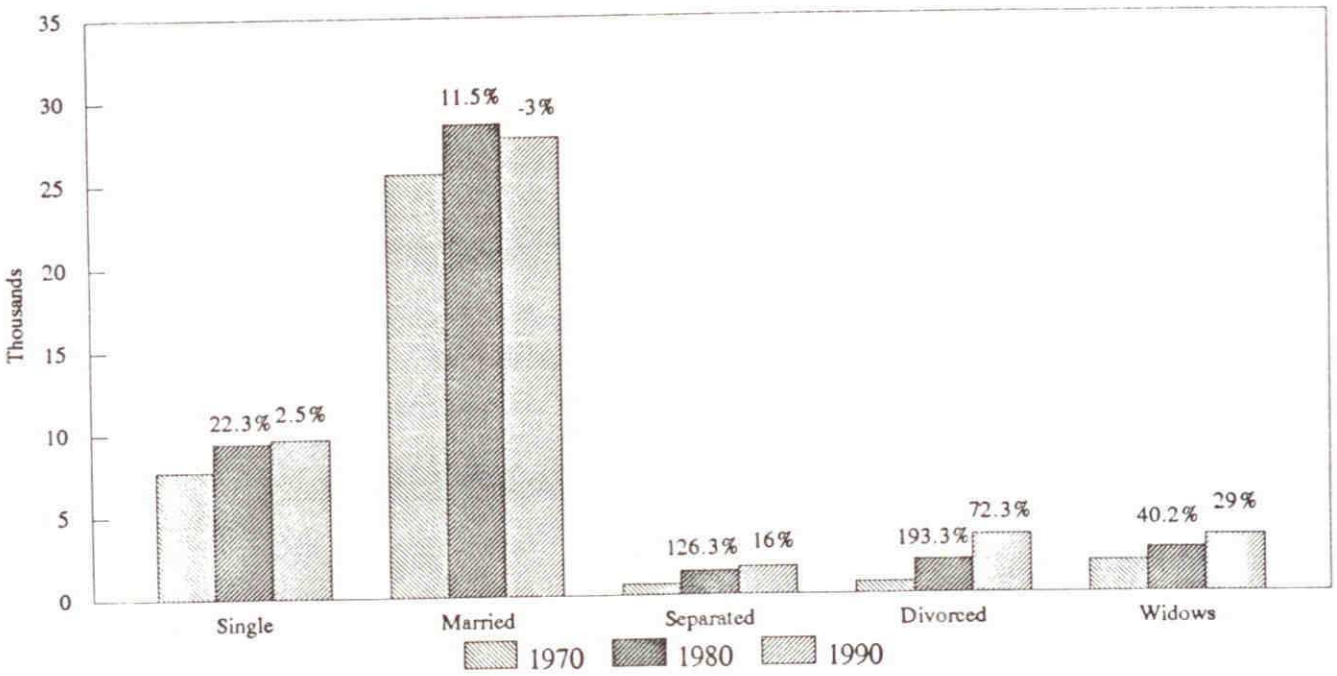
Marital Status

Marital status affects natural population changes and can therefore influence housing requirements, available labor supply, school-age population, and other service needs. The following graph portrays marital status of persons aged fourteen or over in 1970 and 1980, and persons aged fifteen years and over in 1990.

Figure 3 shows that the number of persons in each category rose between 1970 and 1980. Divorced and separated persons account for the most significant percentage increases, rising 193.3% and 126.3% respectively. Data from the 1990 Census show that divorce continues to become more prevalent in the County, as evidenced by a 72.3% increase. The number of widows also continues to grow, from 1,911 in 1970 to 3,454 in 1990. Single persons increased in numbers as well, from 7,705 to 9,420 in 1980, and to 9,654 in 1990.

All other things being equal, these trends translate into increased housing needs for the County. A decrease in married persons coupled with an increase in divorced, separated, single, and widowed persons results in a reduced *person per household* average (see "Households" section for further discussion).

Figure 7
Marital Status (1970-1990)



Source: Bureau of the Census

Families

The rising divorce rate has led to a decrease in the number of traditional, "nuclear" families in the County. During the eighties, married-couple families decreased by 34.8%, from 13,831 to 9,019. Conversely, female heads of households (those without husbands) increased 52% from 1,455 to 2,214.

Households

In 1970, the average persons per household was 3.18. This average decreased in 1980 to 2.94, and again to 2.59 in 1990. While population has decreased in recent years, the number of households has actually increased due

to the smaller number of persons per household. This trend helps explain the continuing residential development in the County, despite recent population decline. Since the shift toward smaller households will likely continue, the County must continue to anticipate and plan for future housing development.

Population Distribution and Density

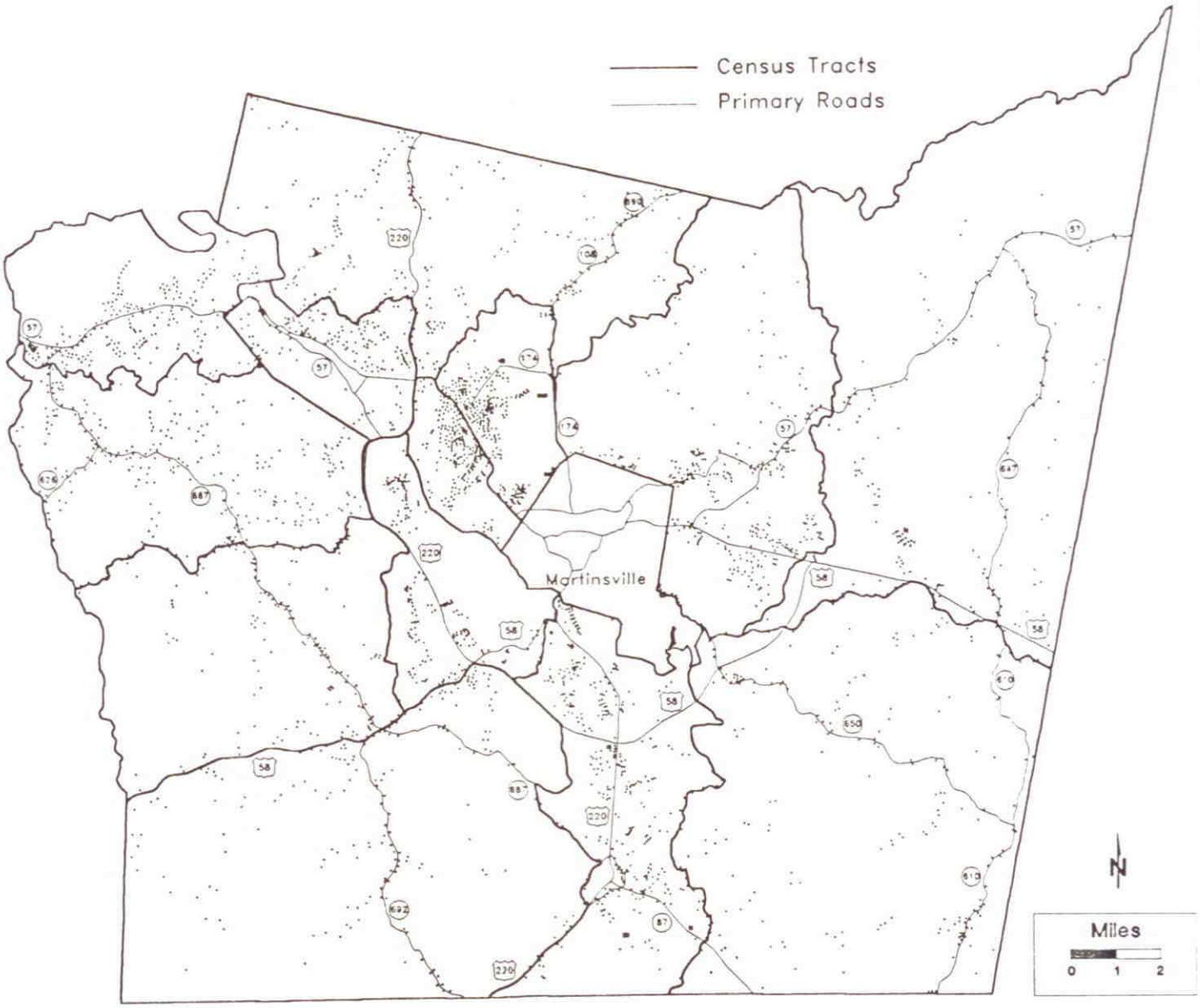
Several factors have influenced the location of the County's population, depicted on the map of the following page. For example, when manufacturing enterprises opened in the area, many located next to the Smith River, particularly in the northwest portion of the County. Factory workers, needing to live near their places of work, created and settled in nearby developments.

In later years, as automobile and truck travel became more prevalent, the relation between the location of the area's major road corridors and population increased. The Route 220 corridor, extending north and south of Martinsville and encompassing the Town of Ridgeway, delineates a densely-populated area. Similarly, the Route 58 East Corridor, which provides easy access to Martinsville and Danville, is currently experiencing significant growth.

Despite these and other areas of concentrated population, Henry County has become relatively disperse in recent years. Due to a development pattern called *suburban sprawl*, the population continues to spread across the County's landscape. The term describes peoples' recent tendency to leave residences in urban areas in favor of lower density, suburban areas. Commercial development has followed this out-migration, with most new commercial development occurring outside traditional urban areas. Once generally centralized in certain "nodes," the country's population has "sprawled out" over larger land areas. This plan's Land Use chapter discusses in greater detail the effects of sprawl development.

The following table shows the decreasing populations of the County's traditional urban areas. The table lists data for Census Designation Places (CDP's)--general areas that are urban in character.

Henry County
1990 Population Distribution



Note: Each dot represents approximately 20 persons.

Source: 1990 Census of Population & Housing STF-1

Table 10

Population in CDP's

CDP	1970	1980	% Change	1990	% Change
Collinsville	6,015	7,517	25.0	7,280	-3.2
Bassett	3,058	2,034	-33.5	1,579	-22.4
Stanleytown	N/A	1,761	N/A	1,563	-11.2
Fieldale	1,337	1,190	-11.0	1,018	-14.5
Ridgeway	624	906	45.2	752	-17.0

Source: U.S. Bureau of the Census

As the table shows, each CDP experienced some population decline during the past decade. In the previous decade of 1970-1980, the Collinsville and Ridgeway areas grew significantly, only to lose population in subsequent years. The greatest losses came in the older urban areas of Bassett and Fieldale. Over the twenty-year period, population in Bassett has fallen from 3,058 to 1,579--almost a 50% decrease. The Fieldale area has experienced similar, but less severe, population loss.

NOTE: For more detailed demographic information for specific areas of the County, see *Appendix B*: Census Tract Analyses.

ECONOMY

Economic forces have played a larger role in shaping present-day Henry County than any other. In many ways, the County is characterized by a tradition of economic opportunism and entrepreneurship. These attributes served as impetus for its evolution from an agricultural to a manufacturing-based community. Any planning effort, therefore, must fully consider the County's past and present economic situations in order to properly envision its tomorrow.

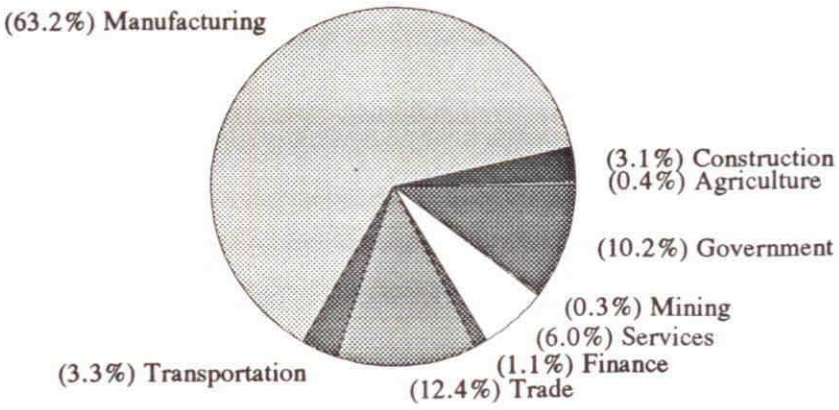
In some respects, this is an opportune time for long-range planning in that the County has arrived at an economic crossroads of sorts. Recent job losses due to industrial downsizing have forced the County to more critically consider where it will fit into the emerging global economy of the twenty-first century. For example, the County has applied for grant money for an "economic adjustment strategy" to cope with the downsizing of the area's textile and apparel industries. This project will entail a consultant assessing the County's strengths and weaknesses and recommending an appropriate economic strategy for the future.

This section will provide policy initiatives for the County in charting its future economic course. It discusses the structure of the economy, several economic growth indicators, and the existing institutions charged with economic development in the County.

Structure

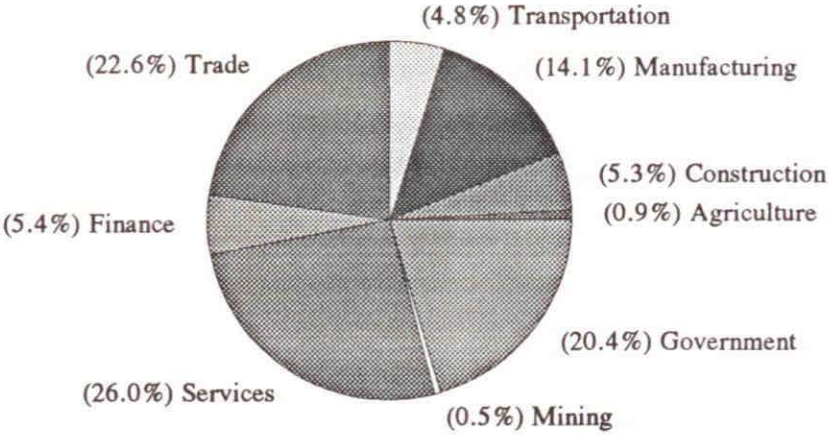
Simply stated, manufacturing serves as the cornerstone of the County's economy. In June 1993, 63.2% of the labor force in Henry County was employed in some type of manufacturing. Conversely, manufacturing in the state accounted for only 14.1% of total employment in 1993. At this time, service-related employment accounted for only 6% of the County employment compared to almost 26% in the State. The following graphics illustrate this distinct reliance on manufacturing.

Figure 8
Employment by Industry
Henry County: June 1993



Source: Virginia Employment Commission. *Covered Employment and Wages in Va.*

Figure 9
Employment by Industry
Virginia: June 1993



Source: Virginia Employment Commission. *Covered Employment and Wages in Va.*

Due to its high amount of manufacturing, the County seems to be in an enviable position compared to other localities, since manufacturing is considered a *basic* industry. Base analysis is a commonly used frame of reference used to describe economic systems. Essentially, this method divides jobs into two categories--basic and non-basic. Basic activities produce goods or services that are shipped to outside markets, whereas non-basic activities provide support services and rely almost entirely on local trade. The standard rule used when considering basic vs. non-basic employment is that every basic job creates three to four non-basic, supportive jobs. Obviously, localities attempt to promote basic job creation since it greatly spurs non-basic job creation.

Considering that well over half the County's workforce has employment in a basic industry, it is obvious that this standard does not apply to the County's situation. This is because the non-basic jobs that support the basic jobs are mostly located in other jurisdictions. For instance, Martinsville has traditionally housed financial, legal, and retail businesses serving the County. The Greensboro, Roanoke, and Danville areas have also attracted much of the County's retail business.

Despite having an essentially basic economy, the County suffers from a lack of diversity. Approximately 68% of the County's manufacturing activity resides in the furniture and textile industries. When markets for these goods decline, or competition from other manufacturers increases, the County is particularly hard hit. The fact that both these industries tend to be in the same economic cycle exacerbates the problem. (For example, unemployment levels in the County usually increase at the end of the year, since both industries usually reduce their production when balancing inventories.) Consequently, the County's economic development efforts have targeted industries that function in different economic cycles in an effort to diffuse negative impacts on the economy.

APPROXIMATELY 68% OF THE COUNTY'S MANUFACTURING ACTIVITY RESIDES IN THE FURNITURE AND TEXTILE INDUSTRIES.

Some within the economic development community believe that these efforts should focus on different types of manufacturing enterprises. However, others

contend that over-reliance on manufacturing itself will hinder the County in improving its economic position. The latter argue that economic swings most directly affect the manufacturing sector of the economy. Therefore, changes in the state and national economies tend to be magnified in the County, making the County's economic health largely dependent on the health of these larger economies. This situation could be viewed as advantageous, since the County's existing industries and large manufacturing workforce are poised to capitalize on economic upswings at the national or state levels. Despite these differences, most would agree that the County should strive to diversify its economy in some manner, either by attracting more non-maunfacturing jobs or by decreasing the dependence of the manufacturing sector on textiles and furniture. Examples of more diverse options include the creation of "support" services for industries (e.g. manufacturing supply) and distribution industries. Diversification should promote growth in existing area businesses, and attract new industry and businesses to the area.

The following table shows in more detail the nature of the County economy and how it has changed since 1986.

Table 11
Employment by Industry
March 1986-March 1993

Employment Sector	March 1986	% of Total	March 1993	% of Total	% change 86-93
Total Employment	**28,431**	**100.0%**	**29,513**	**100.0%**	**3.8%**
Manufacturing	16,230	68.0%	15,073	63.8%	-7.1%
Agriculture, Forestry, Fisheries	47	0.2%	65	0.3%	38.3%
Mining	73	0.3%	65	0.3%	-11.0%
Construction	648	2.7%	693	2.9%	6.9%
Transportation, Commun. & Utilities	904	3.8%	819	3.5%	-9.4%
Wholesale & Retail Trade	2,441	10.2%	2,859	12.1%	17.1%
Finance, Insurance, & Real Estate	244	1.0%	248	1.0%	1.6%
Service	1,166	4.9%	1,385	5.9%	18.8%
Government	2,247	9.4%	2,417	10.2%	7.6%
Nondisclosures & Nonclassifiables	14	0.1%	0	0.0%	0.0%

Source: Virginia Employment Commission. *Covered Employment and Wages*

Similar to national and state economies, the service sector of the County's economy is growing. The agriculture, forestry , and fisheries category had the largest percentage increase (38.3%), likely due to new forestry jobs. Wholesale and retail trade employment has also increased. The manufacturing and mining sectors suffered employment losses from 1986 to 1993, as did the transportation, communication, and utilities category.

Economic Indicators

Growth indicators serve as an objective means to evaluate the strength of economic systems. This section will use the following commonly used indicators:

- Unemployment Rates
- Commuting Patterns
- Per-Capita Income
- Poverty Levels
- Taxable Sales

Unemployment

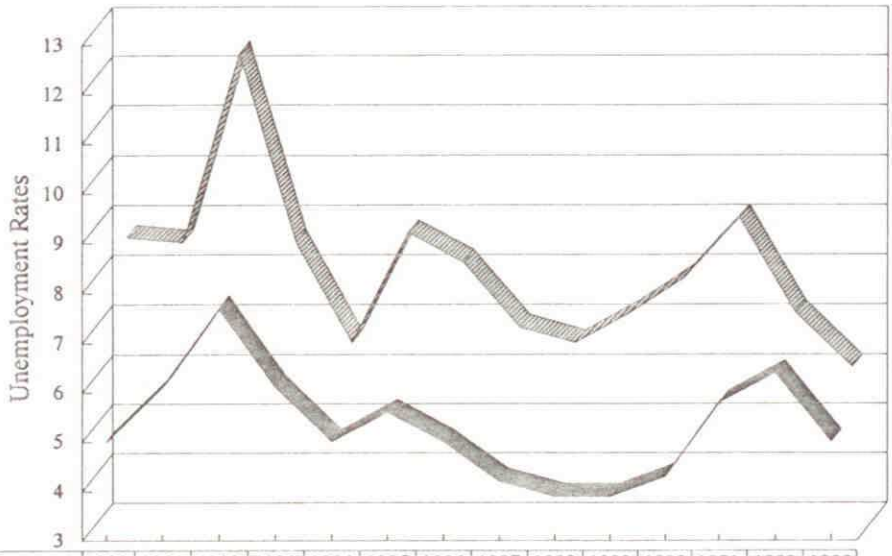
Over the past several years, changes in the County's unemployment rate have closely paralleled the State's (see graphic on following page). The similarity reveals the local economy's dependence upon the state economy. Also, the unemployment rate in the County is generally three to four points higher than the State's. On October 1, 1990, the U.S. Department of Labor classified Henry County as one of the thirty-one "labor surplus areas" in Virginia. This classification indicates that the county's average unemployment rate had remained at least 20% above the national average for the two previous calendar years. (Employers located in labor surplus areas can be given preference in bidding on federal procurement contracts).

In recent years, the County's unemployment rate has risen due to an industrial trend common throughout the region. Major conglomerates have begun to purchase local, homespun industries, often resulting in employee layoffs as

operations are consolidated among many firms. Increased foreign competition in the textile industry has also caused local unemployment to rise. Over the past year, DuPont has reduced its workforce by approximately one-half, from 1350 to 650. More recently, Sara Lee Knit Products, Inc. has begun cutting back its workforce. The company will reduce jobs over the course of a year from 3083 to an estimated 1200.

These cutbacks were largely attributed to a rise in foreign competition. Other local industries have blamed recent layoffs on increased operating costs, often due to rising employee health care costs.

Figure 10
Unemployment Rates
Henry Co. & Virginia



	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Virginia	5	6.1	7.7	6.1	5	5.6	5	4.2	3.9	3.9	4.3	5.8	6.4	5
Henry Co.	8.6	8.5	12.3	8.5	6.5	8.7	8.1	6.8	6.5	7.1	7.8	9	7.1	6

Source: Virginia Employment Commission

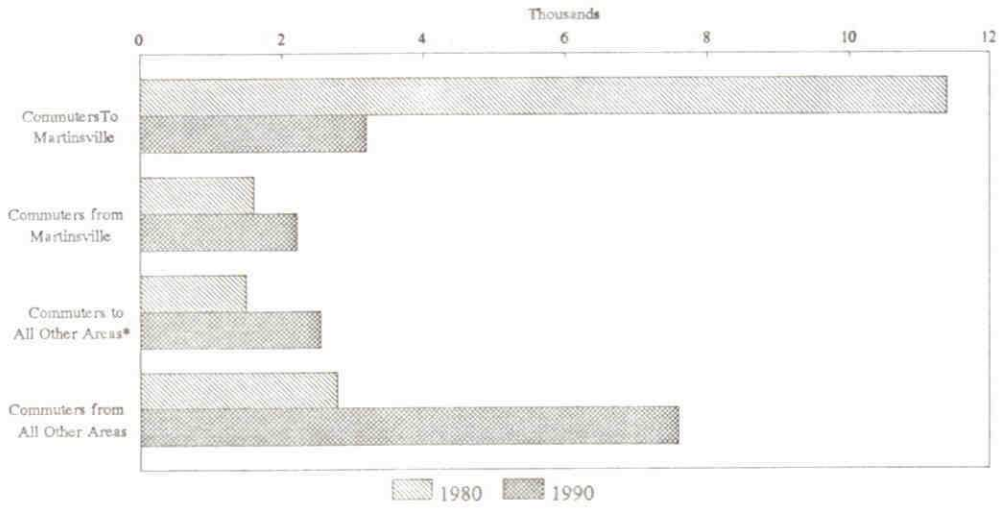
The recently ratified North American Free Trade Agreement (NAFTA) and General Agreement on Tariffs and Trade (GATT) may affect local industry. While the agreements purport to expand the economy through increased trade, many local labor leaders have expressed concern over these agreements. They contend

that County unemployment stands to rise as jobs move to Third World countries. With such a high concentration of textile and apparel firms, they argue that the County remains vulnerable since these countries have traditionally been attractive locations for many of these types of industries.

Commuting Patterns

Commuting patterns help assess a locality's economic vitality by indicating regional changes in employment. To this extent, they serve as a useful economic indicator.

Figure 11
Commuting Patterns for Henry County
1980-1990



* "All Other Areas" includes any area outside of the Martinsville/Henry Co. area.
Source: U.S. Bureau of the Census

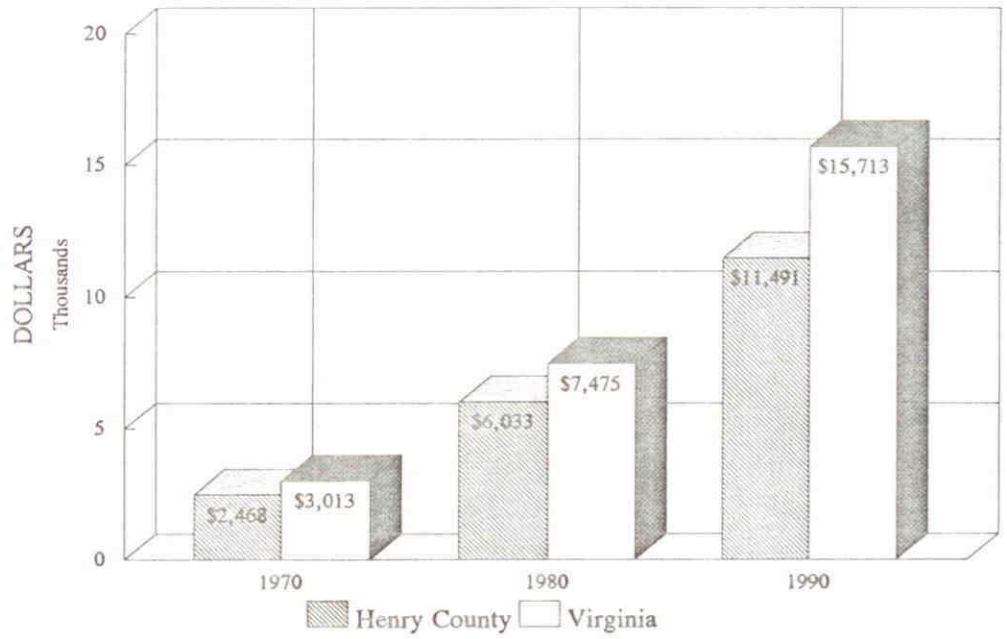
With large numbers of existing manufacturing jobs, Henry County has long served as a work area for many nonresidents. This is even more true today, since the number of commuters entering the County has increased over the past decade. While only 4,369 commuters traveled into the County to work in 1980, this number has more than doubled over the decade to 9,799.

Over the same period, the number of County residents who commute outside the County has decreased by over half, from 12,871 in 1980 to only 5,726 in 1990. A dramatic reduction in commuting from the County to the City of Martinsville accounts for the vast majority of this decrease. Over the decade, commuting from the County to the City has dwindled from 11,383 commuters to only 3,185 in 1990, a decline of 72%. Not only are fewer people traveling into the City, but more City residents are now commuting into the County. Also, the number of people commuting from other areas has increased dramatically, from 2,774 to 7,597. These trends indicate a regional employment shift, as more people from surrounding areas commute into the County to work.

Income

Per capita income represents the sum total of personal income of an area divided by the area's population. The 1990 per capita income in Henry County was

Figure 12
Per-Capita Income
Henry County and Virginia (1970-1990)



Source: U.S. Bureau of the Census

$11,491, which represents an increase of 90% from 1980. The State per capita income was $15,713, representing an increase of 110% from 1980.

Average incomes in the County have historically been lower than State averages, mostly due to the presence of labor-intensive manufacturing enterprises that require large amounts of unskilled labor. However, this disparity has grown over the past two decades. In 1970, the per capita income of Henry County was 82% of the state per capita income--by 1980, it had dropped to 80%. The 1990 figures shown below represent a 73% difference between the two. These figures ignore the fact that high incomes in Northern Virginia partially skew the state's averages. Nonetheless, it remains obvious that the County continues to trail other localities in the State in regard to personal income.

Poverty

The number of persons living below the poverty level not only serves as an indicator of general economic wellness, but also displays the need for services to assist persons of low-income. The following table contains poverty trends for the area and State.

From 1980 to 1990, the County has seen a slight decrease in the number of people living in poverty, based on the federal definition of the word. (Poverty level is determined through use of a formula which considers average costs for basic needs such as food, clothing, housing, and utilities. In 1989, the poverty level for a family of four was $12,674 gross income per year.) In 1980, 9.8% of the population, 5,603 people, lived below the national poverty level. By 1990, the number had dropped to 5,241, 9.3% of the population.

The County's figures remained lower than both the region and State. However, the Census data reveal a troubling poverty concerning the rising poverty level among single mothers. In 1980, 160 female heads of households in the County, having at least one child under five years old, lived in poverty. Over the decade, the number had risen to 259, an increase of 61.9%. Overall, 41.7% of these women in 1990 lived below the poverty level. Finally, poverty remains a

problem in the City of Martinsville. In 1980, it accounted for 13.3% of the population, and rose to 15.6% of the population in 1990.

Table 12
Population Below Poverty Level
1980 & 1990

Below Poverty Level	Henry County	City of Martinsville	WPPD	Virginia
1980 Persons	5,603	2,343	29,825	611,310
% of Total	9.8%	13.3%	12.6%	11.8%
1990 Persons	5,241	2,504	30,873	611,611
% of Total	9.3%	15.6%	13.2%	10.2%
% Change	-6.5%	6.9%	3.5%	0.0

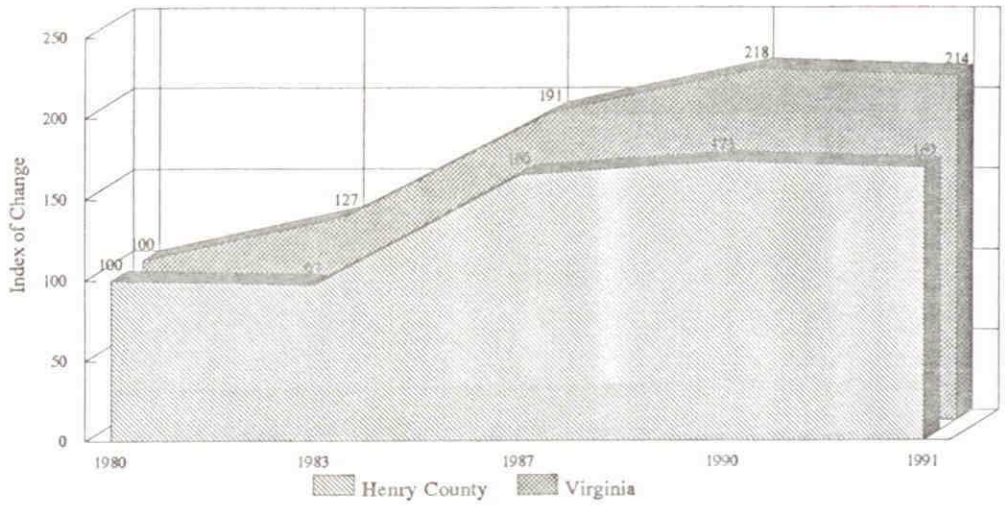
SOURCE: U.S. Bureau of the Census, Prepared by Virginia State Data Center

Business

The amount of taxable sales helps demonstrate business vitality. Taxable sales consist of sales that are covered by state sales tax, and include virtually all retail sales with several notable exceptions, such as sales of motor vehicles, motor fuels, prescription drugs, and state liquor sales.

In 1991, Henry County's taxable sales totaled $233,194,000 an increase of 68.9% since 1980. However, this increase was significantly less than the 114% increase at the state level. To better represent changes in sales for a locality, economists use a measue referred to an *index of change* (the taxable sales of the year divided by the taxable sales in 1980 and expressed as a percentage). The following graph compares the indices of change for taxable sales for the County and State. It shows that the County index of sales increases generally runs about 40% below the state level. As mentioned previously, the many County shoppers who travel to retail centers in the City and other nearby urban areas account for this modest retail activity. An increase in retail shopping opportunities in the County would attract more shoppers from both inside and outside the County.

Figure 13
Taxable Sales
Henry County and Virginia



Source: Tayloe Murphy Institute

Existing Economic Programs/Institutions

Several institutions and agencies exist which address economic issues and development within the County. The *Patrick Henry Development Council* (PHDC) (the marketing name for the Martinsville-Henry County Economic Development Corporation) was created in the mid 1980's to market the area to prospective companies and provide information and assistance to existing industry. In 1992, the PHDC created a "Partnership for Progress" to raise investment capital to support economic development projects. The partnership was also intended to serve as a means of involving a larger segment of the community in the economic development process. In its recently prepared report entitled a "Year 2000: An Economic Development Program," the partnership argues that the area's primary goal should be "an expanded and more diverse industrial economy" by the Year 2000. The report lists a number of industries that the PHDC will target in the future, such as electronics, furniture and textile accessories, medical-surgical equipment and pharmaceutical.

Recently, the PHDC also initiated a comprehensive distribution concept to involve a committee of experts in developing a full range of distribution industries.

With affordable real estate, economical freight rates and close proximity to major East Coast markets, many believe the area has potential as a distribution hub.

The *Martinville-Henry County Chamber of Commerce* also works to expand the local economy, while enhancing the area's quality of life through various community improvement programs. In late 1992, the Chamber worked with the West Piedmont Planning District Commission (WPPDC) on the area's application for redesignation as a "Certified Community". The certification program, administered by the Virginia Department of Economic Development, encourages communities to become better prepared to attract new industries and expand existing industries. The Department granted recertification to Martinsville-Henry County in April, 1993, but has since discontinued the program. Another ambitious project undertaken by the Chamber involves the establishment of the *Gateway Streetscapes Foundation*. The Foundation is a non-profit organization dedicated to community improvement through the design, implementation, and funding of landscaping projects.

The County government also remains active in economic development efforts. It recently received Rural Economic Development (RED) grant to carry out an industrial site selection study and Economic Development Administration (EDA) funds for an expansion of Beaver Creek Industrial Park. Also, the WPPDC, a regional planning entity, staffs a full-time economic development planner responsible for the region. The planner provides technical and administrative support to all of the economic development institutions and agencies.

Finally, the Economic Development Administration (EDA) serves as the federal agency responsible for aiding localities in economic development. In 1992, the EDA announced the designation of the Planning District as an "Economic Development District." The designation helps regionalize often disjointed, parochial economic development projects. Each project attempting to receive EDA grant monies must explain how it fits into the "larger picture" (i.e. the Overall Economic Development Plan).

Conclusions

Generally speaking, the County has a solid economy that has fared the recent recession better than many other local economies. It also has a strong institutional

framework in place for effective economic develoment and commuting patterns indicate that the County now stands as an employment center in the region. Finally, the poverty rate has declined and remains below the state poverty rate.

However, the preceding analyses reveal some disturbing trends that the County should address to ensure a viable economy. First, the County's economic structure lacks diversity and therefore remains vulnerable to economic downturns. Also, unemployment levels, which have consistently been above state levels, have increased further due to recent layoffs. Personal income levels continue to rise in Henry County, but fall short of increases in other areas of the state. Taxable sales have also increased but, again, not as much as taxable sales statewide.

Recent commuting patterns show that many jobs have left the City of Martinsville, while poverty has increased. The City's apparent economic decline is troubling, as the County realizes that the entire area's economic well-being depends on the viability of both economies. Greater cooperation between the two jurisdictions will help foster more coordinated and concentrated economic development efforts.

HOUSING

Due to cost increases over the past several decades, housing has emerged as a major concern for public policy makers. Faced with waning financial support from federal and state governments, local governments must play a larger role in housing programs and projects to insure a viable and affordable housing supply.

Although the County has provided support on many successful housing projects, it has lacked a cohesive, planned approach to housing problems. Through the comprehensive planning process, housing will be studied relative to other variables that influence its provision, such as demographics, the economy, land use, and infrastructure. Within this larger framework, the County can better address and plan for the housing needs of its citizenry. The Plan, therefore, will serve as the basis for the County's future housing strategy.

In 1993, the Virginia General Assembly acknowledged the vital role that the comprehensive plan plays in establishing housing policy. It passed legislation that expanded the scope of local comprehensive plans to include:

> the designation of areas for the implementation of measures to promote the construction and maintenance of affordable housing, sufficient to meet the current and future needs of the planning district within which the locality is situated.

This section assesses the County's housing situation by inventorying past and current housing stock and its accompanying costs. The inventory focuses on five aspects of housing: growth, occupancy (owner or renter occupied), structural type, cost, and condition. The plan outlines objectives and strategies that the County will pursue in fostering clean, safe, and affordable housing.

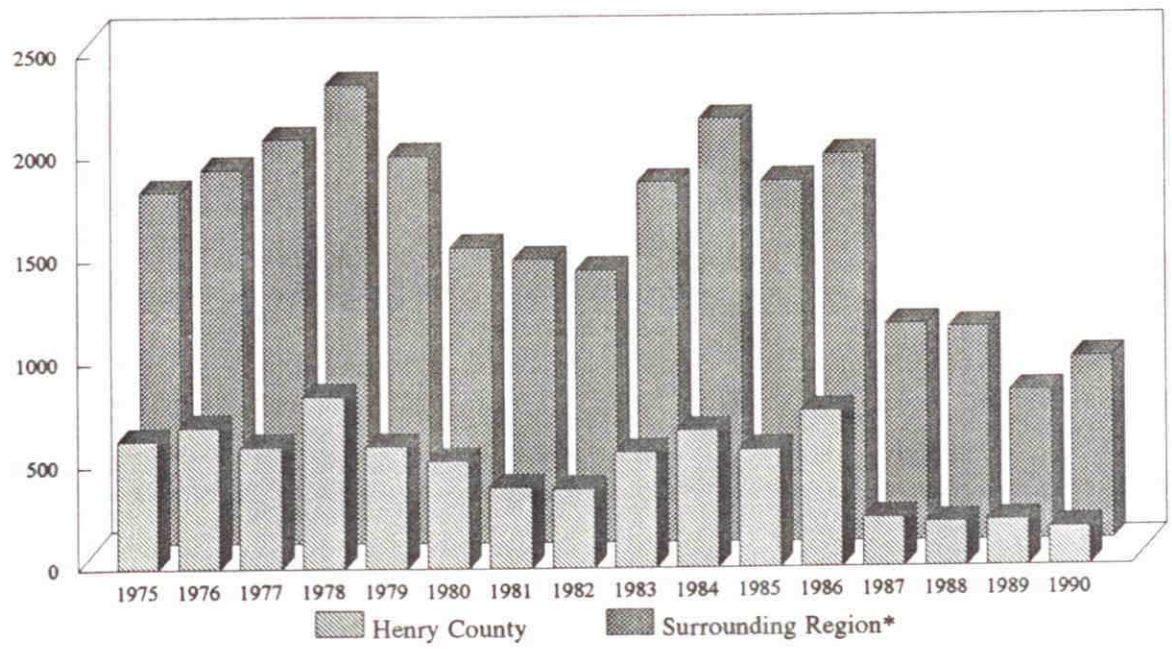
Housing Growth

Since 1970, the rate at which new housing units have been constructed in the County has differed from the population changes discussed previously in this

chapter. Total housing units increased by 33.3% from 1970 to 1980--significantly larger than that decade's population increase of 13.3%. ("Total housing units" encompasses virtually all types of units--owner and renter-occupied, seasonal, migratory, and vacant units.) Housing units rose again by 10.5% from 1980 to 1990, despite the 1.2% decrease in population. These increases are largely attributable to the decreases in average household size, also discussed previously (See *Households* section of *Population*).

Recent growth in the County's residential housing stock has accounted for approximately one quarter of housing growth in the West Piedmont Planning District. (The WPPD includes Henry County, Franklin County, Patrick County, Pittsylvania County, Rocky Mount, Danville City and Martinsville City.) From 1975 to 1990, Henry County issued 8,112 residential building permits, with an average

Figure 14
Building Permits Authorized: 1975-1990



Sources: University of Virginia's Tayloe-Murphy Institute and Center for Public Service.
Note: "Surrounding Region" comprises Franklin County, Patrick County, Pittsylvania County, Rocky Mount, Danville, and Martinsville--it excludes Henry County.

of 507 residential permits issued per year. The WPPD had 33,034 permits for residential units issued during this time, with an average annual count of 2,065 units.

The amount of new housing construction in both the County and its region has varied greatly from year to year. The following graphic shows the numbers of residential permits (single-family detached dwelling units and multi-family units) issued from 1975 to 1990. It illustrates that the ebbs and flows in housing supply for the County, as well as for the other areas of the WPPD, follow the same general pattern. These similarities suggest that the variations in the County's housing supply transcend its jurisdictional boundaries and should be considered in a regional context.

Occupancy

A study of occupancy identifies and compares the number of existing owner-occupied, rental, and vacant units. This information therefore helps characterize the housing stock and reveal any existing market deficiencies.

The County has a high home ownership rate of 77.9%. This rate is significantly higher than the State rate of 66.3%, but only slightly higher than the WPPD rate of 73.5%. Although a large number of County residents who own homes may suggest that housing is more affordable in the County than the State, the County's high home ownership rate may simply reflect its "greying" population. In general, older people can afford homes since they typically are financially more secure than younger people. Also, differences in age may influence housing preferences. Largely suburban localities having an older population tend to have higher rates of home-ownership relative to younger urban areas, since young people often have reservations about establishing long term commitments to communities.

Despite the high rate of home ownership, more County residents are renting than in the past. Persons in renter-type units declined by 14.1% from 1970 to 1980, but increased by 19.1% from 1980 to 1990. Conversely, persons living in owner-type units increased by 21% from 1970 to 1980, but declined by 6.3% from 1980 to 1990 (see Appendix C for summarized housing statistics).

Vacancy rates, or the percentages of vacant to total year-round units, represent the amount of available housing that exists in an area. Vacancy rates for rental properties in the County remain high compared with owner units. In 1980, 11.2 % of rentals stood vacant, compared to only 1.7% of owner units. Similarly, 9% of rental units were vacant in 1990, compared to only 1.1% of owner units. For Martinsville, 1990 vacancy rates were 7.2% for rental and 1.4% for owner-occupied units.

Prospective industries and businesses may consider these vacancy rates when evaluating the area's ready supply of housing. Overall, the County/City had a combined 253 units for sale and 297 for rent during 1990. Although some of these units may be substandard, one may assume that a reasonable amount of housing exists to meet demands stemming from new job creation.

Structural Type

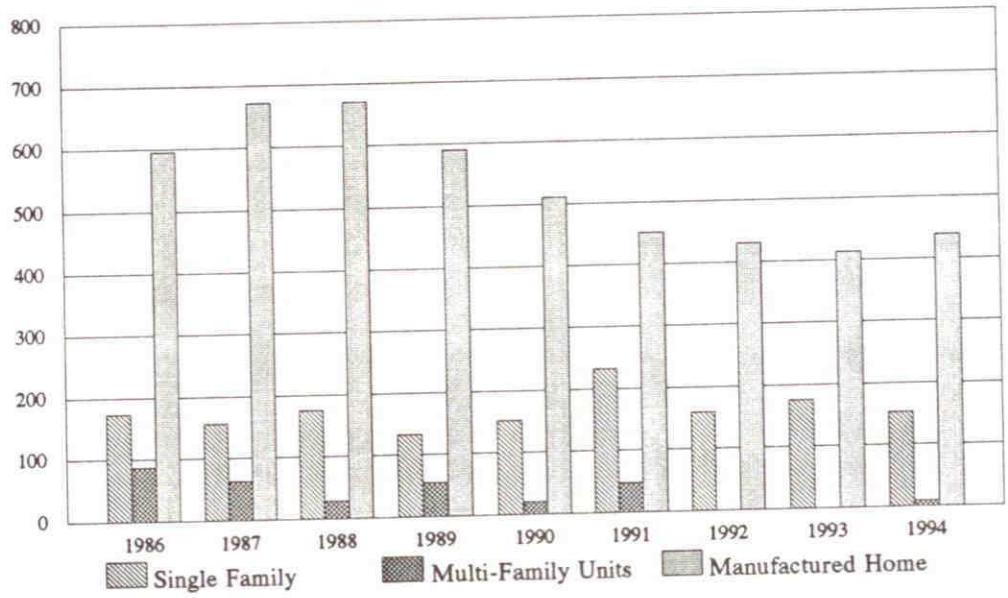
Single-family homes (usually site-built, stick-built, or modular structures) comprise 70% of the total housing units in the County. State and regional figures are similar, with single family homes accounting for 70% and 71.2% of State and WPPD stock, respectively.

Manufactured homes are built on permanent chassis for transport and are subject to federal (HUD) construction regulations. These homes account for a larger proportion of housing units in the County than the State. They comprise 20% of the County's total housing stock, but only 7.3% of the State's stock. Manufactured homes are common in the region, making up 17.2% of WPPD stock.

Multi-family homes are more prevalent in the state as a whole than in the County and its region. This housing form comprises 22.6% of state housing, but only 11.6 and 8.4% of the WPPD and County stock, respectively. The percentage for the state is somewhat skewed by the high number of multi-family units present in highly urbanized areas of the state, such as Northern Virginia and Richmond.

A look at recent development activity suggests that the differences between the County and State become more pronounced each year. The following graphic displays housing starts by structure type over the last eight years.

Figure 15
Housing Starts in Henry County
(1986-1994)



Source: Henry County Department of Planning and Community Development

Manufactured homes continue to be the fastest growing housing type in the County, due largely to their low cost, financing, and general availability. Since 1986, approximately 3.3 manufactured homes have been placed on building lots for every single-family home constructed. The manufactured/single family home differential reached its highest during 1987 when manufactured homes outnumbered single-family homes by 651 to 159. This disparity has recently decreased, however. Another interesting trend involves the increased popularity of "double-wide" manufactured homes. From 1986 to 1992, the number of these homes placed on lots ranged from 16 to 20 per year. However, the County issued 58 building permits for double wides in 1993, with 51 permits issued in 1994.

Construction of multi-family units has declined in recent years--no such units were built in 1992 or 1993.

Housing Costs and Affordability

Affordable housing is a key component to any economic development program. All other variables being equal, the locality that has lower housing costs than another will be a more attractive location for prospective business or industry. Consequently, the County has a strong interest in how its housing costs compare with other areas. The following table compares housing costs in the County to the State.

Table 13
Housing Costs: Henry Co. and Virginia
1970-1990

	1970		1980		1990	
	Henry County	Virginia	Henry County	Virginia	Henry County	Virginia
Median Value of Owner-Occupied Units	$13,000	$17,100	$32,900	$48,000	$51,800	$89,600
Median Price for Vacant Units for Sale	NA	$20,800	$35,200	$53,700	$40,900	$92,900
Median Rent for Occupied Rental Units*	$50	$92	$124	$207	$239	$410
Median Rent Asked for Vacant Units*	NA	$77	$125	$192	$230	$429

SOURCE: Bureau of the Census, 1970, 1980, and 1990.

*Monthly Contract Rent

The table shows that housing prices have greatly increased since 1970. From 1970 to 1990, the median housing cost in the County rose by approximately 300%, while the State's median increased by over 430%. The rising cost in building

materials has been a factor in these housing cost increases. Also, high inflation during the late seventies and eighties indirectly led to inflated housing prices.

Overall, the "average" County citizen enjoys lower housing costs than most State residents. The median value for owner-occupied units in 1990 was $51,800, compared to $91,000 for the State. However, one must consider that the County's large number of manufactured homes effectively lowers the County's median housing value, since manufactured homes are less expensive and depreciate more than other forms of housing. Consequently, the contrast between County and State would be less dramatic if one considered the differences in structure type. Rental costs, which generally involve multi-family units, are lower in the County than the State.

Another variable to consider when assessing housing affordability is the lower incomes in the County compared to those in the State. The average County citizen has less income to devote to housing costs. Although the median housing costs shown above are useful in evaluating the County's general housing costs, the percentage of household income used for housing serves as a stronger measure of housing affordablity.

Realtors, loan officers, and housing researchers generally agree that housing should rarely account for more than 30% of a household's income. This figure was derived in consideration of the many other demands placed on an average household's income. Taken as a whole, more households across the State pay over the 30% level than households in the County. In 1990, 20.5% of homeowners in the State paid 30% or more of their income for housing, compared to only 10.9% of County homeowners. For renters, 38.8% across the State paid 30% or more of their income, but only 27.2% in the County paid this much. The Planning District figures fall between those for the State and County.

These favorable comparisons ignore the fact that low income groups are particularly hard-hit by housing costs. The following graphics portray the increased burden which housing costs place on low income households compared to higher income groups.

Figure 16
Henry County

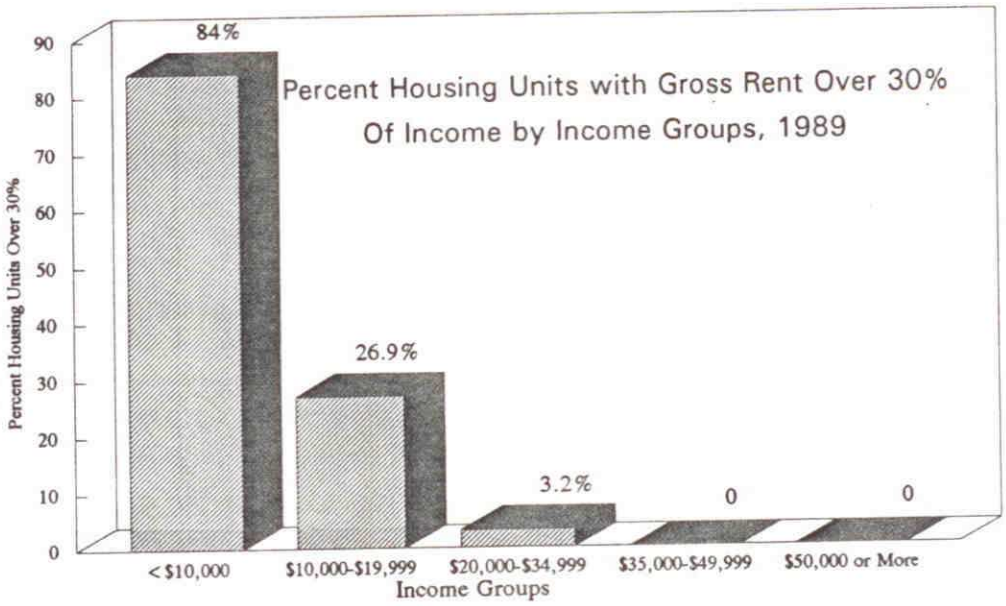


Figure 17
Henry County

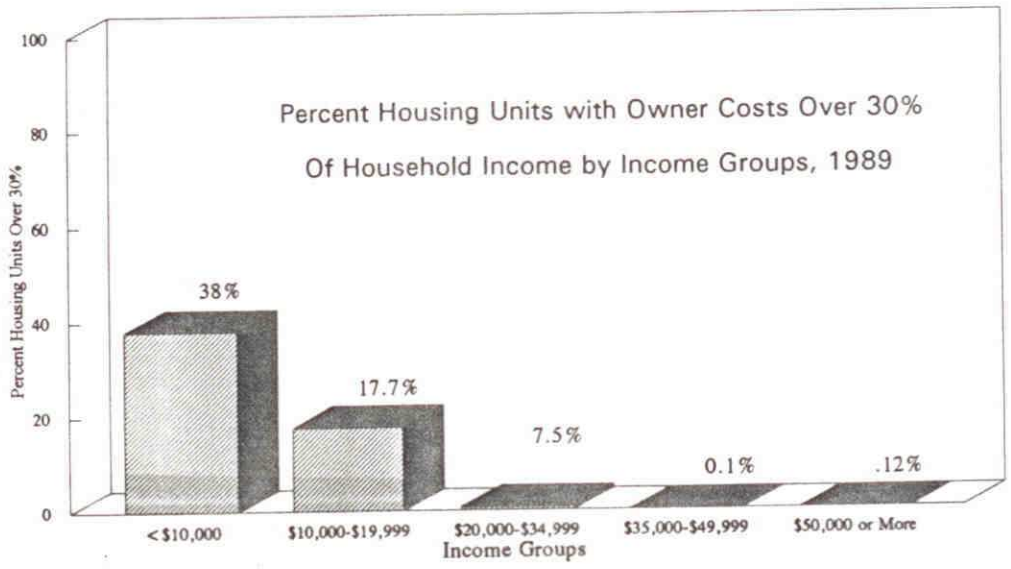


Figure 18
Virginia

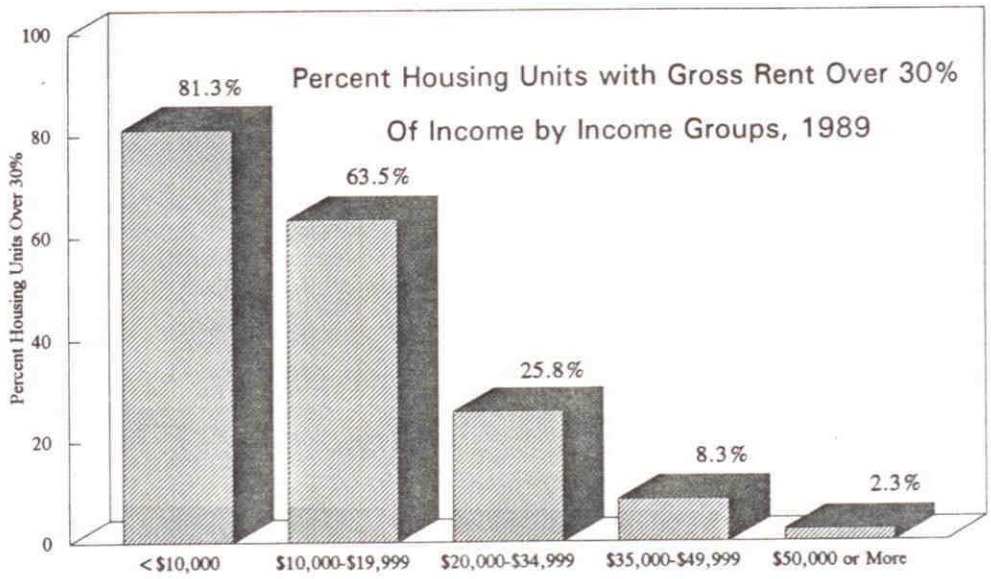
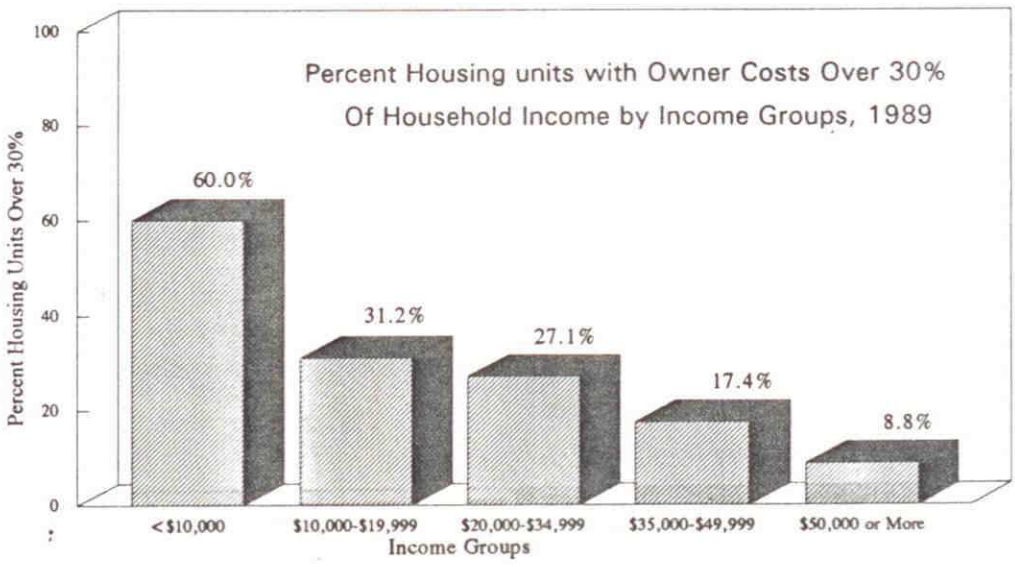


Figure 19
Virginia



Source for all figures: U.S. Bureau of Census

The first graph shows approximately 40% of units, where household income is below $10,000, pay over 30% for housing. Roughly 20% of units in the $10,000-$19,999 group have over 30% income going toward housing. None of the households in the sample group making over $35,000 paid over 30%. The second graphic pertains to rental units in the County. It shows 84% of rental units leased to households making below $10,000 require over 30% of their income. This cost burden decreases sharply for the remaining income groups. In sum, these figures seem to support arguments for increased housing assistance to the County's low-income groups.

As the last two graphs show, low income groups across the State also suffer from the high costs of housing. However, the State and County's situation differs for the remaining income groups. A much larger percentage of households in the low-middle and middle income groups cost over 30% of income. Therefore, County residents in these income groups enjoy relatively low housing costs.

Housing Conditions

A survey of housing conditions helps indicate the need for rehabilitation projects and programs. Three often-used measures of housing condition are:

- availability of plumbing;
- crowding; and
- age of housing stock.

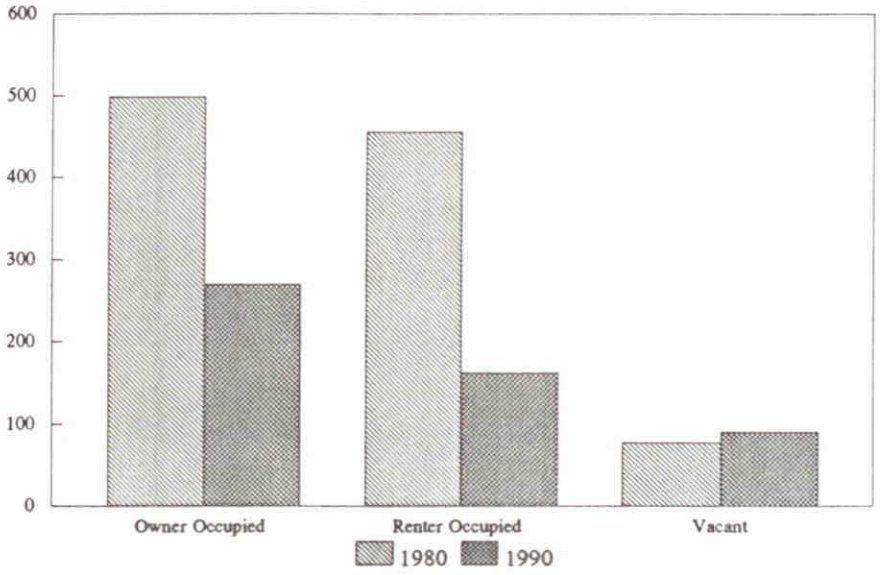
Study of these elements alone has obvious limitations, since many variables such as roof, siding, insulation, and fit of windows are not assessed. However, in absence of house-by-house surveys, these measures serve as useful tools in determining improvements of an area's housing stock over time and in comparison with other areas.

Plumbing

In 1940, 64.9% of Virginia's housing units lacked complete plumbing. ("Complete plumbing" assumes a unit with hot and cold piped water, a flush toilet, and a bathtub or shower inside a housing unit for the exclusive use of the occupants of the unit.) Since then, the State has made significant progress in improving plumbing conditions, and the County has been party to this progress. Today, only 1.8% of the State and 2.2% of the County's housing units are plumbing deficient, with the WPPD's rate standing at 2.9%. The abandonment of old housing and upgrade of existing housing (by those who could afford it) comprise most of these improvements. Since lower income families occupy most housing without plumbing, any improvements to these houses will likely be the result of specialized housing programs.

The following graphic represents housing units in the County which lack complete plumbing for 1980 and 1990.

Figure 20
Plumbing Conditions by Owner Type
Henry County-1980-1990



Source: Bureau of the Census. Census of Housing

Figure 20 illustrates the marked improvement in the plumbing conditions of owner and renter-occupied units. However, the number of vacant units that are plumbing deficient increased from 1980 to 1990. In percentage terms, 6.5% of all vacant units lacked plumbing in 1990, compared to only 1.6% and 3.4% of owner and renter occupied units, respectively. Despite an improved situation, the County still contains 523 plumbing-deficient units. One may assume that the elderly poor inhabit a large number of these units, since this group has historically been reluctant to improve their plumbing situation by moving their residence. Also, this group often lacks the financial resources to add plumbing.

Crowding

The Census Bureau derives "Persons per room" by dividing the number of persons in each occupied unit by the number of rooms. "Rooms" are defined as living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches and lodger's rooms. The following table shows the percentage of occupied units with over one person per room. Units that have more than 1.01 persons per room are generally considered crowded.

Table 14
Units with 1.01 or More Persons Per Room
(as a Percentage of Total Occupied Units)

Year	Henry County	Virginia
1980	4.9	3.4
1990	0.4	2.8

Source: U.S. Bureau of the Census.

Over the course of the 1980's, Henry County's crowding situation improved greatly compared to the State's. In 1990, 0.4 % of occupied units could be considered crowded in the County compared to 2.8 % of units across the State. However, both figures are quite low compared to similar statistics from past Censuses, indicating that overcrowding has become less of a problem.

Age of Housing Stock

Although many older homes are modernized and kept in good repair, a large number of older homes in an area often reveal a need for rehabilitative work. As of 1990, 1,812 of the County's housing units (7.8 %) had been built in 1939 or earlier. About 1,890, or 8.2 %, were built during the 1940s. Therefore, one may assume that many of these homes require rehabilitation, modernization, weatherization, and other improvements.

Potential Projects

1. Potential Project Areas

County staff recently inventoried areas in the County containing substandard housing for grant application purposes. Following this study, the County applied for and received a $24,000 community development planning grant for the North Bassett area. This grant has prepared County staff for the next stage in the process, making application for a Community Improvement Grant. Public water and sewer provision, road and drainage improvements, and housing rehabilitation are likely projects that this grant will help fund.

Other potential project areas for the future include:

- portions of Routes 672, 673 and 674 in the Oak Level area;
- Sandy Level;
- Villa Heights, in certain areas off Route 1141 (Stultz Road); and
- portions of the Rangely community where raw sewage is being discharged into Rangely Creek.

2. Potential Needs-Based Projects

Special groups or topic areas that should receive attention when considering future projects include the following:

- the elderly;
- housing affordability, particularly for low income groups;
- fair housing and Americans with Disabilities Act (ADA) requirements; and
- cooperative planning efforts between the County and City.

Community Facilities, Services, and Utilities

I. Community Facilities and Services

Local governments provide numerous public facilities and services to their citizens. The quality of these services and the levels at which they are provided helps determine the quality of life that exists in these areas. Quality of life, in turn, plays an important part in the decision making of industrial and business leaders seeking to relocate into a new area.

The locations of community facilities also influence growth patterns, and must therefore be considered into decisions regarding future land use. Effective planning can also aid the County government in providing services as efficiently and equitably as possible. For instance, efficiency can be improved by planning facilities for multiple uses, such as having school grounds double as neighborhood parks or having fire stations contain community meeting rooms. Localities can also benefit from economies of scale by providing facilities on a multi-jurisdictional or regional basis.

Capital Improvement Program

The Capital Improvement Program (CIP) serves as an example of how the County has attempted to improve the efficiency of its service provision. The construction of new community facilities requires large capital expenditures by the County government. To guide the construction and acquisition of these capital projects over a five-year period, the Board of Supervisors recently adopted in concept its first CIP. The Planning Commission reviewed the proposed CIP for its consistency with the existing Comprehensive Plan, as authorized by §15.1-464 of the Code of Virginia.

For capital projects over $10,000, the CIP:

- estimates project cost;
- prioritizes the projects;

- establishes a general timeframe for beginning projects; and
- recommends possible payment methods in light of fiscal restraints.

The CIP consists only of non-recurring expenses for those major projects and major replacement projects over which the Board of Supervisors has purview. Conversely, funding for projects such as school or public utilities expansions are not included since different entities would have oversight over these projects.

The CIP will be updated annually, with updates being based on this comprehensive plan. It will enable the County to forecast needs for new capital investments in an orderly manner and schedule the replacement of existing facilities and equipment. In other words, the CIP will provide better information on which to base budgetary decisions regarding capital projects.

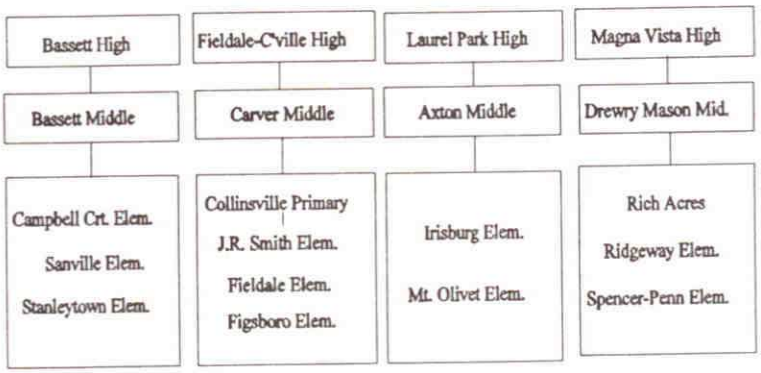
This community facilities and services section discusses the following:

- Public schools
- Libraries
- Parks
- Public and human services
- Hospital/health services
- Fire protection
- Rescue/emergency services
- Law Enforcement

Public Schools

The high quality educational facilities in the County seek to provide opportunities to achieve the highest degree of academic accomplishment and/or technical training. The County's Public School System offers a comprehensive program for grades pre-K through 12, as well as a variety of special programs. A seven-member, elected School Board establishes policies for the County schools, while a superintendent, administrative staff, and school principals administer these policies accordingly. All schools have full accreditation from the Virginia Department of Education.

The County's twenty schools are divided into four high school zones. Students from twelve elementary schools (pre-K- grade 5) graduate to four middle schools (grades 6-8), and then attend four high schools (grades 9-12). This three-tiered structure groups students geographically into *attendance zones*, ensuring a natural progression from kindergarten through graduation.



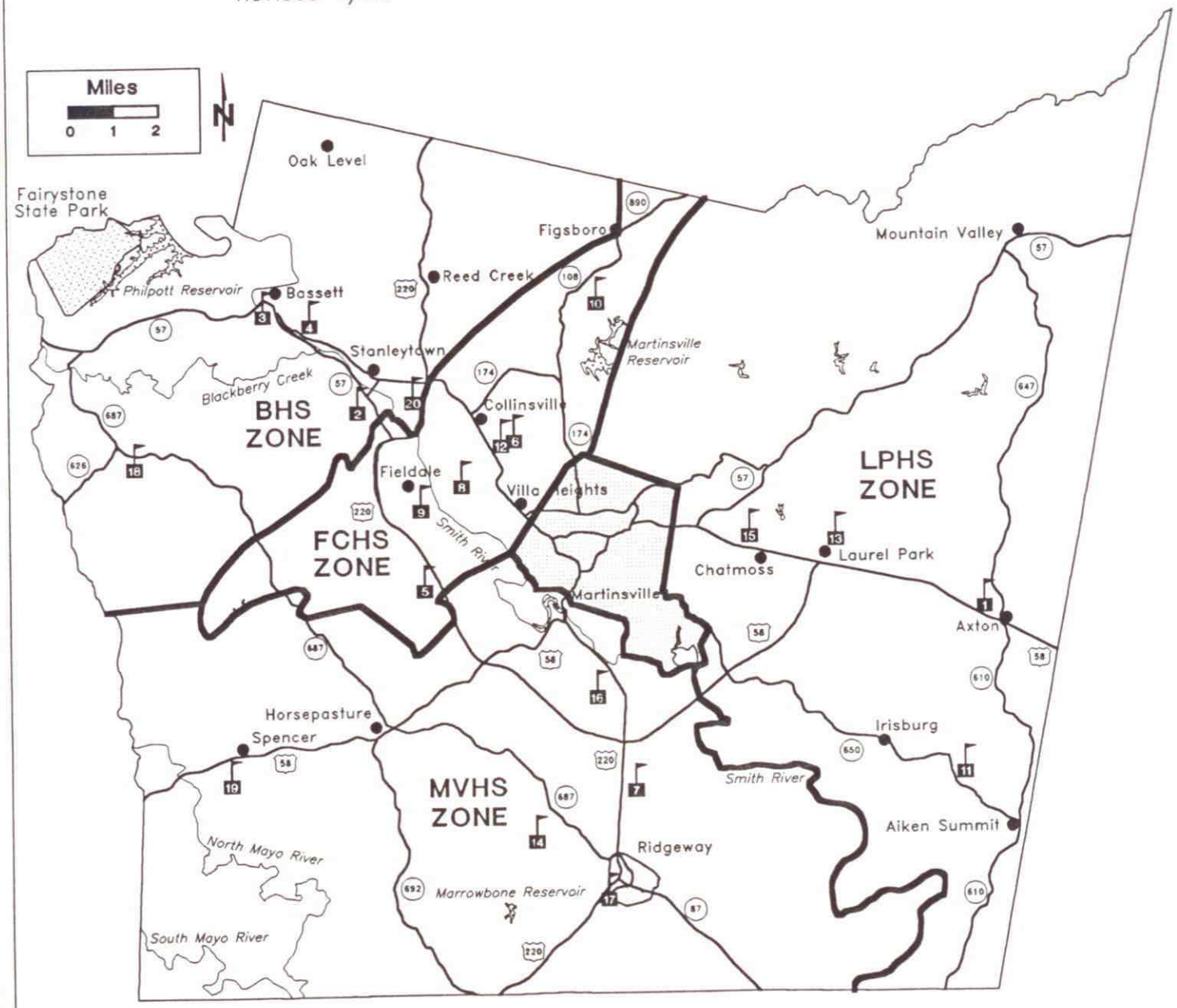
The school system continually strives to lower the pupil-teacher ratio, especially in kindergarten through grade three. As of 1995, the average pupil-teacher ratio in elementary schools was 21/1--at the primary level (kindergarten through grade three) it was 19.5/1. (Support staff such as music, art, and gifted and talented teachers are used to determine these ratios, whereas administrative staff such as principals and librarians are not included.)

As part of an effort to address the problem of school disparity, the 1994 General Assembly passed legislation that establishes a maximum threshold for pupil-teacher ratios at the primary level. Qualifying schools can receive state funds to help them meet this standard. This threshold varies by locality, with the County's maximum ratio being 20:1. The County school system will receive an estimated $500,000 to help staff new teaching positions at eight of its 12 elementary schools.

The Henry County School System offers seven vocational programs: Agriculture (including Horticulture), Business, Home Economics, Health Occupations (LPN School), Marketing, Technology, and Trades/Industrial

Henry County
Public Schools

Revised 1/95



1. Axton Middle School
2. Bassett High School
3. Bassett Middle School
4. Campbell Court Elementary
5. Carver Middle School
6. Collinsville Primary
7. Drewry Mason Middle School
8. Fieldale–Collinsville High School
9. Fieldale Elementary
10. Figsboro Elementary
11. Irisburg Elementary
12. John Redd Smith Elementary
13. Laurel Park High School
14. Magna Vista High School
15. Mt. Olivet Elementary
16. Rich Acres Elementary
17. Ridgeway Elementary
18. Sanville Elementary
19. Spencer–Penn Elementary
20. Stanleytown Elementary

Education. Over one-third of the high school students in the Martinsville-Henry County area are enrolled in a vocational class.

The School Board also offers special education programs that address the needs of disabled learners, ages 2-21. The special education department provides specialized services to students who are learning disabled, mentally handicapped, hearing impaired, vision impaired, physically handicapped, severely and profoundly handicapped, emotionally disturbed, and speech and language impaired. Preschool disabled services are available in both the home-based and school-based format.

Through the Head Start Program, the County School system provides a comprehensive preschool program for four-year-old children from low-income families. Components of the Head Start Program include health services (medical, dental, nutritional, and mental) and parental involvement and social service programs. In 1994, the General Assembly recognized the needs of this age group by creating a pool of funds for a new preschool program for at-risk four-year olds. The County is eligible for approximately $150,000 of these funds, provided it contributes roughly $60,000 in matching funds. The program will augment the services currently provided by the Head Start Program.

County/City Cooperative Efforts

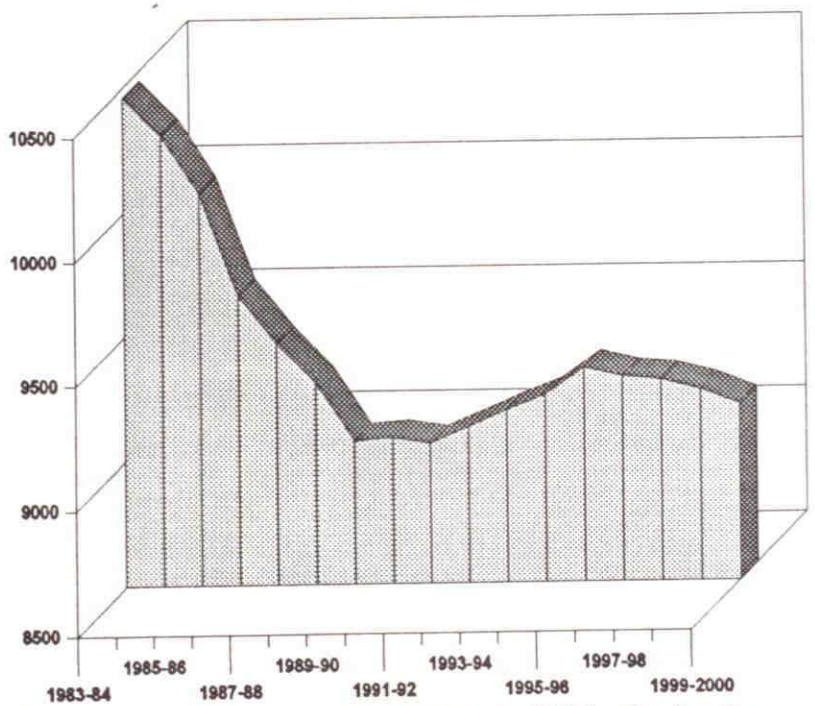
The County and City school systems have forged many cooperative efforts over the past several years. The two school systems continue to collaborate when working with the University of Virginia to ensure that teacher certification and re-certification courses are provided. For the past five years, the systems have operated a Joint Summer School Program for high school students in both divisions. As individual cases arise, they work together to provide special education services. Also, County schools have included City schools in bidding processes, particularly in the procurement of art and instructional supplies.

School Facility Planning

The following graph contains actual and projected fall enrollment statistics for the County school system. This data helps evaluate the need for new facilities and possible changes in staffing.

The graph shows that enrollment has steadily decreased over the past decade. However, increases in enrollments over the next few years are expected to come from younger children entering the school system at the elementary level (see Growth and Development Chapter for population projections).

Figure 21
Henry County School Enrollment (1983-2000)



Source: Projections of Educational Statistics to 2010: Center for Public Service

To address existing overcrowding problems as well as the needs of this "echo" generation (so-called since most of their parents are baby boomers), the School system has proposed expansions at four elementary schools: Irisburg, Rich Acres,

Sanville, and Stanleytown. These expansions will replace existing modular units currently used at these schools. State Literary Loan Funds (low-interest loans for school construction and/or renovation) for these projects are expected to become available in May or June of 1995. Construction should begin soon after the County School Board receives these funds.

Enrollment in the City's public schools has also been steadily declining. Fall enrollment dropped from 3278 for the 1983-84 school year to 2786 for the 1992-93 year. Unlike the County, the City's enrollment is expected to continue declining for the remainder of the decade, with a projected enrollment of 2497 for the 1999-2000 school year. In light of these projections, opportunities seem to exist for some type of consolidation of the two school systems.

Higher Education

The County is home to Patrick Henry Community College (PHCC), located on College Drive off Kings Mountain Road. PHCC is a public, two-year institution and a member of the Virginia Community College System. Established in 1962 as a branch of the University of Virginia, it later joined the Virginia Community College System in 1971. County residents constitute approximately 58% of the school's 2,500 students.

The college offers 50 programs of study, including associate of arts and science degrees, associate in applied science degrees, diplomas, certificates and career-studies certificates. Also, students may receive occupational-technical training, courses designed for transfer to a senior institution, continuing adult education and developmental studies. The A.L. Philpott Technical Center, completed in 1985, houses classrooms for industrial and electricity electronics, computer-assisted and conventional drafting, furniture production, and upholstery programs.

The college actively fosters partnerships with the local business community through a variety of programs. First, the Computer-Integrated Manufacturing (CIM) Laboratory provides computer training tailored to manufacturing applications. The Business, Industry, & Government Training and Education Center (BIG-TEC) offers

a broader range of specialized training programs for employers and employees. Also, the Virginia's Center for Innovative Technology (CIT) operates through both the PHCC and the Virginia Western Community College. Established in 1984, CIT attempts to spur economic development around the Commonwealth through better technology and increased technological application. It fields specially trained directors at the community colleges to provide free assistance to small and medium-sized businesses. PHCC also houses the Technology Assistance and Transfer office and the Small Business Center. Finally, in 1993, the college and Tultex Corporation began a two-year degree program in business technology. The program, which is taught on-site at Tultex, offers specialties in marketing and management.

Through a general obligation bond issue for higher education, approved by Virginia voters in 1992, PHCC received $2.5 million to construct a 25,000 square-foot addition to the A.L. Philpott Technical Center. The addition will contain additional laboratories and classrooms. In November 1993, the Center also received a two-year, $1.6 million grant to establish a Manufacturing Technology Center. The grant will help employ five manufacturing extension specialists at several locations across Southside Virginia. Possible locations include Martinsville, South Boston, Lynchburg, and Petersburg. The specialists will offer hands-on, on-site assistance to small and mid-sized companies and supply firms in the region. The grant stemmed from a recent federal initiative to aid defense industry conversion and promote manufacturing modernization.

Area residents wishing to pursue a career in business may attend the *National Business College*, a private school that has a branch located in Uptown Martinsville. Some County students attend the community colleges located in Danville and Rockingham County, North Carolina. Although no four-year colleges are located in the County/City area, several institutions are within commuting distance. Examples within the State include Averett College in Danville, Ferrum College, Roanoke College, Hollins College in Roanoke, Virginia Tech in Blacksburg and Radford University. North Carolina also has several fine four-year institutions proximate to the County, such as Wake Forest in Winston Salem, the University of North Carolina in Greensboro and Chapel Hill, and North Carolina State in Raleigh.

Other Educational Services

As indicated in the "Population" section, the County's levels of educational attainment trail State averages. Several programs exist to encourage and promote adult education. The County and City governments sponsor *Literacy Volunteers of Martinsville-Henry County*. This program, which is coordinated by the Blue Ridge Regional Library, offers free, one-on-one reading instruction for beginning adult readers. The public schools also offer workplace literacy programs at Bassett Industries, Tultex Inc., Stanley Furniture Inc., and Bassett-Walker Inc. Through the Department of Social Services, the County school system also provides special classes for unemployed adults. Through its *Adult Education Department*, the County School System administers a monthly General Education Development (GED) test for adults interested in receiving their high school equivalency certification. The department also operates an *Adult Learning Center*, comprising two classrooms at Fieldale-Collinsville High School.

In an attempt to enhance communication between the business and academic communities, the Martinsville-Henry County Chamber of Commerce recently initiated a School-Business Partnership Program called *Partnerships in Excellence*. The program pairs businesses, institutions and other organizations in the community with local public schools. Businesses provide information regarding employment opportunities, personnel and/or material support to the school, and offer incentives for graduates to remain in or return to the community.

Libraries

The County is committed to supplying high quality public libraries for its citizens. Over the past several decades, the County has been involved in an ongoing effort to regionalize its library operations. Today, all County libraries are included in this regional library system, which is controlled by a board of trustees consisting of representatives from the County, City, and Patrick County.

The *Blue Ridge Regional Library*, located on Church St. in Martinsville, serves as the main library for the regional system. In 1986, a $1.6 million addition to the Blue Ridge Regional Library in Martinsville was completed. A number of

branch libraries also provide services to the member jurisdictions. County facilities include the Collinsville and Bassett libraries, and the recently-opened Ridgeway branch.

In January 1992, the branch in Collinsville moved to a larger location on Virginia Avenue. Despite this expansion, the library has experienced heavy usage and library officials hope to either expand or relocate in the near future. The library system has also planned an expansion to the Blue Ridge library. However, both projects are not expected to begin within the next several years. Library officials are also considering replacing or augmenting the Bassett library, perhaps using the existing building solely for a genealogy center.

The West Piedmont Planning District Commission, located in Martinsville, has a planning library that is open daily to the public. In addition, the WPPDC serves as a State Data Affiliate Center and Labor Market Information Center in conjunction with the U.S. Census Bureau and the Virginia Employment Commission. Through its statistical data base, the Commission's staff provides information to the public and private sectors and to local government and economic development staffs across the District. Area residents can also use the library at PHCC, which has computer linkages to other state libraries.

Parks and Recreation

A vital park system improves general quality of life by providing opportunities for recreation and preserving open space. Accordingly, parks should be considered an important part of the County's infrastructure, and should be planned in light of recreation demands and demographics.

Existing Facilities

County Parks

Henry County currently owns and operates three County parks, managed by the Parks and Recreation Department. *Fisher Farm* Park is the County's largest,

with 125 acres. Located near the Smith River on State Routes 640 and 642 in the Ridgeway District, the park has two heavily-used ballfields and a large picnic shelter. Four capital improvement projects are planned for Fisher Farm Park, including the construction of another picnic shelter complex, the purchase of surrounding land to buffer the park, and the addition of lighting facilities for the ballfields.

The *Collinsville-Jaycee* Park is a 30-acre facility located in Collinsville off Kings Mountain Road. This facility currently has four tennis courts, a playground, two picnic shelters, and a hiking trail.

The *Jordan Creek* Recreational Area, a 13-acre site located near the community of Fieldale, is used primarily for baseball and softball games. The park consists of two ballfields, one of which is lighted. Since it is located in a flood plain, the park has limited development potential.

The Parks and Recreation Department coordinates many recreational activities with entities such as the County School System. The Department uses the schools' recreational facilities for baseball, football, and other sports.

Other Park/Recreational Areas

County residents benefit from State and Federally owned areas located on opposite ends of the County. The *Fairystone State Park and Wildlife Management Area*, located between Henry County and Patrick County on Route 57, consists of several thousand acres, including a 168-acre lake, picnic facilities, overnight cabins, a swimming beach, boating, fishing, hunting, hiking, and horseback riding. *Philpott Reservoir*, a Corps of Engineers flood-control project on the Smith River, is adjacent to Fairystone State Park. Part of the reservoir and surrounding federal land lies with the County's northwest boundaries. Encompassing 3,000 acres and having a 110-mile shoreline, the Reservoir supports a variety of recreational facilities, such as camping and picnic areas, fishing, public docks, hiking, and biking. Due to its cold temperature and purity, the water released from the dam into the Smith River supports naturally producing trout.

The *Turkeycock Wildlife Management Area* lies on the northeastern border of Henry and Franklin County and is accessed by Route 619. The area, managed by the Virginia Game and Fish Commission, consists of over 2650 acres used for recreational purposes, mainly hunting. Hunters also have occasional access to several privately owned areas offered by the Lester Lumber Company Lands and Westvaco Timber Corporation. Also, the *Martinsville City Reservoir* is available for boating, fishing, hiking, and picnicking.

Recently, the Gravely family donated a 76 acre site, located on Rt. 642 in the Ridgeway District, to the Museum of Natural History. The property borders the Smith River to the north and is under a conservatory easement which protects it from development interests. The Museum has been working with the Anchor Group Home, a non-profit organization, to restore the site to its natural state by removing trash and debris. Possible long term plans include the creation of interpretive programs that would educate visiting groups on the site's different natural resources.

Several years ago, work began on the *DuPont Wildlife Habitat*, located on DuPont property off Route 220 South. The 200 acre habitat currently contains walking trails, picnic areas, canoe landings, feeding fields, and bird boxes. Appendix D contains a matrix which lists parks and recreation areas and the primary recreation activities available at these sites.

Park and Recreational Facility Planning

In late 1993, the County began construction of a new recreational area, located behind the County Administration Building on Kings Mountain Road. The park will be located on the former County landfill, and the park's initial construction has constituted part of the larger landfill closure effort. This facility will be used for both active recreation and open public green space. Also, the County is currently searching for a 60-80 acre site to build a park in the Iriswood District. The new park will offer both active and passive recreational opportunities. The County CIP contains several additional park projects, including new ballfields for the Horsepasture and Blackberry districts and small mini-parks for each magisterial district.

A soon-to-be-completed study by the Virginia Department of Conservation and Recreation (DCR) will underscore the need for additional County parkland. The Virginia Outdoors Plan, which is published every five years, uses survey data to estimate Virginians' demand for recreational facilities and open space. This data is then compared with results of a statewide inventory of the amenities currently available to the public. Consequently, DCR can estimate current and future needs for recreational infrastructure and open space. Table 8 on the previous page outlines the results.

The results indicate that high demand exists for water-based activities, such as boating, fishing, water skiing, and outdoor swimming. County park officials also believe a need exists for an indoor swimming facility. Extremely high demands are also estimated for hunting areas. The study also suggests that the County should look toward increasing the number of playgrounds and building bicycling trails. (See Appendix E for a brief description of the methodology used by DCR).

Obviously, other localities help accommodate the recreational needs of County citizens. However, these figures should serve as a general guide for future park and recreational facility planning. The County would benefit from the development of a separate park plan which would serve as an amendment to this plan.

Public and Human Services

The County government helps improve the quality of life for County residents by providing an array of public and human services. *Public services* are defined as those funded by the County and made available to all County residents, whereas *human services* receive partial funding from the County and are provided to certain segments of the County population.

This plan does not attempt to evaluate needs for particular services or make recommendations regarding the levels of services currently being provided. Rather, it simply highlights the various agencies receiving County funding. It should be noted that other public and non-profit organizations operate in the area, but rely

Table 15--Estimated Recreation Needs --Henry County

DCR Recreation Categories	Units	Current Demand (*D*)	Supply (*S*)		Shortfall (*D-S*)	Priority
			Public	Non-Public		
Lake, River, and Bay Use (combined)	water acres	3285	620	67	2598	N/A
jet skiing	water acres	14				
lake fishing	water acres	654				
power boating	water acres	2025				
sailboarding	water acres	19				
water skiing	water acres	348				
Stream Use (combined)	stream miles	660	1	0	659	High
canoe, kayak, jon boat	stream miles	6				
stream fishing	stream miles	126				
Outdoor Beach Use and Swimming	beach acres	22	6	0	16	High
Outdoor Pool Swimming	pools	10	0	6	4	High
Swimming Indoors	pools	1	0	0	1	Medium
All Camping (combined)	sites	713	105	400	208	Medium
tent camping	sites	266	105	0	161	Medium
developed camping	sites	447	0	400	47	Medium
Picknicking Away	tables	307	91	18	198	High
Hunting	acres	16309	1640	300	14,369	High
Football and Soccer (combined)	fields	10	13	1	-4	
football	fields	2				
soccer	fields	8				
Baseball	fields	18	20	0	-2	High
Softball	fields	25	6	7	12	High
Basketball	goals	21	16	1	4	Medium
Tennis	courts	32	18	13	1	Low
Golf	courses	4	0	5	-1	High
Playground Use	sit es	43	29		14	High
Bicycling for Pleasure	miles	16	0	0	16	High
Hiking, Backpacking	trail miles	13	6	0	7	Medium
Horseback Riding	miles	3	0	0	3	Medium
Fitness Trail and Jogging	mile trails	3	1	0	2	Medium
Motorcycle/A.T.V. (combined)	trail miles	6				
Skateboarding	sites	2				
Volleyball	courts	11				
Visit Garden	sites	2				
Visits Natural Area	sites	3	0	0	3	Medium

Source: Virginia Dept. of Conservation and Recreation--Division of Planning and Recreation Resources

on alternative funding sources. Private institutions also meet some of the demand for services. The table on the following pages show the major service agencies and organizations to which the County provides funding.

Hospital and Health Services

Medical services are primarily supplied by private and non-profit institutions. *Memorial Hospital* of Martinsville and Henry County serves as the backbone of the local medical community. An acute care, non-profit community hospital, Memorial's medical staff consists of more than 90 physicians representing 25 specialties. Other professional personnel include six dentists, a physician's assistant, two clinical psychologists, three nurse anesthetist's, and an organ procurement coordinator.

The hospital opened in 1970 and has since undergone two major expansion and renovation programs which were completed in 1981 and 1990. Many hospital departments were expanded and improved, including an Oncology Center, Emergency Services, Elective (Outpatient) Procedures, Cardio-Pulmonary/Neurophysiology Services, Laboratory/Pathology, Pharmacy, Physical Rehabilitation, Surgical Intensive Care, and Radiology. The Oncology center is affiliated with the Duke Comprehensive Cancer Center, making available the university's outstanding resources in this area. The hospital also has a helicopter pad. New services include a 28-bed Medical/Surgical Unit with all private rooms, an 11-bed Mental Health Unit, an 8-bed Cardiac Care Unit with all private rooms and full support services, a contemporary obstetrics unit, Cardiology, and a business health services program. In August 1993, the hospital announced that it would construct a $1.5 million Cardiac-Catheter unit, scheduled for completion in mid-1994.

Table 16
Public Services

Agency/ Organization Name	Services and Activities Provided	County Funding 94\95
Henry County Department of Social Services	Financial assistance (e.g. food stamps, fuel assistance, aid to dependent children, Medicaid, general and emergency relief); programs to prevent or remedy neglect, abuse, or delinquency of children; foster care placement and adoptions; family and personal adjustment counseling; day care; family planning; etc.	$2,352,386
Martinsville-Henry County Health Department (est. late 1940s)	Immunization; family planning ; maternal, child, dental, and home health; VD clinic; X-Ray clinic; nutrition; Medicaid screening; school health; vital statistics; PKU testing; on-site sewage disposal permits; environmental health services; restaurant inspection; Bureau of Crippled Children's clinics.	$254,706
Piedmont Regional Community Services Board (est. 1972)	Operates many different services and programs, including: *Mental Retardation Group Home*--Serving ambulatory, adult mentally retarded persons aged 18 or over; provides housing and meals services; assistance in independant living skills, etc.; *Patrick Henry Drug and Alcohol Council*--Offers programs designed to reduce alcohol abuse, drug abuse, and related problems through three programs --Employee Assistance Services, IMPACT, PASSAGES; *Patrick Henry Mental Health Center*--Day treatment program; residential program to help develop independent living skills; 24-hour Crisis Intervention Program; individual, family, marital, and children's counseling; psychiatric and psychological evaluations, clinical assessment; emergency walk-in and telephone services; screening for psychiatric hospitalization; *Regional Infant Parent Program*--Serving developmentally-delayed infants from birth to 2 years: development of motor skills; referrals; prescription assistance.	$62,105

Table 17
Human Services

Adult Day Care Center (est. 1990)	Day care services for persons 60 years or older: recreational and educational activities (e.g. social and musical programs; exercise, crafts); meals.	$10,000
Citizens Against Family Violence Rainbow House (est. 1981)	Assistance to families victimized by domestic abuse and violence: shelter for abused women and their children; counseling; court advocacy; public awareness; crisis intervention; sexual abuse counseling; transportation; etc. Rainbow House will soon expand its operation.	$30,000

Agency/ Organization Name	Services and Activities Provided	County Funding 94\95
Martinsville Housing Services Office (est. 1976)	Section 8-- Existing and Moderate Rehabilitative Rental assistance for low-income persons in City and County.	$19,000
FOCUS (est. 1976)	Serving youth under 18 years of age living in City/ County area; enrichment activities through Discovery Club and Explorers Post programs; program for juveniles having court-ordered community service delegations; career development program; court advocacy;	$5,300
MARC Workshop (est. 1969)	Work adjustment training for mentally and physically handicapped persons aged 16 or older; assistance in developing self-help, personal, and independent living skills; pre-vocational services.	$16,264
Parks and Recreation Dept.-- Senior Services (Est. 1975)	Provides services to the elderly, including transportation, recreational programs, checking services, information & referral.	$29,000
Southside Community Action Program (est. 1964)	Coordinates weatherization and elderly meals program; emergency services to assist low-income persons in need of food, clothing, housing, etc.; referral services;	$10,000
Southern Area Agency on Aging (est. 1976)	Distribute information on age-related concerns; referral, meal, and in-home services; job training and referral; senior citizens' discount program.	$7,000
W.C. Ham Center (est. 1975)	For moderately/severely mentally retarded or handicapped persons age 16 or over in City or County; provides pre-vocational training; extended shelter employment; work adjustment training, transportation services; programs in the areas of personal hygiene, independent living skills, and communications.	$3,935

Other Health Services

The *Adult Day Care Center* of Martinsville & Henry County, established in 1988, provides day care services to frail adults 60 years of age and older. The facility provides an alternative to nursing home care and allows many family members to remain employed rather than having to personally care for elders on a full time basis. The facility is designed to accommodate 24 clients daily.

The *Blue Ridge Nursing Center* of Martinsville and Henry County, located at Blue Ridge Street in Martinsville off U.S. Route 58, serves the needs of the area's elderly and has a total of 300 intermediate care beds. Licensed by the Virginia Department of Health, it has a 24-hour professional nursing service, an activities program, and a social services program. Speech, occupational, and physical therapy are also provided.

Hairston Home for Adults, located at 601 Armstead Avenue in Martinsville, is a licensed facility for 59 residents.

Harmony Hall Home for Adults, located on Riverside Drive in Bassett, is a licensed ambulatory Senior Citizens's Residence which can accommodate 50 persons. The Center provides its residents with a professionally trained staff of certified geriatric nursing assistants on duty 24 hours a day.

King's Grant, a licensed Continuing Care Retirement Community, recently completed construction of its facility located on Kings Mountain Road. The retirement community currently offers several levels of residence and care options to meet the varying needs and lifestyles of its residents, including independent living, assisted living, and a health care wing.

The *Martinsville Convalescent Center* is a long-term care facility providing an alternative to hospital care. Located on Spruce Street in the City, it was designed and built to accommodate 141 residents. The building has divided facilities for ambulatory patients and those requiring intensive nursing care.

The *Ridgeway Medical Center*, a Memorial Hospital affiliate located on U.S. Route 220 South, opened in 1992.

The *Stanleytown Health Care Center*, a 56-bed facility with four two-room suites, is located on Riverside Drive in Bassett. The Center offers skilled and intermediate nursing care, physical, speech, and occupational therapy.

Fire Services

Henry County financially supports eight volunteer fire departments, all linked into the 9-1-1 dispatching system. Firefighters are alerted by radio pagers. Some of the equipment available to the departments includes 23 pumpers, three tankers, five equipment trucks, six brush trucks, one ladder, two first responder vehicles, and two utility vehicles. The County Fire Marshal assumes responsibility for fire investigations, inspections, education, and coordination of volunteer firefighter training. The current County CIP contains proposals for new aerial fire fighting equipment and a new fire services training facility, while the 1995-96 budget contains $150,000 for vehicle and pumper equipment.

Table 18

Fire Department Calls

Department	Number of Calls				ISO Rating*
	1991	1992	1993	1994	
Axton	80	74	84	126	7\9
Bassett	176	186	229	212	5\9
Collinsville	160	197	212	204	6\9
Dyers Store	68	85	104	97	7\9
Fieldale	55	72	74	72	6\9
Horsepasture	93	109	88	115	9\9
Patrick Henry	73	122	121	119	9\9
Ridgeway	150	121	142	182	5\9
Total	855	966	1054	1127	

Source: Henry County Department of Public Safety

*Insurance Service Organization ratings (based on variables such as availability of water, distance of structures to departments, proximity of fire hydrants, etc.) Cheaper insurance rates are given for lower ratings (possible range from 1 to 10).

In addition to these fire departments, most of the area industries have fire brigades. In 1991, DuPont completed the construction of a 7,000-square-foot fire and emergency response training facility on Virginia Route 721 in Henry County. The facility consists mostly of classroom space to train fire and emergency officials from DuPont plants nationwide. More than 1,000 DuPont employees receive fire and chemical response training in Henry County annually.

The effectiveness of these fire-fighting efforts depends of water availability. The Board of Supervisors annually gives the PSA money to maintain existing fire hydrants. These PSA also uses these funds to include new fire hydrants as part of water line extensions.

Emergency Medical Services

The County financially supports six volunteer rescue squad. All are accessed by calling 9-1-1, with rescue squad members being alerted by radio pagers. All six volunteer rescue squads are licensed to provide advanced life support. Equipment available to emergency personnel include the following: 22 ambulances; four crash trucks; six quick response vehicles; boats; and other specialized equipment. Henry County is also served by two helicopter transport services-- Lifeguard 10, stationed at Roanoke Memorial Hospital, and Aircare, stationed at North Carolina Baptist Hospital.

In 1991, the County and City initiated a Joint Emergency Medical Services (EMS) program within the Henry County Department of Public Safety. An EMS Coordinator and EMS Training Coordinator work with volunteer rescue squads to improve emergency services by actively recruiting, training, and coordinating the efforts of volunteers.

To augment the EMS program, two fire department first responder units exist within the Patrick Henry and Dyers Store Fire Departments. These units respond to life-threatening emergencies in their respective fire districts. The area is also served by Stone Ambulance Service, a commercial service. The County CIP contains a proposal for a rescue squad to serve the northeast portion of the County.

Table 19--Rescue Squad Calls

Station	Number of Calls			
	1991	1992	1993	1994
Axton	n/a	n/a	143	501
Bassett	1,518	1,652	1,932	1,848
Fieldale-C'ville	927	1,063	1,247	1,206
Horsepasture	n/a	28	405	587
M'ville-Henry Co.*	2,474	2,673	2,682	2,612
Ridgeway	922	910	717	769
Total	5,841	6,326	7,126	7,523

Source: Henry County Department of Public Safety

*City and County calls

Emergency Services Management

The Henry County Department of Public Safety coordinates all emergency services in the County. The department employs seven personnel, including a director, a fire marshal, two part-time inspectors, and the EMS personnel discussed above. Equipment for emergency management includes a hazardous materials response trailer, a command post/air unit, and a mass casualty incident response trailer.

The County participates in the Federal Emergency Management Agency's Emergency Management Assistance (EMA) program. This program provides federal funds to qualifying localities meeting certain emergency management standards. In early 1995, the County adopted a revised County Emergency Operations Plan. The plan, which is required by State law and must meet FEMA guidelines, details response routines for numerous emergency situations.

Law Enforcement

The Henry County Sheriff's Office is the primary law enforcement agency in the County. The Sheriff, who is elected by popular vote, commands 87 employees

including 30 road deputies, eight criminal investigators, two narcotics officers, five civil process officers, one crime prevention officer, one drug prevention officer, and 20 correctional officers. The department has sixty-four police vehicles equipped with mobile radios with voice privacy functions. Deputies responded to 24,715 calls for service in 1993. In 1991, they responded to 24,295 calls, while in 1992 at total 23,171 dispatches were received.

Through computer technology, the Sheriff's Office has automated many of its administrative functions, such as Criminal Records, Jail Management, criminal offense reports. The Sheriff's Office and the Martinsville Police Department, having identical software programs, have networked their computer systems together to improve efficiency and effectiveness.

The Sheriff's Office also manages the Henry County Jail. Although this facility was initially certified for 48 beds, by double bunking in the dorms the capacity has been increased to 72 beds. Occupancy in the jail currently averages about 80 inmates a day.

Since regional jails are eligible for state funds, increasing interest led to the preparation of a comprehensive study. In 1991, the State Department of Corrections designated the County, City, and Town of Ridgeway as a "region" to allow for the creation of a regional jail to serve these jurisdictions. Despite having merit, the project has not proceeded beyond the planning stages, due in part to other large capital projects. Also, state funds for regional jails have been scarce. The jurisdictions may decide to delay construction of a regional jail if renovations to current facilities provide ample space for the immediate future.

The Henry County Sheriff's Office participates in, and is a part of, the New River Criminal Justice Training Academy. Based in Radford Virginia, the Academy has a satellite office located in Martinsville. Among other services, it provides basic training and certification courses required by the Department of Criminal Justice Service.

The *Virginia State Police* maintains a 12 person contingent in Henry County, with each officer assigned a radio-equipped vehicle on a 24-hour basis. Though based in Henry County, local personnel are dispatched from the Virginia State

Police Division Headquarters in Salem. In addition, Alcoholic Beverage Control officers and a Game Warden are assigned to patrol the County.

Enhanced 9-1-1 Program

The *Martinsville-Henry County Communications Center*, known locally as the 9-1-1 Center, receives and dispatches all emergency calls in the County and City for fire services, emergency medical services, and law enforcement. The Center began operations on January 1, 1990, and effectively combined dispatching functions for the County and City. It employs sixteen dispatchers and one Director, has a state of the art communications system to carry out its functions. Located on the fourth floor of the County Administration building, it is a secure, controlled-access facility that houses control functions for more than a dozen radio transmitters and several computer terminals. This allows instantaneous tracking of all law enforcement, fire, and rescue units.

In 1992, the County began an ongoing effort to improve its Enhanced 9-1-1 system (E911). A part of this larger effort involves a major County-wide street addressing effort and computer use expansion. This new technology will significantly improve service to the community by increasing the effectiveness, efficiency, and accuracy of the Communications Center's emergency dispatching. A proposal also exists to expand the center to accommodate increased emergency services. This expansion should occur within the next three years.

Table 20

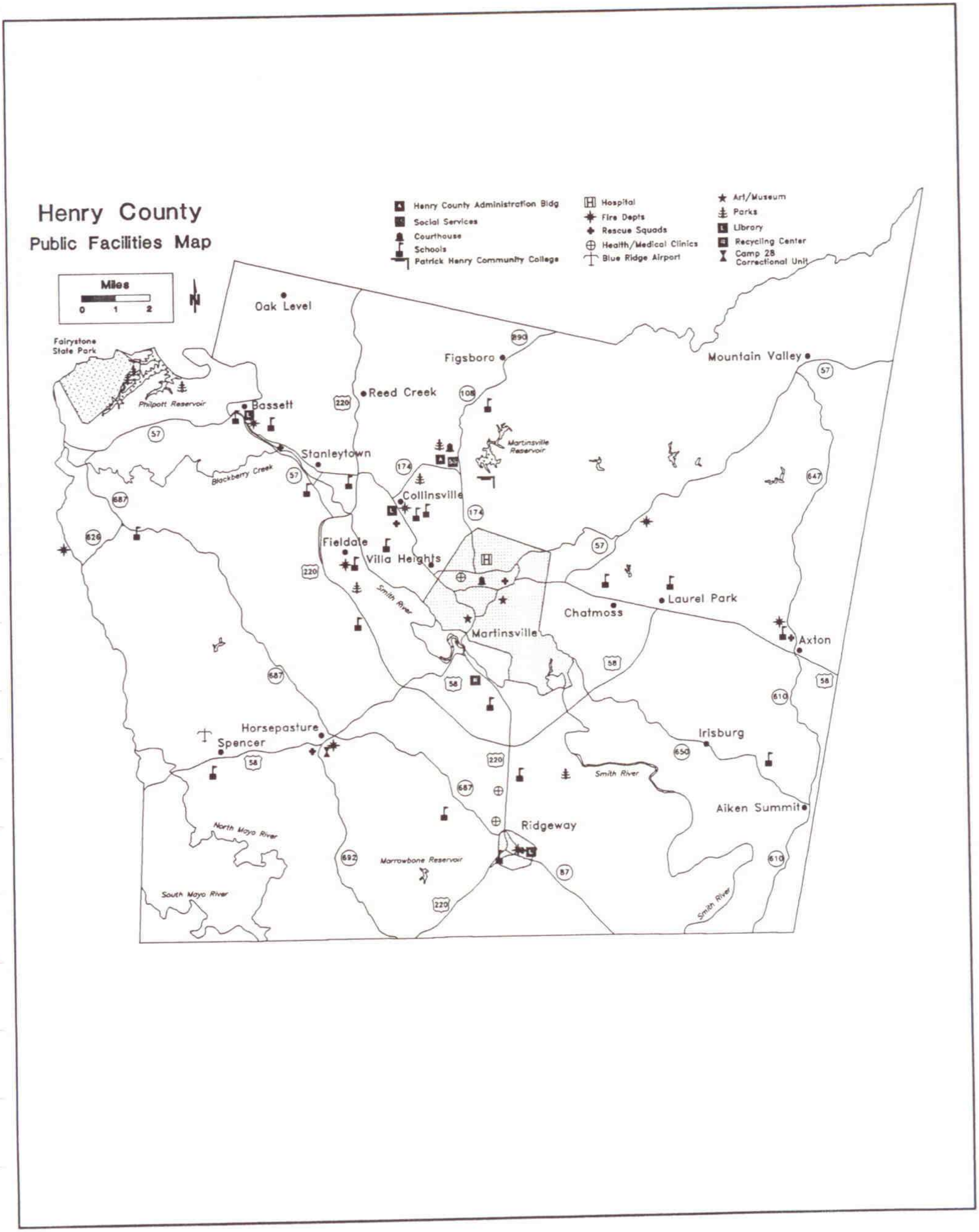
Communications Center--Annual Calls for Service

Agency	1990	1991	1992	1993	1994
H.C. Sheriff's Office	22,653	24,406	23,882	24,747	25,964
M'ville PoliceDept.	19,159	21,414	22,686	22,884	23,546
Fire/Rescue	6,388	7,175	7,775	8,644	6,585
Totals	48,200	52,995	54,343	56,275	56,095

Source:Martinsville-Henry County Communications Center

Once the computer mapping phase of the project is completed, the County will receive computer data that will serve as the basis for its Geographic Information System (GIS). GIS capability will enable County staff to store, analyze, and interpret different types of spatially-referenced data such as tax parcels, roads, streams and lakes, fire and rescue zones, structures, and topography.

Map 9


Henry County
Public Facilities Map
Henry County Administration Bldg
Social Services
Courthouse
Schools
Patrick Henry Community College
Hospital
Fire Depts
Rescue Squads
Health/Medical Clinics
Blue Ridge Airport
Art/Museum
Parks
Library
Recycling Center
Camp 28 Correctional Unit
Miles
0 1 2
N
Fairystone State Park
Philpott Reservoir
Oak Level
Figsboro
Mountain Valley
Reed Creek
Bassett
Stanleytown
Blackberry Creek
Martinsville Reservoir
Collinsville
Fieldale
Villa Heights
Smith River
Laurel Park
Chatmoss
Axton
Martinsville
Horsepasture
Spencer
Irisburg
Aiken Summit
Ridgeway
North Mayo River
South Mayo River
Marrowbone Reservoir
57
220
108
890
174
647
687
826
58
610
650
692
87

II. Utilities

Utilities are extremely important in comprehensive planning since an area's existing and/or planned utilities greatly affect its development potential. This section concentrates on water and sewer services, since these utilities exert the greatest influence on growth patterns. Furthermore, the County sometimes helps determine the location of water and sewer infrastructure through capital contributions to improve the feasibility of certain projects. This section also discusses other utilities such as electric, gas, and telephone service and reviews issues relating to solid waste management.

Public Water and Sewer

As discussed previously, the County experienced relatively rapid industrial and residential growth in the 1940s. Soon thereafter, this development began to take its toll on the County's natural resources--largely in the form of surface and groundwater pollution. Water quality impairment stemmed mainly from untreated industrial discharges into the Smith River and failing residential septic systems.

To address these problems, the Board of Supervisors created the Henry County Public Service Authority (PSA) in 1964 to provide public water and sewer services to County residents, businesses, and industries. The PSA has grown considerably since then, experiencing its largest customer increases during the 1980's. During this decade, several large projects greatly increased the PSA's ability to provide services. It now stands as the third largest Authority in the Commonwealth, providing service to an estimated 30,000 people, or over half the county population.

When it created the PSA, the Board established service boundaries within which the PSA could extend water and sewer lines. In the early 1980s, the Board extended these service boundaries to include the entire County--effectively allowing PSA to use its discretion in determining future project areas. In so doing, the PSA uses a cost/revenue approach, and generally only constructs projects that have a customer base capable of generating sufficient revenue to offset capital costs. PSA

believes that it can provide service to most development as long as the basic infrastructure is in place (i.e. adequate facilities and service mains). To ensure that the land use element of this plan is implemented, the County will work with the PSA to ensure that basic infrastructure exists in or near the plan's designated Growth Areas.

Public Water

The County's geology and hydrogeology discourage the large-scale use of groundwater for drinking water supply purposes (see *Natural Resources*). Therefore, the County has gradually become more reliant on surface water resources, particularly the Smith River, for its water supply. Since PSA's creation, the County has gradually moved toward a more reliable, unified water supply system, replacing smaller, private systems. The PSA currently provides water service to an estimated 30,000 County residents.

The PSA's water system consists of two water filtration plants (WFPs). The Upper Smith River WFP, located in the Bassett area near Philpott Dam, serves the north and west areas of the County. It was constructed in 1985, with funding from the Board of Supervisors, at a cost of $3,500,000. The plant currently has capacity to treat 4 million gallons a day (MGD) of water, after an upgrade from 2 MGD in 1992. Although the facility was designed to accommodate expansion to 12 MGD capacity, current usage is only 1.5 MGD. The following service areas obtain water from the Upper Smith River WFP (see map on following page):

1. Bassett-Stanleytown
2. Collinsville-Villa Heights
3. Virginia Route 57 West to Patrick County line
4. Virginia Route 108 North

The Marrowbone WFP is located behind the Shannon Hills Subdivision in the Ridgeway District. The plant, completed in 1976, has a 1 MGD capacity and serves the County's southern and eastern areas, through the following service areas:

5. U.S. Route 220 South, North Section
6. U.S. Route 220 South, South Section
7. U.S. Route 58 West
8. U.S. Route 220, Ridgeway South
9. State Route 87 South

Through an agreement with the City, the PSA purchases water from the City WTP and distributes it to County residents. The City's facility is located on Jones Creek, off Clearview Drive. It has a 10 MGD capacity but currently only treats approximately 5.5 MGD. The City has allocated 1.0 MGD of water to the PSA, of which 0.5 MGD is currently being used, in the following service area.

10. U.S. Route 58 East

The PSA also uses City water to provide some service to the Route 58 West and Route 220 South areas.

Table 21
Public Water Facilities

Water Facility	Permitted Capacity (MGD)	Current Usage (MGD)	Potential Usage (MGD)
Upper Philpott WFP	4	1.5	2.5
Marrowbone WFP	1	0.7	0.3
Martinsville WFP*	1	0.5	0.5
Martinsville WFP**	9	5.25	3.75
Total	15	7.95	7.05

*Allocated to County users

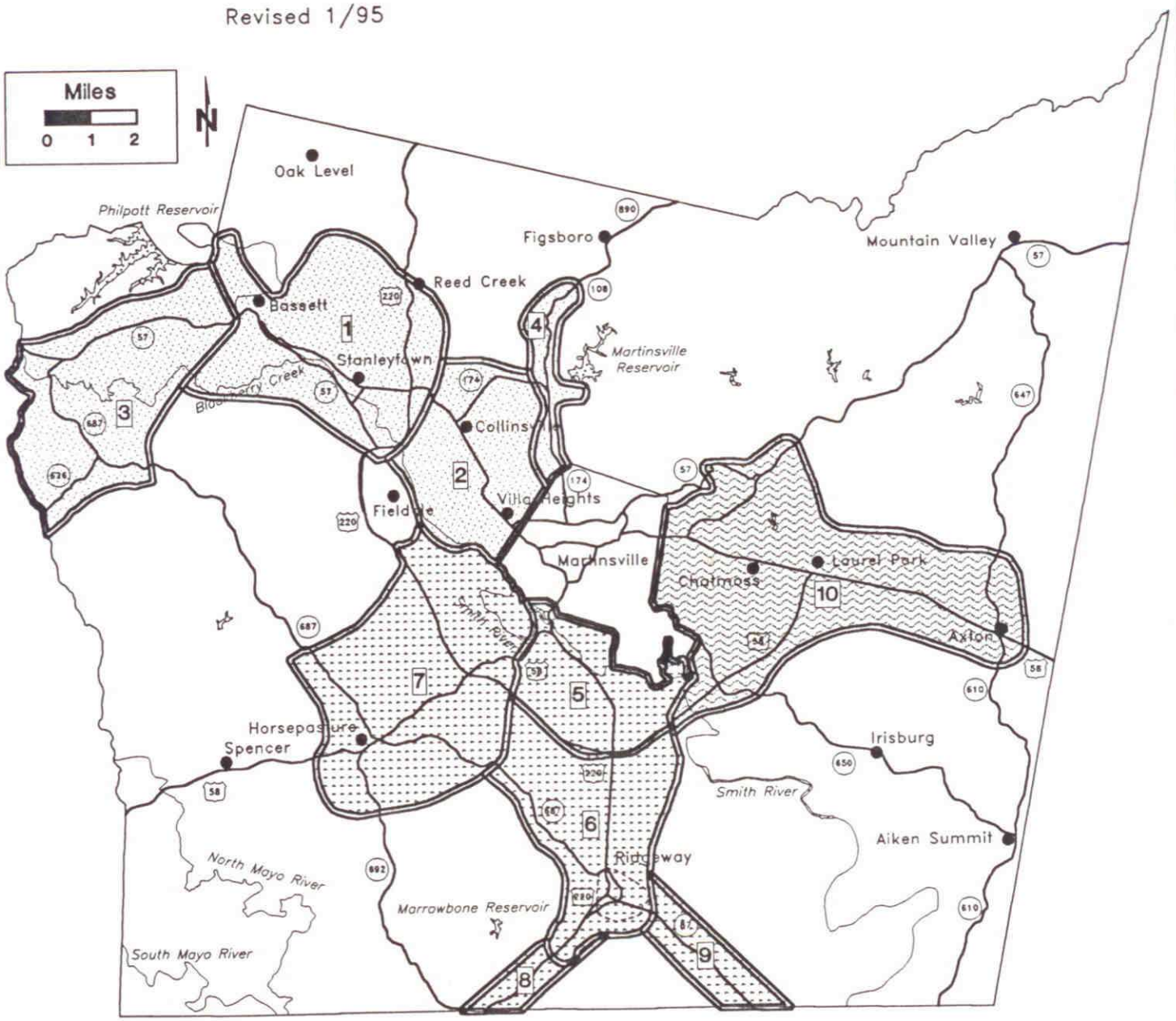
**City capacity and usage *minus* County allocation

Other Water Facilities

Fieldcrest Mills, Inc. owns and operates a 2 MGD water filtration plant in Fieldale. The company sells water to the Fieldale Sanitary District who, in turn, sells it to Fieldale residents. Also, DuPont has a water filtration facility with 2.18 MGD

Henry County
Water Projects Map

(Derived from 1993 Henry County Water & Sewer Study)
Revised 1/95



Water Service Areas Legend

Upper Smith River WFP

1. Bassett–Stanleytown
2. Collinsville–Villa Heights
3. Virginia Route 57 West
4. Virginia Route 108 North

Lower Smith River WFP

5. U.S. Route 220 South – North Section
6. U.S. Route 220 South – South Section
7. U.S. Route 58 West
8. U.S. Route 220 – South of Ridgeway (Portions)
9. State Route 87 South (Portions)

City of Martinsville WFP

10. U.S. Route 58 East

capacity that provides potable and process water to its plant located just southwest of the City. In a 1994 agreement, the PSA assumed operation of the water plant for DuPont.

PSA also owns and operates twelve water systems that are supplied by wells. Since these systems create many operating problems, the Authority tries to link these systems to water lines whenever feasible. Most PSA wells are located on separate pieces of property, called "well lots." The Virginia Department of Health requires well lots to help prevent groundwater contamination by distancing wellheads from incompatible land uses.

County residents and businesses not served by PSA water use one of the twenty-nine private water systems or individual, private wells.

Water Supply Planning

The Upper Smith River WFP currently has sufficient capacity to more than double its production. Therefore, PSA does not anticipate this facility will require improvements in the near future.

The Marrowbone WFP is currently operating at 70% capacity. To address future water needs for this area of the County, in 1990 the PSA began efforts to expand Marrowbone's capacity from 1 to 3 MGD by modifying the Marrowbone Dam to provide additional raw water. Although once cost effective, changes in dam safety regulations have dramatically increased the cost of securing this additional water to $4 million. The sizeable cost and problems associated with this project have made it unfeasible.

As an alternative, in 1994 the PSA began a study of the feasibility of constructing a new 10 MGD facility at the local DuPont manufacturing complex. The study, which will include issues relative to both cost and demand, is being conducted jointly with DuPont. The PSA determined that other options, such as tapping into the Mayo River and expanding the Upper Smith River WFP distribution system to include southern supply areas, were not feasible because of costs and regulatory complexity. To stimulate growth and encourage increased water demand to support the proposed

plant, the Authority has offered to enter into partnerships with public and/or private entities for commercial and industrial development in the U.S. 220 South area.

PSA's problems with the Marrowbone facility reflect the increased difficulty involved in securing water supplies in general. In addition to stricter withdrawal regulations, the County faces growing competition from other jurisdictions for water. The Smith River is a part of the drainage network for the Roanoke River Basin. Other localities are also seeking permission to withdraw water from this drainage system. Virginia Beach has recently laid claim to water from Lake Gaston, into which the Smith River eventually drains. Originally, the City of Virginia Beach proposed to withdraw and pipe up to 60 MGD from the lake for its drinking water. A recent agreement with North Carolina has increased the proposed amount to 95 MGD, with the additional 35 MGD allocated for North Carolina's Outer Banks area. Also, localities in North Carolina have expressed interest in using the Mayo River for water supply. Any withdrawals from water sources in the Roanoke River Basin could hinder the County's ability to withdraw water in the future.

Since the permitting process involved in securing raw water takes roughly six years, the County and PSA must plan ahead for future water needs. The PSA recently completed facility upgrades to the Upper Smith WFP to increase its capacity from 2 to 4 MGD. In the past, the Department of Game and Inland Fisheries has expressed concern about additional water withdrawals from the Upper Smith, since the River is a designated trout habitat. The agency believes that reducing water levels below certain flows may increase water temperature and reduce the amount of available oxygen in the water, adversely affecting the trout. The PSA has previously petitioned the Army Corps of Engineers to increase its discharge from the Philpott Dam. Not only would greater flow increase the PSA's ability to withdraw water from the Smith, but it would also increase the River's natural ability to assimilate, or accept, wastewater discharges. However, releasing additional water from the dam would reduce the revenues the Corps takes in from its electricity generation. Consequently, in 1985, the County negotiated a ten-year contract with the Corps where the County would pay for additional water releases. The contract, which has options for renewal, has not been used to date.

Public Sewer

Since 1978, the Henry County PSA has provided sewer service from its 4 MGD Upper Smith River Wastewater Treatment Plant (WTP). The plant is located in the Koehler area on Route 682 and serves approximately two-thirds of the County residents connected to the sewer system, through the following service areas:

1. Bassett-Stanleytown
2. Collinsville

Through reciprocal agreements, the Authority also uses the City of Martinsville's 8 MGD wastewater treatment plant, located adjacent to the City and County's southeast jurisdictional line. The following service areas are served by this plant:

3. Villa Heights
4. VA Rt. 108
5. Martinsville Peripheral

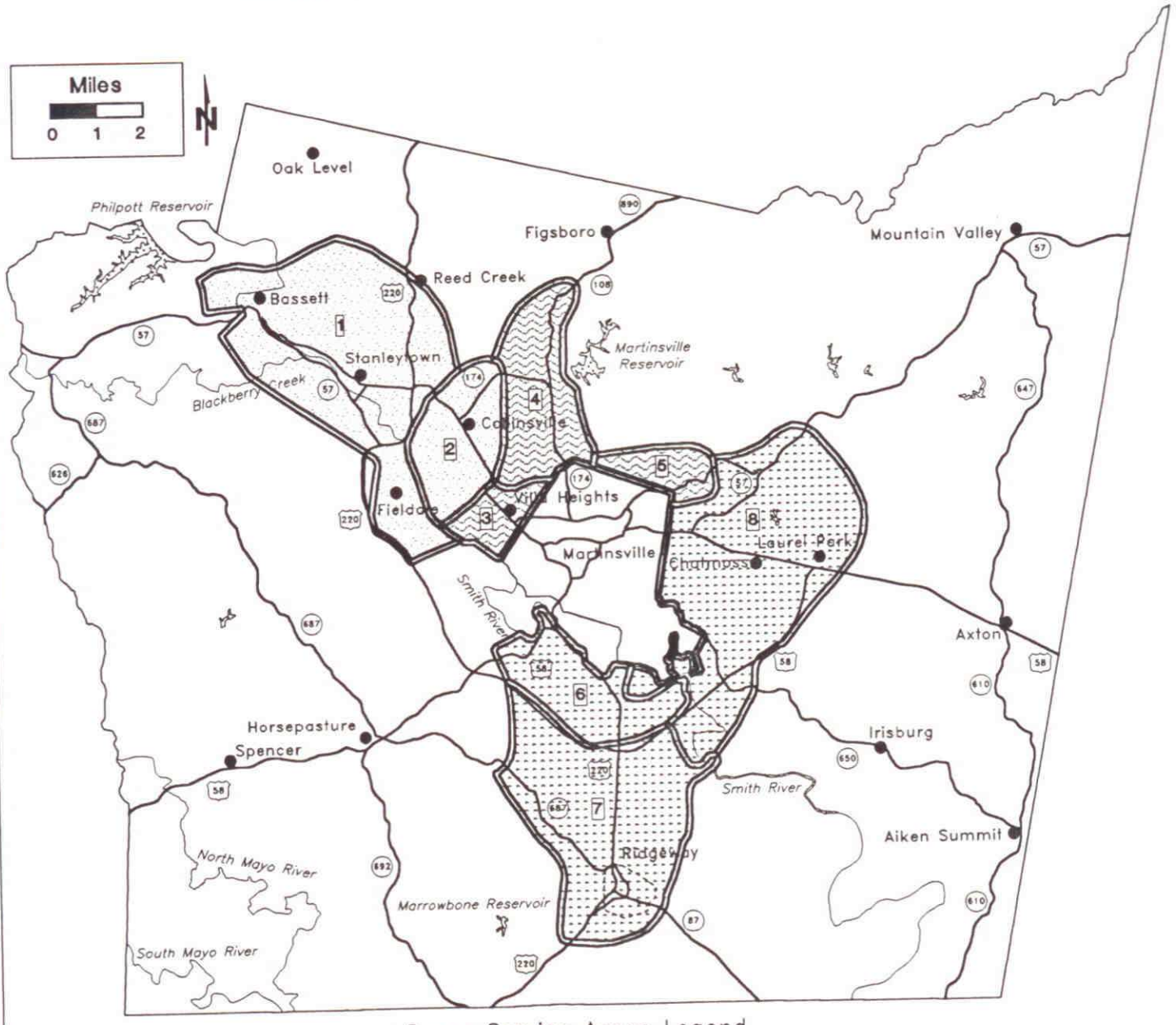
Recognizing that future residential and industrial sewerage needs would soon outweigh the capacity of existing facilities, the Authority issued bonds in 1988 to finance the construction of the Lower Smith River WTP. The plant, located on Rt. 702 along the Smith River, was completed in early 1991. Using modified extended aeration technology, the plant was designed to treat up to 6 MGD of sewage, but is currently only permitted for 4 MGD. It also includes additional facilities to remove color from wastewater caused by dyes used in local textile manufacturing processes.

The bonds also raised funds for construction of numerous interceptors and collectors which direct wastewater to the Lower Smith WTP. The plant and interceptor cost approximately $22,200,000 to construct. Both serve the County's eastern and southern parts through the following service areas:

6. U.S. Rt. 220 South-North Section
7. U.S. Rt. 220 South-South Section
8. U.S. Rt. 58 East

Henry County
Sewer Projects Map

(Derived from 1993 Henry County Water & Sewer Study)
Revised 1/95



Sewer Service Areas Legend

Upper Smith River WTP

1. Bassett–Stanleytown
2. Collinsville

City of Martinsville WTP

3. Villa Heights
4. Virginia Route 108 North
5. Martinsville Peripheral

Lower Smith River WTP

6. U.S. Route 220 South – North Section
7. U.S. Route 220 South – South Section
8. U.S. Route 58 East

In 1990, the PSA approved a second bond issue totaling approximately $26,000,000. Most of these funds were used to construct about 20 miles of sewer interceptors and 37 miles of sewer collectors to extend service into several new areas. The rest funded the addition of dechlorination facilities at the Upper Smith WTP, a project required to meet new environmental regulations.

Table 22
Public Sewer Facilities

Treatment Facility	Permitted Capacity (MGD)	Average Usage (MGD)	Potential Usage (MGD)
Upper Smith WTP	4	2.6	1.4
Lower Smith WTP	4	2.6	1.4
Martinsville WTP*	0.4	0.4	0
Martinsville WTP**	7.6	5.75	1.85
Total	16	11.35	4.65

*allocated to County users

**City's capacity and usage *minus* County allocation

Other Wastewater Facilities

The PSA owns and operates three sewage systems that rely on lagoons to treat wastewater. Stricter wastewater regulations will soon render these lagoons inadequate. Therefore, PSA will work to connect these lagoons to its central sewer system where feasible. County residents and businesses not receiving PSA service rely on private lagoons or individual septic systems.

Wastewater Planning

Barring unexpected demands, PSA officials estimate that their treatment capacity is adequate through 2010. However, new regulations continually threaten to place additional treatment requirements on the Upper and Lower Smith WTPs. In early 1995,

the PSA and DEQ resolved disagreements concerning compliance with temperature and color requirements for WTP effluent (the treated discharge). The final permits for both plants will be issued in early 1995 and will only require minor facility upgrades. The two organizations also reached a temporary agreement on monitoring requirements for toxic metals. The agreement requires the Authority to perform additional effluent monitoring for metals over the next five years, but does not demand facility upgrades.

The water quality standards that determine the limits placed on PSA's wastewater discharges are derived from the Roanoke River Basin Water Quality Management Plan. In 1993, the DEQ announced that a new, more specific Smith-Dan Subarea plan would be prepared for this sub-watershed, within which the County lies. It remains uncertain what effects, if any, this new plan will have on existing wastewater requirements.

1993 Water & Sewer Study

Several years ago, the West Piedmont Planning District Commission received a State Water Control Board 604(b) grant on behalf of the County. The grant was used to hire a consulting firm to develop an update to the existing 1985 water and sewer study. This study, completed in 1993, identifies the following as potential *water* service areas:

- Rangely-Pleasant Grove; and
- Magna Vista

The study also identifies the following potential *sewer* service areas.

- VA Rt. 57 West
- Rangely-Pleasant Grove
- U.S. Rt. 58 West (currently served by PSA lagoons)
- Magna Vista
- U.S. Rt. 220-Ridgeway South
- VA Rt. 87 South

North Bassett Project

In 1993, an initiative began to provide water and sewer service to portions of North Bassett. The County received a planning grant for the project from the Department of Housing and Community Development. County staff is using this grant to prepare and strengthen their application for a Community Development Block Grant to provide water, sewer and other improvements to the area. The application will be submitted to the State in March 1995.

Solid Waste Management

Solid waste management pertains mainly to the collection and disposal of solid waste from residences, industries, businesses, construction sites, etc. Solid waste management has become a larger and more costly problem for local governments as they struggle to comply with stricter federal and state solid waste regulations.

Landfilling

Like most Virginia localities, Henry County disposes of most of its solid waste in a landfill. The 1992 Solid Waste Management Study estimates that the County landfills approximately 79,000 tons of solid waste per year-- roughly 1.45 tons a year per person. Residential waste accounts for approximately 35.7% of the waste stream, while commercial and industrial wastes comprise 20.5% and 17.4% respectively. About 19.4% of total waste is vegetative matter, mostly brush and stumps.

These estimates are based on a temporary weighing program conducted by engineering consultants in 1991. More recent estimates using data from scales located at the City landfill suggest that either these figures are high or the County's waste stream has changed. Using data from the months of October, November, and December 1994, staff estimates that the County landfills roughly 71,160 tons per year. This figure was not adjusted for seasonal variations in waste disposal, as was the original estimate from the 1992 study. However, since *more* solid waste tends to be landfilled during these later months, this estimate may actually be lower than 71,160 tons if adjusted for seasonal variations.

County and City intend to further refine estimates of waste generation to include existing and anticipated changes to the waste stream since the study's preparation. A significant change would occur if the PSA decides to begin composting its sewage sludge, which it currently landfills. The decision will be largely be based on the area's future landfill costs. If implemented, it will greatly reduce the County waste stream, since the sludge accounts for about 15% of the current waste stream (about 10,000 tons per year). Also, the composting facility would incinerate large amounts of wood material and stumps, which are currently landfilled, to dry the sludge.

The County's most recent landfill facility, located behind the County Administration Building on King's Mountain Road, reached maximum capacity and was closed in May 1993. Since that time, the County has used the City Landfill, located on Clearview Drive, which continues to operate under a variance for landfill lining requirements granted by the DEQ. The City estimates that its landfill has a six to eight year life expectancy and should remain open until a new City/County long-term solid waste disposal facility is constructed. Should the City landfill close prior to the development of a new landfill, an option that the localities have available involves activating a contingency agreement to construct a transfer station to take County and City waste to a commercial landfill in Kernersville, North Carolina.

Sanitary Landfill Siting

Over the past several years, the Board of Supervisors and the City Council have worked to establish a new sanitary landfill that meets new federal requirements. In August 1992, these bodies established a Landfill Siting Committee composed of County and City citizens. The Committee was charged with the responsibility of locating and evaluating potential sites and recommending one (and not more than two) potential sites to the Board of Supervisors. (City Council delegated to the Board the ultimate selection of a new landfill site, under the assumption that any potential site would be located in the County.)

The Siting Committee retained the assistance of a consultant and began conducting an extensive study of potential landfill sites. After more than a year's work, the Siting Committee recommended to the Board that it acquire several hundred acres located northwest of the former County landfill site for development as a landfill.

Concurrent with the Siting Committee's recommendation, representatives of a local quarry company approached the Board of Supervisors to request an opportunity to study the feasibility of converting part of its Martinsville stone quarry into a landfill. However, the company later withdrew this offer.

In September 1994, the County and City agreed to mutually pursue development of a long-term solid waste disposal facility. As of this writing, engineering consultants are working on Part A of the permit application for the site recommended by the siting committee.

Refuse Collection

The County does not provide curbside pickup to its citizens, but private haulers provide these services to approximately 15% of County households. First Piedmont Corporation serves about 14% of total County households.

Commercial and industrial establishments in the County use individually owned containers and are primarily served by private haulers. Some establishments, however, transport their own waste to the City landfill. A private hauler collects and disposes of all waste from the County schools.

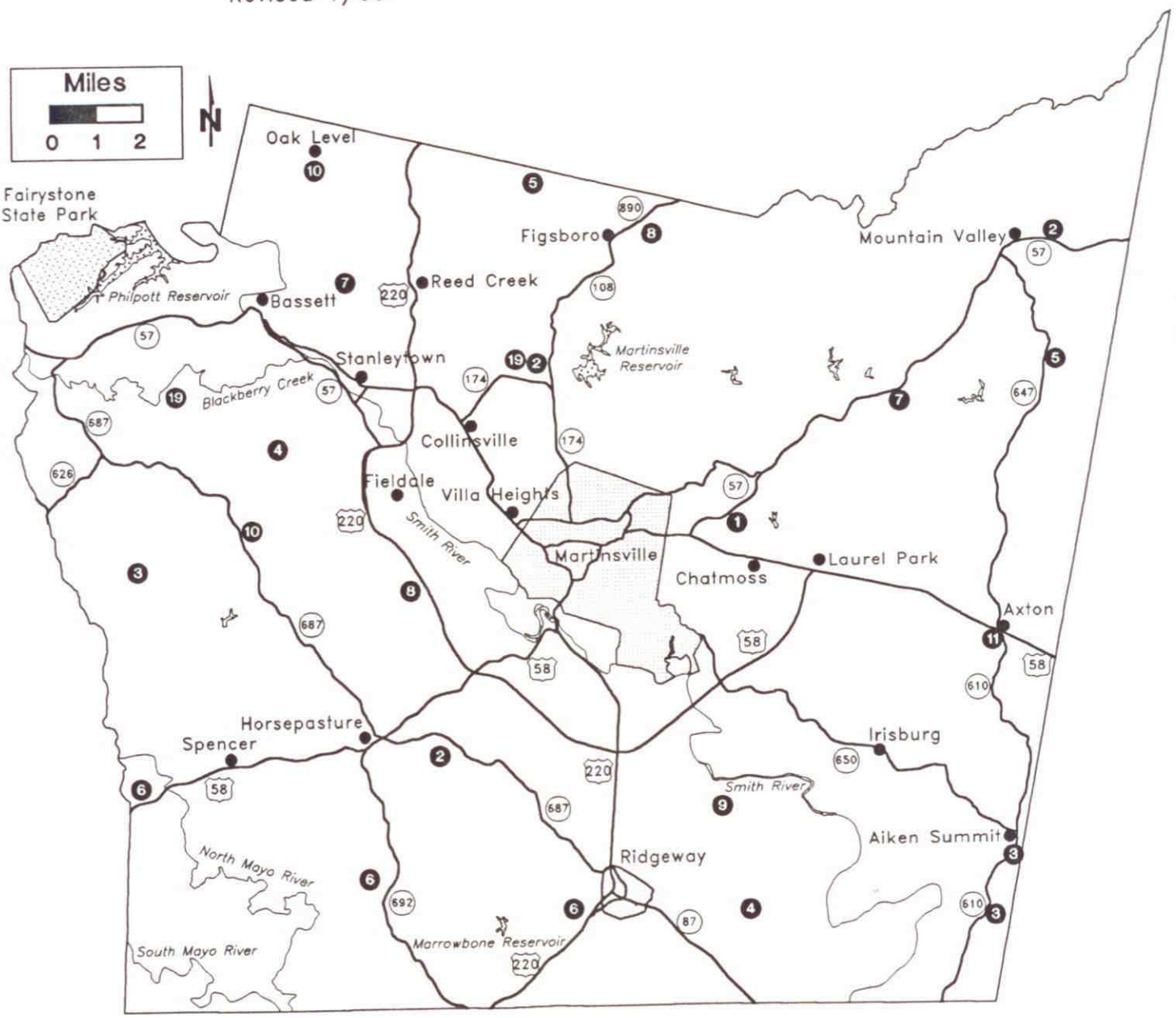
In less densely populated rural areas, residential collection is generally considered to be cost prohibitive. Therefore, the County provides green box, or "dumpster," service. At present, the County has 160 green boxes at 24 different sites (see Map 12). A private hauler empties the boxes three to six times a week on average under contract with the County.

Since green box sites are not staffed, they are subject to abuse. To combat the problems caused by improper use of the green boxes, the County employs two people to monitor and clean green box sites. Also, the Martinsville-Henry County Clean Community Commission (MHCCCC) periodically arranged for placement of forty cubic yard containers at central locations to allow citizens to dispose of large items. Since early 1994, the County has also made these containers available to County residents on a weekly basis. The containers are placed on Refuse Rd. (behind the County Administration building) on Saturday mornings. Despite these efforts, problems still

Henry County

Green Box Locations

Revised 1/95



● Indicates Green Box Locations with number of Green Boxes at each site.

Prepared by West Piedmont Planning District Commission, '94.

exist. Therefore, the County has discussed and budgeted funds for the future development of "convenience centers", which would be manned facilities for both refuse collection and recycling. It is anticipated that up to six convenience centers could be developed in conjunction with the new long-term solid waste facility. In November of 1994, the Board of Supervisors received a report from County staff on the design and development of the convenience center concept. The Board approved the design of the sites and referred the matter to the Planning Commission for a recommendation on the development schedule and location for the centers.

Other Wastes

Proper disposal of **automobile tires** has long been a concern for local governments. The indiscriminate dumping of thousands of tires in the County has created potential health and safety risks as well as aesthetic and environmental problems. To address some of these problems, the County adopted a tire storage ordinance in 1989. In 1992, the County obtained a State grant to inventory illegal tire dumping sites.

In January 1994, the PSA obtained a $106,000 grant from the Division of Waste Management of the DEQ. The grant will allow PSA to continue work on a waste-to-energy facility designed to dry liquid sewage sludge from heat generated from the incineration of whole tires. If successful, the project will create a demand for tires that should reduce illegal dumping.

Many chemicals used around the home, such as paint products, household cleaners, and automotive products, are considered **household hazardous waste.** Due to the very limited options available to residents in disposing of these items, the County sponsored a household hazardous waste collection day in May 1992. Although the turnout was lower than expected, the volume collected per citizen was high and approximately seven tons of hazardous waste was collected.

Another related waste disposal problem involves the illegal dumping of **used oil** from automobiles and other vehicles. Research has shown that one gallon of oil can contaminate up to one million gallons of groundwater. Although the County does not

provide oil collection, four commercial establishments in the County provide private collection (see 1992 Solid Waste Management Study for locations.)

Recycling

Recycling involves the separation, collection, and marketing of recyclables from the waste stream. It serves as an important element in solid waste management programs since it:

- increases the life of landfills;
- reduces landfilling costs;
- conserves natural resources and energy; and
- helps involve and educate the public in solid waste management.

The MHCCCC and the Planning Department have jointly managed the County's recycling program. As of Spring 1995, the County has one recycling drop off center, located at the Kroger's Grocery Store on Route 220 South. The City has two drop off centers at the Kroger's on Commonwealth Boulevard and the Harris-Teeter Grocery Store on Brookdale Road. The centers accept aluminum and metal cans, container glass, newspaper, and certain types of plastic.

While the drop off centers provide opportunities for voluntary residential recycling, industries and businesses account for most of the recycling activity in the area. For example, in 1993, household recyclables accounted for only 4% of all recycled material. Industrial recycling comprised 75% of this amount, while commercial recycling accounted for 21%. During that year, the County recycled approximately 35,929 tons of material.

The County recognizes that it must increase its recycling activity, for several reasons. First, the General Assembly may alter its recycling mandates to place greater emphasis on residential recycling. Secondly, stricter landfill requirements have caused landfill disposal costs to increase by over five times as much as previous costs. Consequently, the "avoided costs" in landfill fees that come from recycling have

increased exponentially. Recycling, therefore, which many have long-supported for environmental and ethical reasons, may soon be justifiable solely in economic terms.

A major benefit of the convenience-center concept involves the increased recycling activity it would promote. These centers would each have recycling bins, which would greatly increase the number of locations that accept recyclables. Having joint locations for refuse disposal and recycling would also increase the convenience of recycling, since both tasks could be done concurrently.

The PSA is also active in trying to promote better waste management. Both the tire incineration and sludge composting initiatives discussed previously have the potential to significantly reduce the amount of solid waste that is currently landfilled.

Litter Control

The MHCCCC has coordinated most of the County's litter control programs. Among other activities, the MHCCCC has organized a yearly Smith River Cleanup since 1989. This event brings together community groups and individual citizens to pick up trash in and along the Smith. The MHCCCC also works to educate citizens, particularly school children, on litter control and recycling issues.

Beyond these efforts, the Virginia Department of Transportation (VDOT) sponsors the "Adopt a Highway" program, in which groups assume litter control responsibilities for road segments approximately two miles in length. About 27.4% of the County's primary roadways and 14% of secondary roads have been adopted.

Finally, the Division of Waste Management manages a similar "Adopt a Spot" program for areas such as parks, school grounds and local streets. Presently, there are six "spots" in the County that have been adopted.

Private Utilities

Electric

Appalachian Power Company (APCO), one of the largest electric utilities in Virginia, provides electric services to Henry County and the City of Martinsville. Approximately 97 percent of Appalachian's generating capability is supplied by coal-fired steam generators. Currently, electric power is supplied to the Henry County area through a network of 765 KV circuits.

In July 1993, APCO announced it would make a $5 million investment in the County. Since then, the company has finished construction of a $3.5 million substation approximately two miles northeast of Axton. The substation serves the Axton area and also backs-up the Martinsville substation. As of mid-1995, APCO was building distribution lines to serve customers from this substation. Improvements to the Collinsville area were completed in late 1994.

APCO has improvements in the area east of the intersection of Routes 57 East and 647 scheduled for late 1995 . The company also has improvements planned for the Route 58 West corridor, Spencer, Rich Acres, and Carver. Interim improvements are planned for the Oak Level area for the summer of 1997.

Natural Gas

Southwestern Virginia Gas Company has authorization from the Virginia State Corporation Commission to provide natural gas service to the County, City, and a portion of southwest Pittslyvania County. Formed in 1942, Southwestern serves over 4,000 customers and distributes nearly 2 billion cubic feet of natural gas each year. The company holds firm capacity rights on Transcontinental Gas Pipe Line, which it connects to at Berry Hill in Pittslyvania County. It purchases natural gas from a variety of sources and arranges for transportation on Transco to the Company's City Gate.

Natural gas service is available in most areas of the City as well as several areas of the County. Significant industrial customers include the DuPont facility, Fieldcrest Cannon, and Bassett-Walker. Natural gas is also available in the Martinsville, Beaver Creek, and Bowles Industrial Parks. Southwestern recently completed a $1.6 million

addition to its Henry County service area in a project known as the "Eastern Loop". A major substation, located on Route 58 East, will provide additional pressure to several areas of the company's system which have experienced load growth, as well as provide service to the residents of Laurel Park. Any future development of natural gas service into other areas of the County will depend on economic feasibility.

Telephone

Sprint/Centel provides telecommunications products and services to residential and business customers in the County-City area. Sprint/Centel has constructed an extensive fiber optic network and maintains digital switching systems throughout the state. The company connects all of its customers to County-City E-911 Emergency Services. Sprint/Centel is one of four companies in Sprint's Mid-Atlantic region which provide local telecommunications services, including long distance, cellular, and local exchange services, to customers in Virginia, North Carolina, South Carolina, and Tennessee.

Cable Television

Adelphia Cable Communications currently supplies cable television service to much of the County area. The company has 1.4 million total subscribers and stands as the seventh largest cable company in the country.

The cable service available has a fifty- five channel capacity with two pay-per-view channels. Approximately 20 miles of extensions are planned in 1995.

Transportation

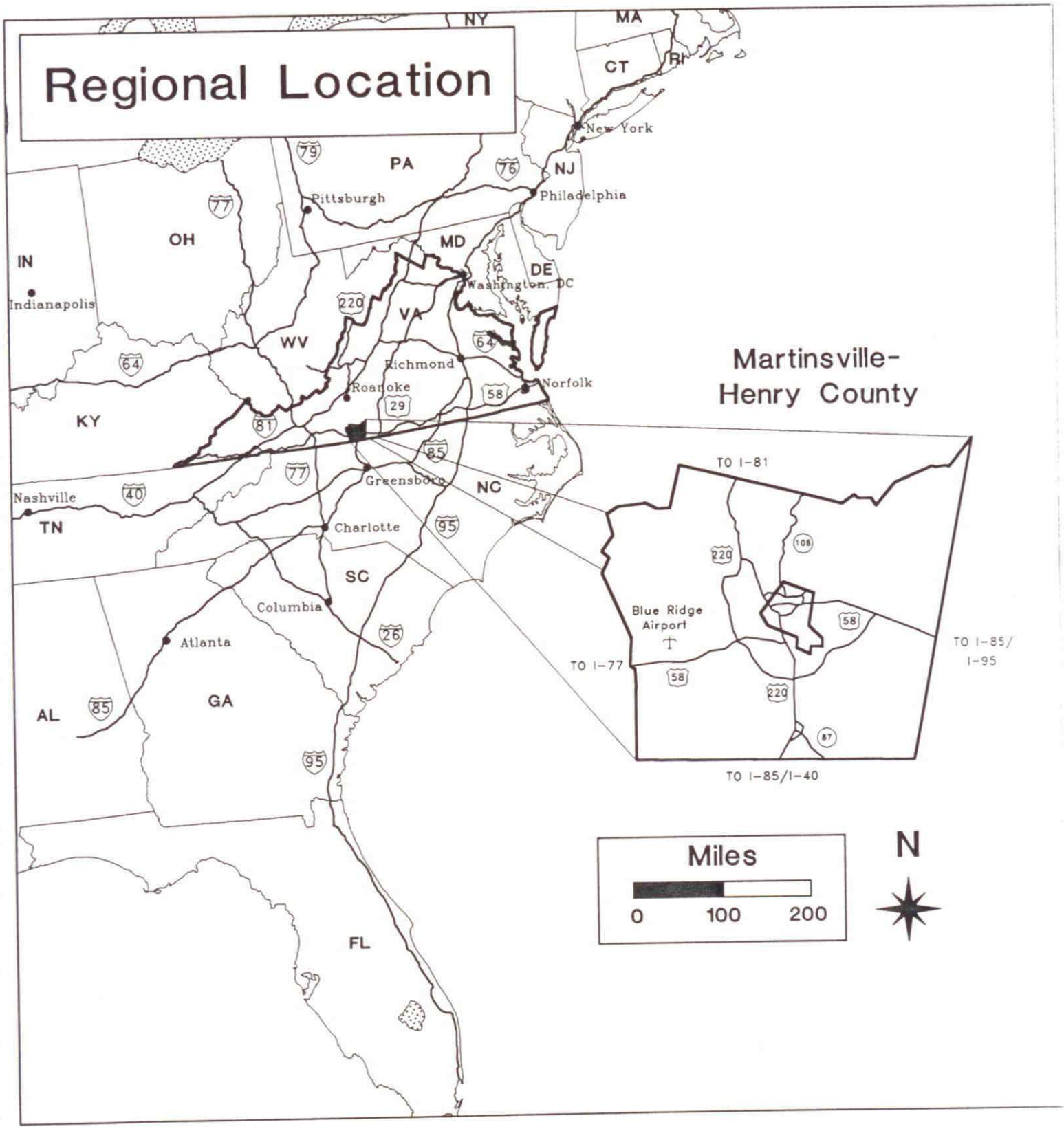
An area's transportation network serves as the central framework for its growth and development. The quality of a transportation system greatly influence an area's economic development potential, quality of life, public safety, and natural environment. Henry County is similar to most suburban-rural localities in that it almost exclusively relies on the automobile to serve its transportation needs. Consequently, this chapter will focus on the County's existing and future highway systems. However, alternate modes of transport such as air, rail, bicycle, and pedestrian are discussed.

Highway System

Two U.S. highways and three Virginia primary highways cross through the Martinsville-Henry County area, providing local business and industry access to major business centers (see Map 13). U.S. Route 58 runs east-to-west through the County and City. It intersects Route 29 in Pittsylvania County and the Blue Ridge Parkway in Patrick County. Route 58 is part of VDOT's arterial system and has interchanges at U.S. Route 220 South, Alternate Route 57, and U.S. Route 220 North.

U.S. Route 220, which runs in a north-south direction through the County and City, provides access to Interstates 85 and 40 in Greensboro, NC, and to Interstate 81 (via Interstate 581) directly north of Roanoke. In 1991, preliminary design work began to realign and improve Route 220 at the North Carolina line. The project will eliminate curves and provide a straighter, safer road link between Henry County and Greensboro. Upon completion, this improved roadway will adjoin recent improvements to the North Carolina portion of the road (see Future Projects).

In the late 1970s, a phased project began to construct bypasses to expedite traffic through the central County-City area. In 1980, the Route 220 Bypass was completed, connecting Route 220 south of the City with Route 220 North. The Route 58 Bypass connects Route 220 Bypass with Route 58 East. The bypass was


Regional Location
NY
MA
CT
RI
New York
PA
NJ
Philadelphia
Pittsburgh
OH
IN
Indianapolis
MD
DE
Washington, DC
VA
WV
Richmond
Roanoke
Norfolk
KY
Martinsville-
Henry County
TO I-81
Greensboro
NC
Nashville
TN
Charlotte
SC
Columbia
Atlanta
GA
AL
FL
Blue Ridge
Airport
TO I-77
TO I-85/
I-95
TO I-85/I-40
Miles
0
100
200
N

MAP 3-1

recently completed with the first segment, from Route 220 South to Route 650, opening for traffic in November 1990. The second segment opened in December 1992 and runs from Route 650 to Route 58 East.

Virginia Primary Route 57 runs from Route 8 in Patrick County to U.S. Route 29 in Chatham, via Martinsville. The corridor intersects with U.S. Route 220 to the east of the City and provides principal access to Philpott Dam and Fairystone State Park.

Virginia Primary Route 108 originates at its intersection with Route 174/Kings Mountain Road and extends northward through Figsboro to southern Franklin County. In Franklin, it changes to Route 890 and extends to the Penhook area, providing access to Smith Mountain Lake. In 1991, Route 174/King's Mountain Road was improved and widened to four-lanes. This corridor now provides improved industrial access to Beaver Creek Industrial Park and helps link Route 220 Business to Route 58 Business.

Virginia Primary Route 87 originates at its intersection with Route 220 South in Ridgeway and extends southeastwardly to Eden and Reidsville North Carolina, providing connection to U.S. Route 29.

A network of state-maintained secondary roads supports this primary roadway system. Many private roads also exist in the County. Although active in transportation issues, the County government does not maintain its own road system. Maps 14 and 15 illustrate the area's more heavily travelled primary and major secondary roads through use of 1989 traffic count data.

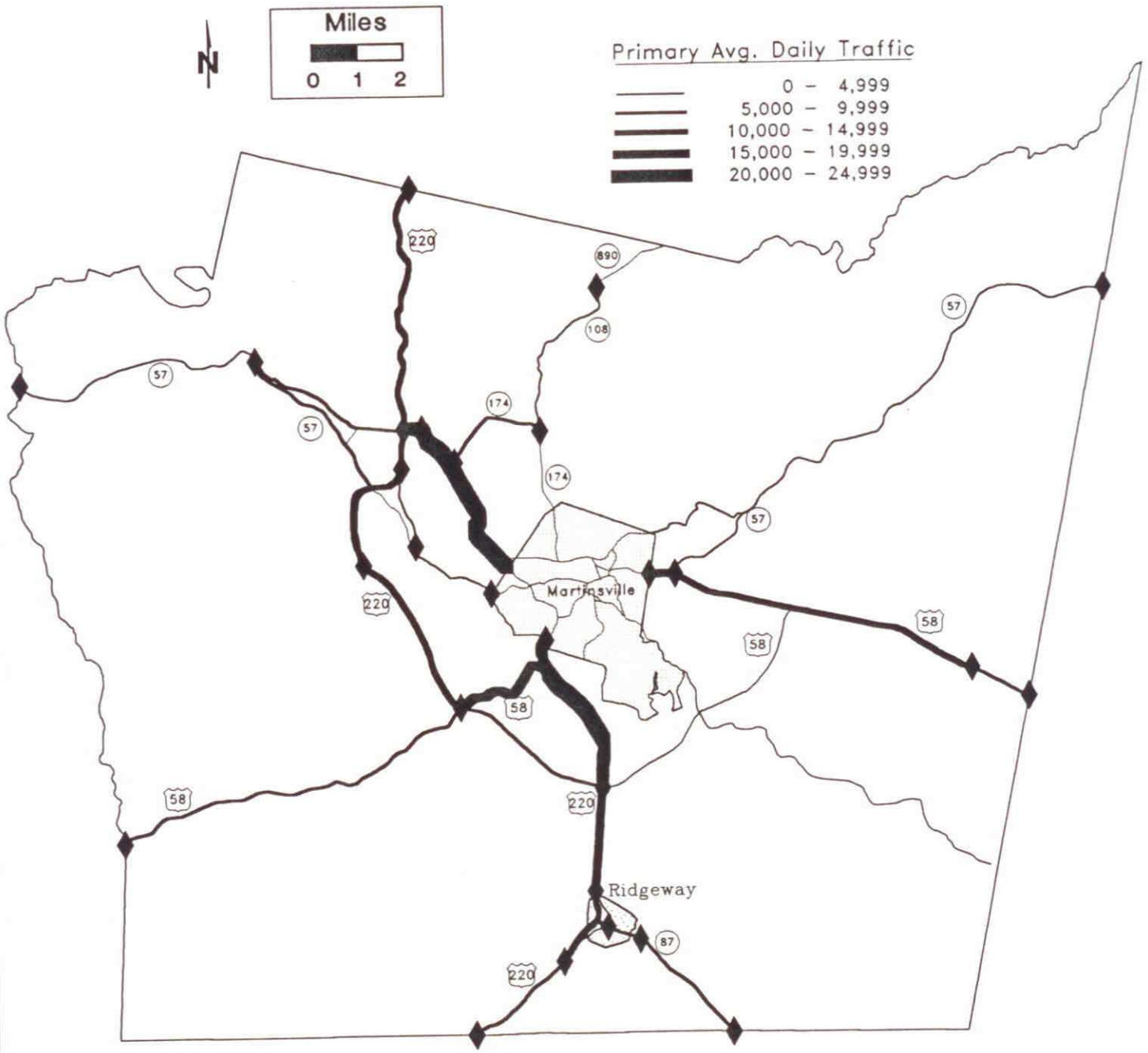
Highway Accident Rates

Transportation planners and engineers use *accident rates* to help determine where needs exist for improvements to existing roadways. Accident rates consider the following variables:

- Length of road or road segment
- Average Daily Traffic for road (or road segment)
- Number of Reported Accidents

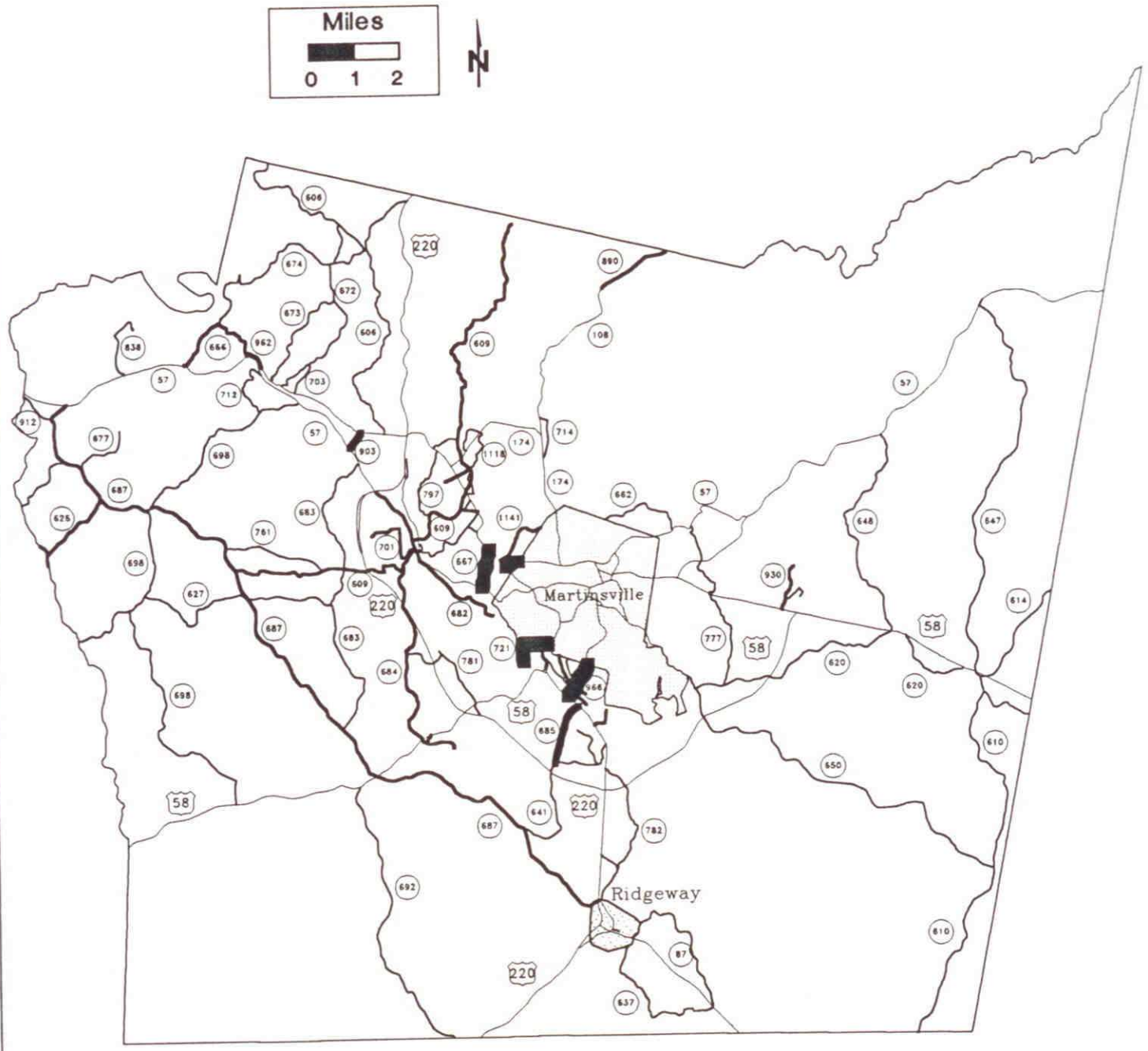
Henry County

1989 Primary Road Segments Traffic Count



Map 3-2

Henry County
1989 Secondary Roads Traffic Count



Average Daily Traffic

0 – 499 not shown

500 – 1500

1501 – 3000

3001 – 4500

Over 4500

Using historical data, accident rates estimate the *probability* that a person traveling on a particular road or road segment will have an accident. (Note: Accident Rates are derived by multiplying the number of accidents on road segment by the number "100 million". This value is then divided by the Average Daily Traffic.)

The Virginia Department of Transportation (VDOT) periodically publishes a report, Summary of Accident Data, which contains data for Interstate, Primary, Secondary, and Frontage Road highway systems throughout the State. Accident rates for both primary and secondary roads for 1989 are portrayed on the following maps. Although this information is from 1989, it can serve as a general guide in locating problem accident and traffic areas.

For primary highway segments, as shown on Map 16, the highest accident rates are:

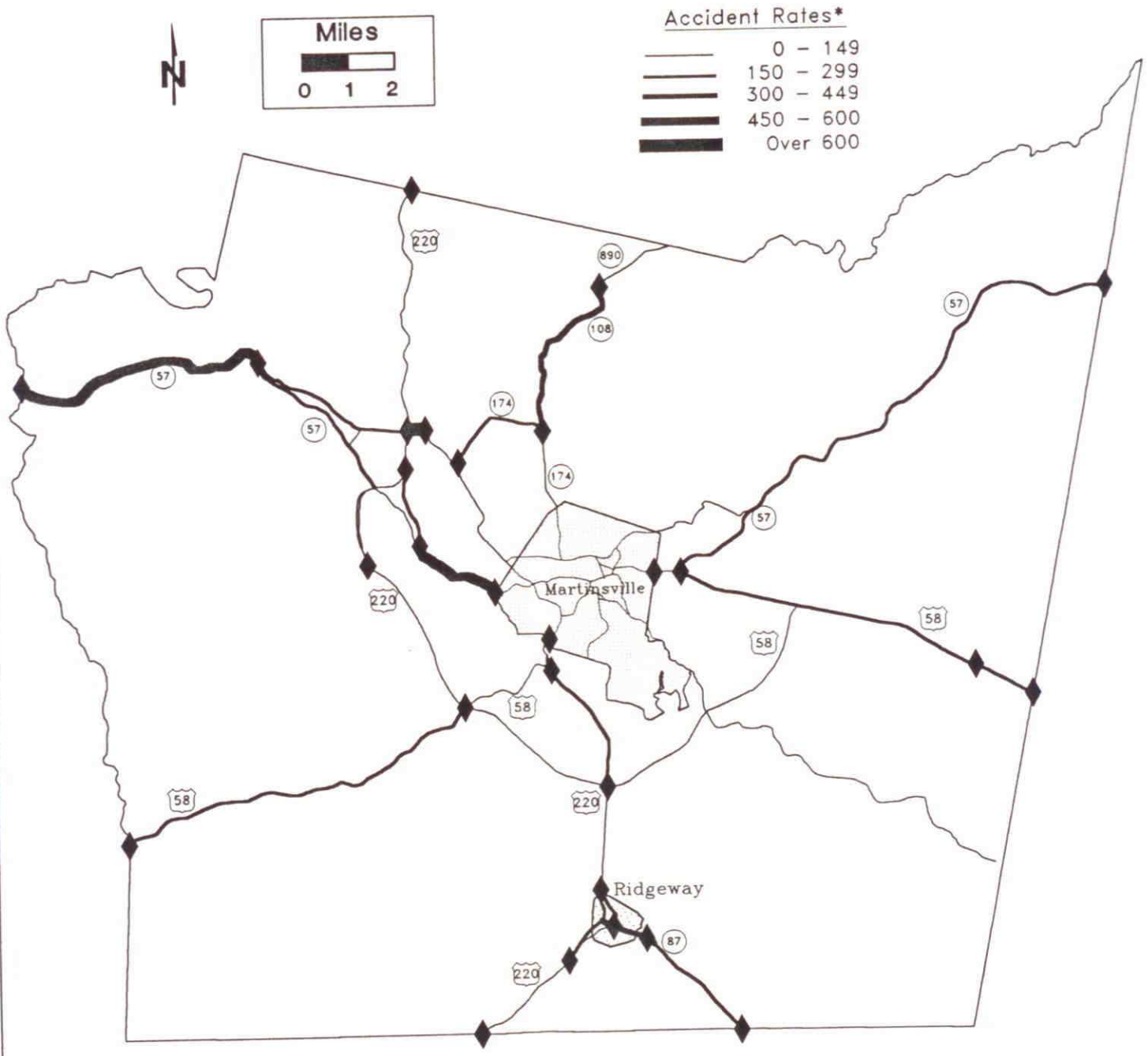
- Route 220 Business near Bassett Forks;
- Route 220 South of Ridgeway;
- Route 57 from the City to its intersection with Route 609;
- Route 57 from near its intersection with Route 666 to the Patrick County line;
- Route 108 from north of the City to Route 657 (part of this segment was redesignated as Route 174).

Accident data for secondary routes covers entire routes rather than certain segments as with primary routes. Small road lengths and low traffic counts may distort the data somewhat, resulting in high accident rates for certain roads. Secondary roads having the highest accident rates for 1989, as shown on Map 3-5, are:

- Route 610 (Axton Rd.)
- Route 684 (Carver Rd.)
- Route 667 (Koehler Rd.)
- Route 966 (Rives Rd.)

Henry County

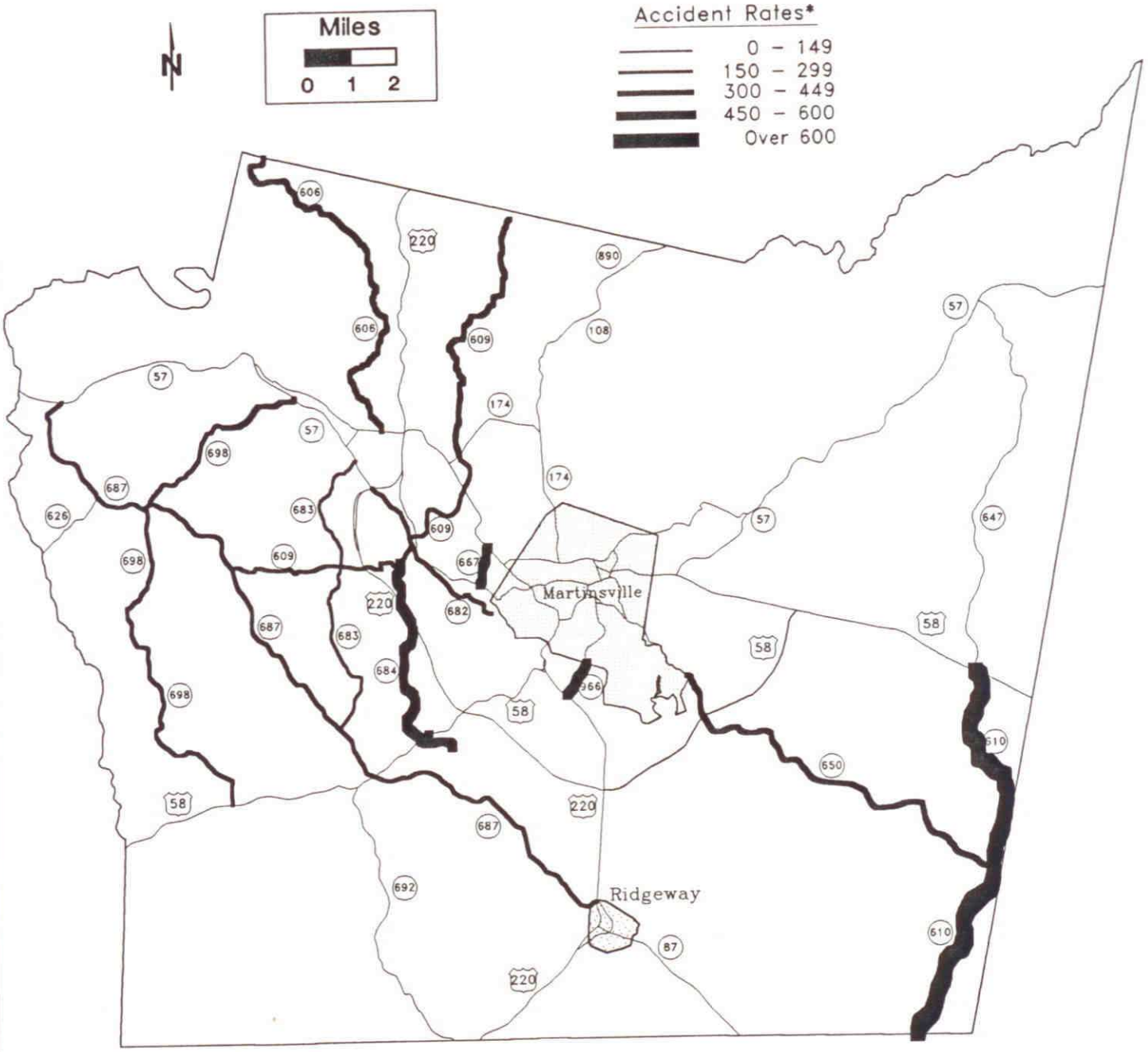
1989 Primary Road Segments with High Accident Rates



*See text for explanation of Accident Rates.

Henry County

1989 Secondary Roads with High Accident Rates



*See text for explanation of Accident Rates.

Future Projects

The County supports continued road improvements to maintain a safe and viable roadway network. The following list and accompanying maps highlight current and future projects that affect the County.

- Route 58

A $4 million project began in the fall of 1991 to improve Route 58 from the U.S. Route 220 Bypass to the Horsepasture community. Due to complications, the project is not scheduled for completion until late 1995. However, another project has already begun to four-lane and improve Route 58 from Route 687 to Route 695 in the Spencer community. This project is scheduled for completion in mid 1995.

These projects are part of a larger effort to upgrade Route 58 across the southern part of the Commonwealth, from Cumberland Gap in Southwest Virginia to Hampton Roads on the Eastern shore. The County stands to benefit greatly from the project, since it will provide linkage with Interstates 85, 95, 81,77, U.S. Route 29, and provide improved access to the Port of Hampton Roads (see Map 3-1).

- Route 220 (four-laning from Virginia/North Carolina border south to Greensboro, NC)

This project will place Henry County in the center of an improved Route 220 corridor between the Piedmont Triad in North Carolina and Roanoke. North Carolina's plans include:

1) extending the four laning on the existing 220 corridor to the Summerfield area;
2) veering to the southwest on a new alignment;
3) joining Route 68 above the Piedmont Triad International Airport area; and
4) following the four-laned Route 68 corridor to Interstate 40.

In early 1994, the Henry County Board of Supervisors adopted and forwarded a resolution to VDOT and the Commonwealth Transportation Board. The resolution requested that VDOT and the Transportation Board fund, develop, and implement a Traffic Engineering and Safety Improvement Study along Route 220 from Interstate 581 in Roanoke south to the North Carolina state line. Similar resolutions were adopted by the governing bodies of the City of Roanoke, Roanoke County, Franklin County, and the Town of Rocky Mount.

- Route 87

North Carolina is currently four-laning Route 87, with much of the construction completed or underway. This improved route will provide the County with better access to U.S. 29 and the North Carolina industrial and trade areas. However, to fully benefit from these improvements, strong consideration must be given to improving and/or four-laning Route 87 from Route 220 to the North Carolina line. This plan also supports improvements to the intersection of Routes 220 and 87.

- Interstate 73/83

In 1993, the County government requested that VDOT support the routing of I-73, a proposed federal interstate from Detroit MI to Charleston SC, through Martinsville/Henry County. This route would connect the Roanoke Valley and the Piedmont Triad. After a series of public hearings in various parts of Virginia, the Commonwealth Transportation Board recommended this route to Congress.

As an offshoot of the discussions regarding I-73, several local congressional representatives began a separate I-83 initiative to link Roanoke and the Piedmont Triad. Local representative worked to have the House of Representatives to approve $5 million dollars toward a study of I-83, but the measure was recently defeated in the Senate.

If approved, it remains unclear how the two proposed projects would mesh with one another. However, it is likely that they would merge at some point and not be entirely separate routes. The final decision on the location either of these routes is unlikely to occur before 1995.

In conjunction with these efforts, a private industry group known as Job Link was formed to support development of an interstate route linking the Piedmont Triad, the Roanoke Valley, and developing areas between. Job Link is composed of local industrial representatives from Henry and Franklin Counties in Virginia and Rockingham County, North Carolina.

- "Northern Loop" Bypass from Route 58 East to Route 220 North

County and VDOT officials have informally discussed the possibility of linking Route 58 East to Route 220 North with a bypass, thereby closing the "loop" around the central County/City area. Although funding has not been allocated for planning or design of this project, this plan recommends that this project remain a future consideration.

- "Talking" Highway

In 1993, the Virginia Museum of Natural History in Martinsville received funding through the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) for Phase I in the development of a Traveler's Information System, or "talking highway." The proposed project would extend along the entire 508-mile length of Route 58. The goal is to develop and implement an interpretive system that will reveal the cultural and ecological wealth along this route and make it accessible to people who use the road. In 1994, the Museum applied for funding for Phase II.

Transportation Planning

VDOT currently performs most of the transportation planning duties for the County. However, the process does involve input from the Board of Supervisors, which advises the VDOT Resident Engineer's Office on potential and needed projects. Also, the County also participates in annual pre-allocation hearings held in Salem, VA, where it provides input on various needs for transportation infrastructure development.

The VDOT Transportation Planning Division in Richmond, with other VDOT divisions, develops *Six-Year Plans* and other transportation studies to guide the orderly development of the State's road systems. Under ISTEA, VDOT also develops a Statewide Transportation Improvement Program (STIP), which now encompasses the Six-Year Planning process. The STIP will be developed annually as were the Six-Year Plans.

Statewide Highway and Six-Year Plans

In 1981, VDOT developed the report "Statewide Transportation Facilities Inventory and Local Transportation Issues" for the West Piedmont Planning District. The report used information on roadway type, pavement width, number of lanes, accident data, and serviceability to determine existing deficiencies.

In 1989, VDOT developed the "Statewide Highway Plan for the Year 2010," a report that consolidated principal primary and secondary routes of the County into a single inventory. This plan evaluated existing conditions, determined deficiencies, and made recommendations for improvements using suggestions from local governments and the Construction District Office in Salem, VA. (VDOT has started work on a new Statewide Transportation Plan under the new requirements of the ISTEA legislation of 1991.)

Also, VDOT annually develops Six-Year Plans for roadway improvements to primary and secondary roads in the County, using input from the Board of Supervisors. The current program covers the period from 1994-1995 through 1999-2000, with an update scheduled for the fall of 1994. Adoption of six-year plans by the Board of Supervisors should be considered as a plan-updating process and directly applicable to the Comprehensive Plan.

While Six-Year Plans typically call for extensive improvements to the County's secondary road system, the State has projected that funds will be limited for these improvements during the 1990's. Unfortunately, the ISTEA legislation will do little to improve the availability of federal funds for basic secondary and primary roads in the County. (ISTEA provides substantial funds for urban areas with air quality problems. It also funds several new programs, such as the safety program

and enhancement program.) To adjust to this possible decrease in federal funding, the State may begin financing a larger share of road improvements. Should this occur, Southside and Southwest counties would obviously face increased competition for State funds from other areas of the state.

Maps 18 and 19 on the following pages display the planned improvements for primary and secondary roads in the County. (Refer to actual plans for more detailed information).

Martinsville (Henry County) Area Transportation Study

In the spring of 1994, the County began making arrangements for an update of the Martinsville (Henry County) Area Transportation Study (MATS). The MATS plan would require the collective support of the Board of Supervisors, City Council, and the Town of Ridgeway in order to establish a memorandum of agreement for the purposes of creating the study. The study, which usually requires several years to complete, would involve the coordinated efforts of the staffs of the VDOT, County, City, West Piedmont Planning District, and other contributing parties.

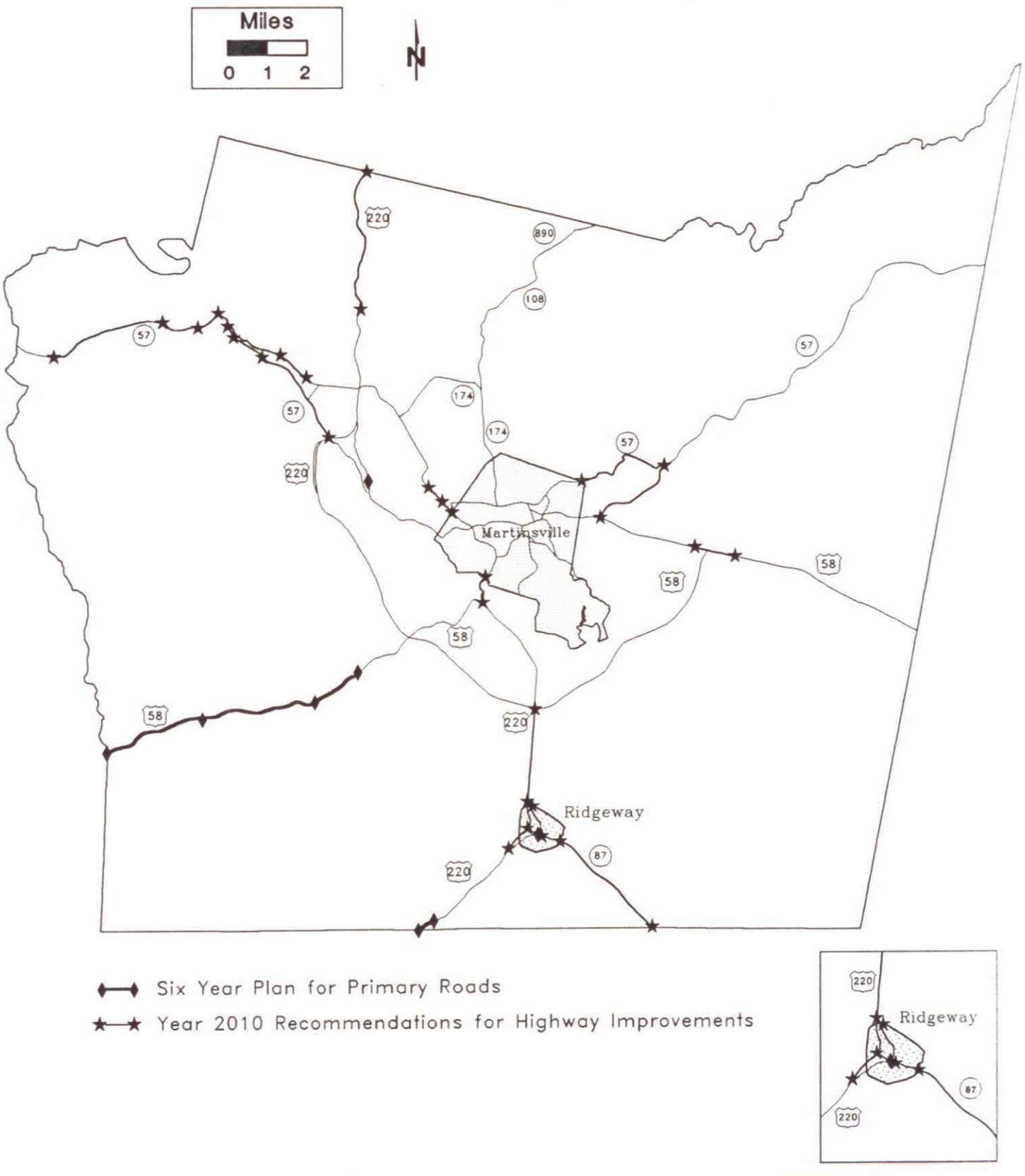
The creation of this plan, in compliance with new ISTEA regulations, would involve a higher level of public participation. It would also include subplanning for highways, bikeways, trails, pedestrian ways, aviation, and rail transportation. Consideration of environmental issues, historic resources preservation and protection, and minority and disadvantaged populations will be required.

National Highway System Routes in Henry County

As a result of ISTEA, a new, nationwide highway classification has been established. This classification places interstates, the nation's strategic highway network, highways connecting critical facilities and ports, and routes selected by state transportation departments within the National Highway System. If a route is placed in the system, it is assured of qualifying for future federal aid funds. Routes not within the system may or may not qualify for this federal funding. (Any future interstate route passing through the County, such as Interstate 73, would

Henry County Primary Roads

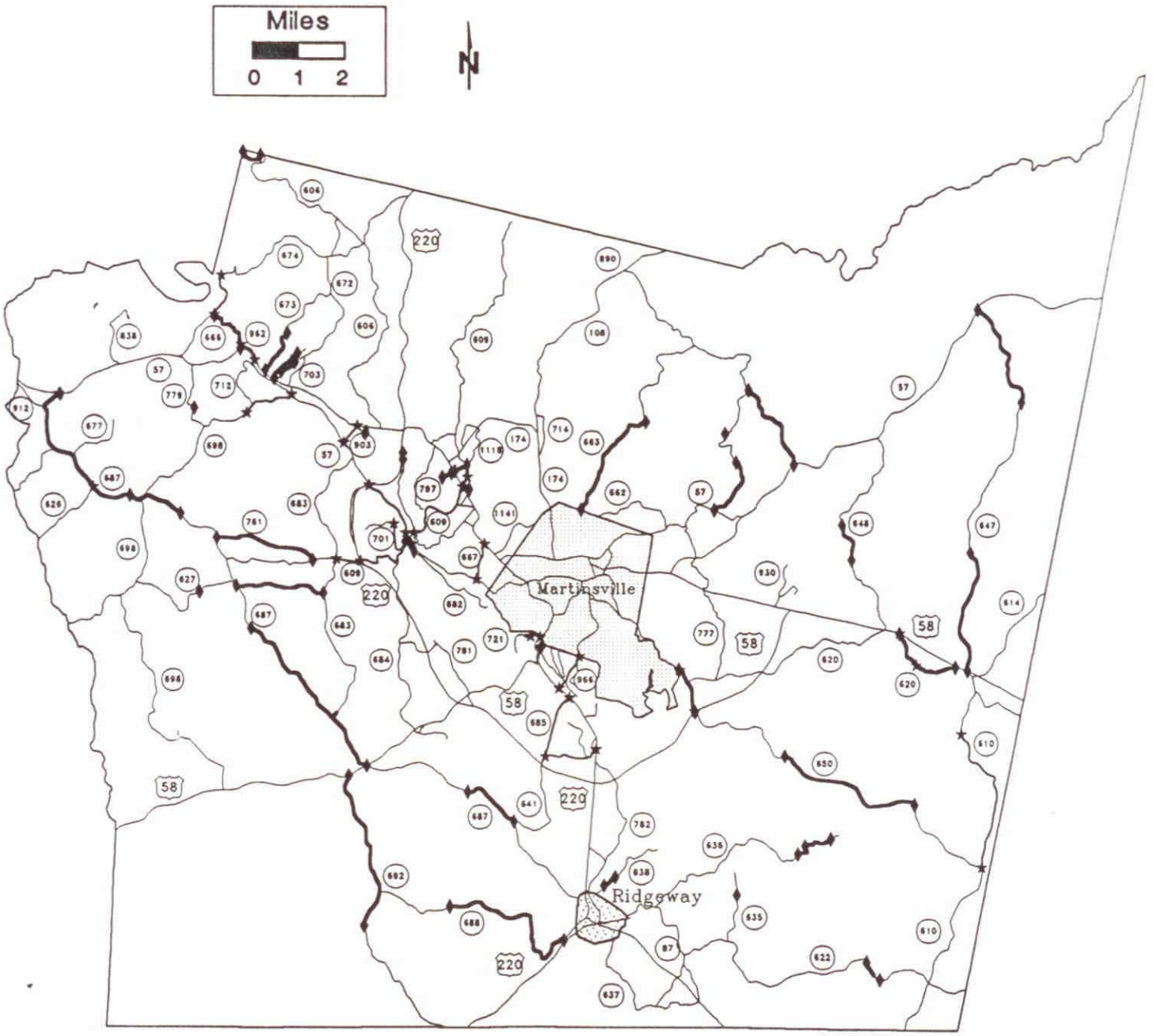
Recommendations for Highway Improvements

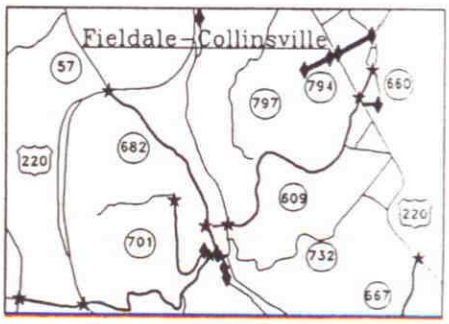


MAP 3-6

Henry County Secondary Roads

Recommendations for Highway Improvements





Six Year Plan for Secondary Roads

Year 2010 Recommendations for Highway Improvements

MAP 3-7

increase the potential for highways currently not included to be added to the National Highway System.)

Routes on National Highway System	Routes not on National Highway System
Rt. 220 Bypass--Bassett Forks area to Rt. 220 South	Rt.58 west of U.S. 220 Bypass
Rt. 220 North--Bassett Forks to Franklin County	Rt. 58 inside City limits, east to Rt. 58 Bypass
Rt. 220 South--from Bypass to North Carolina line	Route 57
New Rt. 58 Bypass--from Rt. 220 South to U.S. 58 to Rt. 58 East	Route 174
U.S. Route 58 East--Rt. 58 Bypass to Pittsylvania Co.	Route 108

Funding for Future Transportation Projects--Enhancement and Safety Programs

The ISTEA Act of 1991, also known as the Enhancements Program, created a pool of funds to increase the value of a project or make it more aesthetically pleasing. It also provided appropriations of special funds for state departments of transportation to initiate projects to reduce unsafe conditions through safety programs. This past year, Virginia qualified for approximately $7.5 million for each of these programs.

The Enhancement Program, in particular, symbolizes a new approach to transportation issues. The following list highlights possible enhancement projects and the criteria with which they will be evaluated.

ISTEA Enhancements Program: Summary

Project Evaluation Criteria	Possible Projects
• Inclusion in a state, regional, or local plan	• Provision of pedestrians and bicycles trails
• Ability to enhance safety	• Acquisition of scenic easements and scenic or historic sites
• Accessibility to the public	• Scenic or historic highway programs;
• Compatibility with adjacent land use	• Landscaping or other scenic beautification;
• Ability to connect to existing or proposed facilities	• Historic preservation archaeological planning and research;
• Cost in relation to public benefit	• Rehabilitation and operation of historic transportation buildings
• Total project cost	• Preservation of abandoned railway corridors;
• Environmental and social impacts	• Control and removal of outdoor advertising
	• Mitigation of water pollution due to highway run-off.

Transamerica Transportation Corridor Program

In 1991, the U.S. Congress passed an appropriations act which included provisions for an Interstate 66 Feasibility Study. This corridor, also referred to at the Transamerica Transportation Corridor, was perceived as a transcontinental route extending from the East to the West Coast, with possible termini at the Ports of Long Beach, Southern California and Hampton Roads. The project's study commission is considering both intermodal and innovative technology alternatives. Among the more interesting alternatives being considered include a high-tech train reaching 125-135 miles per hour speed and a superhighway/truckway with vehicle speeds up to 150 miles per hour.

The project has great importance, since the County could easily lie within 25-100 miles of the corridor, which is to be selected in the next few years. Obviously, this would increase the future marketability of the area. However, recent events have led to doubts as to whether the Transamerica program will receive funding.

Special Transportation Programs

Rural Addition Program

Under state law, Virginia counties may recommend to VDOT that qualifying roads be improved to state standards and taken into the secondary system as rural additions. The State has an special fund (averaging 5% of each year's total construction funds for all state roads) designated as rural addition funds.

Also, under its Revenue Sharing Program, the State will match County dollars to an annual maximum amount for construction, while the County pays for any necessary utilities relocation and right-of-way purchases. Although these funds could be used for other transportation purposes, Henry County currently directs all of its revenue sharing monies toward its Rural Addition Program. The annual total funds (State and County) spent on local roads under the rural addition program is over $500,000. The program accounts for an average 8-10 private roads being brought into the state system annually.

Industrial Access Road Program

Industries locating on inadequate secondary roads or requiring on-site access roads may have these roads built or improved through the Virginia Industrial Access Road Fund. As of 1993, the General Assembly allocates $2.5 million a year to the fund with aid being determined on an industry-by-industry basis.

The funds are available for widening, straightening, or otherwise improving existing roads as well as for building new roads onto new or expanding industrial

sites. However, not more than $300,000 of industrial access funds (with a $50,000 local match) may be allocated for use in any one county in any fiscal year. Once constructed, the roads are owned and maintained by VDOT at no cost to the industry.

Other VDOT Access Programs

VDOT runs other programs designed to improve access to important facilities. These are the:

- *recreational access fund*, to provide access via road or bikeway to publicly developed recreation or historic sites. These sites must be operated by either a state or local government entity.

- *railroad access fund*, to provide railroad tracks to industrial or commercial sites.

- *airport access fund*, to provide access roads to publicly-owned airports.

These programs operate similar to the rural addition programs. The local government must guarantee right-of-way for the projects and is responsible for any adjustment or relocation of utilities. The VDOT pays for construction and maintenance of the accessways.

Gateway Programs

In addition to participating in VDOT's Enhancement Program, localities may also develop Gateway Programs to improve the aesthetics and "curbside appeal" of important corridors. In 1991, the Gateway Streetscape Foundation was created to coordinate, implement, and manage landscaping projects along the area's major corridors. The Foundation, which evolved from the Chamber of Commerce's Beautification Committee, works to integrate the 'hard' appearance of man-made facilities with the 'softer' natural landscape offered by trees and other types of vegetation.

This joint County-City effort has received funds from the Virginia Division of Forestry along with local sources of funding. The Foundation currently has projects underway along the Kings Mountain and Rt. 58/East Church Street corridors. This corridor improvements program provides a justifiable basis for the County's entry into the Enhancements program.

Transportation Programs for the Elderly

The County's Senior Services program, which operates through the Department of Parks and Recreation with funding from the Southern Area on Aging, provides transportation services to elderly persons. These needs will increase as the aged population in the County increases.

Highway Corridor Protection

Many local governments currently use a variety of planning tools to protect transportation corridors from unsafe and unsightly "strip"development. The Land Use Chapter discusses transportation problems posed by unplanned development along major corridors and offers solutions (see *Highway Corridor District*).

Other Transportation Modes

Rail Network

The Norfolk Southern Corporation, through its subsidiary the Norfolk Southern Railway Company, provides rail transportation to Martinsville and Henry County. Norfolk Southern Railway's system lines extend over more than 14,800 miles of railroad in 20 states, primarily in the Southeast, Midwest, and the Province of Ontario, Canada. From Martinsville and Henry County, Norfolk Southern provides main track connections northbound to Roanoke or southbound to Winston-Salem. The company, which specializes in bulk and mixed freight service, interchanges with all major carriers and serves the gateways of Hagerstown, Chicago, Memphis, Kansas City, St. Louis, Detroit, and New Orleans.

Norfolk Southern operates a local shifter, stationed at the Norfolk and Southern Payne Yard at Fieldale in the County. Additional switching service can be provided by a southbound and southbound locals. A branch line exists in the City which connects with Norfolk Southern's main line--switching service is provided on this line daily with a local shifter on weekdays.

Air Service

The latest air transportation planning document concerning the County was the Blue Ridge Air Transportation Systems Study (BRATSS). Developed by Wilbur Smith and Associates in 1977, the study covered a 16-county area and sought to determine the aviation facilities required to meet immediate and future air transportation needs. The recommended plan provided a framework for future regional decisions regarding air transportation.

BRATSS recommended that the area's primary airport, Blue Ridge Airport, be upgraded from Basic Utility to General Utility, and then to Basic Transport by the year 2000. The Blue Ridge Airport Authority's Master Planning Study of 1980 detailed the necessary steps to make the needed upgrades. Located in the western portion of the County on Route 698, the Blue Ridge Airport, is now classified as a General Aviation Regional Airport. According to the Virginia Department of Aviation's June 1990 Technical Report of the Virginia Air Transportation System Plan Update, the Blue Ridge Airport generated $1.5 million in direct economic impact in 1988, creating 35 jobs. The Airport, which is regularly used by many local industries, has a paved 5,000-foot runway which can support aircraft weighing up to 60,000 pounds, a parallel taxiway, and 28 hangars. In April 1994, the Blue Ridge Airport Authority applied for federal assistance to help improve the airport. Proposed projects include the construction of "safety areas" for two runways and an expansion of hangar and taxilane space.

There are two small private airparks in the County--one in the northern part of the County and another near State Route 688 in the central part of the County.

Public Transit

Public transit services are not available in the County. However, the Danville-based D&M Bus Company, which primarily transports industrial workers and other regular transit users, makes several trips per day between Martinsville-Henry County and the Danville-Pittsylvania County area.

A consultant completed development of a Coordinated Transportation Systems Study for Henry, Franklin, and Patrick Counties and the City of Martinsville in 1991. This study sought to better coordinate the activities of the transportation service providers in these localities. As a result of the Study, a group named TRIPS (Transportation Resources in Planning Stages) has been formed by fourteen human service agencies in the project service area. Efforts toward coordination have begun, including modest route-sharing arrangements, plans for joint training of drivers, bids for fleet maintenance and insurance, and a standard format for policies, procedures, and recordkeeping. However, implementation of the TRIPS program is still in the early stages and suffers from a lack of strong financial and administrative support.

Pedestrian and Bicycle Transportation

Over the course of the century, the United States has evolved into an automobile-dependent society. Despite the merits of automobile travel, this trend has resulted in development patterns that are generally inefficient, adverse to the natural environment, and do little to foster social interaction. Walking, bicycling, and other modes of transport serve as alternatives to automobile travel. However, on the whole, the County's transportation system could be described as "pedestrian and bicyclist unfriendly"--our commercial areas lack sidewalks, and our secondary roads are generally too narrow and developed to allow for safe bicycling. The trails that do exist in the County only serve *recreational* purposes--no trails are located such that they function as *transportation* corridors.

As discussed previously, funding sources created to implement ISTEA have made the development of bike and walking trails more alluring for local governments. Indeed, many local governments in Virginia have already taken

advantage of these funds to promote alternatives to automobile travel. In order to obtain funding, any proposed project should have a clear transportation link (i.e. a trail designed solely for recreational purposes is not likely to be funded). Should the County become more active in promoting transportation options, it could work to convert abandoned railroad rights-of-way into trail systems. An alternative to separate trails would involve creating additional space along existing roads for bicyclists. The newly created bike lanes are appropriately marked with painted "divider" lines.

Land Use

This land use section represents a consensus of many different opinions regarding the best use of Henry County's land resources. County land use ordinances, such as the Zoning and Subdivision ordinances, serve as the vehicles to achieve this objective in a fair and equitable manner. While serving as a basis for these ordinances, comprehensive plans are not intended to be "placed on the shelf" after ordinance rewrites. Rather, court decisions continually affirm the role of comprehensive plans in day-to-day land use decisions such as rezonings or special use permits.

This chapter is divided into two sections. The first section discusses the County's general land use trends and their effects. It also establishes *growth* and *rural* areas, which will serve as the basis for the Future Land Use Plan. The second section reviews options available to the County for implementing the Land Use Plan. Development standards are introduced which will serve as general guides for reviewing future development proposals.

Development Trends

A. Strip Development Trends

Strip Development refers to development, usually one-parcel deep, that fronts on major roads. There are two varieties of strip development prevalent in the County--commercial and residential.

- Commercial Strip Development

All of the County's major commercial areas are best described as *commercial strip* developments. The commercial strip evolves in society reliant on the automobile as the primary means of transport. Developers locate on major corridors to increase visibility, for convenience, and to attract the greatest amount

of car and truck traffic. Planner Kirk Bishop describes these commercial strips as typically having:

"THE DEVELOPMENT OF THE COMMERCIAL STRIP IS A PRODUCT OF LOGICAL PRIVATE MARKET DECISIONS IN AN AUTOMOBILE ORIENTED SOCIETY."

- Numerous large freestanding and portable signs;
- Large expanses of unscreened surface parking;
- Little or no landscaping of public or private property;
- Few or no pedestrian improvements;
- Above-ground utilities and overhead lights;
- Numerous poorly delineated and closely spaced driveway access points; and
- A generally uncoordinated approach to the designing, location, and planning of various public and private improvements.

Besides these characteristics, commercial strips usually consist of similar fast-food and convenience store franchises. The appearance of these businesses typically do not vary from place to place in terms of their design, facade, and signage.

The result is commercial areas that lack character (a unique "sense of place") and are virtually indistinguishable from each other. Many people believe that this reflects poorly on a community and reduces its "curb appeal" to visitors and potential industry. Also, commercial strips usually allow for multiple "curb cuts," resulting in inefficient and unsafe access from market areas and heavily congested highways. They also do not allow for smooth transitions to adjacent land uses--especially residential neighborhoods.

- Residential Strip Development

Although residential and commercial strip developments obviously differ in terms of their respective land uses, they also differ by location. Residential strip development in the County has occurred typically along state secondary roads. Similar to commercial areas, this creates numerous curb cuts along these roads, worsening traffic and safety conditions. Also, these secondary roads are often heavily traveled and may be dangerous play areas for children. Unlike self-contained subdivisions, they often do not foster social interaction among neighbors.

Finally, these residential strips do not allow for smooth transitions to other land uses.

These linear, state-road frontage subdivisions are the most popular new form of residential development, as shown below. In fact, state-road frontage lots are twice as prevalent as any other type of building lot. Landowners and developers often prefer this form of development since they are not required to provide infrastructure such as roads, water, and sewer. The current subdivision ordinance has tended to encourage this type of development by applying few planning or coordination requirements.

Table 23

Estimates of New Building Lots Recorded (Jan. 1990-July 1994)

Type of Building Lot	Means of Access	Number Recorded
State-Road Frontage	Existing State primary or secondary roads	348
Back-Lots	Access easements or rights-of-way	141
"Regular" Subdivision	Newly-constructed road to State standards	116
"Large Lot" Subdivision	Newly-constructed road to County standards	66

Source: Department of Planning and Community Development

B. Sprawl Development Trend

Related to strip development is the development pattern known as suburban sprawl, which refers to peoples' tendency to leave homes in urban areas in favor of lower density, suburban areas. As described in the *Population* Chapter, the County's population, once more centralized in certain areas, has sprawled out over larger land areas. The *Housing* chapter mentions that manufactured home development accounts for the vast majority of this new residential development. For example, for every site or stick built home constructed, three manufactured homes are placed on lots. The tendency for developers and landowners to create large lot subdivisions has contributed to sprawl development. Commercial

development has followed this out-migration, with most new commercial development occurring outside traditional urban areas.

The dispersed nature of the County has increased costs associated with service provision. For example, public water and sewer costs are relatively high since the PSA has been forced to extend lines farther to serve this scattered development. Emergency medical services have also expanded to accommodate the dispersed population with two new volunteer rescue squads organized in the last two years. Also, three of the four proposed school expansions are located in outlying areas.

Another effect of sprawl development involves conflicts with incompatible land uses. Across Virginia, farmers have been subject to more nuisance and noise complaints stemming from their agricultural operations. These complaints typically come from the farmers' new residential neighbors. This land use plan attempts to protect land uses associated with traditional rural areas, such as forestry and farming, while ensuring ample room for development to occur. Henry County has recently experienced problems with traditionally rural activities impacting areas that are becoming residential.

C. *Effects of Service Delivery on Growth*

As discussed previously, the County's hydrogeologic characteristics do not allow for a good supply of groundwater. Also, the County's many steep slopes often make placement of individual septic systems difficult. Public water and sewer service is a more reliable and, in most cases, less expensive means to develop land. *Therefore, the locations of public water and sewer lines in the County have, and will continue to, greatly influence the location of future growth.*

The following map presents findings from an analysis of building permits issued by the County from 1986 to 1993. In doing this analysis, the Planning Staff recorded the type and general location of the 838 new structures that comprised the sample group.

The results of the permit analysis affirm the major development trends discussed above. As the map shows, development has taken place in nearly all areas of the County during this period. In general, areas that have experienced the most residential growth have access to PSA water and sewer service. These include the County's northwest, the southern part of the County along the Route 220 corridor, and areas directly east of the City. The northeastern and southwestern areas of the County have experienced the least development.

Growth Areas and Rural Areas

While current development trends help define the *existing* land use in an area, the remainder of this chapter focuses on future land use. Essentially, the future land use plan categorizes all areas in the County into one of two areas--growth or rural areas. These designations were made recognizing the fact that Henry County generally offers a balanced lifestyle, having many amenities often associated with urban areas within a rural setting. The land use plan seeks to maintain this balance. Land uses appropriate for the particular area shall be encouraged, while inappropriate land uses shall be discouraged.

Growth Areas

The growth areas identified by this plan seek to direct development to allow the efficient use of County land and public services. A coordinated approach to development will also help minimize conflicting land uses. Finally, proper land use planning will help divert development from environmentally sensitive areas, such as steep slopes, floodplains, and wetlands.

Characteristics of Growth Areas

The growth areas are characterized as typically having:

- existing or planned road networks that can sustain traffic increases;
- PSA water and sewer availability or the potential for future service; and

- physical suitability for development (i.e. absence of environmentally sensitive areas such as floodplains or steep slopes);

This plan also encourages growth in areas where development has already taken place. *Redevelopment*, as this practice is often called, has a common sense attraction with many benefits. Developers profit from having lower development costs, since infrastructure exists and they can often reuse old buildings. The community benefits through the conversion of aging "eyesores" to vital, new businesses. Vacant land is also preserved.

Despite these many benefits, redevelopment does not occur as often as it should in the County. Several large commercial chains have opted to build new facilities nearby rather than expanding, and have abandoned their former stores. Also, businesses continue to develop and locate outside traditional commercial areas where vacant space exists, largely in response to the continuing population sprawl.

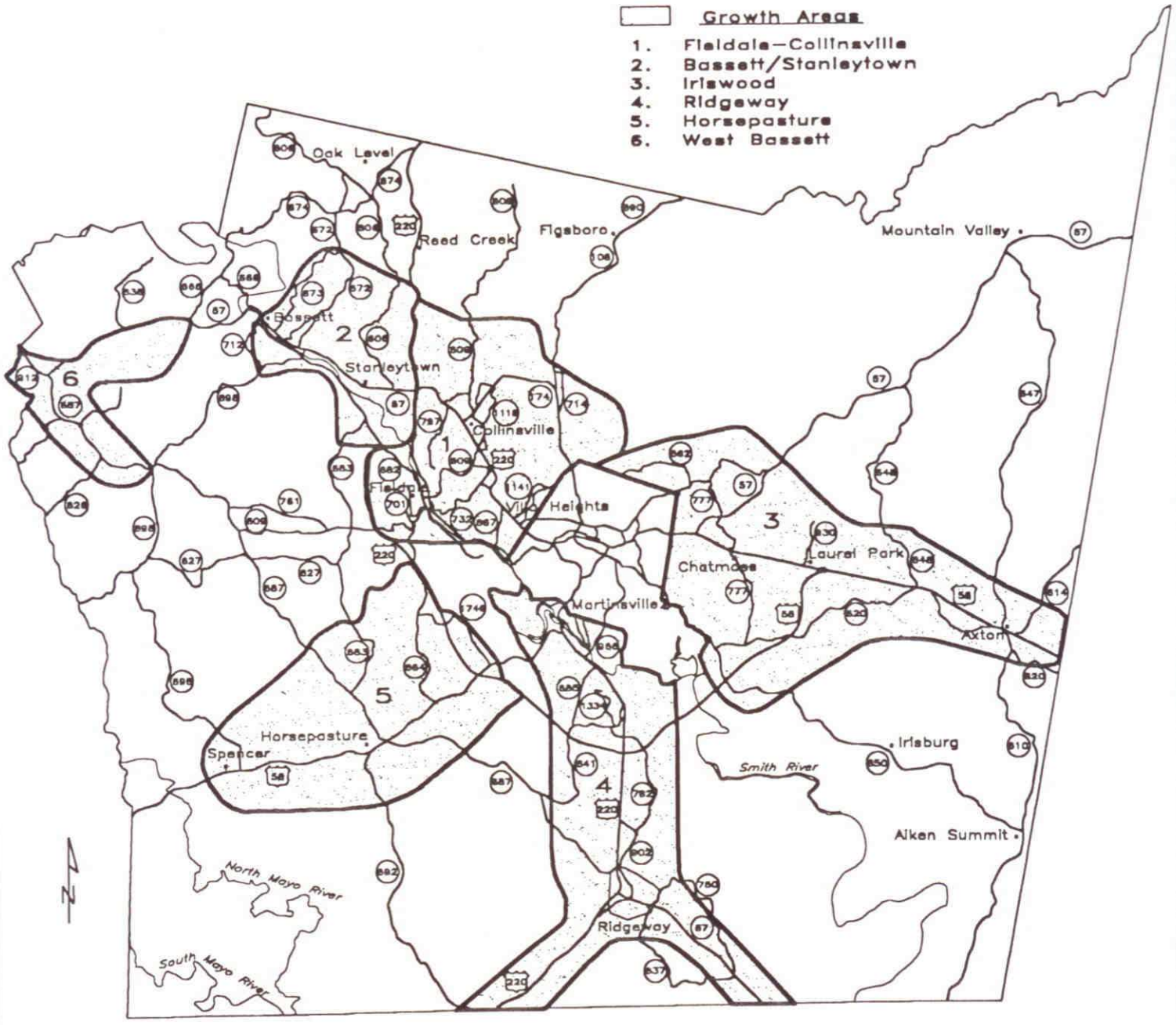
This plan also encourages *infill* development within growth areas. Infill differs from redevelopment since the latter applies to properties where development has already occurred. Conversely, infill is defined as "development of new housing or other buildings on scattered *vacant* sites in a built-up area." Despite this difference, infill achieves many of the same goals, including minimizing infrastructure costs and incompatible land uses.

Specific Growth Area Profiles

This Plan identifies the following growth areas:

1. Collinsville/Fieldale;
2. Bassett/Stanleytown;
3. Iriswood;
4. Ridgeway;
5. Horspasture; and
6. West Bassett.

Henry County
Growth Areas



The following section contains profiles for each growth area. Each profile is divided into five categories:

A. Existing Land Use;

This category includes comments regarding recent growth and land use trends.

B. Natural Development Constraints;

Growth areas generally lack sensitive environmental areas that are unsuitable for development. However, each growth area contains some natural features where development should be discouraged.

C. Transportation;
D. Public water and sewer; and
E. Recommendations.

1. Collinsville/Fieldale Growth Area

Location

Bounded on the west by Route 220 Bypass; encompassing Fieldale and Koehler communities. City limits and Barrows Mill Road form the southeast boundaries. Growth area follows Route 174 to the watershed boundary of the Martinsville Reservoir; encompasses Collinsville, Villa Heights, and eastern portion of Bassett Forks.

A. Existing Land Use

The Route 220 corridor through Collinsville served, until the 1970's, as the principal north-south route through the County for interstate and intrastate traffic. It also linked the traditional job centers of Martinsville and Bassett and therefore attracted a significant amount of commuter traffic. For these reasons, the corridor and its surrounding area became commercial and residential centers as the County became more industrialized.

Other highway and physical features exist that have, and will continue to, influence development locations in the planning area. For example, highway interchanges often serve as attractive locations for growth. The Route 220 Bypass, which delineates the western side of the planning area, has interchanges at the following locations: Route 220 Business at Bassett Forks; Route 682 north of Fieldale; and Route 609 southwest of Fieldale. Although development has occurred at the Basset Forks interchange, growth has been limited at the other interchanges, due largely to rough terrain at these locations.

The corridor formed by the Smith River, Route 57, and the Norfolk-Southern Railway tracks has also influenced development location. The corridor divides Fieldale on the west from the remainder of the planning area. Much of this corridor, including the river valley and adjoining terraces, consists of land unsuitable for development because of steep slopes. Also, improvements to Kings Mountain Road has led to growth on the corridor and in nearby areas.

Commercial

The Route 220 Business corridor contains the County's most intensive commercial development. This area contains both shopping centers and individual commercial sites, providing a range of goods and services. A large commercial development near the City limits, anchored by a WalMart discount store, will greatly increase commercial activity in the area.

Generally speaking, the corridor has grown in an haphazard and unplanned manner. Residential development occurring behind the commercial corridor increased demand for new streets to intersect the corridor. Traffic signals followed these new streets, resulting in further traffic slow-downs. Also, virtually every establishment along Route 220 has its own "curb cut" or access to the road. The area now experiences significant congestion, especially during peak hours.

In addition to traffic problems, many commercial ventures have failed along Route 220 in recent years. Many of these stores have been vacant for long periods of time, leading to a general deterioration of buildings and parking lots.

Commercial development has recently occurred along the South Daniel's Creek Road and Kings Mountain Road corridors. Most of this activity consists of low-intensity commercial land uses, such as professional offices and beauty shops.

Residential

Collinsville and Fieldale contain the Growth Area's older residential neighborhoods. The neighborhoods in Collinsville, which include the Villa Heights area, extend from behind the commercial areas of Route 220. They consist mostly of high to medium density single family dwellings, along with several apartment complexes and mobile-home parks. Several commercial operations are also located in these residential area, often in close proximity with residences. In recent years, significant residential growth has occurred in higher-end subdivisions located off of Kings Mountain Road.

The area's manufactured homes are concentrated in two areas. Neighborhoods in north Collinsville, bounded by Route 220 Business and North Daniels Creek Road, contain several manufactured home parks. Several parks also exist off South Daniels Creek Road. Individual manufactured homes are scattered throughout the planning area.

The planning area contains the highest amount of multi-family housing in the County. As mentioned previously, most of these apartment complexes are located within the suburbs of Collinsville. Smaller complexes exist in Fieldale, Villa Heights, and off Kings Mountain Road.

Industrial

This growth area contains most of the County's more recent industrial activity. Presently, the County is readying additional sites at the Beaver Creek Industrial Park for marketing to industrial prospects. Also, the Bowles Industrial Park, located off College Drive, has grown steadily in recent years. Other industrial land uses include the Fieldcrest Mills

plant in Fieldale and the Dutalier, National Homes, and Stanley Bowles Construction facilities near Villa Heights.

Public

The County's administrative offices are located on Kings Mountain Road in the northern portion of the planning area. This complex also includes the County Sheriffs' Offices, the County Jail, and the Department of Social Services. Currently, work is underway to build a County park at the location of the former County landfill. The proposed location for a new sanitary landfill is located nearby. Construction has recently begun on a new courts facility adjacent to the County Administration complex. Also, a County park is located off of Colonial Drive.

Schools in the planning area include: Fieldale-Collinsville High School between Collinsville and Fieldale on South Daniels Creek Road; John Redd Smith Elementary; Collinsville Elementary; Fieldale Elementary; and Fieldale Primary. The Patrick Henry Community College campus and facilities are located on College Drive, off Kings Mountain Road.

Semi-public land uses include the PSA's Upper Smith Sewage Treatment Plant and the PSA Shop.

B. Natural Development Constraints

Primary Floodplains	*Critical/Steep Slopes*
• Smith River	• East side of Route 220 Bypass, near interchange with Route 57 Alternate
• Jordan Creek	• South of Route 220 Bypass/Route 220 Business interchange
• South Daniel's Creek	• Northern section of Growth Area, between Route 609 (North Daniel's Creek) and Route 174
• Beaver Creek	
• Little Beaver Creek	
• Reed Creek	

C. *Transportation*

This area's principal primary routes are Route 220, Route 220 Business, Route 220 Bypass, Route 174, and State Route 57. Major collector routes include North Daniels Creek Road, South Daniels Creek Road, Reed Creek Drive, Murphy Road, John Redd Boulevard, Colonial Drive, Longview Drive, Stultz Road, River Road, Patrick Avenue, Chestnut Hill, Dillons Fork Road. The Norfolk Southern Railway's tracks generally parallel the Smith River that passes through the southwestern part of the growth area. There are no bus lines serving the area. The Route 220 Business corridor passes through the center of the area connecting it to Route 220 and the Route 220 Bypass along the western boundary and also the City of Martinsville to the south. Route 174/Kings Mountain Road is now a key route that provides an alternate, four lane connecting route between Route 220 North/North Collinsville and the City of Martinsville/ U.S. 58 area.

The Department of Transportation's Year 2010 needs inventory included two primary route segments that need to be improved within the growth area. The Six Year Plan for Primary roads did not include recommendations for Primary road improvements within the growth area.

Observance of accident rates along primary routes indicates high rates occur along Route 57/Applachian Drive, Route 174 and 108, and near the northbound ramp for Route 220 where Route 220 Business and Route 220 Bypass combine; among secondary routes, Koehler Road and North Daniels Creek Road and South Daniels Creek Road have relatively high rates.

The Year 2010 needs inventory for Secondary routes included suggestions for eight projects. The Six Year Plan for Secondary roads included eight project recommendations for the area.

D. *Public water and sewer*

Fieldcrest Mills supplies water to the Fieldale area from Fieldcrest Mills, while most of the remaining areas are served by PSA water from the Philpott WFP. There is water capacity available to serve growth in the Beaver Creek and Bowles industrial parks and residential areas.

PSA sewer serves the Collinsville, Villa Heights and Fieldale areas. There is sewer capacity available to serve growth in the Beaver Creek and Bowles industrial parks and residential areas.

E. Recommendations

This growth area has infrastructure to accommodate a variety of land uses. The land use plan calls for medium to high density residential development for much of the area, with the Hunt County Farms Subdivision designated as low to medium density. A major industrial area encompasses the Beaver Creek and Bowles industrial parks, and an area extending to Barrows Mill Road. Any decisions regarding the specific industrial uses of this area, however, must be made in consideration of water quality effects to Little Beaver Creek. (The City has an intermittent water intake on this creek that it uses during periods of drought and/or low flow.)

The plan calls for Office and Professional land uses along King's Mountain Road, to help preserve the integrity of this corridor while allowing for development. These types of lower intensity commercial uses also serve as good buffers between more intensive commercial land uses and residential areas.

The plan designates the Route 220 Business corridor as a commercial area. To address some of the problems discussed above, the County could improve the area with a landscaping program along the right-of-way. Also, fix-up programs for retail properties and other aesthetic improvements might be suggested through a business or citizens group interested in community improvement. Furthermore, the County, Chamber of Commerce, Patrick Henry Development Council and citizen groups could target this area to encourage new, more varied business ventures.

2. Bassett-Stanleytown Growth Area

Location

Route 220 Bypass forms eastern boundary; encompassing residential and commercial areas located along Route 57 and areas west of Route 220 Bypass.

A. *Existing Land Use*

The Smith River, Route 57, and the railroad form a corridor that has historically defined the location of development. Over time, development has occurred along roads that radiate out from Route 57.

Commercial

Two commercial strips along Route 57 comprise most of the commercial land uses--one in Stanleytown between Church Street and Colonial Street, the other in Bassett between Bassett Heights and First Street. Less concentrated commercial areas exist along Route 220 North, Oak Level Road, and 57 Alternate. Since 1986, the area has had only modest commercial growth. A shopping center was built at the intersection of Routes 57 and 57 Alternate. Also, scattered commercial developments have located at the intersection of Routes 57 Alternate and 682, and along Route 220 North.

Residential

Residential land uses are concentrated in areas near Route 57 and Route 57A. These neighborhoods have traditionally housed workers for industries in the area. Other neighborhoods exist in the Stoneleigh Farm/Firestone and Hillcrest Park areas, as well as along Oak Level Road. Relatively speaking, there has been little single-family residential development in the planning area over the past decade.

This planning area has relatively few manufactured homes. Most of the manufactured-home growth that has occurred has been in the eastern portion of the planning area, off streets intersecting with Route 220.

Several multi-family housing complexes are located off streets that intersect with Route 57, with several such developments located on Oak Level Road.

Industrial The area has a heavy concentration of industry and, as the center for Bassett Industries, has traditionally served as a major employment center. Stanley Furniture also has a large plant at the intersection of Routes 57 and 57 Alternate.

Public Schools in the planning area include Bassett High School on the south side of Route 57 Alternate, Bassett Middle, Stanleytown Elementary, and Campbell Court Elementary.

Bassett Rescue Squad has a station on Route 57 Alternate near the intersection with Blackberry Road. Both a volunteer fire department and library serve the area and are located near the center of Bassett. The area also contains the VDOT Residency Office.

B. *Natural Development Constraints*

Primary Floodplains	*Critical/Steep Slopes*
• Smith River • Little Reed Creek • Rock Run Creek • North Rock Run Creek • Blackberry Creek	There are no large areas characterized by steep slopes in the planning area.

C. *Transportation*

This area's primary routes are State Route 57, State Route 57 Alternate, U.S. Route 220, U.S. Route 220 Bypass. The two Route 57 segments connects the area to: 1) Route 220 and Route 220 Bypass that run north to south along the area's western border; 2) the Collinsville/Fieldale growth area to the southeast; and 3) the North Bassett growth area to the west. Major collector routes include Blackberry Road, Mary Hunter Drive, The Great Road, Oak Level Road, Barksdale Ford Road, Franklin Heights, Robinhood Road, Ridgewood Road, Bassett Heights Road, Carson Drive, Sunset Drive, and Colonial Hill Drive. The Norfolk Southern Railway's track

lies along the Smith River and provides important freight service and opportunities to the growth area. Important crossing routes over the river include: Route 673/Bullock Drive, Route 1228/Governor Stanley Highway, and Route 905/T.B. Stanley Highway. There are no bus lines serving the area.

The Department of Transportation's Year 2010 needs inventory indicates that four Primary segments need to be improved within the growth area.

Observance of accident rates indicates high rates along Route 57 within the growth area; among secondary routes Blackberry Road and Oak Level Road have relatively high rates compared to other routes in the area.

The Year 2010 needs inventory includes recommendations for three Secondary road improvements. The Six Year Plan for Secondary roads includes recommendations for improvements to four Secondary route segments.

D. Public water and sewer

The Philpott Water Filtration Plant supplies water to this area. Areas not presently served include Bassett Heights Extension and Oak Level Road north of Pine Valley Drive. Although interest in extending water to these areas has been expressed, PSA does not consider this to be cost effective since those areas are not densely populated. Water capacity is available to serve this growth area.

The Koehler Treatment Plant provides sewer service to this area. Generally speaking, the northern portion of the growth area is not served by PSA sewer. Although capacity exists to serve these areas, it is currently not cost effective because the area is not densely populated.

E. Recommendations

Due to existing infrastructure or the potential for infrastructure improvements, the future land use plan designates most of this area for medium to high density residential development. Commercial Activity Areas are located at the intersection of Routes 57 and 903, and at the Route 57 Alternate/Route 903 intersection.

3. Iriswood Growth Area

Location

Bounded by the Martinsville City limits to the west; the watershed boundary of the Little Beaver Creek to the northwest; following Route 58 East corridor to Axton; encompassing Chatmoss, Laurel Park, and old Chatham Road areas.

A. Existing Land Use

In general, the terrain and the location of the many tributaries of Leatherwood Creek have shaped development in the planning area. The area's growth potential has increased significantly in recent years, due in large part to the completion of the Route 58 Bypass in late 1992. Extension of PSA water service to Axton Middle School has also improved the area's development potential.

Commercial

Two primary clusters of highway commercial development exist in the planning area. The first extends along Route 58, from the City Limits to the Route 58/Route 57 intersection. Leatherwood Crossing, a large shopping center at this intersection, has recently increased commercial activity in the area. Commercial development has also begun on Route 57 immediately above this intersection. The second commercial node consists of a shopping center and nearby commercial uses in the Laurel Park area. These businesses are supported by commuter traffic, local neighborhood users, and through traffic brought by Route 58. Other commercial land uses exist on Route 58 at several intersections and along Old Chatham Road/Route 457.

Residential

Since 1986, the vast majority of residential activity has occurred in the Chatmoss Village subdivision. Also, Patrick Henry Farms subdivision, located near the intersection of Route 58 and the Route 58 Bypass, has had several recent expansions. Other major subdivisions include Laurel Park, Place in the Country, Chatmoss Court, Piedmont Estates, and

Eastwood. To the west, residential growth has occurred along short streets and loop roads that intersect with Route 457/ Old Chatham Road.

Manufactured homes are dispersed throughout the planning area. Several exist along Route 650, and several smaller parks are located along Route 58. Another manufactured home park was recently developed near Lakewood Trail. Individual manufactured homes also exist on secondary roads in the planning area, particularly on Routes 620 and 644.

Multi-family residential land uses are also spread throughout the area, with the larger developments being the Wellington Manor and Fox Tree apartment complexes. Others exist along Routes 57 and 457.

Industrial

Although the eastern portion of the County does not contain much industry, several industrial land uses exist on or near Route 58. These include Hooker Furniture, Thomas Systems, Brown Products, and Southern Timber.

Public

Public schools in the planning area include Laurel Park High School on Route 930, Axton Middle, and Mount Olivet Elementary School. Carlisle School, a large private school, is located southeast of the Chatmoss area. Other public uses in the planning area include the City of Martinsville's landfill, the Axton Fire Department, the Axton Rescue Station, and the County's EMS Training Center.

B. Natural Development Constraints

Primary Floodplains	Critical/Steep Slopes
• Leatherwood Creek	• Along northern boundary of planning area
• Mulberry Branch	• Areas south of intersection of Routes 57 and 457
• Camp Branch	• Areas near Reservoir Six

C. Transportation

This area's principal primary routes are U.S. Route 220 Bypass and U.S. Route 58. Major collector routes include Old Chatham Road, Clearview Drive, Mount Olivet Road, Turner Ashby Road, Old Liberty Drive, Stoney Mountain Road, Daniel Road, Mountain Valley Road, and Axton Road. There are no bus lines or rail lines serving the area; the Norfolk and Southern's Hilltop to Leaksville rail line was ordered for abandonment in the late 1980's. The U.S. Route 58 corridor passes through the center of the area, east to west, connecting the area to the Route 58 Bypass and Route 220 Business further west in Martinsville. The Route 58 Bypass runs from its intersection with Route 58 East near the center of the growth area southwesterly to a connection with U.S. 220 South.

The Department of Transportation's Year 2010 needs inventory did not indicate any Primary road segments needing to be improved within the growth area. The Six Year Plan for Primary Routes indicates no improvement projects for the growth area.

Observance of accident rates along primary routes indicates moderate rates occur along Route 58 East and Route 57(Chatham Road). Secondary routes with moderate accident rates include: Irisburg Road/Route 650 and Axton Road/Route 610.

The Year 2010 needs inventory for Secondary roads included two projects. The Six Year Plan for Secondary roads included four recommendations for secondary road improvements.

D. Public water and sewer

A connection to the City of Martinsville's service lines allows the PSA to provide water to most of this area. Areas not served include Route 620 east of the Route 58 Bypass, Route 644, and Route 699. The Heritage Court area is served by City water while the Eastwood Subdivision uses PSA wells. Future service to the areas not presently served is possible. Since these areas are not densely populated, however, PSA does not consider service extension to be cost effective at this time.

PSA sewer presently serves Chatmoss, Chatmoss Plantation, Laurel Park, and the area near the intersection of Routes 57 and 58. Sewer service has not been extended into other areas because it is deemed cost prohibitive.

E. Recommendations

Due to existing infrastructure or the potential for infrastructure improvements, the future land use plan calls for medium to high density residential development in the western portion of this growth area. The remainder is designated as a low to medium density residential area. Commercial Activity Areas are located along Route 58 East at its intersections with Routes 57, 647, and 648, and near the Laurel Park Subdivision entrance. The plan also designates the Route 57/457 intersection as a Commercial Activity Area. A focus on development at these locations, along with the adoption and implementation of a "Highway Corridor Overlay", will help protect the functional and visual integrity of this corridor (see *Land Use Implementation*.) Finally, the area near the U.S. 58 Bypass/Route 650 interchange is designated for future industrial use.

4. Ridgeway Growth Area

Bordered on the north by the southern City limits; extending southerly along the Route 220 and Route 87 corridors; encompassing the Town of Ridgeway, the DuPont facility, and the Martinsville Industrial Park.

A. *Existing Land Use*

Most development in the planning area has traditionally located either near the City or within the Town of Ridgeway. However, completion of the Route 220 Bypass has opened the area to increased development along the Route 220 corridor. Also, provision of PSA services along the Route 220 corridor has spurred residential and commercial growth.

Commercial

Primary commercial nodes exist in the following locations along the Route 220 Corridor:

- immediately south of the City limits;
- immediately south of the intersection of Routes 220 and 58;
- immediately north of the intersection of Route 220 and the Route 220 Bypass;
- at the intersection of Routes 220 and 902; and
- along Main Street in the Town of Ridgeway.

As mentioned previously, completion of both bypasses has opened the planning area to more traffic. In large part, this has contributed to the recent commercial growth occurring along the Route 220 Business corridor. This development has been concentrated in two locations--immediately south of the "Cloverleaf" (the intersection of Route 220 and Route 58) and immediately north of the intersection of Route 220 Business with its Bypass. Strip commercial development has also occurred further south, north of the Town of Ridgeway. Currently, an initiative exists to remove the limited access status of Route 220 within the Town limits. If this proposal succeeds, then this segment of the corridor would be open to commercial development.

Residential

Several subdivisions are located on interior streets that intersect with Route 220, including English Village, Marrowbone Heights, Shannon Hills; and Sheffield Terrace. Areas directly south of the City limits contain older residential

neighborhoods along Dye Plant Road and nearby streets. Small subdivisions also exist near Routes 685 and 641. Edgewood Subdivision, south of the Town of Ridgeway, recently completed an expansion.

Unlike some of the other planning areas, most manufactured homes are located in manufactured home parks. In fact, manufactured homes being placed within parks off Route 87 constitute much of the area's residential growth since 1986. Manufactured homes do exist on individual lots, particularly off Routes 641, 782, and 640.

Little multi-family housing currently exists in the area. Several small developments exist near the Route 58/Route 220 South interchange, off Dye Plant Road, off Route 685 (Rich Acres) and in other areas farther south. With the exception of apartment complexes near the intersection of Routes 58 and 220 South, most complexes are near single family, detached residential units.

Industrial

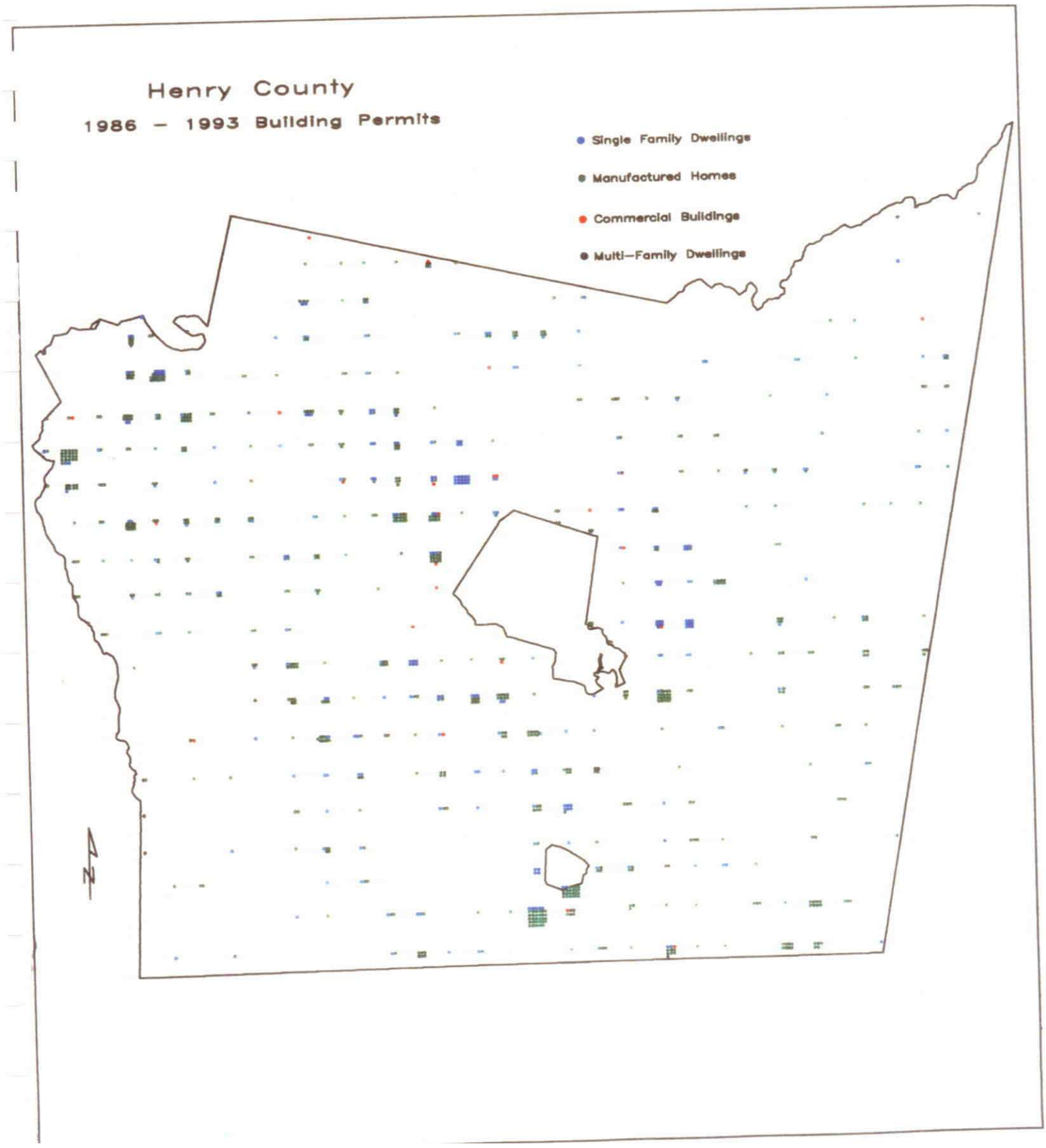
Major industries in the area include E.I. dupont de Nemours nylon plant, American Furniture, and the Bassett-Walker textile plant. The Martinsville Industrial Park, located further south along the Route 220 corridor, contains a number of industrial firms. The planning area also contains Ridgeway Clocks, Henry County Plywood and, on Route 641, the Bassett-Walker Distribution Center and Pannill warehouses. Also, along the Route 87 corridor near North Carolina, Container Warehouse has been steadily increasing its warehousing facilities.

Public

Public schools in the Ridgeway planning area include the Magna Vista High School off Route 687, Drewey Mason Middle, Ridgeway Elementary, and Rich Acres Elementary. Also, Fisher Farm County Park on Route 641 provides recreational opportunities to citizens in the area. The local Fire

Henry County

1986 – 1993 Building Permits



Department, Rescue Squad, and library are located within the Town of Ridgeway. The Virginia State Police has a facility at the intersection of Route 220 South and Route 641 (Fisher Farm Road). The City of Martinsville's sewage treatment plant also lies within the growth area.

Semi-public land uses include the PSA's administrative offices, which the Authority recently moved to the DuPont complex on DuPont Road, and the PSA Marrowbone Water Treatment Plant.

B. *Natural Development Constraints*

Primary Floodplains	*Critical/Steep Slopes*
• Smith River	• Northwestern portion of growth area, along Route 752
• Marrowbone Creek	• Near some of the rivers and streams
• Little Marrowbone Creek	
• Red's Creek	
• Toeclout Branch	

C. *Transportation*

This area's principal primary routes are U.S. Route 220 Bypass, U.S. 220 Business, U.S. Route 220, U.S. Route 58; and State Route 87. Major collector routes include: Dupont Road; Joseph Martin Highway/Route 683/641; Fontaine Drive; Rives Road; Fisher Farm Road; Shamrock Drive; Covington Lane; Mica Road. The Norfolk Southern Railway tracks run generally north to south and to the east of Route 220. There are no bus lines serving the area. The U.S. Route 220 corridor bisects the area connecting the area to Martinsville and the Fieldale/Collinsville area to the north and North Carolina Piedmont Triad to the south. The Route 220 Bypass/Route 58 Bypass intersects with Route 220 at the northern end of the growth area; this route connects the area with both U.S. Route 58, East and West, as the Bypass is a partial circumferential route.

The Department of Transportation's Year 2010 needs inventory indicates seven Primary road segments as needing to be improved. The Six Year Plan for Primary Routes indicates one improvement project for the growth area: signalize and improve intersection of Route 87 and Route 220 Business in Ridgeway.

Observance of accident rates along primary routes indicates moderate rates occur along Route 220 South between the Bypass and Martinsville southern corporate limits, Route 87 south from Ridgeway, Route 220 Bypass around Ridgeway. Higher rates were observed along Route 87 in Ridgeway. Secondary routes with moderate accident rates include: Route 687/Soapstone Road; Route 966/Rives Road showed high accident rates.

The Year 2010 needs inventory for Secondary Roads included four projects for the area. The Six Year Plan for Secondary roads included four recommendations for secondary road improvements.

D. Public water and sewer

The Marrowbone Water Filtration Plant Water provides water service to this growth area. Presently, the PSA serves the Rich Acres, English Village, Shannon Hills, Sheffield Terrace, Lithia Springs, Town of Ridgeway, and Huntington Hills areas. However, limited water availability exists for future grow since the Marrowbone WFP is currently operating near capacity. The new water treatment plant at DuPont would allow for expansion into other areas.

The PSA sewers most of this area except the Route 87 corridor and Route 220 area south of the Town of Ridgeway. PSA does not consider sewering the 87 corridor in the near future to be likely, since that corridor lies in several different drainage basins which would make sewer installation cost prohibitive.

E. Recommendations

The land use plan calls for industrial land uses in several areas. These include, but are not limited to, the Martinsville Industrial Park and several areas off of Routes 782 and 641. The U.S. Route 220 South corridor, from the City limits to the Route 57 Bypass, is designated for commercial growth. As stated previously,

the adoption and implementation of a "Highway Corridor Overlay", will help protect the functional and visual integrity of this corridor (see *Land Use Implementation*.) Commercial Activity Areas are located at the U.S. Route 220 South/Route 902 intersection and the U.S. Route 87/Route 622 intersection. Finally, the plan calls for medium to high residential growth in the remainder of the growth area.

(Note: The feasibility of many of the plan's proposed land uses will depend on the success of PSA's efforts to increase water availability to this area.)

5. Horsepasture Growth Area

Following Route 220 Bypass, encompassing Carver Estates and Greenbriar Park, following Route 58 West to Spencer; encompassing Blue Ridge Airport. Jordon Creek and Bassett Branch form northern boundaries.

A. Existing Land Use

Development in the southwestern portion of the County has traditionally been limited. However, improvements to Route 58 West will increase the growth potential of this area. Also, a proposed PSA water facility at DuPont would greatly increase the Authority's ability to provide services to this area.

Commercial Very little commercial land uses exist in the planning area. Scattered businesses are located along Route 58. Routes 683, 836, 630, and 793 also have individual commercial used located along them.

Residential Residential strip development along state secondary roads comprises much of the site-built housing in the area. However, small subdivisions do exist near Route 58 and the Route 220 Bypass. These include Greenbriar Park, Carver Estates, John Spencer Court, and Lakewood Forest.

The area has several manufactured home parks, with the larger ones located on or near Route 58. Manufactured

homes being placed on individual lots, near Route 687 and to the north of Route 58, constitute most of the residential growth in the area since 1986. There is only one multi-family complex in the planning area, located near the intersection of Route 58 and Route 630.

Industrial Doyle Lumber, located near the intersection of Routes 58 and 684, is the only industrial use in the growth area.

B. *Natural Development Constraints*

Primary Floodplains	*Critical/Steep Slopes*
• Horsepasture Creek	• west of the Route 220 Bypass
• Grassy Creek	• areas adjacent to Jordan Creek
• Meadow's Creek	
• Tanyard Branch	
• Muddy Creek	
• Shelton Branch	
• Spencers Mill Creek	

C. *Transportation*

This area's principal primary routes are U.S. Route 220 Bypass and U.S. Route 58. Major connector routes include Spencer Preston Road, Preston Road/Soapstone Road, Carver Road, Summit Road, and Chestnut Knob Road. There are no bus lines or rail lines serving the area. The U.S. Route 58 corridor passes through the center of the area, east to west, connecting the area to the Route 220 Bypass and Route 220 Business further east. The Route 220 Bypass runs north to south along the eastern portion of the growth area.

The Department of Transportation's Year 2010 needs inventory did not indicate any Primary road segments needing to be improved within the growth area. The Six Year Plan for Primary Routes indicates improvement projects on U.S. Route

58 and should be part of the Route 58 Superhighway improvement program. Observance of accident rates along primary routes indicates moderate rates occur along Route 58 West that passes through the area. Secondary routes with high accident rates include Carver Road; moderate rates occur on Airport Road, Route 687/ Preston Road-Soapstone Road, and Route 687/Meadowood Trail.

The Year 2010 inventory of needs for Secondary routes did not include any recommendations for improvements on secondary routes. The Six Year Plan for Secondary roads included two recommendations for secondary road improvements.

D. Public water and sewer

The Marrowbone Water Filtration Plant provides water service to the Carver Road, Summit Road, Greenbriar Park, Route 58 West, Lake Wood Forest and Preston Gardens areas. Since the Marrowbone WFP is currently operating near capacity, limited water exists for future growth. Construction of the new water treatment plant at DuPont would allow the PSA's water service area to include Route 687, both north and south of Route 58 and possibly the Route 58 corridor west of Lake Wood Forest. Serving the Route 58 corridor west of Lake Wood would depend on growth in that area.

Presently, the PSA has limited sewer service to this area, consisting of treatment lagoons at Greenbriar Park and Carver Parkway. PSA does not anticipate additional sewer service to be available to this growth area in the foreseeable future.

E. Recommendations

Due to existing infrastructure or the potential for infrastructure improvements, the future land use plan calls for medium to high density residential development in the eastern portion of this growth area. The remainder is designated as a low to medium density residential area. Commercial Activity Areas are located along Route 58 West at its intersections with the Route 58 Bypass, Route 687, and Route 692. A focus on development at these locations, along with the adoption and implementation of a "Highway Corridor Overlay", will help protect the functional and visual integrity of this corridor (see *Land Use Implementation*.)

6. West Bassett Growth Area

Northern boundary formed by Route 57, which also delineates Conservation Overlay/Philpott Lake watershed; following Route 687 corridor until end of existing PSA water main; eastern border roughly formed by area consisting of very steep slopes; encompassing Stones Dairy and Sanville areas.

A. Existing Land Use

At present, the road system serving this area cannot accommodate significant traffic increases coming from residential growth. However, road improvements planned for Routes 57 and 687 (the roads most commonly used to access the area) would increase its suitability for development.

Commercial Most of the limited commercial activity is concentrated along Route 57, near its intersection with Route 687. Each business has its own curb cut, and this contributes to the traffic problems experienced along the road. The Sanville community also has a few commercial land uses.

Residential The area is characterized by strip residential development along the area's secondary roads. Most of the residential development has occurred along the corridors of Routes 57 and 687. Major subdivisions include Fairway Acres and Cambridge Estates.

The area has a relatively large amount of manufactured homes and contains several major manufactured home parks. Most of the development activity in the past decade has consisted of manufactured home being placed on spaces in these parks. Several multi-family land uses exist, most located on or near Route 687.

Industrial There are no industrial land uses in the planning area.

B. Natural Development Constraints

Primary Floodplains	Critical/Steep Slopes
• Blackberry Creek • Whitt's Branch	There are no large areas characterized by steep slopes in the planning area.

C. Transportation

This area's principal primary route is State Route 57 that passes through the area from east to west. Major collector routes include Stones Dairy Road, Fairmont Drive, Longview Drive, Bowens Creek Road, and Philpott Dam Road. There are no railway or bus lines serving the area. The Route 57 corridor connects the area to Route 220 Business and the Route 220 Bypass. Stones Dairy Road and further south, Preston Road, connects the area to U.S. Route 58.

The Department of Transportation's Year 2010 needs inventory indicates that Route 57 needs to be improved within the growth area. The current Six Year Plan for Primary routes does not include a project in the area.

Observance of accident rates indicates high rates along Route 57 within the growth area; among secondary routes Stones Dairy Road has relatively high rates.

The Year 2010 needs inventory for Secondary roads includes recommendations for improvements to Route 687. The Six Year Plan for Secondary roads includes recommendations for improvements to Route 687/Stones Dairy Road.

D. Public water and sewer

The Philpott Water Filtration Plant currently provides water service to the Route 57 West and Route 687 corridors. Although low density areas near these corridors are not currently not served, available capacity exists to serve these areas.

PSA does not have sewer service in this area. The Authority does not anticipate these areas will be served by PSA sewer in the foreseeable future.

E. Recommendations

Due to existing infrastructure, the future land use plan calls for medium to high density residential development in the northern portion of this growth area. The remainder is designated as a low to medium density residential area. A Commercial Activity Area is located on Route 58 West at its intersection with Route 687.

Rural Areas

Quite simply, all remaining areas of the County not designated by this plan as growth areas are classified as rural areas. A rural area is not equivalent to a non-growth area. Rather, this plan allows for certain types of development in these areas consistent with the County's goals regarding rural areas.

A primary reason for establishing Rural Areas involves maintaining rural character in areas where it is appropriate. A loss of the County's traditional rural character has accompanied the decline of agricultural activity discussed in previous chapters. The County recognizes the need for new approaches to promote more attractive and sustainable land development. The following *Land Use Plan Implementation* section describes several techniques available to localities to achieve this desired end.

II. Land Use Plan Implementation

This section decribes how the County will achieve its desired land use goals. To implement the Future Land Use Plan, the County has many planning tools at its disposal. The County currently uses the most common of these, zoning and subdivision ordinances. Items discussed in this section, such as density bonuses, PUDs, and conditional zoning, are variations in zoning and subdivision regulation and would require amendments to these existing ordinances. The remaining items discussed are non-regulatory. Although some of these planning measures may not currently be viable, this plan includes them for future consideration.

The second part of this implementation section contains development guidelines for future growth in the County. Planning Commissioners, members of the Board of Supervisors, and County staff should use these standards in reviewing development proposals such as zoning and subdivision cases. Referencing these guidelines will help ensure that the County remains consistent and fair in these reviews. Also, although they are non-binding, they may be used to legally reinforce decisions in development review.

Subdivision Ordinance

In 1974, the General Assembly adopted legislation that required all localities within the Commonwealth to adopt subdivision ordinances to promote orderly land development. The County responded by adopting its first subdivision ordinance the same year. Since then, the ordinance has been amended several times.

In essence, the ordinance allows the creation of two types of subdivisions--"Regular" and "Large-Lot". For the former, developers must construct roads meeting state road specifications for acceptance into the state road system. Developers of Large-Lot subdivisions must only *design* roads to these same standards, but are allowed in reality to build roads to lesser standards. The ordinance contains several exceptions (e.g., state road frontage lots) that enables landowners to create individual building lots in certain circumstances.

Zoning Ordinance

The County adopted its first zoning ordinance in 1989. After several years, Planning Commissioners and staff saw a need for more flexibility in the Ordinance, which led to comprehensive amendments being made in February 1992. These amendments added four new zoning classifications to the ordinance: Mixed Residential (M-R); Neighborhood Commercial (B-2); Office and Professional (B-3); Limited Industrial (I-2); and Government and Special Use (G-S). A Conservation Overlay District was established in October 1992 to protect the quality of drinking water resources. (see *Natural and Historic Resources* chapter).

Capital Improvement Program

To guide the construction and acquisition of capital projects over the next five years, the Board of Supervisors recently adopted in concept its first Capital Improvement Program (CIP) (see *Community Facilities*). The Planning Commission reviewed the proposed CIP for its consistency with the existing Comprehensive Plan, as authorized by §15.1-464 of the Code of Virginia.

The CIP will be updated annually, with updates being based on this comprehensive plan. It will help implement the land use plan through the orderly and planned approach to new community facility projects.

Conditional Zoning

While "traditional" zoning of the type used by the County does much to help protect the public interest, some believe that it lacks flexibility. To address this concern, the 1978 General Assembly passed legislation (§15.1-491.1 to 491.6) that enabled all localities in the State to enact conditional zoning. In simple terms, conditional zoning allows a locality to secure the agreement of a property owner to do something not specifically required by the zoning ordinance. For example, a developer, in attempting to get a rezoning approved, could offer to build a landscaped berm between a proposed commercial facility and a residential area. This added flexibility often benefits both parties--the developer would receive the

desired rezoning while assuring that the nearby community would be protected. (The County has previously denied rezoning applications because no legal means existed to ensure that the developer would actually perform what he or she promised). All conditions must be offered *voluntarily* by the developer and be consistent with the Comprehensive Plan.

Despite its benefits, conditional zoning adds to administrative workloads and often requires staff increases. For this and other reasons, many localities have opted against conditional zoning as a means to achieve their planning goals.

Highway Corridor District

The County's main corridors serve as the primary entrance and exit ways for industrial prospects, visitors, and its citizens. However, as discussed previously, some of these areas are characterized by many of the unsafe and unsightly aspects associated with strip development. To improve these areas, and to preserve the integrity of undeveloped corridors, the County could consider creation of a highway corridor district.

This district would most likely take the form of an overlay zone, similar to the Conservation Overlay. A property within the district would be subject to the requirements of its regular zoning classification *and* the district requirements. These requirements would help achieve many of the development standards outlined in this chapter. More specifically, they would likely include:

- Special or coordinated access requirements;
- Aesthetic controls (signage, portable signage, lighting, etc.); and
- Landscaped buffering and special setback requirements.

The following corridors would be likely candidates for inclusion in such a district:

- U.S. Route 58
- U.S. Route 220
- Virginia Primary Route 174 (Kings Mountain Road)
- Virginia Primary Route 57
- Virginia Primary Route 108 (Figsboro Road)
- Virginia Primary Route 87

Planned Unit Developments

This land use plan allows for the creation of Planned Unit Developments (PUDs) within designated growth areas. PUDs allow for intensive development on a site, usually in exchange for the designation of public areas or community facility improvements. PUDs are unique in that they may allow for different (but compatible) land uses on one site. They therefore afford greater flexibility to the landowner while ensuring that community needs are met.

When granting greater densities as a part of PUD approval, County officials must consider the effects of the proposed development on the surrounding area. For example, PUD applications should not be approved in areas where roads are not adequate to meet increases in traffic or where adjacent land uses may be negatively affected.

Although the County's current Subdivision Ordinance allows for certain types of PUD development, this has rarely been used by developers. The Zoning Ordinance does not make mention of PUDs, and does not contain provisions to allow for mixed land uses.

Density Bonuses

This planning tool is intended solely for use in rural areas. Essentially, the density bonus approach offers developers the chance to develop in higher densities,

in exchange for residential subdivision design that better achieves the County's policies for the development of rural areas. In essence, the density bonus approach establishes a base residential density for rural areas, such as one residential unit per 10 acres. This base density can be decreased (e.g., to one unit per eight or five acres) in different circumstances.

This approach encourages the *clustering* of home sites within a residential development, leaving areas for permanent open space. This provision of open space helps maintain the community's rural character while preserving the forestal and agricultural economies. Additional benefits include lower land costs for the lot purchaser and decreased road construction costs, since lots are grouped together as opposed to scattered throughout the site. This concept challenges traditional, "cookie-cutter" subdivision designs often perpetuated by inflexible subdivision and zoning ordinance requirements.

The following list contains the development standards associated with the density bonus approach.

- Clustering of all dwelling units and lots on site within a certain percentage (e.g., 50 percent) of total site area;

- Permanent establishment of remaining area as open space (forest, farm, or public use) to be restricted from further development through covenants or easements;

- Newly-subdivided, residential lots served by one point of access to state roads;

- Establishment of setbacks for residential structures in the subdivision from existing state roads, with appropriate screening with an existing or planted landscaped buffer; and

- Development of a central water supply system.

Therefore, if a developer had a 100-acre parcel using a base residential density of one dwelling unit per 10 acres, then he or she could create 10 building

lots. These lots would have to clustered within a certain percentage of the property. Landowners could choose to decrease their base residential densities, if they cluster all development within a smaller percentage of the total site and set aside more open space. In these instances, greater setbacks from state roads should be established. Owners may also vary lot size, but a range of lots sizes to choose from should be established in consideration of desired residential densities, standards for septic systems, etc. Regardless of the residential densities decided upon, the base density of a parcel or tract should be calculated on the amount of "net-buildable" land present. In other words, land areas having natural development constraints should not be included in the base density calculation of a tract.

Voluntary Methods

Many voluntary planning tools exist that may accompany methods outlined in this section. The following serve as examples:

- Voluntary Agricultural/Forestal Districts

The State Code (§15.1-1507-1513) allows for the establishment of voluntary agricultural/forestal districts. These districts provide landowners with tax benefits and helps ensure preservation of these areas through government action and restriction of public utilities construction.

State law spells out the procedures and process involved with the creation of voluntary districts. In essence, landowners must offer at least 200 acres of contiguous farm or forested land for consideration, whereupon a series of public hearings is held. If the governing body approves the designation, landowners must agree to place certain development restrictions on the property in exchange for benefits.

- Conservation or Open Space Easements

These easements could be given to the County or other holding agencies such as the Virginia Outdoors Foundation. Although the minimum term for such an easement is five years, the deed must be written for perpetuity to qualify for

federal tax credits. The Museum of Natural History recently made use of this option by placing a 76-acre site donated by the Gravely family under a conservation easement.

- Land Use Taxation Program

In 1981, the County adopted a Land Use Taxation Program to help preserve agricultural land through fair taxation methods (see *Agriculture*). This program is based on the premise that these lands should be taxed on their current *use* rather than at market value.

Development Standards

The following standards will serve as guides in the review of zoning cases, subdivisions, and other development proposals.

Commercial Land Use Standards

- Locate commercial zoning districts only in planned Growth Areas.
- Concentrate and cluster highway-oriented commercial activities to reduce traffic hazards and adverse visual impacts.
- Provide linear landscaped areas along public roads and property lines.
- Employ commercial office or neighborhood commercial uses as transitional areas between residential areas and heavier commercial or industrial areas. This is particularly important since many intensely developed commercial strips have been located next to residential areas in the County.
- Establish set distances from major intersections for entrances to major shopping areas in order to prevent accidents and congestion.

Existing and future commercial development along Routes 58 West, 58 East, 220 South, and 220 North should receive priority. In these areas, this plan encourages the reduction of the numbers of entrances or curb cuts into the highway. This will, in turn, reduce traffic problems, congestion, and the need for more traffic lights along these routes. Concentration in shopping plazas and the use of frontage roads where businesses will share entrances onto state routes should be encouraged. Landscaping and appropriate display signs will also help improve the appearance of these areas.

Industrial Land Use Standards

- Locate industrial uses adjacent to compatible uses (commercial, public, other industrial uses, or similar uses) as opposed to residential or other sensitive areas. Locate agricultural and forestal industries convenient to the uses they support. Where an industrial user desires a location near a sensitive area, consider the establishment of transitional land use uses (e.g., commercial offices) to serve as buffers.

- Address objectionable aspects of an industrial use through a combined approach, including realistic performance standards, buffering, screening, special setback regulations, and separation from incompatible uses. Traffic levels and traffic patterns, off-street parking, and loading spaces should also be considered in initial site planning. Keep this approach flexible to accomplish the objective without creating burdensome and arbitrary regulations. At time of rezoning, the applicant should submit proposals to mitigate any obvious objectionable aspects of the activity.

- Encourage the location of industrial uses in areas where public utilities and facilities are adequate to support such uses. Industrial development should continue to be located close to major highways and arterials, both sewer and water service areas, and ideally, close to rail services. Consider the upgrading and extension of roads, water, sewer, electrical, telephone, and natural gas systems in the review of an industrial rezoning application.

- Locate industrial uses near highway, air, or rail transportation facilities. This is not intended solely for the convenience of the industry, but also to avoid industrial traffic through residential and agricultural areas, and on roads not designed for such traffic. Consider effects of proposed development on general transportation flow.

- Actively enforce erosion and sedimentation controls, since new industrial development requires significant land disturbance during initial construction. Help firms requiring special arrangements for effluent treatment and solid and hazardous waste management and disposal.

Residential Land Use Standards

The application and nature of residential standards may warrant frequent review due to changes in the economy, housing market, and housing industry. Flexibility in meeting changing needs and situations must be a guiding principle in decision making.

Residential Types

All types and forms of ownership shall be permitted within the County as long as applicable building code and planning standards are met. Particular types of dwelling units now included in the County are: single-family detached, single-family attached, modular homes, manufactured homes, townhouses, duplexes, garden apartments limited by height, patio homes, midrise apartments limited by height, and hybrid type units in forms such as triplexes, quadraplexes.

Residential Densities

Gross or overall housing densities shall be compatible with the local environment, the unique physical features of the site, the scale of public facilities and utilities available or planned, and the character of any nearby development.

Net densities should be higher than gross densities when feasible to provide usable open space and visual amenities, and to protect the County's natural resources.

Residential Scales

- Limit rural residential developments to a maximum of twenty dwelling units.

- Develop home sites on internal, subdivision roads as this is preferred to the incremental encroachment of strip residential development. This will reduce access points to public roads, improve traffic movement, and reduce points of potential accidents.

- In suburban residential areas, permit conventional developments at up to seventy-five dwelling units. Such developments should be internally oriented and served by new local streets. Locate appropriate conventional developments in designated growth areas. Provide recreational facilities and other amenities where densities exceed four dwellings per acre or more.

- Consider unified planned development approaches for projects with seventy-five or more dwelling units. Require a viable homeowner's organization that can maintain meaningful open space, landscaping and vegetative buffers, recreation areas, and pedestrian linkages. The appropriate locations for unified planned developments are designated Growth Areas of the County.

Residential Development Design

- Preserve sensitive areas as open space, maintain trees and vegetation, and orient residential development to preserve the natural setting that is available. These are virtual 'no cost' factors which will provide a more workable, efficient, and pleasing living environment while enhancing the marketability for later home sales.

- Base design on a rational use of land reflecting topographic and other physical features and natural boundaries of the site rather than imposing

a rectilinear layout intended solely to satisfy minimum ordinance requirements.

- In larger developments, vary building orientation and setback, facade treatment, and lot size. This will avoid repetitiveness while enhancing the general marketability of the dwelling units.

- Make available a variety of development approaches that encourage innovative design and reduce housing costs. These could include cluster development, zero lot line subdivision (where the sides of buildings rest directly on lot lines), and solar design incentives.

- Directly access single-family detached and duplex units from local streets only.

- Directly access multi-family residential units from common parking areas with internal circulation.

The following sections specifically address the two primary types of residential development occurring in the County--rural residential areas and suburban residential areas. These classifications are also reflected in the County's current zoning ordinance.

Rural Residential Areas

- Consider distances of structures from lot lines separating manufactured homes from single-family, site-built dwellings. Also consider lot sizes, street requirements, and provisions for utilities. The manufactured home ordinance should be reviewed periodically to ensure sound development.

- Require that adequate roads serve large lot subdivisions.

- Protect integrity of water resources, since the County's rural residential development frequently occurs near water bodies important to drinking water supply.

Suburban Residential Areas

- Buffer new subdivision development from nearby commercial and industrial developments. Residential areas should also have buffers from heavily traveled roads or highways.

- Considering that these areas will contain single family dwelling developments, duplexes, and apartments (each with different characteristics), Consider buffer areas between these uses.

- Advocate more innovative uses of unified planned development and cluster development approaches to encourage better lot designs and use of the land. Practical uses of zero lot line development alternatives should also be explored.

- Consider effects of new residential development on commuting patterns. Recognize that the locations of these developments and their design (e.g., layout of streets, street widths, signs, entrances etc.) play important roles in the total efficiency of the transportation system.

Goals, Objectives, and Strategies

Natural and Historic Resources

GOAL: PRESERVE AND PROTECT THE COUNTY'S NATURAL RESOURCES AND HISTORIC HERITAGE.

Objective: **Recognize and encourage historic preservation in the County.**

Strategy: Preserve the County's historical and cultural resources, including historic sites, structures and landscape features; archaeological sites; and other unique man-made features.

Strategy: Continue to support the Museum of Natural History. Support expansions of the Museum in the Martinsville/Henry County area.

Strategy: Encourage the owners of potentially eligible sites to pursue a Virginia Landmark or National Register designation.

Strategy: Promote voluntary techniques such as conservation easements which serve to protect historic settings.

Strategy: Help establish a mechanism to identify historic and scenic resources.

Objective: **Protect the County's surface water and groundwater supplies.**

Strategy: Consider forming a joint County/City water resource committee to address water resource questions and concerns.

Strategy: Identify the current and potential uses of major streams, rivers, and impoundments, excluding farm ponds. Consider these uses in the review of rezoning and special use permit applications.

Strategy: Protect the quality of groundwater resources, especially in Rural Areas where public water is not expected to be available.

Strategy: Discourage any withdrawals from the Roanoke River Basin which could hinder the County's ability to provide safe and reliable drinking water to its citizens.

Strategy: Direct the majority of future County development to designated Growth Areas where public sewer services are in place or planned. Limit the future use of on-site sewage treatment systems to those areas where public sewage systems are unavailable. Discourage larger concentrations of individual on-site sewage treatment facilities in environmentally sensitive areas through density controls, particularly in areas with soils constraints for septic systems.

Strategy: Inform both public officials and the public in general about water pollution, particuarly nonpoint source pollution from agricultural, forestal, and urban sources.

Strategy: Minimize runoff and sedimentation associated with development, agricultural, and forestal activities, particularly in areas with steep slopes.

Strategy: Allow only appropriate land uses on very steep or severe slopes.

Strategy: Require evidence of federal wetlands permits as a condition of development approval in areas where wetlands may exist.

Strategy: Support ASCS, SCS, and Department of Forestry programs and policies that promote soil and water conservation and reduce nonpoint source pollution.

Strategy: Inform and encourage property owners to take advantage of available preservation and conservation measures.

Objective: **Reduce flooding and flood-related problems through proactive land use planning.**

Strategy: Protect the important natural function of floodplains within the County by limiting disturbance and development activity.

Strategy: Consider the use of regional stormwater management facilities in areas where extensive flooding occurs or where future flooding may occur.

Strategy: Continue to enforce applicable county, state and federal regulations within the designated 100-year floodplain.

Strategy: Encourage the use of floodway fringe areas for recreational uses, other non-structural uses, and open space.

Objective: **Preserve important scenic resources and open space to help maintain rural character and improve the quality of life.**

Strategy: Promote preservation of these areas through non-regulatory approaches such as conservation easements, purchase of development rights (PDR), and density bonuses.

Strategy: Coordinate efforts to preserve scenic resources and open space with future opportunities to establish public parks and natural recreation areas.

Strategy: Encourage the wise use of land resources through zoning incentives that promote cluster development. Update the County development ordinances to provide greater incentive for clustering.

Objective: **Establish programs, and support existing programs, to help stop the decline of agriculture as a viable sector of the County economy. Ensure that the forestal industry remains strong.**

Strategy: Increase the use of the local farmer's market and, if feasible, coordinate its development with the City.

Strategy: Request the EDC to analyze marketing needs of the agricultural and forestal industry and recommend programs supporting the industry.

Strategy: Support the Virginia Cooperative Extension Service's efforts to identify, publicize, and provide technical assistance for alternative agricultural/forestal activities in the County. Assist in the identification of activities

particularly adaptable and marketable in Henry County.

Strategy: Discourage the conversion of prime and important farmlands to other land uses.

Strategy: Countinue support of land use taxation programs.

Economy

GOAL: PROMOTE ECONOMIC DEVELOPMENT EFFORTS TO DIVERSIFY AND EXPAND THE COUNTY'S ECONOMIC BASE TO PROVIDE A BROAD RANGE OF EMPLOYMENT AND COMMERCIAL OPPORTUNITIES.

Objective: **Attract new business and industry to the area, while strengthening retention efforts and assisting existing business and industries to expand within the County.**

Strategy: Acquire and develop industrial sites which can compete favorably on a global basis.

Strategy: Pursue State and Federal sources of capital to promote economic development.

Strategy: Continue to promote development of a transportation network that will improve access to industrial sites and link the District with major trade centers.

Strategy: Encourage private sector participation in making venture capital available to new and existing industries.

Strategy: Pursue Enterprise Zone designation for certain growth areas of the County.

Strategy: Support educational efforts to provide a capable and well-trained labor pool.

Objective: **Increase commercial and retail business activity in the County consistent with land use policies.**

Strategy: Provide appropriately zoned land areas suitable for future commercial growth within designated Growth Areas.

Strategy: Encourage additional residential development to increase consumer markets for more retail and service businesses.

Strategy: Promote and encourage the development of tourism and travel-related industry.

Strategy: Continue to support local economic development organizations.

Strategy: Maintain the level of preparedness for promotion of new and existing business and industry as has occured under the Commonwealth's Community Certification Program.

Objective: **Improve attractiveness and traffic safety of older commercial areas to reflect community pride and stimulate commercial growth.**

Strategy: Work with the Gateway Streetscapes Foundation to implement landscaping projects to improve attractiveness and "curbside appeal" of older commercial areas.

Strategy: Work with VDOT to improve traffic conditions in existing commercial areas through planned road improvements.

Strategy: Encourage aggressive redevelopment policies to revitalize older, strip commercial areas.

Housing

GOAL: PROVIDE OPPORTUNITIES FOR DECENT, AFFORDABLE, AND ACCESSIBLE HOUSING PROVISION TO ALL OF THE COUNTY'S CITIZENRY.

Objective: **Maintain and increase numbers of affordable housing units in the County, particularly for low and average income persons.**

Strategy: Pursue grants and loans via nonprofit, public, and private efforts to provide affordable housing.

Strategy: Expand the existing rental assistance program, using federal and state subsidies.

Strategy: Encourage developers to use innovative design techniques to lower development costs for housing consumers (See Land Use Chapter).

Strategy: Research successful programs of localities with housing challenges similar to the County's.

Strategy: Study and consider implementing a link deposit agreement between banks and local government.

Strategy: Support the creation of a non-profit housing authority for the County.

Strategy: Consider forming a task force to initiate a funding plan to obtain local money for low and moderate housing projects.

Strategy: Make public aware of funding possibilities.

Strategy: Promote community outreach programs that help provide low and moderate income housing.

Objective: **Upgrade or replace substandard housing in the County.**

Strategy: Apply for a Community Improvement Grant for the North Bassett area.

Strategy: Seek Community Development Block Grants (CDBG) through the Department of Housing and Community Development to upgrade neighborhoods, with particular emphasis on housing rehabilitation and infrastructure improvements.

Strategy: Work with developers on projects to replace existing, substandard housing with new, affordable, low-income housing.

Strategy: Study the feasibility of preparing an inventory of substandard housing through the real estate assessment process.

Strategy: Develop a comprehensive list of all public and private funding sources available for housing.

Strategy: Develop, through public and private resources, an ongoing housing rehabilitation program.

Strategy: Develop a resource list of volunteers for housing rehabilitation projects.

Objective: **Review development ordinances to reduce local governmental barriers to the creation of affordable housing.**

Strategy: Consider amending the development ordinances to encourage development of affordable housing.

Strategy: Study existing development regulations to locate unnecessary barriers or impediments to the provision of affordable housing.

Strategy: Review and, if necessary, request changes to VDOT street requirements.

Strategy: Inform general public on requirements of local development ordinances.

Strategy: Support PSA's efforts to reduce water and sewer costs, particularly with regard to hook-up fees.

Community Services and Facilities

GOAL: PROVIDE PUBLIC SERVICES AND FACILITIES NECESSARY TO MEET THE NEEDS OF COUNTY CITIZENS.

Objective: **Continue establishing systematic and efficient methods to determine public facility needs and plan for improvements.**

Strategy: Update annually the Capital Improvements Program (CIP) in order to schedule and finance necessary public improvements.

Strategy: Continually evaluate current levels of service of County-funded public services and facilities to ensure their adequacy.

Strategy: Review the performance and effectiveness of existing facilities and proceed with changes or expansion as necessary. Consider requiring that organizations provide outcome/evaluations data as a condition for County funding.

Strategy: Meet the community facilities and services needs of existing development before planned development.

Strategy: Encourage adaptive and shared use/reuse of existing community facilities by both public and private sectors. Consideration should be given to the design of new County facilities (schools, libraries, etc.) to accommodate several functions such as gyms and meeting rooms. Additional acreage at these sites could also provide recreational open space.

Objective: **Develop procedures leading toward a more equitable and systematic evaluation procedure for County-funded human services.**

Strategy: Create and support programs that address the needs of the growing number of senior citizens of Henry County.

Strategy: Support programs which have demonstrated success in achieving their objectives.

Strategy: Support efforts to coordinate and complement related services and activities so as to avoid duplication of services.

Strategy: Use social and demographic data in order to establish priorities in human services support.

Objective: **Develop a strategic plan that links local educational efforts and job training/retraining efforts with the future needs of employees and employers in order to promote economic growth and diversity.**

Strategy: Encourage and support work force training and retraining efforts to make the community more attractive to existing industries and to attract new industries and businesses.

Strategy: Initiate training/retraining programs through technical certifications and apprenticeship programs. Training/retraining efforts should combine public and private input to achieve agreed-upon results.

Objective: **Promote education as a tool of economic development in order to create a more competitive and well-trained work force.**

Strategy: Encourage a partnership between the public sector and industrial leaders to upgrade the skill level of the local work force to enable them to work in a more competitive and technical work environment.

Strategy: Use the County's strong manufacturing base and its associated resources in order to create a better-trained employee base for existing industry needs and to attract new industries requiring advanced manufacturing processes.

Strategy: Coordinate efforts with existing committees and organizations within the County and the region to bring together a coordinated effort to improve work

skills and thereby the employment opportunities for the local work force.

Objective: **Meet current and future recreational needs through expanded and improved County park and recreational facilities and services.**

Strategy: Coordinate natural resource protection efforts with future opportunities for County parks and open space.

Strategy: Periodically evaluate the effectiveness of County parks in meeting recreational needs, perhaps through questionnaires and the use of surveys.

Strategy: Use population data to ensure that future park facilities are located where needs exist.

Strategy: Use workshops offered by the Department of Conservation and Recreation to become better informed about methods to develop, operate, and maintain parks and recreational programs.

Strategy: Acquire land that has potential for parks development. This includes acquiring abandoned railway rights-of-way for conversion into recreational trails and greenways, and properties fronting on the Smith River to increase river access.

Strategy: Study the need for a County park facility between the Stones Dairy and Pleasant Grove areas.

Strategy: Apply for Virginia Outdoors Fund monies to assist in acquiring and developing recreational lands.

Strategy: Require developers to incorporate parks and open space into their subdivision or manufactured home park design.

Objective: **Continue to explore cooperative arrangements with other entities to provide public services more efficiently and more effectively to citizens.**

Objective: **Ensure citizens receive adequate levels of public safety services, including law enforcement, fire protection, and emergency medical services.**

Strategy: Work with volunteer fire and rescue personnel to develop a long-range emergency services plan as an amendment to this plan.

Strategy: Encourage and promote the provision of emergency services by volunteers.

Strategy: Continue to support fire, rescue, and law enforcement programs to ensure that service providers are able to meet or exceed professional standards.

Strategy: Maintain a modern emergency services communication network.

Strategy: Develop a contingency plan to respond to hazardous materials emergencies in the County.

Utilities

GOAL: PROVIDE UTILITIES TO IMPROVE QUALITY OF LIFE AND PROTECT PUBLIC HEALTH.

Objective: **Provide water and sewer services to the growth areas established by this plan.**

Strategy: Continue to require water and/or sewer provision as a condition of subdivision approval whenever feasible. Consult the Soils Survey for the County in instances where developers propose the use of individual on-site septic systems.

Strategy: Pursue Community Development Block Grants (CDBG) to expand water and sewer service to low and moderate income areas.

Strategy: Work with utility providers to help ensure that new utility projects are consistent with this plan.

Objective: **Provide public water and sewer systems to promote economic development and protect the health and safety of County residents.**

Strategy: Continue to support adopted PSA procedures and policies in evaluating projects that require supplemental County funds.

Strategy: Review and revise the Comprehensive Water and Sewer Study on a regular basis. These reviews should be considered as supplementary to the comprehensive plan.

Strategy: Continue to work cooperatively with the City in cases of water and sewer provision.

Objective: **Address the County's current solid waste disposal needs.**

Strategy: Begin permitting process for a modern, sanitary landfill as soon as possible. Lower tipping fees by canvassing adjacent jurisdictions to also use this facility.

Strategy: Consider replacing the County green box system with manned, convenience centers that will allow for both solid waste disposal and enhanced recycling.

Strategy: Consider developing a construction and debris landfill in order to prolong the life of the new sanitary landfill.

Strategy: Consider sponsoring annual household hazardous waste collection days with the City to provide citizens a means to dispose of these wastes.

Objective: **Develop a comprehensive solid waste management strategy considering the state's hierarchy for waste management: planning, source reduction, reuse, recycling, resource recovery, incineration, and landfilling.**

Strategy: Update the 1992 Solid Waste Management Plan every five years for submittal to DEQ. Work to implement study recommendations.

Strategy: Increase public awareness of solid waste issues through educational and participatory programs.

Strategy: Continue to coordinate recycling activities with the City.

Strategy: Encourage public involvement in clean-up programs such as "Adopt-a-Highway" and "Adopt-a-Spot".

Strategy: Enforce the existing litter control ordinance. Study the possibility of expanding enforcement authority.

Strategy: Expand the County recycling program to allow citizens to recycle office paper, cardboard, etc.

Strategy: Consider alternative means (e.g. composting) for disposal of stumps and other types of vegetation as they become economically viable.

Objective: **Help improve private utility service in the County.**

Strategy: Communicate with private utilities in the development process whenever appropriate.

Strategy: Work with private utility providers to help ensure that new utility projects are consistent with this plan.

Transportation

GOAL: PROVIDE FOR AN EFFICIENT AND SAFE TRANSPORTATION SYSTEM, IN ACCORDANCE WITH THE POLICIES ESTABLISHED BY THIS PLAN.

Objective: **Improve access to the County through an improved highway system.**

Strategy: Continue to support improvements to existing primary roads. Priority projects supported by this plan include:

- Four-laning and general improvements to Route 58.
- Four-laning and general improvements to Route 220.
- Four-laning of Route 87, from its intersection with Route 220 South to the Virginia/North Carolina border.
- Improvements to Route 57 West to the Patrick County line. Eliminate traffic safety problems along this corridor through installation of turn lanes at the major intersections.

Strategy: Support the routing of I-73 through the Martinsville/Henry County area.

Strategy: Support funding for the I-83 initiative.

Objective: **Improve access through the County through an improved secondary road system.**

Strategy: Continue to support improvements to existing secondary roads. Priority projects supported by this plan include the following:

- additional bridgeson secondary roads crossing the Smith River;
- a speedway connection to handle "race" traffic;
- Route 687, from Route 220 to Route 57; with particular emphasis on the segment between Routes 683 and 687.
- Spruce St., from City limits to Route 625; and
- Commonwealth Boulevard Extension.

Objective: **Recognize primary roads as important County resources which require protection to ensure their continued performance and safety. Improve the appearance of these corridors so that they reflect positively on the community.**

Strategy: Encourage controlled access management along principal corridors; discourage strip development on secondary corridors.

Strategy: Require additional setbacks on designated corridors to allow for frontage and/or service roads or development of additional lanes.

Strategy: Regulate signs to improve appearance of corridors while ensuring that the signs' desired purpose is achieved.

Strategy: Encourage street lighting in those areas where lighting is appropriate.

Objective: **Consider present and future transportation implications when making land use decisions.**

Strategy: Adopt appropriate land use regulations to limit intensive development to areas which are served by adequate existing or planned future transportation facilities.

Strategy: Require that subdivision roads be planned, constructed, and maintained according to County and/or VDOT standards.

Strategy: Amend land use regulations to require a Traffic Impact Analysis for developments that promise to generate large traffic increases.

Strategy: Use the state road functional classification system to help evaluate rezoning and special use permit requests.

Objective: **Improve the transportation planning process by supporting or establishing systematic methods to determine County recommendations for transportation improvements and projects.**

Strategy: Actively participate in and support the new Martinsville Area Transportation Study (MATS).

Strategy: Develop the transportation planning potential of the County's future geographic information system (GIS).

Strategy: Base all transportation decisions on the best available information including current and future transportation needs, demographic data, and commercial, industrial, and residential growth.

Objective: **Encourage the use of alternative modes of transportation whenever appropriate.**

Strategy: Preserve and enhance opportunities for greater industrial use of the County's rail and airport facilities.

Strategy: Support expansion efforts undertaken by the Blue Ridge Aiport.

Strategy: Promote private sector initiatives and incentives to the development of ridesharing and/or flextime programs.

Strategy: Obtain funds through the VDOT Enhancements and Safety Program for appropriate projects.

Strategy: Provide for pedestrian access in areas where such access is appropriate.

Strategy: Capitalize on opportunities to convert abandoned railroad rights-of-way into pedestrian and bicycle trails.

Land Use

GOAL: TO GUIDE DEVELOPMENT IN ORDER TO PROTECT THE PUBLIC INTEREST, ENHANCE QUALITY OF LIFE, AND INCREASE THE EFFICIENCY OF SERVICE PROVISION.

Objective: **Develop an ongoing long-range planning process, anchored by this plan.**

Strategy: Annually perform "Status of the Plan" reviews to evaluate the Plan and determine the need for plan amendments or updates.

Strategy: Consider the need for specific community subplans.

Objective: **Direct growth into designated growth areas, establishing a mix of industrial, commercial, and residential uses that support the County's needs.**

Strategy: Develop redevelopment policies that encourage the reuse of vacant buildings and sites. Aggressively market these properties to commercial and industrial interests.

Strategy: Provide for future employment opportunities by reviewing the current zoning map to ensure it allows for significant industrial, commercial, and residential development in Growth Areas.

Strategy: Encourage the development of planned communities with a complementary mix of land uses within Growth Areas.

Strategy: Consider revisions to land development ordinances to encourage PUDs that allow for mixed, complementary land uses.

Objective: **Recognize primary roads as important County resources which require protection to ensure their continued performance and safety. Improve the appearance of these corridors so that they reflect positively on the community.**

Objective: **Plan for the orderly development of primary road corridors. Preserve the integrity, safety, and function of these corridors.**

Strategy: Consider amending the subdivision ordinance to reduce the trend of residential strip development and to encourage residential development on interior roads.

Strategy: Ensure that developers pay their fair share of infrastructure costs to residential development.

Strategy: Promote commercial developments in "nodes" located at major intersections and other appropriate areas.

Strategy: Form a "Route 58 Corridor Council" with representatives from neighboring localities. The Council would address planning issues and eventually draft a plan to help coordinate development along the corridor.

Objective: **Limit development in rural areas to low density residential uses to allow for efficient service delivery, protection of rural character, and preservation of natural resources.**

Strategy: Consider increasing the minimum lot size in the agricultural zoning district to reduce residential sprawl in outlying areas of the County.

Strategy: Revise land development ordinances to increase flexibility and allow for clustering of development.

Strategy: Guide development away from Rural Areas that requires PSA water and sewer service. In general, residential development in rural areas should expect to receive a lower level of service delivery than development in Growth Areas.

Objective: **Discourage growth in environmentally sensitive areas, such as steep slopes, floodplains, and wetlands.**

Strategy: Continue to enforce the County erosion and sediment control and floodplain ordinances.

Strategy: Include a list of any existing or potential environmentally sensitive features in staff rezoning reports.

Strategy: Mitigate development impacts on water quality by establishing setbacks or buffers from water bodies.

Objective: **Establish a systematic means to review land development applications.**

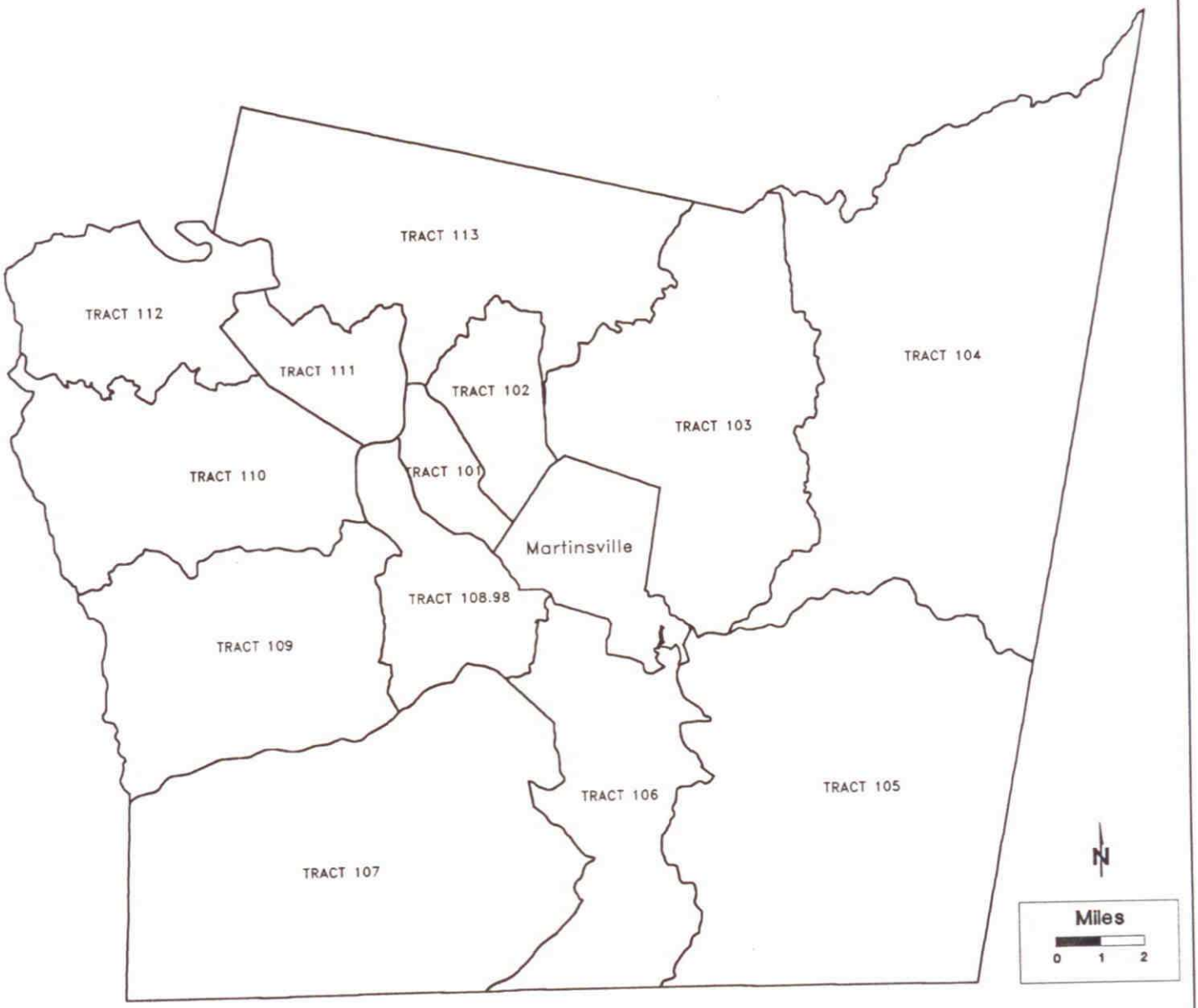
Strategy: Use development standards contained in this plan as guidelines in the review of rezoning and subdivision applications.

APPENDIX A

Summary Results from 1993 40(B) Plan--Virginia Department of Environmental Quality

Water Body	Swimmable	Fishable	Reasons/Comments
South Mayo	20 miles do not support goal, another 20 partially support goal	20 miles partially support goal	Effluent limited for dissolved oxygen; frequent fecal coliform exceedences (maybe due to Stuart STP); sometimes low pH in upper section.
North Mayo	Partially supported in 18% of water body	Fully supported	Low pH, probably due to area's geology; occasional fecal coliform violations.
Philpott Reservior	Fully supported	Fully supported	Moderate nutrient enrichment
Reed Creek	Partially supported in 20 miles	Partially supported in 20 miles	12.5% of samples violated pH and fecal coliform standards.
Middle Smith	66 % partially support goal.	66% partially support goal	At Fieldale monitoring station, 25% of samples violated fecal coliform standards, due possibly to raw sewage discharges into Rangely Creek from residences.
Marrowbone Creek	Partially supported	Partially supported	Several fecal coliform violations, probably from non-point source pollution from agriculatural land uses.
Leatherwood Creek	Fully supported	Fully supported	Iron and Magnesium concentrations above standards due to natural sources.
Lower Smith River	Partially supported	Partially supported	Iron and Magnesium concentrations above standards at one montioring station due to natural sources; Several problems cited due to variable streams flows caused by Philpott and Martinsville Dams--study suggest reviewing pattern of dam water releases.

Henry County
1990 Census Tracts



Tract 101

Location: Northwest of Martinsville, encompassing parts of Collinsville and Villa Heights; Boundaries formed by U.S. 220 Business on east and north, the City of Martinsville to the south and the Smith River along the western border. Within the Martinsville voting district except for a portion on the northern side of the tract that lies in the Reed Creek election district.

Land Use: Predominantely residential, but with concentrated commercial development along Route 220; Several industrial properties in the southern part of the tract.

1980 Pop.:	3980
1990 Pop.:	4160
% Change:	4.5
1980 White Pop.:	3958
1990 White Pop.:	3910
1980 Black Pop.:	4
1990 Black Pop.:	219
1990 Other Races:	31
1990 Median Age:	30.6
% Pre-school :	6.3
% School Pop.:	16
% Senior Pop.:	11.6

1990 # of Households:	1802
Median Household Income:	$26 070
Per Capita Income:	$12 369
# of Families with Children:	541
%Single-Parent Families:	30.3
Median Family Income:	$31 303
% of Families below Pov. Level:	3.1
% of Persons below Pov. Level:	4.8
1990 # with High Sch. Degrees:	64.1
# Employed:	2 288
% Non-Durable Employment	25.7
% Durable Employment	18
% Services Employment	20

Tract 102

Location: Northwest of Martinsville, bordered on east by Route 108, north by King's Mountain Road, west by U.S. Route 220 Business, and by Martinsville City Limits.

Land Use: Parts of Collinsville and Villa Heights located in tract's western portion relatively developed--eastern area primarily farmland or forested.

1980 Pop.:	5103
1990 Pop.:	5122
% Change:	.37
1980 White Pop.:	4775
1990 White Pop.:	4358
1980 Black Pop.:	304
1990 Black Pop.:	744
1990 Other Races:	19
Median Age:	30.4
% Pre-school :	6.8
% School Pop.:	17.2
% Senior Pop.:	13.8

# of Households:	2089
Median Household Income:	$25 672
Per Capita Income:	$11 690
# of Families with Children:	693
%Single-Parent Families:	30.4
Median Family Income:	$31 084
% of Families below Pov. Level:	7.4
% of Persons below Pov. Level:	11.3
% with High Sch. Degrees:	54.9
# Employed:	2667
% Non-Durable	27.1
% Durable	19.9
% Services	20.3

Tract 103

Location: North of Martinsville, southern boundary is Martinsville City Limits and Route 57; Route 619 serves as eastern boundary, with Franklin County line as a northern boundary. Encompassing both Figsboro and Dyers Store.

Land Use: Mainly pasture, farm, and forested land except for residential development near City.

1980 Pop.:	5393
1990 Pop.:	3850
% Change:	40.1
1980 White Pop.:	3850
1990 White Pop.:	4053
1980 Black Pop.:	1507
1990 Black Pop.:	1892
1990 Other Races:	42
Median Age:	31.6
% Pre-school :	5.8
% School Pop.:	17.7
% Senior Pop.:	15.9
# of Households:	2132
Median Household Income:	$32 771
Per Capita Income:	$14 453
# of Families with Children:	799
%Single-Parent Families:	19.5
Median Family Income:	$37 422
% of Families below Pov. Level:	3.2
% of Persons below Pov. Level:	4.6
% with High Sch. Degrees:	65.4
# Employed:	3188
% Non-Durable	39.9
% Durable	10
% Services	17.6

Tract 104

Location: Northeast corner of County; encompassing the Axton and Leatherwood communities.

Land Use: Generally rural with farming and forest; some medium-density residential development near Axton--low-density development in Mountain Valley area. Turkeycock Wildlife Management Area located in the north.

1980 Pop.:	3253
1990 Pop.:	3471
% Change:	6.7
1980 White Pop.:	1477
1990 White Pop.:	1714
1980 Black Pop.:	1776
1990 Black Pop.:	1718
1990 Other Races:	38
Median Age:	28.3
% Pre-school :	5.8
% School Pop.:	17.7
% Senior Pop.:	15.9
# of Households:	1209
Median Household Income:	$23 770
Per Capita Income:	$9724
# of Families with Children:	561
%Single-Parent Families:	26.4
Median Family Income:	$28 030
% of Families below Pov. Level:	12.2
% of Persons below Pov. Level:	14.4
% with High Sch. Degrees:	47.7
# Employed:	1719
% Non-Durable	45
% Durable	15.5
% Services	17.1

Tract 105

Location: Southeast of County, including Irisburg and Aikens Summitt communities. Smith River traverses area in a northwest-to-southeast direction.

Land Use: Predominately rural, with farming and forestry enterprise.

1980 Pop.:	3599
1990 Pop.:	3892
% Change:	8.1
1980 White Pop.:	2220
1990 White Pop.:	2545
1980 Black Pop.:	1379
1990 Black Pop.:	1334
1990 Other Races:	13
Median Age:	29.1
% Pre-school :	6.8
% School Pop.:	20.4
% Senior Pop.:	10.4

# of Households:	1408
Median Household Income:	$25 022
Per Capita Income:	$10 472
# of Families with Children:	567
%Single-Parent Families:	26.4
Median Family Income:	$29 293
% of Families below Pov. Level:	8.2
% of Persons below Pov. Level:	10.4
% with High Sch. Degrees:	50.4
# Employed:	2061
% Non-Durable	46.1
% Durable	15.2
% Services	14.7

Tract 106

Location: South-central of County, including Town of Ridgeway and Shannon Hills, Marrowbone Heights, and Sheffield Terrace subdivisions.

Land Use: Substantial commercial, industrial, and residential development along Route 220 corridor.

1980 Pop.:	6806
1990 Pop.:	7230
% Change:	6.2
1980 White Pop.:	6156
1990 White Pop.:	6185
1980 Black Pop.:	598
1990 Black Pop.:	979
1990 Other Races:	69
Median Age:	30.6
% Pre-school :	6.5
% School Pop.:	18.5
% Senior Pop.:	10.8

# of Households:	2825
Median Household Income:	$26 947
Per Capita Income:	$12 243
# of Families with Children:	1044
%Single-Parent Families:	26.2
Median Family Income:	$30 407
% of Families below Pov. Level:	5.5
% of Persons below Pov. Level:	7.5
% with High Sch. Degrees:	59.4
# Employed:	3817
% Non-Durable	33
% Durable	20
% Services	17.7

Tract 107

Location: Southwest of County, including Horsepasture and Spencer communities; North Carolina state line serves as southern boundary; while Patrick County line and Route 58 delineate western and northern boundaries, respectivly.

Land Use: Mostly rural, with agricultural and forestal operations.

1980 Pop.:	3941
1990 Pop.:	3772
% Change:	-4.2
1980 White Pop.:	2659
1990 White Pop.:	2592
1980 Black Pop.:	1254
1990 Black Pop.:	1176
1990 Other Races:	5
Median Age:	30
% Pre-school :	6.5
% School Pop.:	18.6
% Senior Pop.:	13

# of Households:	1387
Median Household Income:	$26 420
Per Capita Income:	$11 709
# of Families with Children:	532
%Single-Parent Families:	22.2
Median Family Income:	$29 444
% of Families below Pov. Level:	6.2
% of Persons below Pov. Level:	9.2
% with High Sch. Degrees:	58.5
# Employed:	1846
% Non-Durable	36.2
% Durable	10
% Services	17.3

Tract 108.96

Location: West of City; includes Fieldale area to the north as well asareas west of Route 220 Bypass.

Land Use: Much residential, but severe slopes have limited development in some areas.

1980 Pop.:	4557
1990 Pop.:	3362
% Change:	
1980 White Pop.:	1654
1990 White Pop.:	1653
1980 Black Pop.:	2443
1990 Black Pop.:	1707
1990 Other Races:	2
Median Age:	29.6
% Pre-school :	6
% School Pop.:	18.8
% Senior Pop.:	13.2

# of Households:	1230
Median Household Income:	$25 109
Per Capita Income:	$9931
# of Families with Children:	450
% Single-Parent Families:	26
Median Family Income:	$29 539
% of Families below Pov. Level:	8
% of Persons below Pov. Level:	11.5
% with High Sch. Degrees:	51
# Employed:	1680
% Non-Durable	41.7
% Durable	13
% Services	16

Tract 109

Location: West-central area; Patrick County acts as western boundary; Route 58 as southern; includes Preston and Spencer communities as well as the Blue RidgeAirport.

Land Use: Primarily agricultural, forests, and rural residential.

1980 Pop.:	2740
1990 Pop.:	2892
% Change:	5.5
1980 White Pop.:	1940
1990 White Pop.:	2213
1980 Black P9op.:	860
1990 Black Pop.:	671
1990 Other Races:	9
Median Age:	36.7
% Pre-school :	5.9
% School Pop.:	16.4
% Senior Pop.:	14.3
# of Households:	1155
Median Household Income:	$23 861
Per Capita Income:	$11 175
# of Families with Children:	388
%Single-Parent Families:	21.6
Median Family Income:	$31 303
% of Families below Pov. Level:	6.2
% of Persons below Pov. Level:	7.8
% with High Sch. Degrees:	49.6
# Employed:	1485
% Non-Durable	43.1
% Durable	15.9
% Services	10.9

Tract 110

Location: West of Bassett Forks and south of Bassett; encompassing the Blackberry and Dillon's Fork communities.

Land Use: Farming and scattered subdivisions; significant mobile-home development near Patrick County in recent years.

1980 Pop.:	5593
1990 Pop.:	5304
% Change:	-5.2
1980 White Pop.:	4349
1990 White Pop.:	4176
1980 Black Pop.:	1244
1990 Black Pop.:	1117
1990 Other Races:	
Median Age:	33.5
% Pre-school :	7.0
% School Pop.:	19.4
% Senior Pop.:	10.8
# of Households:	1955
Median Household Income:	$23 117
Per Capita Income:	$9268
# of Families with Children:	798
%Single-Parent Families:	25
Median Family Income:	$26 424
% of Families below Pov. Level:	9.9
% of Persons below Pov. Level:	11.3
% with High Sch. Degrees:	39.5
# Employed:	2719
% Non-Durable	30
% Durable	30.4
% Services	14.6

Tract 111

Location: Northwestern part of County, including Bassett, Stanleytown, and Lake Philpott.
Land Use: Dense residential and commercial, surrounding major indutrial area; Majority of development located near the Smith River.

1980 Pop.:	3624
1990 Pop.:	3101
% Change:	-14.4
1980 White Pop.:	3291
1990 White Pop.:	2804
1980 Black Pop.:	333
1990 Black Pop.:	292
1990 Other Races:	6
Median Age:	42.4
% Pre-school :	5.8
% School Pop.:	15.5
% Senior Pop.:	18.7

# of Households:	1239
Median Household Income:	$25 396
Per Capita Income:	$13 930
# of Families with Children:	364
%Single-Parent Families:	25.5
Median Family Income:	$27 981
% of Families below Pov. Level:	6.7
% of Persons below Pov. Level:	11.3
% with High Sch. Degrees:	50.1
# Employed:	1456
% Non-Durable	20.7
% Durable	36.1
% Services	17.8

Tract 112

Location: Area inbetween West Bassett and Patrick County; Lake Philpott serves as northern boundary.

Land Use: Commercial and residential mixed along Route 57 corridor; portion of Fairy-stone State Park Lies within tract.

1980 Pop.:	4001
1990 Pop.:	4279
% Change:	6.9
1980 White Pop.:	3680
1990 White Pop.:	3944
1980 Black Pop.:	331
1990 Black Pop.:	326
1990 Other Races:	8
Median Age:	32.6
% Pre-school :	7.1
% School Pop.:	20.6
% Senior Pop.:	10.0

# of Households:	1640
Median Household Income:	$23 716
Per Capita Income:	$10 233
# of Families with Children:	650
%Single-Parent Families:	30.6
Median Family Income:	$26 968
% of Families below Pov. Level:	9.2
% of Persons below Pov. Level:	11.7
% with High Sch. Degrees:	43.6
# Employed:	2201
% Non-Durable	23.7
% Durable	31
% Services	15.4

Tract 113

Location: Northwest section of County adjacent to Franklin County; including areas to east and west of Route 220; Containing Bassett Forks, Oak Level, and Figsboro areas.

Land Use: Commercial development in Bassett Forks and along Rt. 220; mostly rural elsewhere.

1980 Pop.:	5054
1990 Pop.:	4367
% Change:	-13.5
1980 White Pop.:	3621
1990 White Pop.:	3382
1980 Black Pop.:	1430
1990 Black Pop.:	980
1990 Other Races:	7
Median Age:	37.5
% Pre-school :	5.5
% School Pop.:	17.0
% Senior Pop.:	13.6

# of Households:	1700
Median Household Income:	$23 891
Per Capita Income:	$10 950
# of Families with Children:	587
%Single-Parent Families:	21.8
Median Family Income:	$28 840
% of Families below Pov. Level:	6.4
% of Persons below Pov. Level:	8.6
% with High Sch. Degrees:	56.2
# Employed:	2386
% Non-Durable	29.8
% Durable	26.3
% Services	12.4

APPENDIX C
Summary of Housing Changes: 1970-1990

	1970	1980	% Change	1990	% Change
Total Housing Units	15,726	20,968	33.3	23,169	10.5
Occupied Housing Units	14,763	19,569	32.6	21,771	11.3
Owner-Occupied	11,586	15,784	36.2	16,961	7.5
Renter-Occupied	3,177	3,785	19.1	4,810	27.1
Vacant Housing Units	953	1,127	18.2	1,388	23.2
For Rent	316	479	51.6	487	1.7
For Sale	256	282	10.1	196	-30.5
Renter or Sold, Not Occupied*	NA	NA	NA	167	---
For Seasonal or Migratory Use	NA	110	NA	99	-10.0
Other Vacant	381	366	-3.9	439	19.9
Vacancy Rate	6.1	6.5	---	6.0	---
Population in Occupied Units	50,637	57,498	13.5	56,343	-2.0
Persons in Owner Units	39,241	47,748	21.7	44,734	-6.3
Persons in Renter Units	11,396	9,750	-14.4	11,609	19.1
Persons per Occupied Unit	3.4	2.94	---	2.6	---
Persons per Owner Unit	3.4	2.03	---	2.6	---
Persons per Renter Unit	3.4	2.6	---	2.4	---

Source: U.S. Bureau of the Census

Appendix D

Public Parks and Recreational Facilities

Facilities	Softball field (apx 280)	Baseball 280' less	Baseball Field 280' +-	Football Field	Soccer Field	Basketball Gym	Tennis Courts	Swimming Pool or area	Track	Playground	Picnic Shelter	Volleyball	Horseshoes	Dancing	Horseback	Hiking	Camping	Fishing	Boating	Hunting	Reading	Arts and Crafts	Outdoor Theatre	Social Interaction	Special Events
Public Recreation Agencies																									
Henry County Parks & Rec.																									
Public Bldgs./Rec. Areas																									
Henry County Admin. Bldg.																						●		●	●
Jordan Creek Co. Park	●	●		●						●	●														
Collinsville J.C. Co. Park							●			●	●	●	●			●								●	●
Fisher Farm Co. Park		●	●							●	●		●			●	●								●
Fairystone State Park								●			●	●	●		●	●	●	●	●	●					
King's Mountain County Park	●	●										●				●								●	●
Philpott Res. (U. S. Govt.)								●			●					●	●	●	●	●					
Turkeycock Mt. WMA (State)																●	●			●					
Smith River																●	●	●	●	●					
Mayo River																●	●	●	●	●					
Coll. & Trade Schools																									
Patrick Henry Comm. College	●				●	●	●					●									●			●	●
Eastern School of Farriery															●									●	
W. C. Ham Learning Ctr.																								●	
High Schools																									
Bassett	●		●	●	●	●	●		●			●											●		
Fieldale-Collinsville			●	●		●	●		●			●													
Laurel Park	●		●	●		●	●		●			●													
Magna Vista	●		●	●	●	●	●		●			●													
Middle Schools																									
Axton		●				●						●													
G. W. Carver			●	●	●	●	●					●													
Drewry Mason			●	●	●	●	●		●			●													
John D. Bassett			●	●	●	●	●					●													

Facilities	Softball field (apx 280)	Baseball 280'less	Baseball Field 280'+-	Football Field	Soccer Field	Basketball Gym	Tennis Courts	Swimming Pool or area	Track	Playground	Picnic Shelter	Volleyball	Horseshoes	Dancing	Horseback	Hiking	Camping	Fishing	Boating	Hunting	Reading	Arts and Crafts	Outdoor Theatre	Social Interaction	Special Events
Elementary Schools																									
Campbell Court		●	●			●				●															
Fieldale																									
Figsboro		●	●			●																			
Irisburg		●	●			●				●															
John Redd Smith		●	●			●				●															
Mt. Olivet		●	●			●				●															
Rich Acres		●	●			●				●															
Ridgeway						●				●															
Sanville		●	●			●				●															
Spencer Penn		●	●			●				●															
Stanleytown		●	●			●				●															
Primary Schools																									
Collinsville						●				●															
Public Libraries																									
Blue Ridge Regional Library																					●				
Bassett Public Library																					●				
Collinsville Branch Library																					●				
Patrick Henry Comm. Coll.																					●				
Ridgeway Branch Library																					●				

Appendix E

The Department of Conservation and Recreation (DCR) completed its last plan in 1989 and will soon complete a 1994 update. By request, DCR supplied raw data from this upcoming plan to the Henry County Department of Planning and Community Development for use in this comprehensive plan.

Survey Data Used in Analysis

DCR uses results from a 1992 survey to estimate *annual activity days* for each recreational activity. Obviously, the greater number of households surveyed increases the accuracy and reliability of survey results. Therefore, this analysis uses data collected from the entire West Piedmont Planning District rather than from the County alone, under the assumption that persons in the WPPD have similar recreational preferences. Annual activity days for County residents were then apportioned based on population. For example, assume that the County accounts for 40% of the region's total population. If survey results from the region estimate 100,000 activity days spent on boating, then the County is apportioned 40,000 of those activity days. This data was then used in the following formula:

$$D = \frac{\frac{AD}{WIS} \times PDP}{TF \times IU}$$

where:

D = Demand (in acreage or facility units)

AD = Number of activity days

WIS = Number of weeks in the season for the activity (e.g. assuming the tennis season is six months out of the year, a WIS standard of 26 weeks is used)

PDP = Peak Day Proportion (the proportion of an average's day's use that occurs on the peak day of the week);

TF = Turnover Factor (how many times during the day the same resource can be used or reached by other visitor; and

IU = Instant Use Capacity (number of people that facility can accommodate *at one time*)

The equation's numerator gives the number of activity days that recreational facilities must accommodate, considering seasons and how much time that activity takes. The denominator takes into account how many people can use a facility during a given day, considering how many people that facility holds and how many times it will be turned over. The resulting quotient provides a reasonable estimate on overall demand for that facility or resource.

For detailed explanation of the methodology used by DCR, please refer to the 1989 Virginia Outdoors Plan.