

**COMPREHENSIVE PLAN  
2008 – 2025  
for  
WHITE COUNTY, GEORGIA  
and the  
CITIES OF CLEVELAND AND HELEN**

**June 2008**

**Prepared Under Contract By:**



**Georgia Mountains Regional Development Center**

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## CHAPTER ONE

### COMMUNITY ASSESSMENT

#### INTRODUCTION

This document, the White County Joint Comprehensive Plan, has been produced to provide the leaders and citizens of White County, the City of Cleveland and the City of Helen with an effective guidebook for community development over the next two decades. It represents the culmination of an intensive planning process that identified goals and objectives for each community and a strategy for achieving those objectives.

This plan has been amended to comply with the standards for local comprehensive plans in Georgia. These standards outline a process that emphasizes public involvement and ultimately creates a document with four major components:

- The Community Assessment
- The Community Participation Program
- The Community Agenda
- The Analysis of Supporting Data

This chapter, the Community Assessment, is the first major component of the Comprehensive Plan, providing an introduction, an assessment of land use and a summary of the issues and identified during the process. It serves as a summary of the information addressed in the Analysis of Supporting Data (Chapters 4-11 of the Comprehensive Plan) and is the foundation for the Community Agenda.

#### Previous Planning Efforts

In 1976, the Georgia Mountains Regional Development Center (then called the Georgia Mountains Planning and Development Commission) prepared a Future Land Use Plan for White County. The 1976 plan addressed primarily land use issues and the natural physical limitations of the land on future development. Although the 1976 Future Land Use Plan provides many useful analyses, it is outdated and no longer adequately serves its purposes.

With significant growth and development since the Future Land Use Plan was formulated some fourteen years ago, White County now faces new development trends and more complex growth issues. In addition, White County is in need of a more comprehensive approach to future growth and development, one that addresses population, housing, community facilities, and other planning elements. Furthermore, White County is today in a more salient position to implement a plan through the adoption of County-wide land use regulations, due at least in part to rapid development and the threat of unwanted and unregulated land uses.

In 1990, the White County Board of Commissioners contracted with the Georgia Mountains Regional Development Center (GMRDC) for preparation of a Comprehensive Plan. Aside from the basic need for a plan to guide growth and development, the requirement of a plan by the Georgia General Assembly (pursuant to the Georgia Planning Act of 1989) to receive certain future state grants provided a major impetus for the White County Commission to embark on a comprehensive planning process. The Georgia Planning Act requires that local

comprehensive plans be updated. Therefore, in 2004 White County began the effort to update the comprehensive plan. The update plan is significant because it includes a joint planning effort with the City of Cleveland and the City of Helen.

### Directive and Purpose of Study

The Comprehensive Plan is intended to provide the basic data and analysis required in the "minimum planning standards" and the maintenance of "qualified local government" status as established by the Georgia Department of Community Affairs (DCA). The minimum planning standards include the following elements: population, housing, economic development, natural and historic resources, community facilities and services, transportation and land use. In addition, the state standards require an implementation segment to the plan. The format of the Comprehensive Plan text parallels the minimum planning standards by devoting a chapter to each required plan element.

The "minimum planning standards" require substantial data collection and analysis, and by following these minimum standards, a solid framework for planning can be achieved, one that is truly "comprehensive" in nature. However, it is the philosophy of the Georgia Mountains Regional Development Center, and indeed, it was the desire of the White County Commission and the Planning Advisory Board, to provide a Comprehensive Plan that goes well beyond the established minimums required by state law. For this reason, the White County Comprehensive Plan provides, in several sections where considered necessary, data and analysis beyond the minimum planning standards.

### What Is A Comprehensive Plan?

A "Comprehensive Plan," known also by other names such as general plan, development plan, master plan, policy plan, and growth management plan, has several characteristics. It is a physical plan intended to guide the physical development of a community by describing how, why, when and where to build or preserve the community. The plan is also long range, in that it considers a horizon of twenty years. It is a picture of what the community desires to become, but it is also realistic with regard to anticipated social, economic and political constraints. The plan is also comprehensive because it covers the entire County geographically (including municipalities), encompasses all the functions that make a community work, and considers the interrelationships of functions. A Comprehensive Plan is a statement of policy, covering future directions desired by the community in each plan element, and it is a guide to decision making for the elected and appointed County officials and other members of the citizenry.

Comprehensive planning is also a continuous process. Formulation of this text and maps is not the ultimate objective; the use of the plan is what is important, and a Comprehensive Plan is only as good as the measures used to implement the plan. No single document can pose solutions to all community problems, and the Comprehensive Plan must be a flexible, continuous and changing activity that is periodically updated based on changing conditions, the shifting of resources, and the alteration of goals.

## Purposes and Uses of the Comprehensive Plan

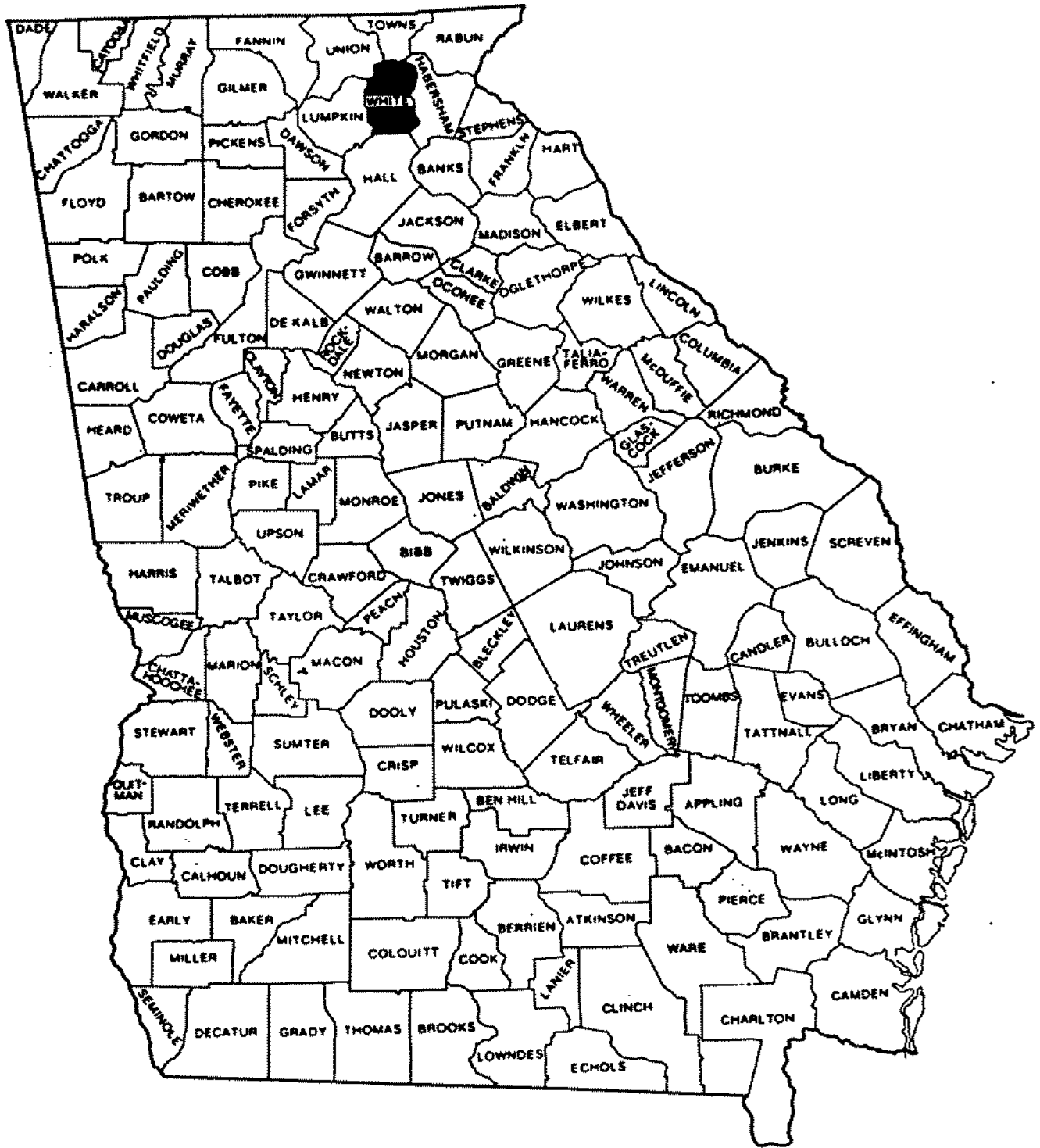
The Comprehensive Plan "represents a focusing of planning thought and effort - an attempt to identify and analyze the complex forces, relationships, and dynamics of growth in order that they can be shaped and directed in accordance with recognized community goals and aspirations." It is a realistic appraisal of what the community is now, a normative and futuristic blueprint of what the community wants to be, and a specific set of programs for achieving community desires. The plan is based on the foundation that if a community knows where it wants to go, it possesses better prospects of getting there. The plan attempts to recognize the relationships between diverse development goals and objectives and establishes a meaningful basis for the resolution of conflicts. A comprehensive plan functions as a "master yardstick" for evaluating all significant future development proposals. The plan is intended to provide the essential background and perspective for decision-making in respect to zoning, land subdivisions, public investments, and capital improvement programs. The comprehensive plan also provides guidance to businessmen, investors and developers regarding the development policies and the future direction and intensity of growth. For the community at large, the plan (if properly implemented) assures that land use conflicts will be resolved if not avoided, that misuses of land will not occur, that traffic congestion will be minimized or averted, that community facilities will be located in areas where people can best use them, and that the community's growth will take place in an orderly, rational manner.

## Jurisdiction and Data Aggregation

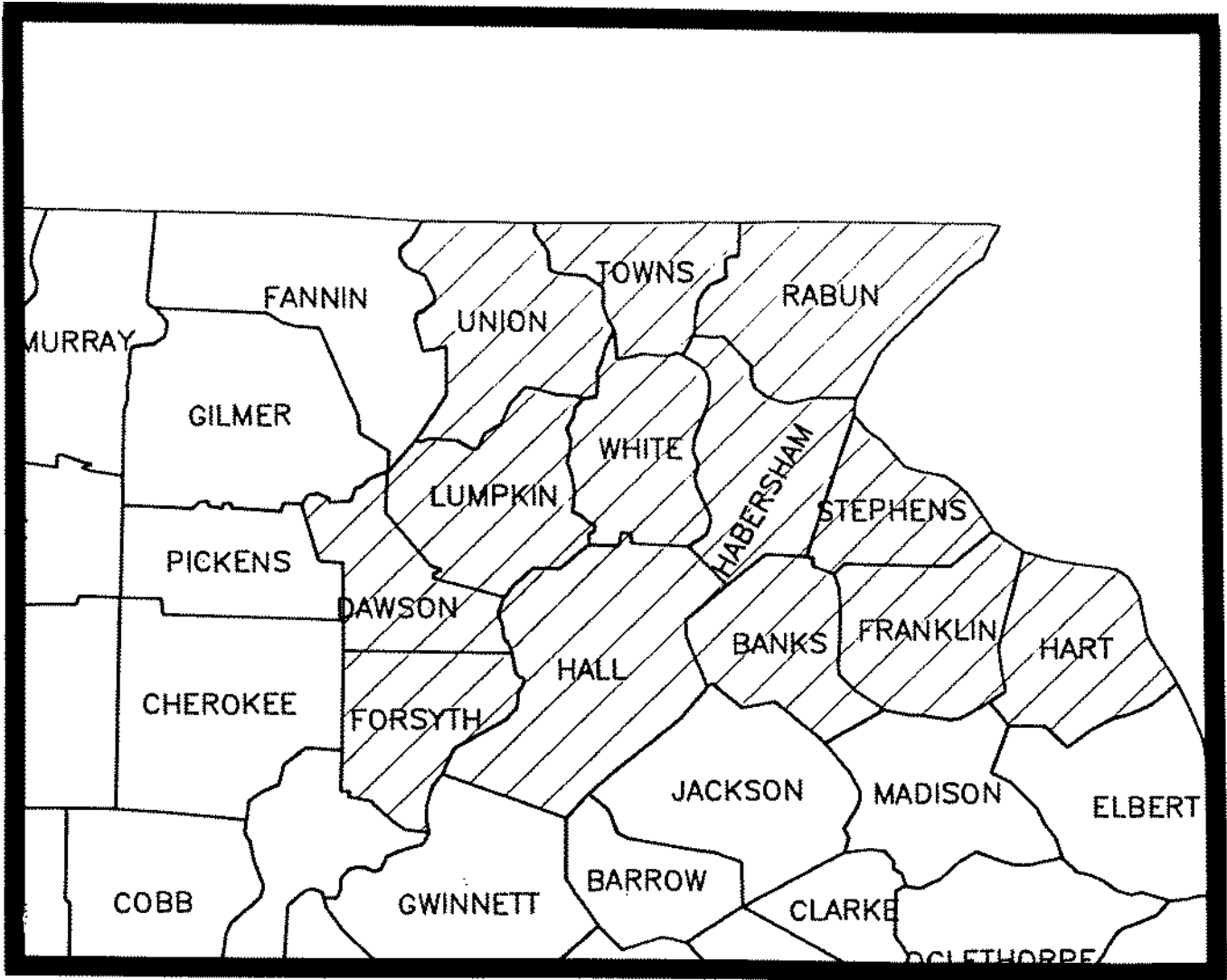
White County consists of the Cities of Cleveland and Helen and the remaining unincorporated area. Much of the data compiled in the Comprehensive Plan is for White County as a whole, including the two municipalities. Recognizing that the focus of the Comprehensive Plan includes three local jurisdictions, every effort was made to provide data for the unincorporated area in addition to citywide figures. It was hoped that, while certain policy decisions are made based on the inclusion of the municipalities, the aggregation of data specific to the unincorporated area would better facilitate the formulation of policy decisions that affected predominantly the residents and businesses in unincorporated White County. On the other hand, issues in the unincorporated areas of the county could have an impact on the development of policy in the municipalities.

## Location

White County is located in northeast Georgia, and the County Seat (Cleveland) is located approximately twenty-three (23) miles north of Gainesville and seventy-seven (77) miles north of Atlanta. Map 1 shows the location of White County within the context of the State of Georgia, and Map 2 identifies White County within the thirteen (13) county region served by the Georgia Mountains Regional Development Center.



MAP 1  
LOCATION OF WHITE COUNTY



MAP 2 GEORGIA MOUNTAINS REGION



## **ANALYSIS OF CONSISTENCY WITH QUALITY COMMUNITY OBJECTIVES**

In 1999, the Board of the Department of Community Affairs adopted the Quality Community Objectives (QCOs) as a statement of the development patterns and options that will help Georgia preserve her unique cultural, natural and historic resources while looking to the future and developing to her fullest potential. The Office of Planning and Quality Growth has created the Quality Community Objectives Assessment to assist local governments in evaluating their progress towards sustainable and livable communities.

This assessment is meant to give a community an idea of how it is progressing toward reaching these objectives set by the Department, but no community will be judged on progress. The assessment is a tool for use at the beginning of the comprehensive planning process, much like a demographic analysis or a land use map, showing a community “you are here.” The questions focus on local ordinances, policies, and organizational strategies intended to create and expand quality growth principles.

A majority of positive responses for an objective may indicate that the community has in place many of the governmental options for managing development patterns. Negative responses may provide guidance as to how to focus planning and implementation efforts for those governments seeking to achieve these Quality Community Objectives. Should a community decide to pursue a particular objective it may consider this assessment as a means of monitoring progress towards achievement.

**Development Patterns 1 - Traditional neighborhood development patterns should be encouraged, including use of more human scale development, compact development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our zoning code does not separate commercial, residential and retail uses in every district.		X	X

County does not have zoning; Helen’s ordinance allows for mix-ed use; Cleveland’s ordinance segregates uses.

Our community has ordinances in place that allow neo-traditional development “By right” so that developers do not have to go through a long variance process.	X	X	X
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County has review process allowing flexibility in variances; Helen has ordinance that allows this by right, Cleveland does not allow “by right.”

We have a street tree ordinance requiring new development to plant shade-bearing trees appropriate to our climate.		X	X
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County does not have an ordinance but both cities participate in the Tree City USA program

Our community has an organized tree-planting campaign in public areas to make walking more comfortable in summer.		X	X
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County does not have such a program but both cities do have organized campaigns.

We have a program to keep our public areas (commercial, retail districts, parks) clean and safe.	X	X	X
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Our community maintains its sidewalks and vegetation well so that walking is an option some would choose.		X	X
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No program in Cleveland; There is a maintenance program in the City of Helen; No sidewalks in County.

In some areas, several errands can be made on foot, if desired.			
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Not applicable in County; Cleveland does have some density of commercial activity adjacent to residences; Helen does have some density of commercial activity adjacent to residences

Some children can and do walk to school safely.		X	
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There are some residences in Cleveland with sidewalks and close proximity to schools but for remaining portions of County and Helen, the schools are too far removed from residential centers.

Some children can and do bike to school safely.		<b>X</b>	
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There are some residences in Cleveland with sidewalks and close proximity to schools but for remaining portions of County and Helen, the schools are too far removed from residential centers.

Schools are located in or near neighborhoods.			
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There are some residences in Cleveland with sidewalks and close proximity to schools but for remaining portions of County and Helen, the schools are too far removed from residential centers.

**Development Patterns 2** - *Communities should maximize the use of existing infrastructure through **infill development** and minimize the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community.*

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our community has an inventory of vacant sites and buildings available for redevelopment and/or infill development.		<b>X</b>	<b>X</b>

Not applicable in County; Cleveland and Helen do not annex and both focus on infill development and redevelopment of existing sites. They both have inventories of properties available for infill development.

We are actively working to promote Brownfield redevelopment.		<b>X</b>	
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Not applicable in County or City of Helen; One possible location in Cleveland that is being promoted for redevelopment.

Our community is actively working to promote greyfield redevelopment.		<b>X</b>	
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Not applicable in County; both cities actively promote redevelopment of existing property, though the only sites currently fitting this description are within Cleveland.

We have areas that are planned for nodal development (compacted near intersections rather than spread along a major road.)	<b>X</b>	<b>X</b>	<b>X</b>
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County has several sites targeted in their future development policies (see Land Use discussion); both cities are relatively small and could be considered singular nodes.

We allow small lot development (<5000 SF) for some uses.		<b>X</b>	<b>X</b>
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County does not regularly allow this due to sewer constraints, but has some policies that allow for smaller lots provided proper utilities are available; both cities allow small lot development.

**Development Patterns 3 – Communities should evoke a Sense of Place.** *Traditional downtown areas should be maintained as the focal point of the community or, for newer areas where this is not possible, the development of activity centers that serve as community focal points should be encouraged. These community focal points should be attractive, mixed-use, pedestrian-friendly places where people choose to gather for shopping, dining, socializing, and entertainment.*

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
If someone dropped from the sky into our community, he or she would know immediately where she was, based on our distinct characteristics.	<b>X</b>		<b>X</b>

White County has two national register districts, several church camps and signature parks and mountains readily associated with the County; Helen is distinguished for its architectural theme and cultural identity; Cleveland has some traditional small urban elements but may lack unique signature places or structures.

We have delineated the areas of our community that are important to our history and heritage and have taken steps to protect those areas.	<b>X</b>	<b>X</b>	
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White County has two national register districts and other cultural sites identified in the Comprehensive Plan; Cleveland is developing their Better Hometown program and downtown protection guidelines; Helen

We have ordinances to regulate the aesthetics of development in our highly visible areas.	<b>X</b>	<b>X</b>	<b>X</b>
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County has stringent environmental ordinances, particularly mountain protection and hillsides; Cleveland has street tree ordinances but no landscaping or environmental ordinances. Helen does have strict design guidelines including landscape regulations and architectural standards.

We have ordinances to regulate the size and type of signage.	<b>X</b>	<b>X</b>	<b>X</b>
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All three communities have current sign ordinances.

Our community has a plan to protect designated farmland.	<b>X</b>		
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White County does have a strategy for farmland protection but has not begun implementation measures.

**Development Patterns 4 - Alternatives to transportation by automobile should be made available in each community, including mass transit, bicycle routes, and pedestrian facilities. Greater use of alternate transportation should be encouraged.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
We have public transportation in our community. County does have rural transit services for select ridership, such as elderly and handicapped. (5311 program)	X	X	X
We require that new development connects with existing development through a street network, not a single entry/exit. Required by regulations in White County and City of Helen.	X		X
We have a good network of sidewalks to allow people to walk to a variety of destinations. No sidewalks within County; There are sidewalks in Cleveland but they do not have a maintenance program; Helen does have an abundance of sidewalks.		X	X
We have a sidewalk ordinance in our community that requires all new development to provide user-friendly sidewalks. Proposed for County and Cleveland as part of subdivision regulations; Helen requires sidewalks as part of new development;	X	X	X
We require that newly built sidewalks connect to existing sidewalks wherever possible Not applicable for White County; this is required in Helen; Encouraged by the City of Cleveland		X	X
We have a plan for bicycle routes through our community. Only done for all communities through Georgia Mountains Regional Bicycle and Pedestrian Plan and the Georgia State Bicycle Highway system.	X	X	X
We allow commercial and retail development to share parking areas wherever possible. Permitted by all communities.	X	X	X

**Development Patterns 5 - Each region should promote and preserve a regional identity, or regional sense of place, defined in terms of traditional architecture, common economic linkages that bind the region together, or other shared characteristics.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our community is characteristic of the region in terms of architectural styles and heritage.	<b>X</b>	<b>X</b>	<b>X</b>

White County is supporting measures to preserve it’s heritage sites as indicative of rural lifestyles for the region; Cleveland and Helen are actively working to preserve and build upon their predominant architectural themes (1950’s and Alpine theme, respectively)

Our community is connected to the surrounding region for economic livelihood through businesses that process local agricultural products.	<b>X</b>		
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White County is connected via agricultural industries, particularly Poultry, Corn and Vineyard production.

Our community encourages businesses that create products that draw on our regional heritage (mountain, agricultural, metropolitan, coastal)	<b>X</b>	<b>X</b>	<b>X</b>
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White County is connected via agricultural industries, particularly Poultry, Corn and Vineyard production; The County and Cities network with other communities as part of efforts to sustain tourism in the region.

Our community participates in the Georgia Department of Economic Development’s regional tourism partnership.	<b>X</b>	<b>X</b>	<b>X</b>
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Our community promotes tourism opportunities based on the unique characteristics of our region.	<b>X</b>	<b>X</b>	<b>X</b>
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Our community contributes to, and draws from, the region, as a source of local culture, commerce, entertainment, and education.	<b>X</b>	<b>X</b>	<b>X</b>
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The County and Cities network with other communities as part of efforts to sustain tourism in the region; Truett McConnell College, in Cleveland, is a regional resource for education; Unicoi State Park and other attractions are regional resources for recreations, commerce and identified as key cultural amenities.

**Resource Conservation 1** - *The traditional character of the community should be maintained through **preserving and revitalizing historic areas** of the community, encouraging new development that is compatible with the traditional features of the community, and protecting other scenic or natural features that are important to defining local character.*

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
We have designated historic districts in our community.	<b>X</b>	<b>X</b>	<b>X</b>

We have an active historic preservation commission.			
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City of Cleveland does have a Better Hometown board that oversees some preservation related efforts.

We want new development to complement historic development, and we have ordinances in place to ensure that happening.	<b>X</b>	<b>X</b>	<b>X*</b>
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\*Helen does have strict general design guidelines that ensure new development is compatible with the overall Alpine theme.

**Resource Conservation 2** - *New development should be designed for **open space preservation**, minimizing the amount of land consumed, and open space should be set aside from development for use as public parks or as greenbelts/wildlife corridors. Compact development ordinances are one way of encouraging this type of open space preservation.*

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our community has a greenspace plan.	<b>X</b>		

White County has a mtn. protection ordinance and subdivision regulations that promote greenspace.

Our community is actively preserving greenspace – either through direct purchase, or by encouraging set-asides in new development.	<b>X</b>		
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White County has a mtn. protection ordinance and subdivision regulations that promote greenspace.

We have a local land conservation program/ work with state or national land conservation programs to preserve environmentally important areas.			
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We have a conservation subdivision ordinance for residential development that is widely used and protects open space in perpetuity.	<b>X</b>		
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**Resource Conservation 3 - Environmentally sensitive areas should be protected from negative impacts of development, particularly when they are important for maintaining traditional character or quality of life of the community or region. Whenever possible, the natural terrain, drainage, and vegetation of an area should be preserved.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
We have a comprehensive natural resources inventory.	X	X	X
We use this resource inventory to steer development away from environmentally sensitive areas. Minimal environmental resources within Cleveland and Helen. Development steered toward places for infill and utilities.	X		
We have identified our defining natural resources and have taken steps to protect them. No additional measures called for within cities.	X		
Our community has passed the necessary Part V Environmental Ordinances, and we enforce them.	X		
Our community has and actively enforces a tree preservation ordinance. Tree protection for White County occurs in mountain protection areas only.		X	X
Our community has a tree-replanting ordinance for new development.		X	X
We are using stormwater best management practices for all new development. In current model E&S Code proposed requirements for county to be adopted n December	X	X	X
We have land use measures that will protect the natural resources in our community (steep slope regulations, floodplain or marsh protection, etc.)	X		



**Social and Economic Development 1 - *Each community should engage in growth preparedness, identifying and putting in place the pre-requisites for the type of growth it seeks to achieve. These might include infrastructure to support new growth, appropriate training of the workforce, ordinances and regulations to manage growth as desired, or leadership capable of responding to growth opportunities and managing new growth when it occurs.***

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
We have population projections for the next 20 years that we refer to when making infrastructure decisions.	X	X	X
Our local governments, the local school board, and other decision-making entities use the same population projections.	X	X	X
We have a Capital Improvements Program that supports current and future growth.	X	X	X
We have designated areas of our community where we would like to see growth. These areas are based on the natural resources inventory of our community.	X		

Growth for Cleveland and Helen to occur within city limits in vacant land and infill sites.

**Social and Economic Development 2 - *The businesses and industries encouraged to develop or expand in a community should be suitable for the community in terms of job skills required, long-term sustainability, linkages to other economic activities in the region, impact on the resources of the area, and future prospects for expansion and creation of higher-skill job opportunities.***

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our economic development organization has a business development strategy based on our community's strengths, assets, and weaknesses.	X	X	X
Our ED organization has considered the types of businesses already in our community, and has a plan to recruit business/industry that will be compatible.	X	X	X
We recruit businesses that provide/ create sustainable products.	X	X	X
We have a diverse job base, so that one employer leaving would not cripple us.	X	X	X

**Social and Economic Development 3 - *A diverse range of job types should be provided in each***

*community to meet the diverse needs of the local workforce.*

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our economic development program has an entrepreneur support program.	X	X	X

Helen is considered an Entrepreneur Friendly Community.

Our community has jobs for skilled labor.	X	X	X
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Our community has jobs for unskilled labor.	X	X	X
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Our community has professional and managerial jobs.	X	X	X
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Most are within cities, and there is a desire to increase the volume of professional and managerial positions.

**Social and Economic Development 4 - Educational and training opportunities should be readily available in each community to permit community residents to improve their job skills, adapt to technological advances, or to pursue entrepreneurial ambitions.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our community provides work-force training options for our citizens.	X	X	X

North Georgia Tech (Clarkesville)

Our workforce training programs provide citizens with skills for jobs that are available in our community.	X	X	X
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North Georgia Tech (Clarkesville)

Our community has higher education opportunities, or is close to a community that does.	X	X	X
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Truett McConnell College in Cleveland, North Georgia Tech (Clarkesville), Gainesville State College (Oakwood), North Georgia College and State University (Dahlonega), Young Harris (Young Harris).

Our community has job opportunities for college graduates, so that our children may live and work here if they choose.	X	X	X
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Most are within cities, and there is a desire to increase the volume of professional and managerial positions.

**Social and Economic Development 5 - A range of housing size, cost, and density should be provided in each community to make it possible for all who work in the community to also live in the community (reducing commuting distances), to promote a mixture of income and age groups in each community, and to provide a range of housing choice to meet market needs.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
Our community allows accessory units like garage apartments or mother-in-law units. Changes to be adopted by White County in December.		X	X
People who work in our community can afford to live here.	X	X	X
Our community has enough housing for each income level (low, moderate, and above-average incomes) Higher quality of low-end housing needed, with some desire for additional high end housing in/near cities.			
We encourage new residential development to follow the pattern of our original town, continuing the existing street design and smaller setbacks. Higher diversities are encouraged & allowed with infrastructure of cities.	X	X	X
We have options available for loft living, downtown living, or “neo-traditional” development. Little demand for urban/downtown living, no vacant space suitable for lofts.	N/A		X
We have vacant and developable land available for multifamily housing. *Limited to cities and areas immediately around them.	X*	X	X
We allow multifamily housing to be developed in our community.	X	X	X
We support community development corporations building housing for lower-income households.	X	X	X
We have housing programs that focus on households with special needs. Marginal need at the moment; slow growth in need for elderly housing.			
We allow small houses built on small lots (less than 5,000 square feet) in appropriate areas.	X	X	X

**Governmental Relations Local 1 - *Communities should be allowed self-determination, to develop and work toward achieving their own vision for the future. Where the state seeks to achieve particular objectives, state financial and technical assistance should be used as the incentive to encourage local government conformance to those objectives.***

<b>QCO Statement/ Local Comment</b>	<b>Applies</b>		
	<b>White Co.</b>	<b>Cleveland</b>	<b>Helen</b>
We have a citizen-education campaign to allow all interested parties to learn about development processes in our community.	<b>X</b>	<b>X</b>	<b>X</b>
We have processes in place that make it simple for the public to stay informed on land use and zoning decisions, and new development.	<b>X</b>	<b>X</b>	<b>X</b>
We have a public-awareness element in our comprehensive planning process. Community Participation Program summarizes education and awareness efforts.	<b>X</b>	<b>X</b>	<b>X</b>
We have clearly understandable guidelines for new development. Cleveland working on development guidelines; Helen has guidelines but needs to review them for possible updating and amendments.	<b>X</b>	<b>?</b>	<b>?</b>
We offer a development guidebook that illustrates the type of new development we want in our community.	<b>X</b>		
We have reviewed our development regulations and/or zoning code recently and are sure that our ordinances will help us achieve our QCO goals.	<b>X</b>	<b>NA</b>	<b>X</b>
We have a budget for annual training for planning commission members and staff, and we use it.	<b>X</b>	<b>NA</b>	<b>NA</b>
Our elected officials understand the land-development process in our community	<b>X</b>	<b>X</b>	<b>X</b>

**Governmental Relations Local 2 - Regional cooperation should be encouraged in setting priorities, identifying shared needs, and finding collaborative solutions, particularly where it is critical to success of a venture, such as protection of shared natural resources or development of a transportation network.**

QCO Statement/ Local Comment	Applies		
	White Co.	Cleveland	Helen
We plan jointly with our cities and county for Comprehensive Planning purposes	X	X	X
We are satisfied with our Service Delivery Strategies	X	X	X
We cooperate with at least one local government to provide or share services (parks and recreation, E911, Emergency Services, Police or Sheriff’s Office, schools, water, sewer, other)	X	X	X

**ANALYSIS OF LAND USE AND DEVELOPMENT**

This section is devoted to an assessment of the existing land use in White County and the Cities of Cleveland and Helen. This inventory and analysis of land use patterns and trends shall serve as a basis for discussion of present and anticipated land use problems and issues. The result of the analysis will be recommendations regarding future land use and the establishment of a set of policies to guide the physical development or conservation of land.

**Classification of Existing Land Uses**

The minimum planning standards enacted pursuant to the Georgia Planning Act of 1989 established a minimum classification scheme for land use plans to follow. This scheme includes nine minimum classifications; residential, commercial, industrial, public/institutional, transportation/communication/utilities, park/recreation/conservation, agriculture/forestry, undeveloped/vacant, and mixed use.

*Residential* - The predominant use of land within the residential category is for single-family and multi-family dwelling units organized into general categories of net densities.

*Commercial* - This category is for land dedicated to non-industrial business uses, including retail sales, office, service and entertainment facilities, organized into general categories of intensities. Commercial uses may be located as a single use in one building or grouped together in a shopping center or office building. Communities may elect to separate office uses from other commercial uses, such as retail, service or entertainment facilities.

*Industrial* - This category includes all heavy production and manufacturing uses and certain government land uses such as landfills and treatment facilities.

*Public/Institutional* - This land use category includes all facilities and land owned by the local governments in White County, schools, churches, cemeteries, medical facilities and non-profit facilities.

*Transportation/Communication/Utilities* - Includes such uses as major transportation routes, public transit stations, power generations plants, railroad facilities, radio towers, telephone switching stations, airports, port facilities or other similar uses.

*Park/Recreation/Conservation* - This category is for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers or similar uses.

*Agriculture/Forestry* - This category is for land dedicated to farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.), agriculture, or commercial timber or pulpwood harvesting.

*Undeveloped/Vacant* - This category is for lots or tracts of land that are served by typical urban public services (water, sewer, etc.) but have not been developed for a specific use or were developed for a specific use that has since been abandoned.

*Mixed Use* - For a detailed, fine-grained mixed land use, or one in which land uses are more evenly balanced, Mixed Land Use categories may be created and applies at the discretion of the community. If used, Mixed Land Use categories must be clearly defined, including the types of land uses allowed, the percentage distribution among the mix of uses (or other objective measure of the combination), and the allowable density of each use.

### **Historic Settlement Patterns**

Land use in White County is heavily influenced by the rugged, steeply sloping topography. The most rugged areas of the County are generally located in the northern half of the county, with steep slopes interspersed with small rough surfaced plateaus and narrow winding valleys. The southern half of White County is composed of rolling ridge-tops with deeply incised stream valleys, and is interspersed with isolated plateaus rising 500 to 2,000 feet above the surrounding areas. Only the southern most portion of the county contains any sizeable level areas.

Historically, the patterns of land use in White County have been determined by the special qualities of the landscape and by the restrictions they place on the land. Throughout the County, the Cherokee Indians settled along valleys and in the high elevation coves. White settlement has followed the same basic pattern, locating in areas of gentle slopes.

Land use, settlement patterns and economic development is clearly related to predominant physiographic features. Farming and pastures located in the bottomland where the soil is rich and the land level. Timber management and limbering of woodlands have occurred in areas too poor to support farming. Mountaintops and steep slopes were maintained in a natural state because of their unsuitability for intensive use. Roads tend to follow narrow valleys or ridgelines.

In the past, rugged topography has limited access of people to job and educational

opportunities and low population densities prevented the formation of large, integrated economic units. This lack of access and the intrinsic unsuitability of the land for development have contributed to a local dependence on marginal and activities involving the removal of natural resources such as mining and logging.

Due to low employment opportunities, White County, like many mountain counties, has experienced an out-migration of the young and better educated which is an important resource loss to the area. This out-migration along with the decline in agriculture activities has left many previous developed areas abandoned and vacant. Those who chose to remain in the area often commute long distances to work making White County more of a bedroom community.

The most recent decades have brought an influx of older people living in retirement homes and resort locations. In addition, much of the county contains a large, transient, second home or vacation lot population that inhabits the area during summer months, weekends, and holidays. Engineering technology improvements and affordable construction costs have encouraged development for sites (steep slopes) that were once impossible to access and build upon.

Indigenous growth is now following transportation corridors, with the most intense urban-type development occurring along highways and at highway intersections, primarily along routes 129 and 75. "Retiree" residential developments and vacation homes are being located along connecting collector roads scattered throughout the County, especially along streams, lakes, and high ridgelines that provide scenic views. Community commercial developments are now popping up at traditional crossroad areas because of an increasing consumer base.

### **Inventory and Description of Existing Land Use**

Land use data was updated for this Plan in 2004-2005, and includes White County land use as well as land use for the Cities of Cleveland and Helen. Existing land use acreage for all communities is identified in Tables 1 - 3. Existing land uses are found on the Existing Land Use (2005) Maps for each of the local governments in the county. Each table and map provides detail on how the land was used and reported on the tax parcel database for White County. Each parcel was then "ground truthed" by a windshield survey of the county and each of the cities.

#### **White County**

The table below provides an analysis of land use in White County in 1990 and 2005. The 1990 land use was estimated through a windshield survey and public input. The 2005 data was calculated using a Geographic Information System (GIS) at the Georgia Mountains Regional Development Center.

**TABLE 1  
EXISTING LAND USE, WHITE COUNTY**

LAND USE	1990		2005	
	ACRES	%	ACRES	%
<b>US Forest Service</b>	43,560	28.7	43,560	28.7
<b>Agriculture</b>	16,469	10.9	30,289	20.0
<b>Residential</b>	8,624	5.7	28,078	18.6
<b>Forest (Private)</b>	45,545	30.0	22,468	14.8
<b>Park/Rec/Conservation</b>	3,605	2.4	8,584	5.7
<b>Vacant</b>	27,545	18.2	7,494	4.9
<b>Manuf. Housing</b>	1,569	1.0	4,115	2.7
<b>Incorporated Areas</b>	3,181	2.1	3,392	2.2
<b>Commercial</b>	556	0.3	1,905	1.3
<b>Public/Institutional</b>	585	0.4	682	0.5
<b>T/C/U</b>	N/A		530	0.3
<b>Industrial</b>	273	0.1	415	0.2
<b>TOTAL</b>	<b>151,512</b>	<b>100</b>	<b>151,512</b>	<b>100</b>

Residential

Residential land use acreage in White County more than tripled from 1990 to 2005. The percentage of residential land use in the county increase from 5.7% to 18.6%. This tremendous increase reflects the dramatic increase in the county population during the same time frame. This also includes the large number of residential units that were constructed for second home use.

Much of the residential development has occurred in the southern and eastern portions of the county where land has traditionally been cheaper and provides access to employment areas in Cleveland, Hall County, and Habersham County. Most of the second home development is taking place in the northern portions of the county in the Helen and Sautee-Nacoochee areas where mountain views and the National Forest or State Parks are enjoyed.

Another residential land use surveyed in the county is manufactured housing. This type of housing increased dramatically throughout the early 1990's. It was considered the most affordable type of housing for new residents. The use of this type of housing began to slow considerably towards the end of the decade and on to 2005. This has taken place in part to very low interest rates that make stick built housing more affordable, and new residents moving to the area have higher incomes and can afford stick built housing. Also, as the land values increase it has an impact on the use of the manufactured home because those who can afford the land can also afford to build a house.

Increase land values can lead to a lack of affordable housing in the county. The county may need to develop policies and measures that will provide for affordable housing opportunities.



## Commercial

Commercial development in White County continues to increase. Most of the commercial areas in the county in 1990 were in and around Cleveland. Since that time the commercial acreage has nearly doubled from 556 acres to 1,905 acres. Much of the commercial development has taken place along US 129 south where the City of Cleveland has run a sewer line to the Telford Hulsey Industrial Park. Also, a large amount of commercial development has occurred on Helen Highway (SR 75N). Much of this commercial activity not only serves the local community, but also takes advantage of the seasonal/tourist traffic traveling to the north part of the county to enjoy the mountains. A few crossroad commercial nodes have developed throughout the county where residential growth has taken place. These commercial nodes are generally convenience type businesses for goods and services.

## Industrial

Most of the industrial growth in White County has been concentrated in the Telford Hulsey Industrial Park area and along US 129 south where the infrastructure is available for such uses. Other industrial areas are concentrated around the city limits of Cleveland. Industrial land use grew in the county from 273 acres in 1991 to 415 acres in 2005. Industrial land use only makes up about 0.2% of the land in unincorporated White County.

## Public/Institutional

Much of the public/institutional land use in White County is made of schools and religious institutions. This type of land use increased by about 100 acres from 1990 to 2005. Much of this included the new school facilities located off of US 129 north and off of Duncan Bridge Road.

## Transportation/Communications/Utilities

In 2005, approximately 530 acres were categorized under this land use. The largest location of the type of use is the privately owned airport in the southern portion of the county. There are large power stations off of Duncan Bridge Road and US 129 north. This land use category also included the telecommunication towers and related facilities in the county.

## Park/Recreation/Conservation

This type of land use in the county more than doubled over the past fifteen years. This is mainly due to the creation of Smithgall Woods by the State of Georgia. This facility is more than 5,000 acres and is dedicated for conservation recreation uses only. Other State recreation facilities in the county include Unicoi State Park, Buck Shoals and the Hardman Farm. Other recreation uses include the county recreation department facility off of Asbestos Road. All these facilities make up about 5.7% of the land use in White County.

## Agriculture/Forestry

It is interesting that the amount of agricultural land in White County increase from 1990 to 2005. This is a testament that inspire of the residential growth that has occurred over the past 15 years in White County agriculture is an important and valued industry in the county. Agriculture claims approximately 20% of the land use in White County in 2005. Much of the agricultural land

is used in the production of poultry, however, there is also an increase in corn, grape vineyards, and horticultural nurseries.

Private forestland in White County has decreased by almost 50% during the past fifteen years, mostly being lost to development for either residential or commercial land uses. However, in 2005 forested areas still make up almost 15% of the land use in the county.

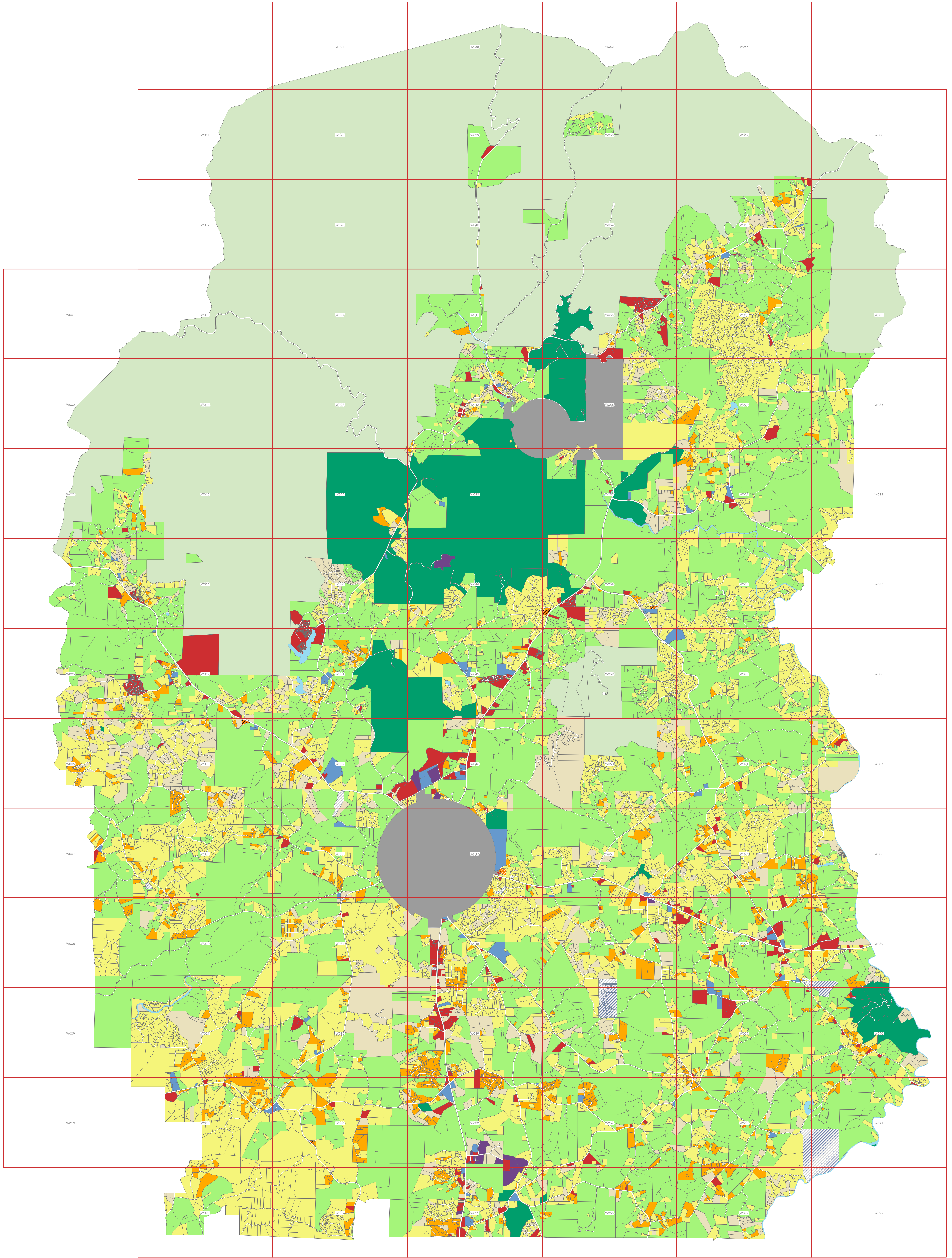
#### Undeveloped/Vacant

In 2005, there were nearly 7,500 acres of land in White County that were classified as vacant. This number is about 5% of the total land in White County. This amount cannot be considered and compared to the 1990 estimate due to the different ways in which the land use was surveyed: The 1990 land use inventory was a windshield survey and subject to strictly an observation, whereas in 2005 the land was actually classified as a vacant parcel by White County.

#### U.S. Forest Service Land

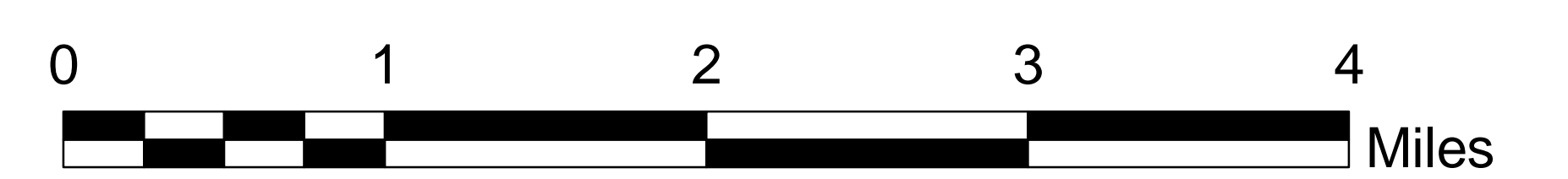
The U.S. Forest Service owns more than 43,500 acres of land in White County and is known as a portion of the Chattahoochee National Forest. This acreage is managed by the Forest Service under their Forest Management Plan. While much of the national forest activities include recreation and conservation uses, the forest is not classified as a recreation forest.

Another important issue to note is that this land, along with the State Parks, is not subject to the ad valorem taxes that other private White County landowners pay. Therefore, while White County benefits from the recreation tourism that is created by these land, such a high percentage of public land has a tremendous impact on the land owners/tax payers in White County.



Current as of 12/06/05

- |                          |             |                                      |                      |
|--------------------------|-------------|--------------------------------------|----------------------|
| <b>Existing Land Use</b> | Mobile Home | Public/Institutional                 | Agriculture/Forestry |
| <all other values>       | Water       | TCU                                  | Vacant               |
| Residential              | Commercial  | Park/Rec/Conservation                | Incorporated Areas   |
| Duplex                   | Industrial  | Park/Rec/Conservation - FS Ownership |                      |



## City of Cleveland

The table below provides a profile of land use in Cleveland for 2005, and was calculated using a Geographic Information System (GIS) at the Georgia Mountains Regional Development Center.

**TABLE 2**  
**EXISTING LAND USE, CITY OF CLEVELAND - 2005**

LAND USE	ACRES	%
<b>Residential</b>	723	34.2
<b>Agriculture/Forestry</b>	587	27.8
<b>Public/Institutional</b>	365	17.3
<b>Vacant/Undeveloped</b>	246	11.6
<b>Commercial</b>	171	8.1
<b>Multi-family</b>	54	2.6
<b>Industrial</b>	34	1.6
<b>Manufactured Housing</b>	33	1.5
<b>T/C/U</b>	5	0.2
<b>Park/Rec/Conservation</b>	4	0.2
<b>TOTAL</b>	<b>2,112</b>	<b>100</b>

### Residential

Residential land uses in the City of Cleveland are well laid out throughout the city. Residential areas have occurred through infill in areas where neighborhoods already existed and are reflected in the population growth the city has seen during the most recent census. Concentrating the residential development helps the city better manage its services to its citizens. Residential land use makes up more than 34% of the total land use in Cleveland.

The city also provides for multi-family housing opportunities. Most of these locations are in areas where wastewater is available and fit within the zoning that is allowed by the city. Some of this housing is located adjacent to Truett-McConnell College and serves as student housing. Other areas are mixed in with and buffer residential development from other land uses.

### Commercial

Commercial land uses are appropriately located within the city in downtown and along the major arterial routes, which include US 129, SR 115, and SR 75. These are areas where businesses take advantage of traffic access and where the city has located its wastewater infrastructure. Commercial land uses make up just over 8 % of the total land use in the city.

### Industrial

Industrial land uses take up 34 acres (about 1.6%) of land in Cleveland. These uses are concentrated in two areas of the city, along SR 115 west and on SR 115 east.

### Public/Institutional

There are a large percentage of public/institutional uses in the City of Cleveland because it is the county seat. The county courts and administrative facilities are located in town along with several of the Board of Education offices and several school facilities. The largest institutional facility in Cleveland is Truett-McConnell College located on the east side of town. Other facilities of this type include the cemetery and several churches located in the city.

### Transportation/Communications/Utilities

There are only about five acres of this type of land use in the city. This includes telephone facilities and the radio station WRWH.

### Park/Recreation/Conservation

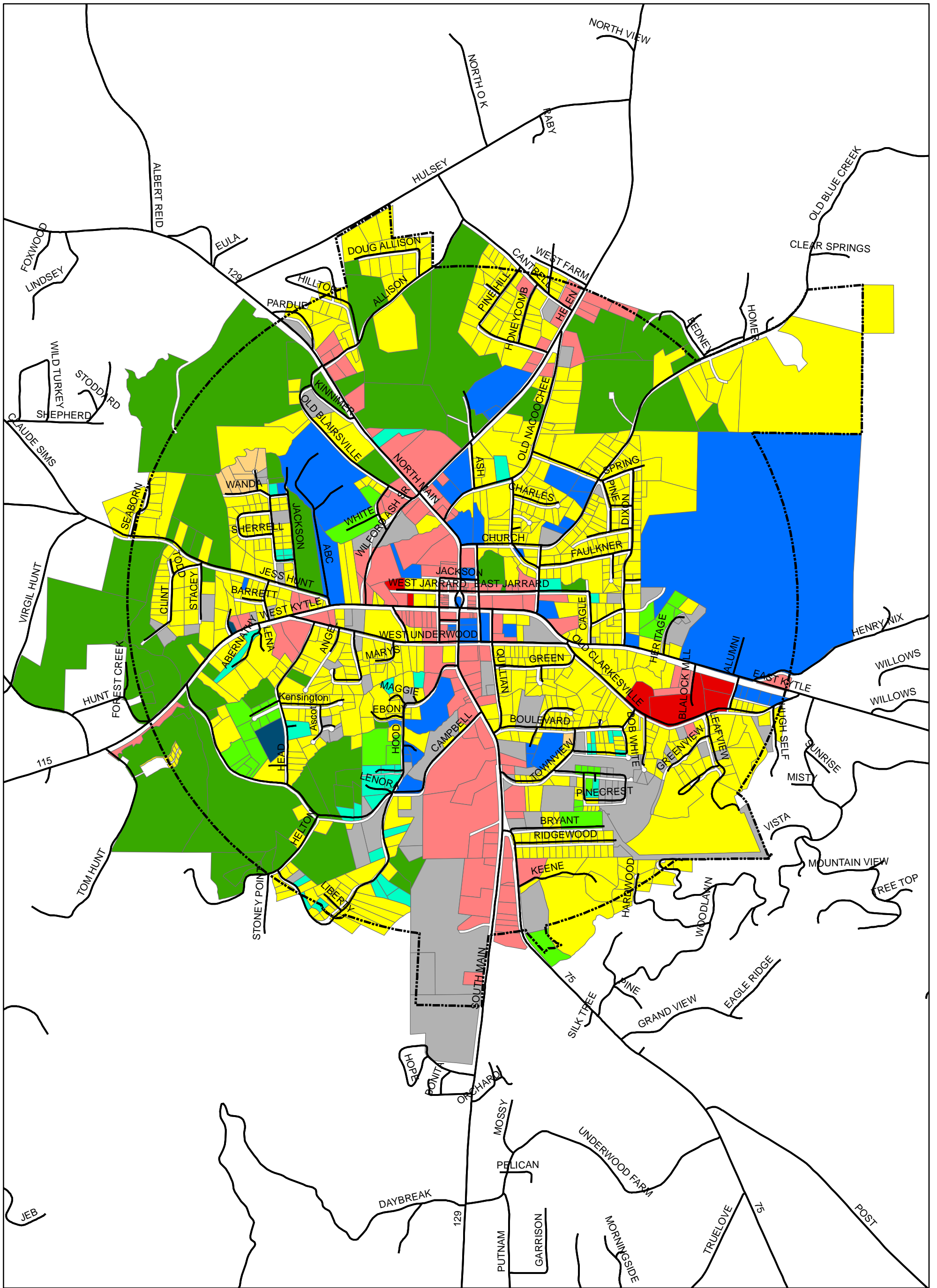
The only park in town is the Woodmen Park on Woodman Hall Road. The park has playgrounds for children, a recreation field and a walking path around the perimeter.

### Agriculture/Forestry

There are 587 acres classified as agriculture/forestry in the City of Cleveland. This makes of 27.8% of the total land use in the city. Most of this land is made up of wooded areas on the peripheries of the city limits and are adjacent to residential communities. There are very few true agricultural land uses within the city. These areas are most likely to be developed as residential communities in the future.

### Undeveloped/Vacant

Vacant land in Cleveland total 246 acres or 11.6% of the total land use. A large portion of vacant land are parcels located adjacent to existing commercial and residential areas and are most likely to be developed in accordance with the surrounding land uses and appropriate zoning. These vacant parcels are dotted through out the city.

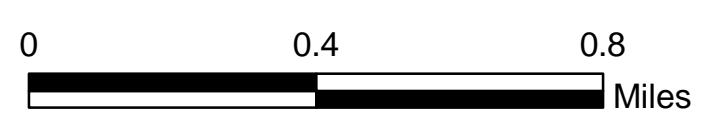


# Cleveland, Georgia

## 2005 Generalized Existing Land Use Map

8

Legend					



## City of Helen

The table below provides a profile of land use in Helen for 2005, and was calculated using a Geographic Information System (GIS) at the Georgia Mountains Regional Development Center.

**TABLE 3  
EXISTING LAND USE, CITY OF HELEN - 2005**

LAND USE	ACRES	%
<b>Park/Rec/Conservation</b>	1,172	58.7
<b>Residential</b>	458	22.9
<b>Vacant/Undeveloped</b>	167	8.4
<b>Commercial</b>	110	5.5
<b>Agriculture/Forestry</b>	44	3.7
<b>Public/Institutional</b>	26	0.1
<b>T/C/U</b>	20	0.1
<b>TOTAL</b>	<b>1,997</b>	<b>100</b>

### Residential

Residential land in the City of Helen is made up of 458 acres, which is almost 23% of the total land use in the city. The largest residential area in the city is Innsbruck, which includes a mixture of single-family homes, second homes and condominiums. Other residential areas are located on collectors' streets on the south side of the city.

### Commercial

There are 110 acres of commercial development in Helen. Most of the commercial activity in the city is tourism related and is located along the Main Street corridor and Edelweiss Strasse. However, the old outlet centers located on the south side of town are beginning to see some transition to local commercial venues. The center now includes a pharmacy, hardware store and general merchandise store. As the population in the northern part of White County continues to increase the demand for businesses catering to the local should increase in the city.

### Industrial

There are no industrial land uses within the City of Helen.

### Public/Institutional

Most of the institutional land uses within the city are related to the city government. This land use category is made up of 26 acres from uses that ranges from city hall to the fire station and library, and to the parking and bathroom facilities for tourists. Other institutional uses in Helen include the churches.

### Transportation/Communications/Utilities

This land use includes the wastewater treatment facilities on the south end of town.

### Park/Recreation/Conservation

The amount of acreage for parks, recreation and conservation in the city is mainly made up of land that belongs to the State of Georgia. Both Unicoi State Park and Smithgall Woods are located within the Helen city limits. Both facilities can be accessed by foot trails or bicycle paths into the city. The other large recreation area within the city is the golf course located within Innsbruck. These land total 1,172 acres or 58.7% of the land use in the city.

### Agriculture/Forestry

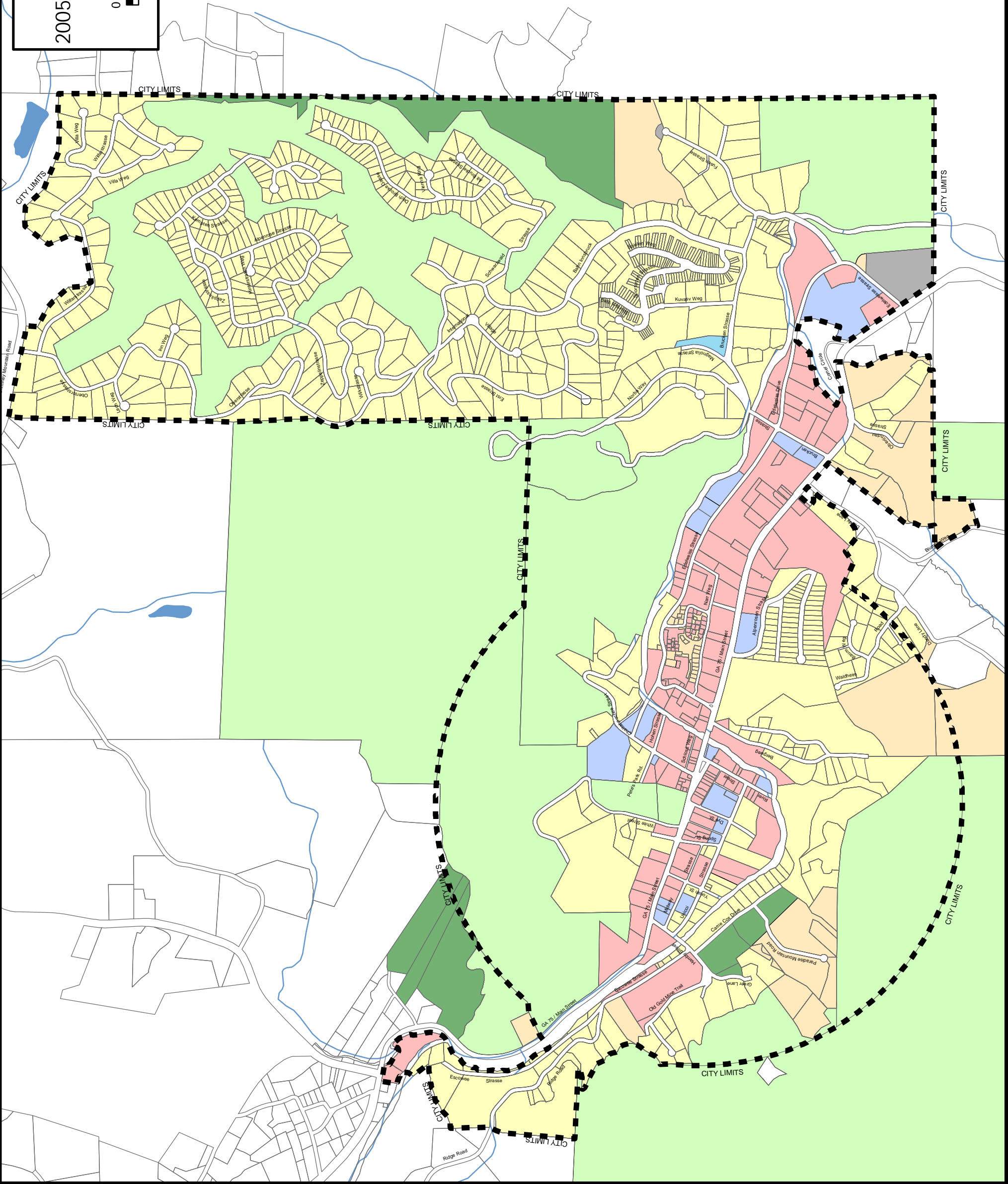
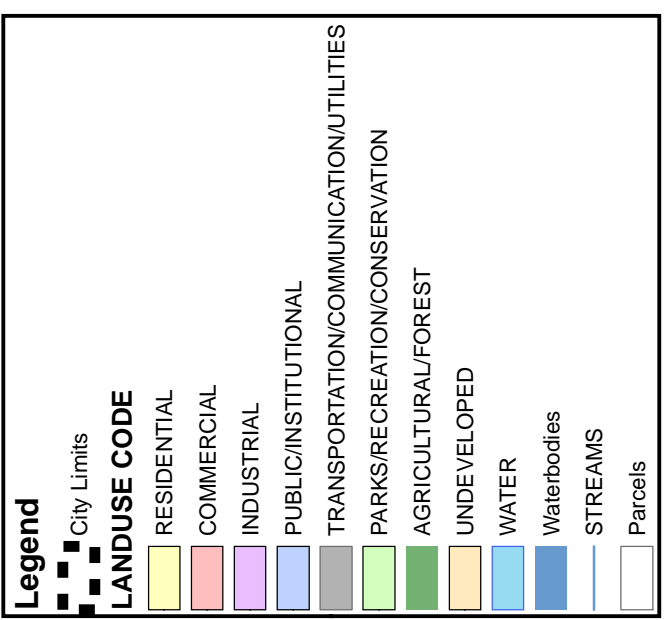
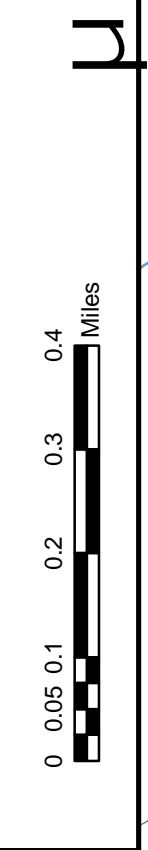
The only area that could be considered agriculture in Helen is property along Carrie Cox Drive where some of the horse carriage businesses keep their horses. The majority of land in this category is made of forested land located in Innsbruck.

### Undeveloped/Vacant

There are some fairly large undeveloped areas in Helen that total to 167 acres. These land are located on the south and west part of town on the edges of the city limits.



# CITY OF HELEN, GEORGIA 2005 GENERALIZED EXISTING LAND USE MAP



## **Land Use Assessment**

### General

- Vast amounts of White County are undeveloped, forested lands under the management of the United States Forest Service.
- The county consists of scattered rural residential and agricultural land uses.
- The largest concentrations of residential and other development occur in and surrounding the Cities of Cleveland and Helen, and also along the corridors of 129 and 75.
- Topography and steep slopes are major factors in the placement of developments throughout the County. In the northern half of White County especially, topography forces all land uses to co-exist in narrow mountain valleys.
- Careful planning of mountain valleys for a variety and mixture of land uses is the most significant challenge.
- "Second" homes are expected to continue developing around streams, lakes, ridgetops with scenic views and in/around The City of Helen.

### Land Use Patterns and Densities Related to Infrastructure

The Cities of Cleveland and Helen are the areas in White County with the highest density of land uses. These cities serve as the economic and social center of activity in the county. Cleveland also serves as the county seat. The White County Water Authority provides water services along much of the 129 corridor and has allowed significant residential and commercial growth along this transportation route. Partly as a result of the water service, Route 129 south of Cleveland is now nearing its maximum capacity.

### Environmentally Sensitive Lands or Resources

These areas include the National Forest lands, State Parks, and the area around trout streams. Also, areas that require mountain protection, protected river corridors, water supply watershed protection, and wetlands. More than 11% of the private land in the county is associated with steep slopes (25% or more). White County has regulations that address water supply watershed, groundwater recharge areas, wetland, steep slopes and mountains, stream buffers and the Chattahoochee River corridor (*See Natural Resources chapter*).

### Problems with Existing Development Patterns

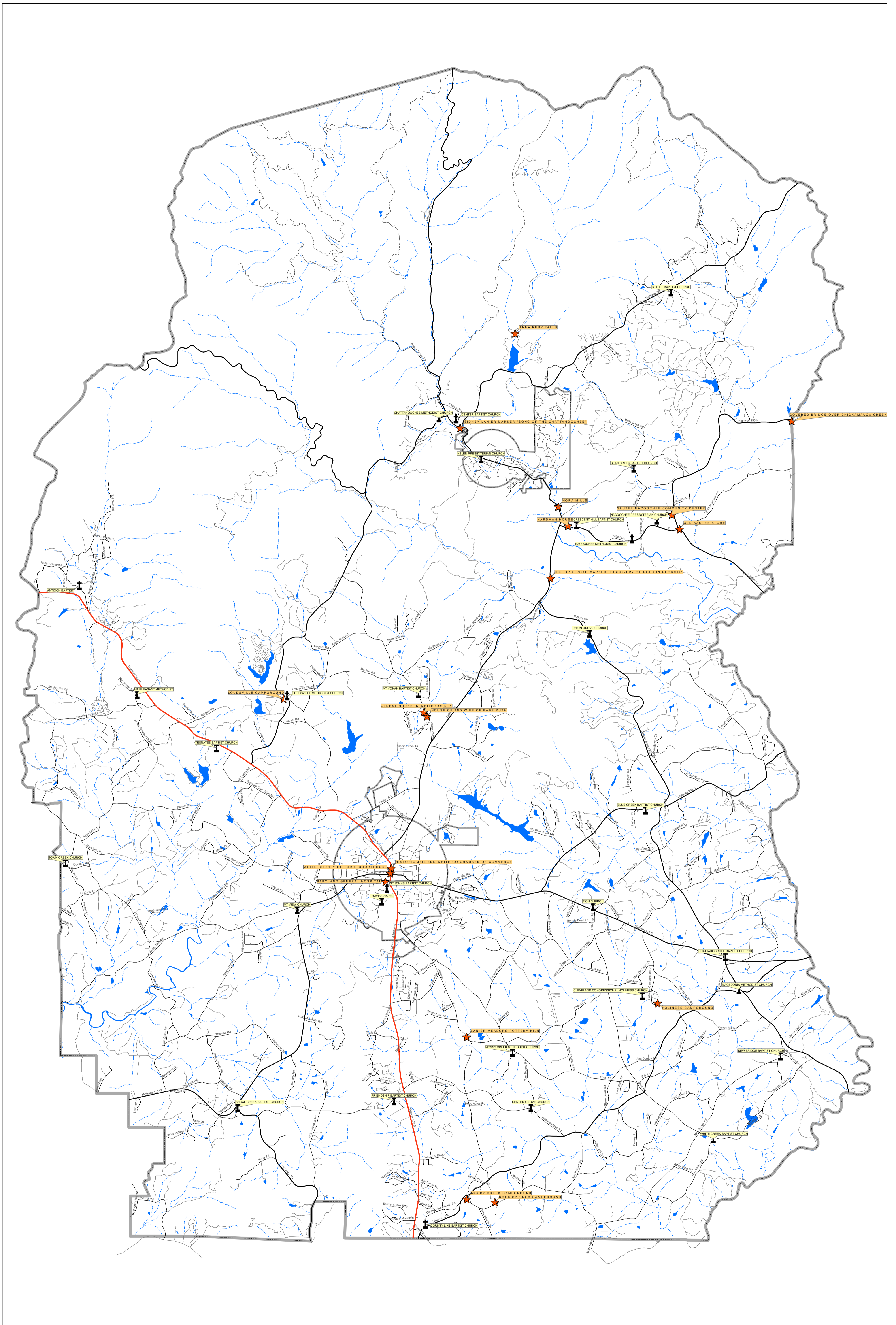
The main problem with existing development patterns is there is no land use management for growth in the unincorporated portion of White County. This lack of guidance has resulted in several growth problems and land use conflicts. The commercial growth that has occurred resembles unmanaged strip commercial development that follows the arterial corridors that cross the County, some of which are considered unattractive and create dangerous traffic conditions.

## Analysis of Areas Requiring Special Attention

This section provides a brief assessment of select issues and concerns for all three communities. This will help each jurisdiction recognize those specific locations in need of special attention through physical investment or change of policy. Maps are included to help reference each area.

### **Areas of significant natural or cultural resources, particularly where these are likely to be intruded upon or otherwise impacted by development**

- There are no specific historic or environmentally sensitive sites being adversely impacted by development. Those sites in need of protection are already being addressed.
- New developments constructed primarily for seasonal or vacation homes have focused on areas with scenic qualities. In many cases, these areas also coincide with sensitive environmental areas such as steep slopes.
- There is a desire to protect prime agricultural areas but a need to define those areas prior to establishing any protective measures above subdivision regulations and management of utility service areas.

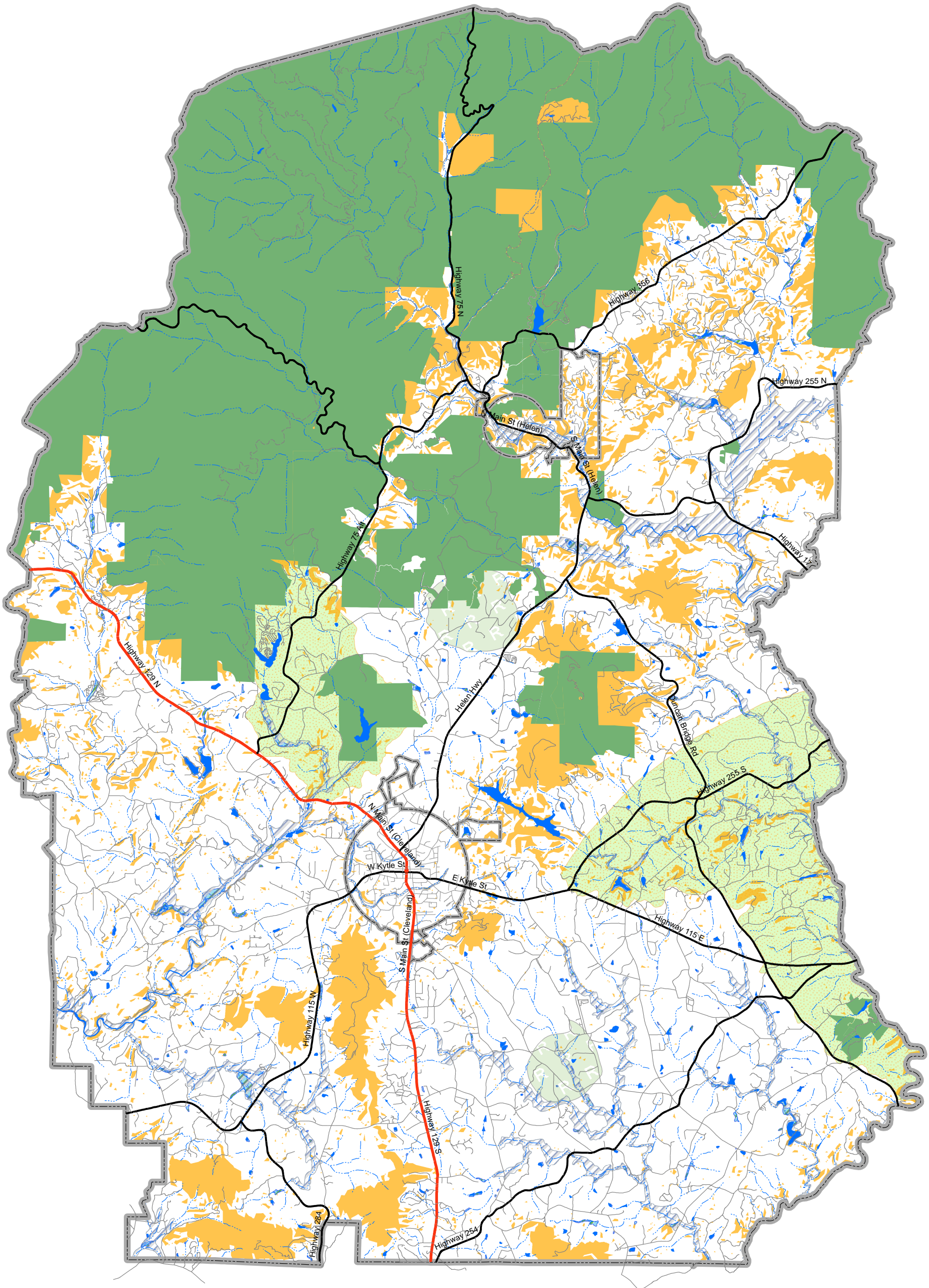


# White County Culturally Sensitive Areas

Legend	
	Historic Churches
	Historic Sites
	City Limits
	County Boundary
	Lakes
	Streams
	US Hwy
	State Hwy
	County Roads
	City Roads
	Private Roads
	Forest Service

Prepared by White County Mapping  
October 16, 2007

Information depicted herein is for reference purposes only and is compiled from best available sources. White County makes no warranty, expressed or implied, concerning its accuracy or completeness and users are advised that their use of County data is at their own risk.



Data Sources: Wetlands: US FWS- National Wetlands Inventory; Water Supply Watershed: GA DNR/EPD- Water Supply Watershed Maps; Flood Hazard Areas: FEMA- 2002 FIRM; Groundwater Recharge Areas: GA DNR/EPD- Digital Environmental Atlas of Georgia; Mountain and Hillside Protection Areas: White County Mapping Dept.

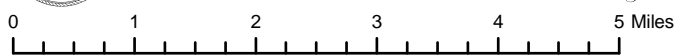
# White County Environmentally Sensitive Areas

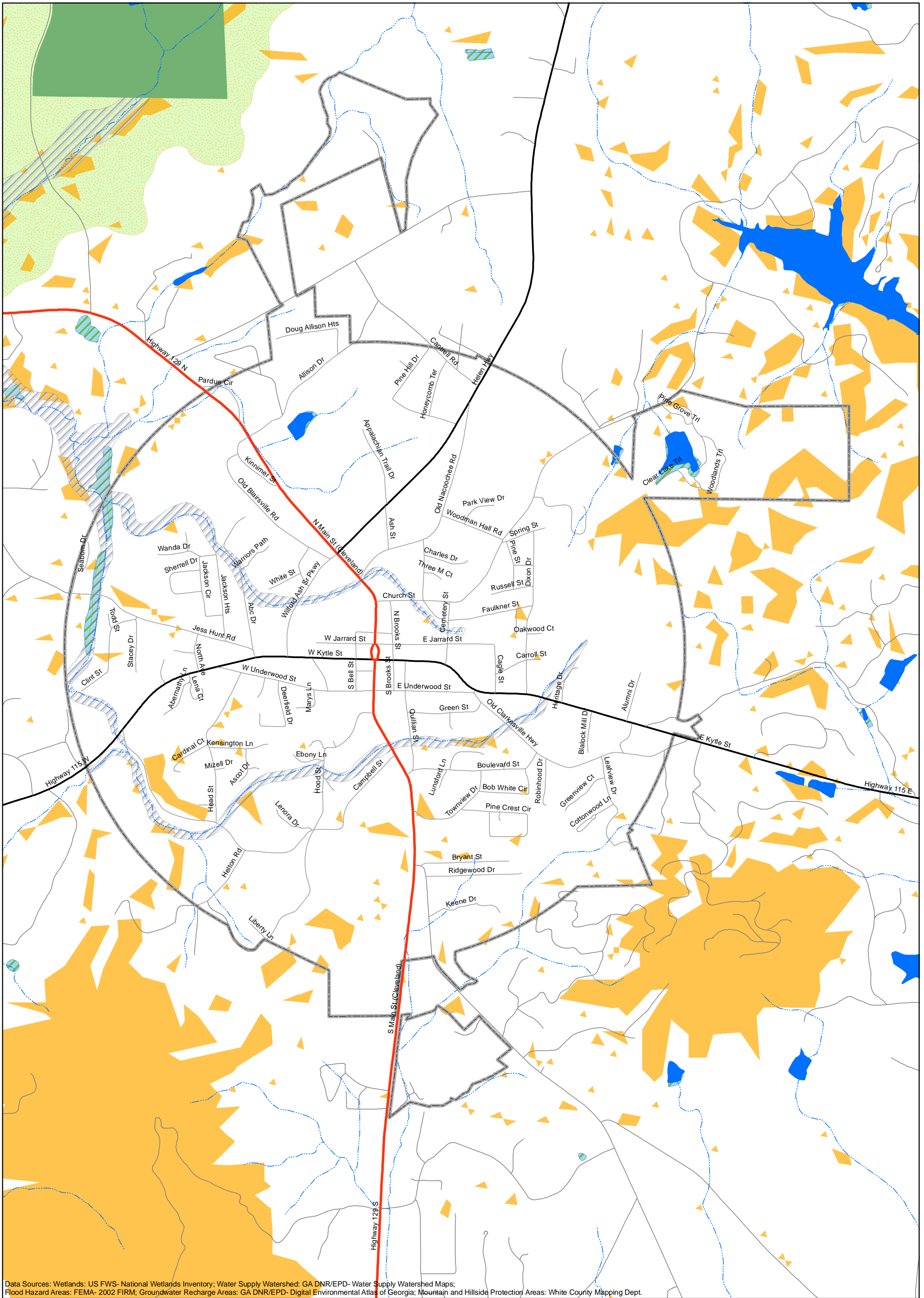
Legend			
	Wetlands		Streams
	Water Supply Watersheds		Lakes
	Flood Hazard Areas		City Limits
	Groundwater Recharge Areas		County Boundary
	Mountain and Hillside Protection Areas		US Hwy
	Public Lands		State Hwy
			County Roads
			City Roads
			Private Roads
			Forest Service

Prepared by White County Mapping  
October 16, 2007



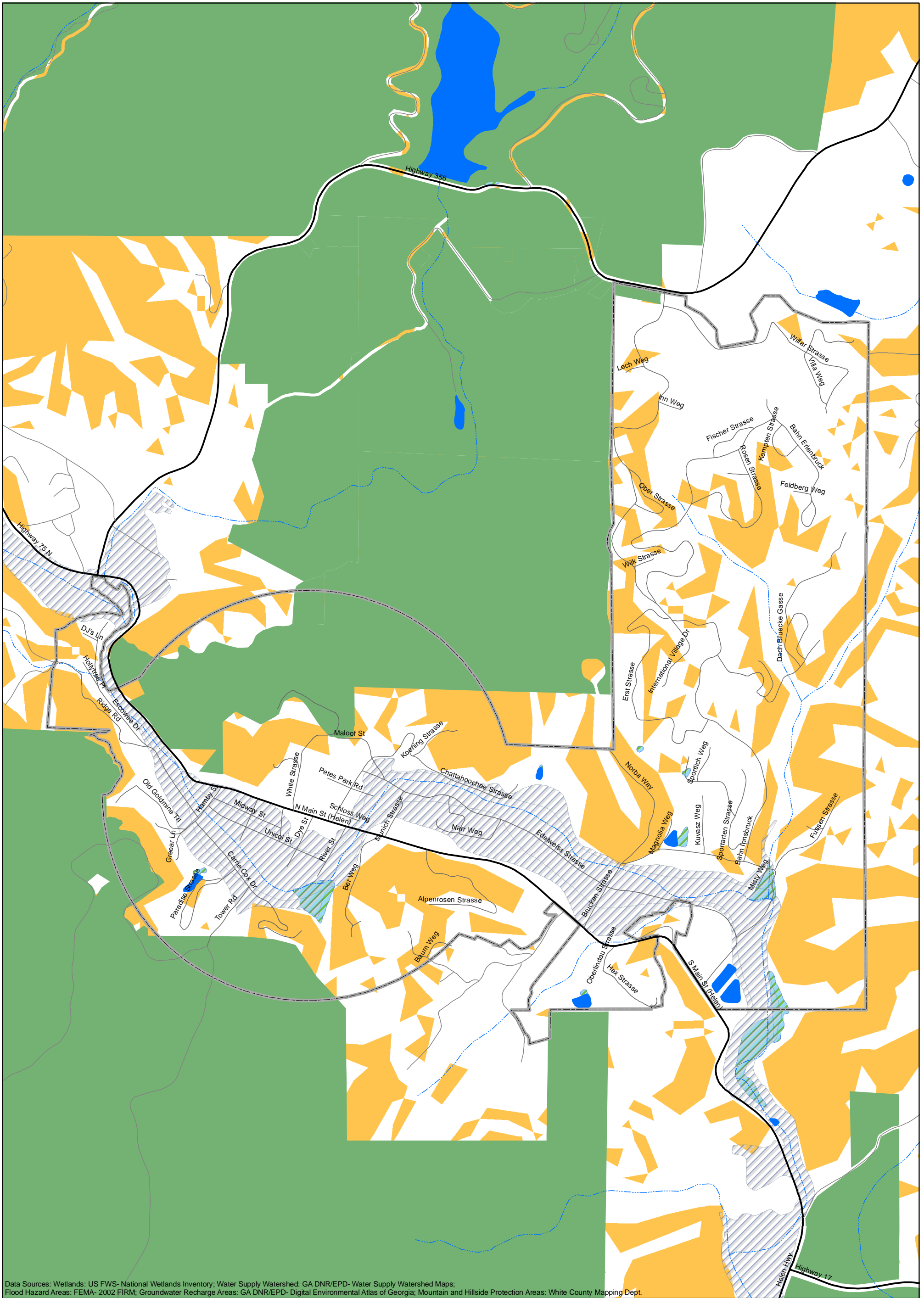
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<h2 style="margin: 0;">City of Cleveland Environmentally Sensitive Areas</h2>	<b>Legend</b> Wetlands Water Supply Watersheds Flood Hazard Areas Groundwater Recharge Areas Mountain and Hillside Protection Areas Public Lands	Streams Lakes City Limits County Boundary US Hwy	State Hwy County Roads City Roads Private Roads Forest Service	<p>Prepared by White County Mapping October 16, 2007</p> <p>Information depicted herein is for reference purposes only and is compiled from best available sources. White County makes no warranty, expressed or implied, concerning its accuracy or completeness and users are advised that their use of County data is at their own risk.</p>
				<p>0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 Miles</p>



Data Sources: Wetlands: US FWS- National Wetlands Inventory; Water Supply Watershed: GA DNR/EPD- Water Supply Watershed Maps; Flood Hazard Areas: FEMA- 2002 FIRM; Groundwater Recharge Areas: GA DNR/EPD- Digital Environmental Atlas of Georgia; Mountain and Hillside Protection Areas: White County Mapping Dept.

<h2 style="text-align: center;">City of Helen Environmentally Sensitive Areas</h2>	<b>Legend</b>	
	<ul style="list-style-type: none"> <li> Wetlands</li> <li> Water Supply Watersheds</li> <li> Flood Hazard Areas</li> <li> Groundwater Recharge Areas</li> <li> Mountain and Hillside Protection Areas</li> <li> Public Lands</li> </ul>	<ul style="list-style-type: none"> <li> Streams</li> <li> Lakes</li> <li> City Limits</li> <li> County Boundary</li> <li> US Hwy</li> </ul>
		<p>Prepared by White County Mapping October 16, 2007</p> <p>Information depicted herein is for reference purposes only and is compiled from best available sources. White County makes no warranty, expressed or implied, concerning its accuracy or completeness and users are advised that their use of County data is at their own risk.</p>

### **Areas where rapid development or change of land uses is likely to occur**

- Most rapid development is occurring in areas with/near full utilities. Some residential growth is occurring in rural White County, but is not concentrated in any particular area.

### **Areas where the pace of development has and/or may outpace the availability of community facilities and services, including transportation**

- Much of the development in White County is scattered in a "leap frog" style throughout the County, which leads to many incompatible land uses. This type of development is contributed to the lack of land use planning at the county level as well as coordination of infrastructure improvements made by local utilities and other agencies.

### **Areas in need of redevelopment and/or significant improvements to aesthetics or attractiveness (including strip commercial corridors)**

- The 129 corridor leading north into Cleveland harbors the concentration of commercial strip centers. The City is considering design guidelines for new and infill development, but additional measures for the entire corridor could be considered.

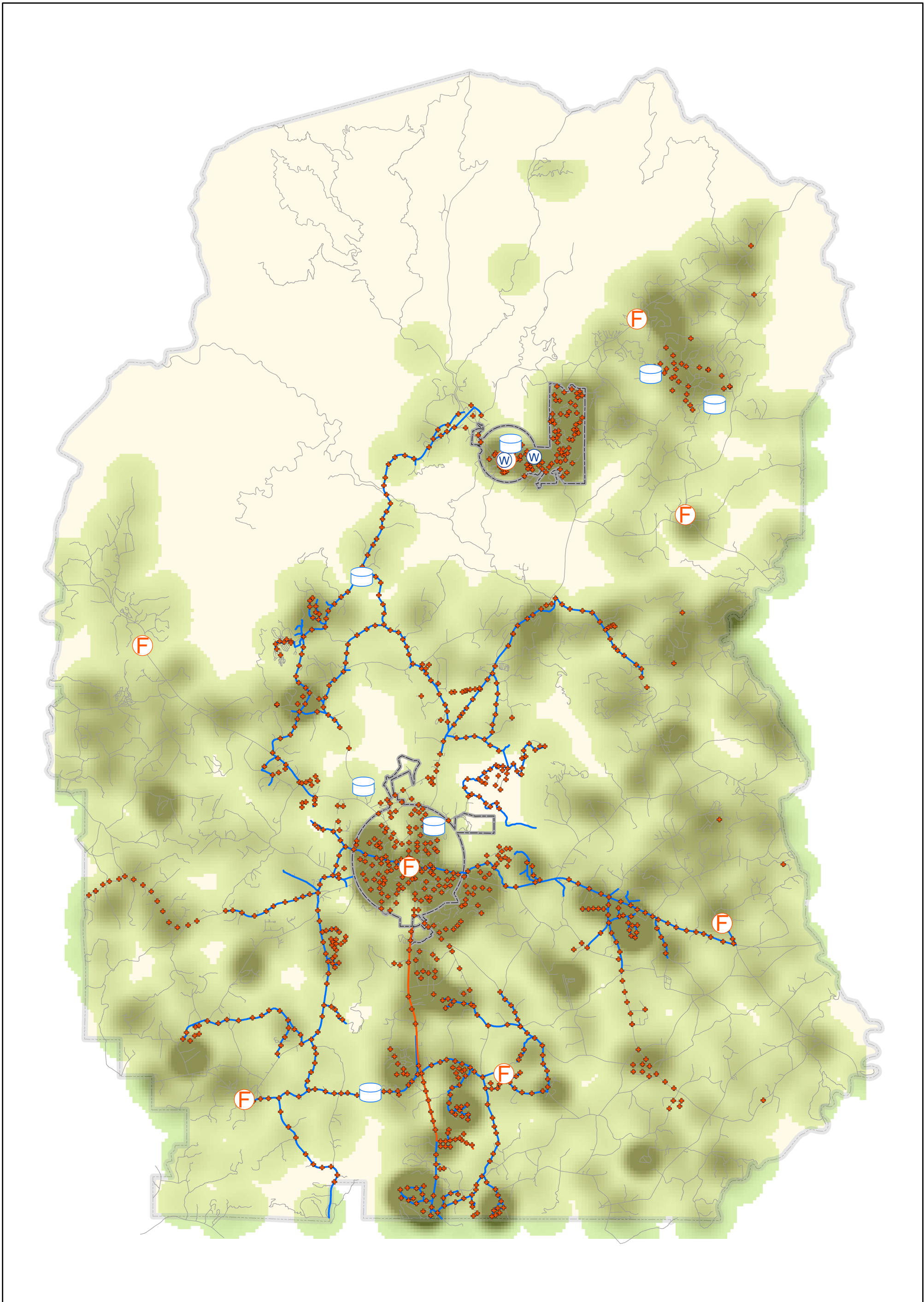
### **Large abandoned structures or sites, including those that may be environmentally contaminated**

- There are a number of older commercial/butler buildings along some of the state routes that have become dilapidated. Some of the older commercial facilities in Helen are in need of replacement or renovation. Many of these buildings were constricted years ago with little regard to building and safety codes. The only significant property of any size, however, is the Talon Building within Cleveland. Once used to make zippers, this building is being proposed for renovation for office use.

### **Areas with significant infill development opportunities (scattered vacant sites)**

- Apart from the vacant properties discussed above there are no specific sites targeted for infill.





### White County Areas of Growth v.s. Existing Infrastructure



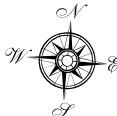
**Legend**

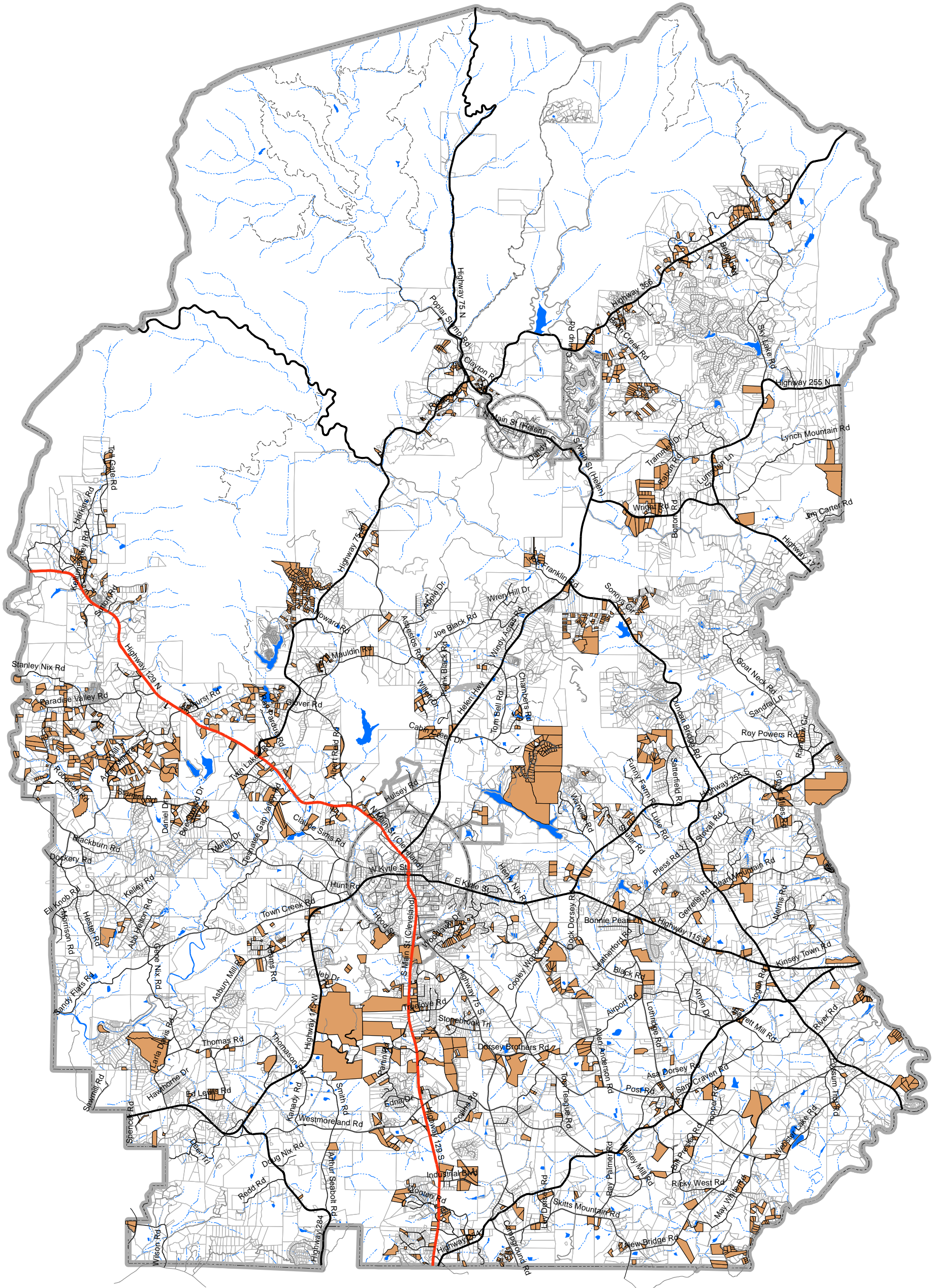
Building Permit Densities 2000-2006

- High
- Low
- F Fire Stations
- W Well Sites
- Water Mains
- Sewer Lines
- + Hydrants
- C Water Tanks
- Roads
- City Limits
- County Boundary

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October 16, 2007

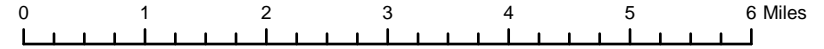
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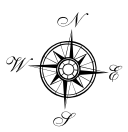
# White County Infill Opportunities

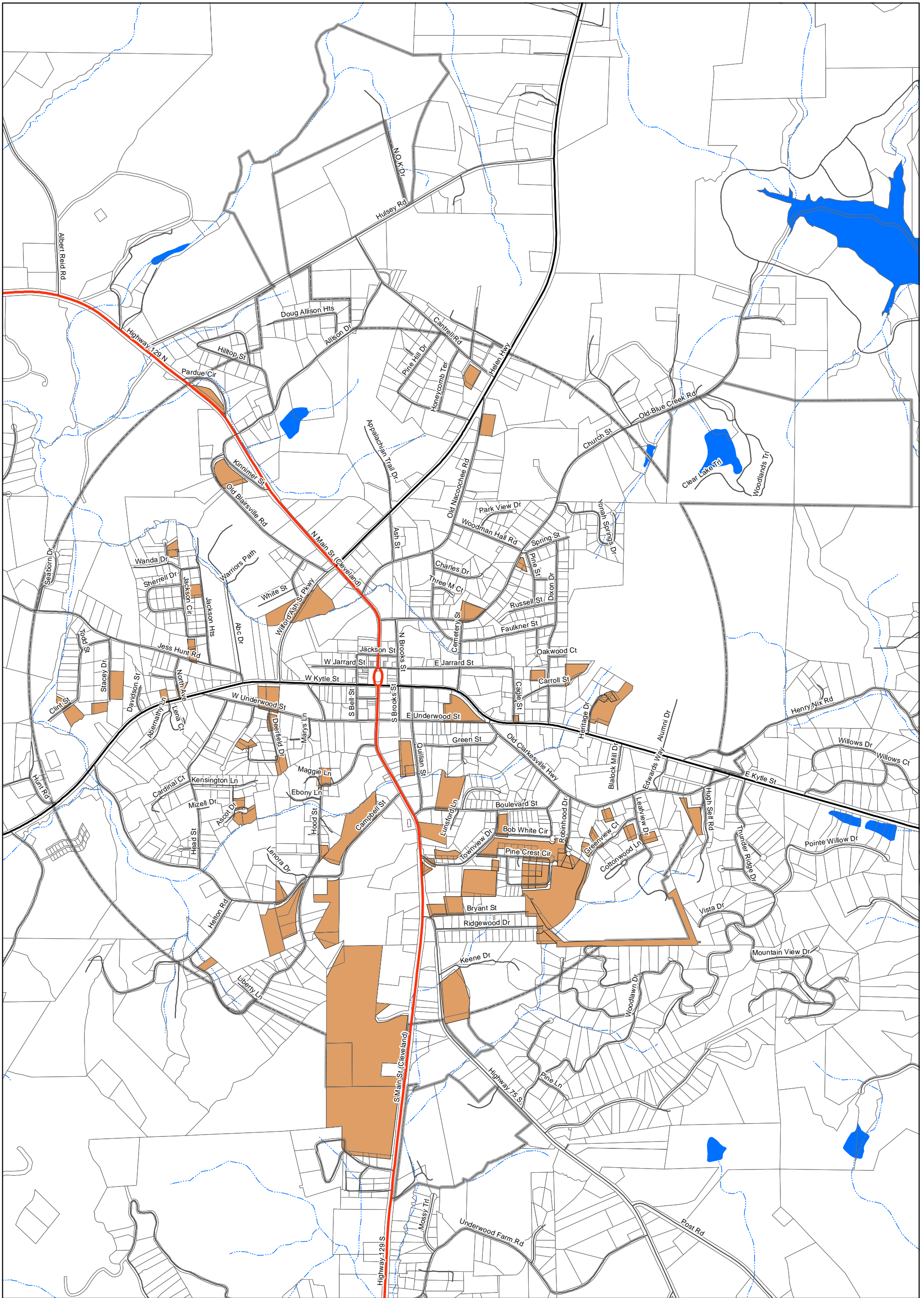
Legend			
	Infill Opportunities		Streams
	Parcels		Lakes
	City Limits		US Hwy
	County Boundary		State Hwy
			County Roads
			City Roads
			Private Roads
			Forest Service



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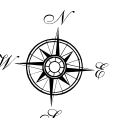
# City of Cleveland Infill Opportunities

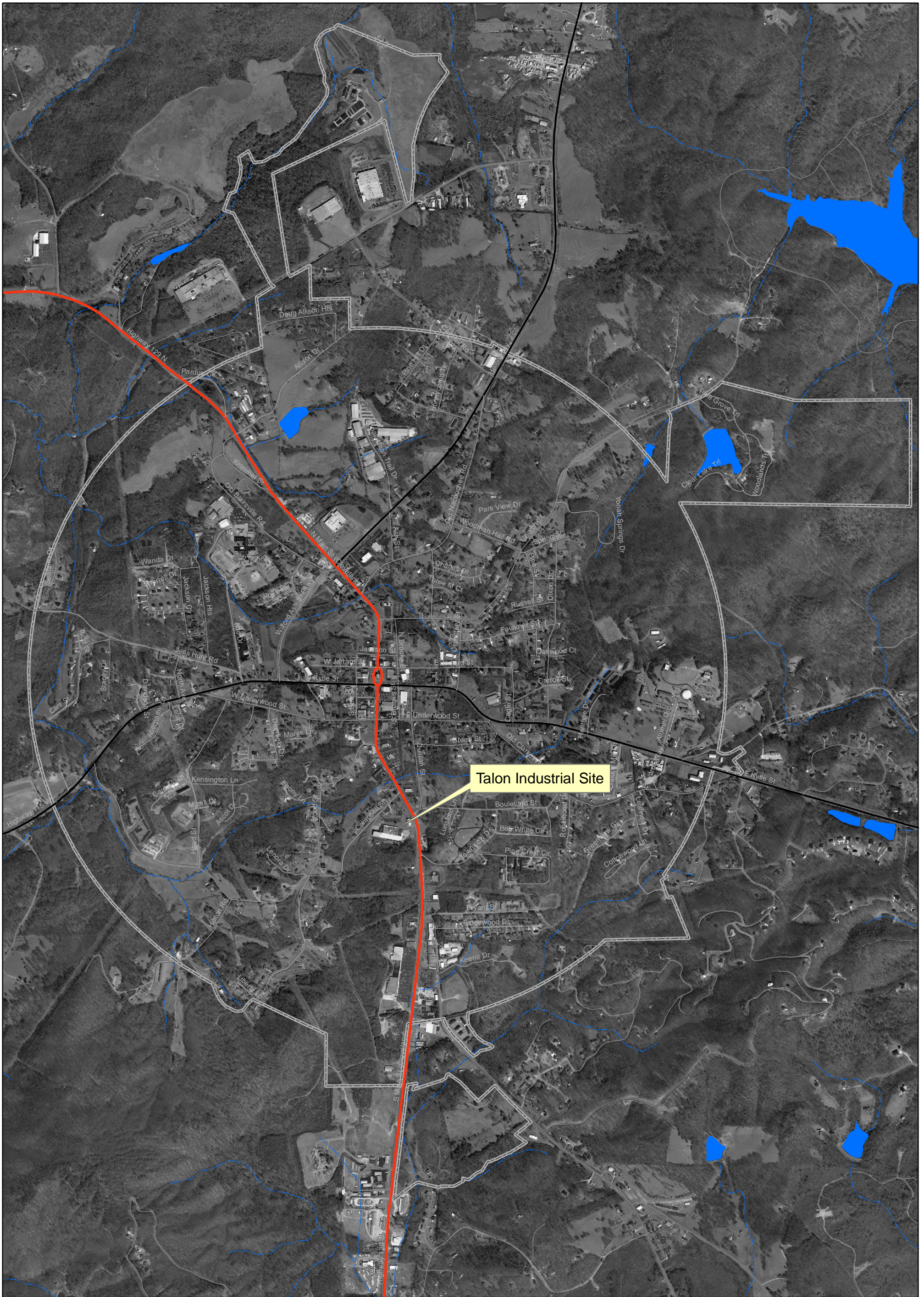
Legend			
	Infill Opportunities		Streams
	Parcels		Lakes
	City Limits		US Hwy
	County Boundary		State Hwy
			County Roads
			City Roads
			Private Roads
			Forest Service



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Talon Industrial Site

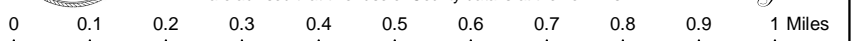
# City of Cleveland Greyfield/Brownfield Redevelopment

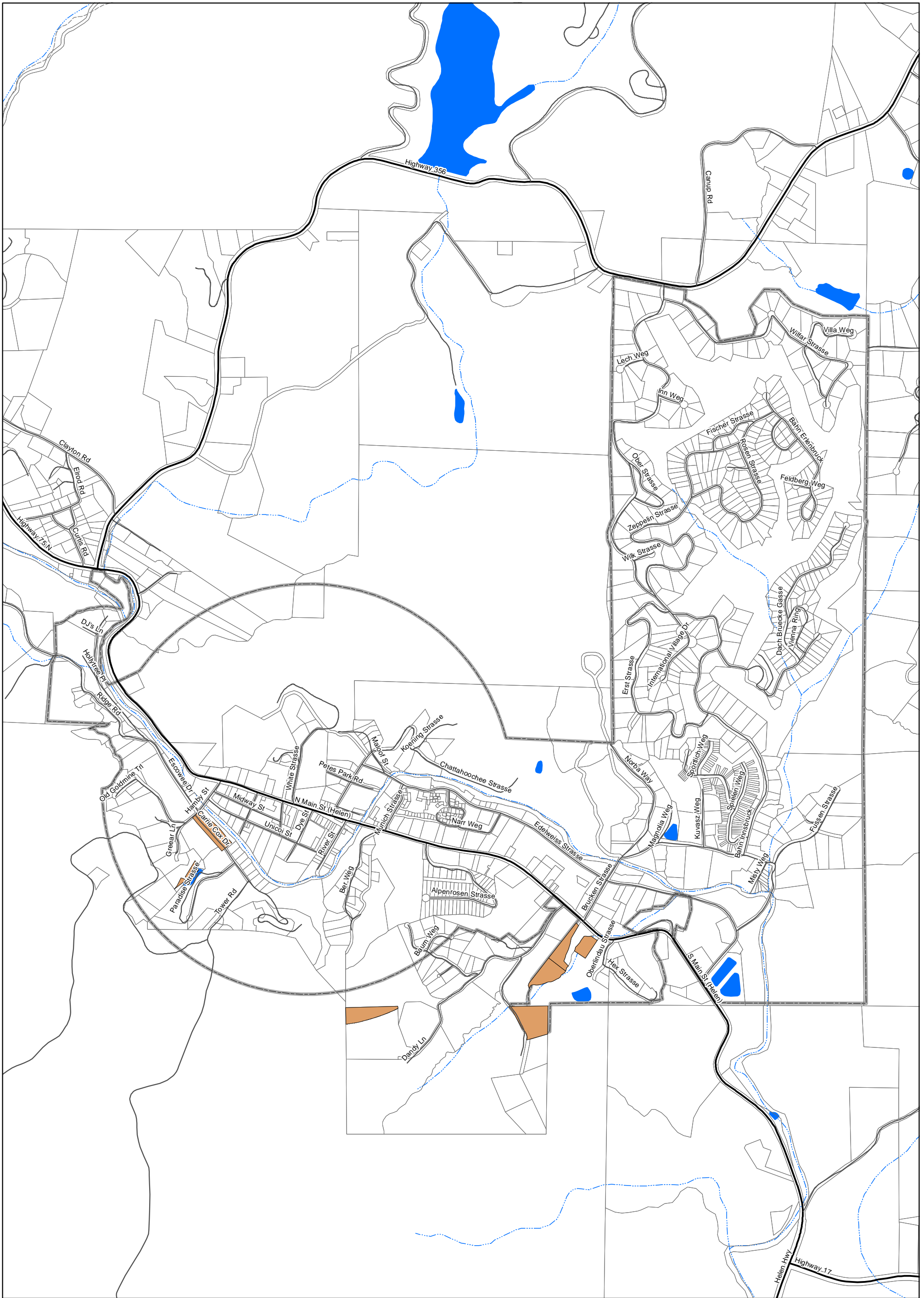
Legend			
	City Limits		Streams
	County Boundary		Lakes
	US Hwy		County Roads
	State Hwy		City Roads
			Private Roads
			Forest Service



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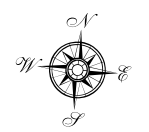
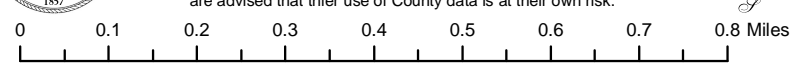
# City of Helen Infill Opportunities

Legend			
	Infill Opportunities		Streams
	Parcels		Lakes
	City Limits		US Hwy
	County Boundary		State Hwy
			County Roads
			City Roads
			Private Roads
			Forest Service



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**Areas of significant disinvestments, levels of poverty, and/or unemployment substantially higher than average levels for the community as a whole.**

- Areas within the county that may be considered blighted are some of the trailer parks that are located in and around the City of Cleveland and scattered throughout the County. While these areas need improvement, the quality of these housing units has not declined significantly in the past years.

**CHARACTER AREAS**

For location of such character areas and land uses please see that attached future land use maps for White County, the City of Cleveland and City of Helen. In addition, these character areas are also reference in the attached illustrations from the White County Resource Team Report.

**Second Home Residential** – These are areas where the majority of second home development has taken place throughout the county. These area include larger lots because they are associated with mountain and hillside protection. The usually have views and the lots with steeper slopes and with more sensitive soils. The mountain protection standard protect the environment and particularly the view shed, which is important to the local community and the tourism based economy in White County and both cities. Some future residential development should occur conservation subdivisions, where the carrying capacity of the land will allow such developments.

**Single Family Residential** – These are areas in the county and in each cities where local residents live full time. Many of these areas were second home developments in the past and have either converted or will be converting to full time residences. These are should allow moderate densities due to the fact that they are located along corridors where there is supporting infrastructure and road network. Many future developments in these areas should encourage traditional neighbor style subdivisions and master planned communities. Both cities have the ability to encourage this type of development through the update of their zoning and subdivision codes and their wastewater infrastructure.

**Single Family Low Density** – These are areas in the county that are very low density. These areas will continue to have large amounts of open space and green belts in its view shed. This area should truly focus on the use of conservation subdivisions. The slopes and soils are such that they can support the clustering of lots and other mixed uses while preserving the best locations for view shed green space and common areas.

**Agricultural and Low Density** – Agriculture will continue to thrive in significant portions of White County. The promotion of the county’s agricultural program and its products is an important way to keep the agricultural value in these areas and prevent them from converting to other types of land uses. Traditional row crops, livestock, poultry and development of new agricultural and horticultural produce, such as grape and nursery plants, add value to the profession the land and to the local economy. Land conservation easement should be encouraged in these areas in order to help the farmer keep their costs (and taxes) at a minimum. If necessary a farmland protection program could be developed to look for additional ways to preserve and enhance agricultural uses in the community. Residential land uses in these area should mostly be related to farm management uses and intra-family land transfers to keep families together. The agricultural areas in the county are

some of the most historical as well. It is important to recognize these lands and corridors and provide protections and incentives in order to preserve these historic areas.

**Agriculture/Forestry** – These are areas in the county that are gateways into the mountains and historic communities. It is important that these be maintained as much as possible because they are part of what draws millions of visitors to the area. Development should be kept at a minimum and if it takes place should appear in a manner that does not compromise the gateway view shed and minimizes the impact on the existing uses.

**Community Commercial** - These are mainly where crossroads exist and nodes of mixed activity are most likely to develop. Uses should be kept to moderate densities with of mix of smaller retail businesses and services that are of a convenience nature to the local areas. Architecture, site design and signage should blend with the unique nature of each community node. This can be accomplished through the plan review process for all commercial sites in White County.

**Tourism Commercial** – White County and its cities play hosts to millions of visitors each year. It is anticipated this the tourism industry in the area will more than double the current number of visitors over the next ten years. These particular areas are mainly focused within the City of Helen and in the northern parts of the county (Robertstown, Sautee-Nacoochee, and Chimney Mountain. They include corridors such S.R. 17 east from Helen to the county line, S.R. 255 from Sautee Junction into Habersham County, S.R. 75 north from Helen to Unicoi Gap, and S.R. 356 from Robertstown and Unicoi State Park north to the county line. These corridors include exquisite views and historic areas. Signage and site setbacks and buffer are most important and should be emphasized in the site location and design of future tourism venues and related facilities. As these corridors and centers develop, they should take place with pedestrian and alternative transportation modes in mind. Many of these alternative modes are identified in the Regional Bicycle and Pedestrian Plan and will be programmed in the State Department of Transportation Improvement Plan as state transportation facilities are improved.

**Commercial Corridor** – The City of Cleveland is the economic and social center of White County. It is projected that this will continue over the time frame of this plan. The four highway corridors leading into the city from unincorporated White County are projected to be commercial corridors, with U.S. 129 being the primary commercial corridor. It is important that future development stay within these corridors and highway nodes. New development will set back appropriately through local and state requirements which may include buffers, access roads, inter-parcel connecting roads, shared driveways, all reducing curbs and maintaining safe traffic flow on the state facilities. The gentrification of abandoned or older dilapidated commercial centers should be encouraged rather than new on spring up. The city will focus uses through their zoning and provision of community services. Signage should be appropriately modest, low and minimally lighted, and properly set back.

**Industrial** – These uses will be kept to the Telford Hulsey Industrial Park and to those areas zoned in the City of Cleveland for industrial use. These areas are where the existing infrastructure is available. It is doubtful and undesirable that such infrastructure would be extended to any other location in the county. The future focus of industrial development in White County is to encourage small light industries that need anywhere from 1,000 to 5,000 square feet of space and employ 3 to 20 employees. The idea behind this concept is to allow small business entrepreneurs to develop and grow in the county and become not just an industry, but part of the community.

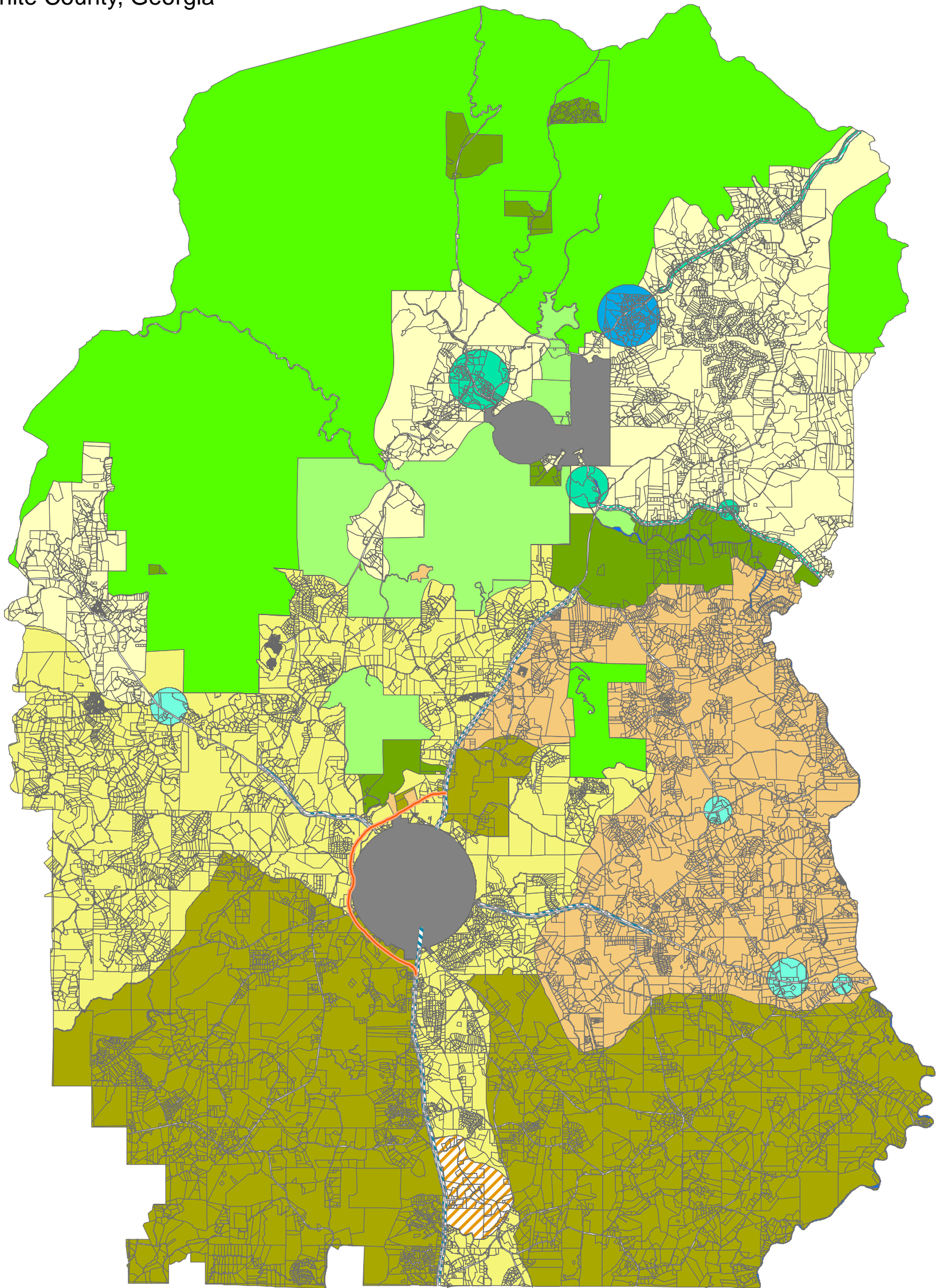
**Historic Downtown District** – This is more than just a business district, but an area that will promote community activity. The City of Cleveland and the Cleveland Better Home Town Program focuses on the management of downtown. Revitalization activities, community promotions and events, and maintaining the historic character and sense of place are being emphasized in downtown Cleveland. In addition to the Better Home Town Program, the city is developing historic design guidelines for downtown structures and businesses and is seeking a pedestrian oriented streetscape plan from the Georgia Department of Transportation.

**Scenic Heritage Corridors** – These areas include S.R. 17, S.S. 254, S.R. 255, S.R. 356, and S.R. 384 from its intersection of S.R. 255 to S.R. 75. These areas either include extremely beautiful view sheds or very important historic community, often both. Each corridor have their defining features and development should be modified to be appropriate to their context and maintain their character. Not only is this important for community appearance and vitality, but also for traffic flow and appropriate land uses.

**Helen/Chattahoochee Riverfront** – This area/corridor would begin in the Chattahoochee River in Robertstowns, traverse through the City of Helen and end below Nacoochee Village at the Hardman Farm. Part of this concept is proposed in the White County Resource Team Report as well as in the Regional Bicycle and Pedestrian Plan. However, a local and visitor pedestrian amenities plan should be developed to provide guidance and oversight in order to the community to capitalize on the river as a quality of life amenity. The plan should include appropriate bicycle and pedestrian facilities that parallel the river and flow around existing structures and properties. There should be linkages to the riverfront from community facilities and visitor venues. The plan should include buffers that are required for environmental protection.



# Generalized Future Land Use White County, Georgia



## Legend

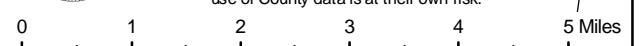
### Land Use Classification

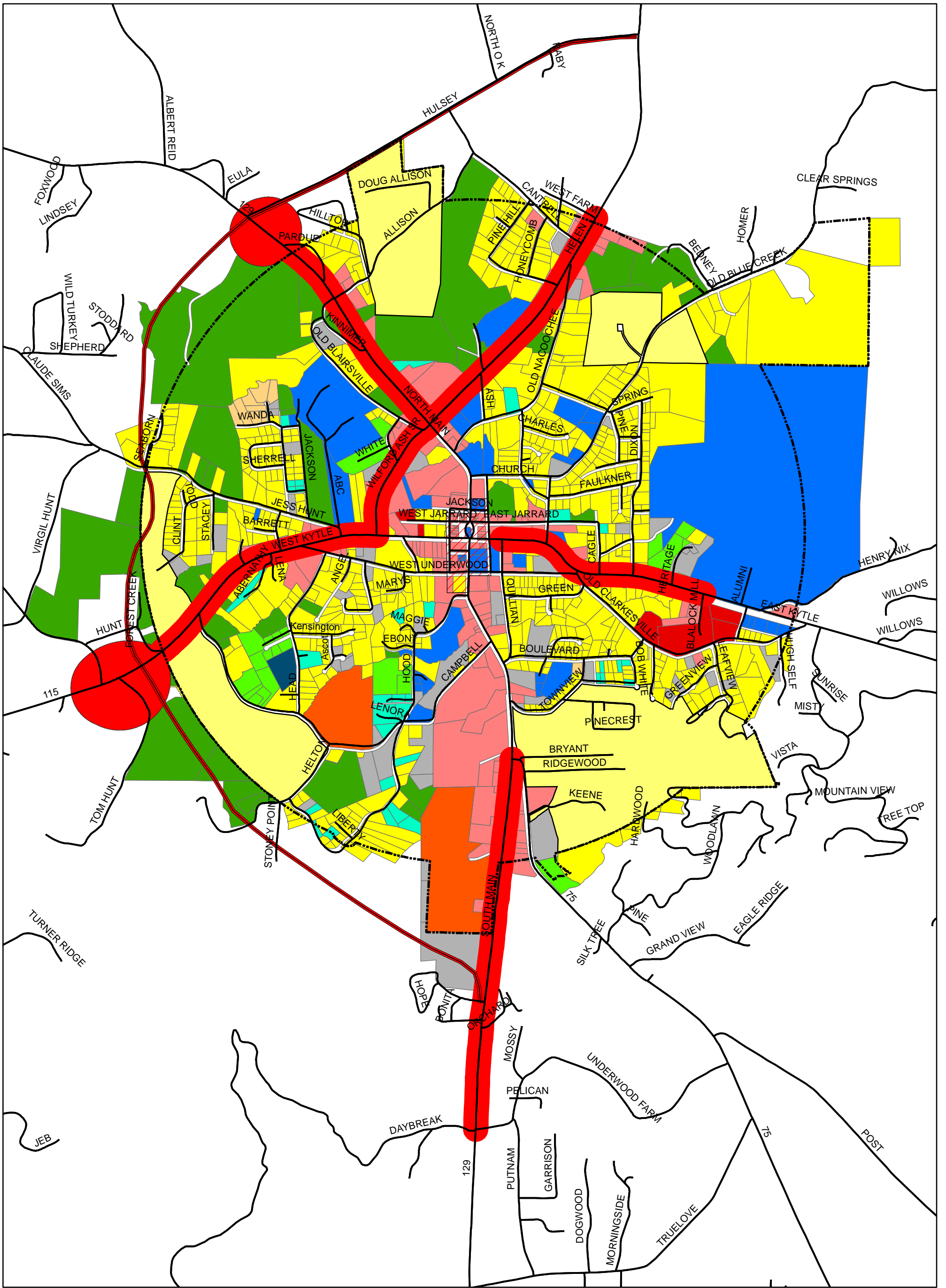
- |                                       |                                     |   |
|---------------------------------------|-------------------------------------|---|
| 1 Second Home Residential             | 12 Tourism Commercial               | 6.B Park/Recreation/Conservation- FS Management |
| 2 Single Family Residential           | 13 Community and Tourism Commercial | 16 Scenic Corridor                              |
| 3 Single Family Low Density           | 17 Commercial Corridor              | 18 Incorporated Areas                           |
| 4 Agriculture and Low Density Housing | 5 Industry                          | 19 Water  |
| 11 Community Commercial               | 7 Agriculture/Forestry              | Cleveland By-Pass (Approximate Location)        |
| 6 Park/Recreation/Conservation        |                                     |   |

Produced by White County Mapping  
May 02, 2007



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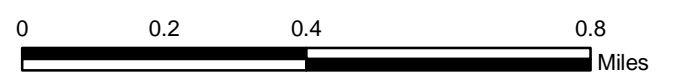




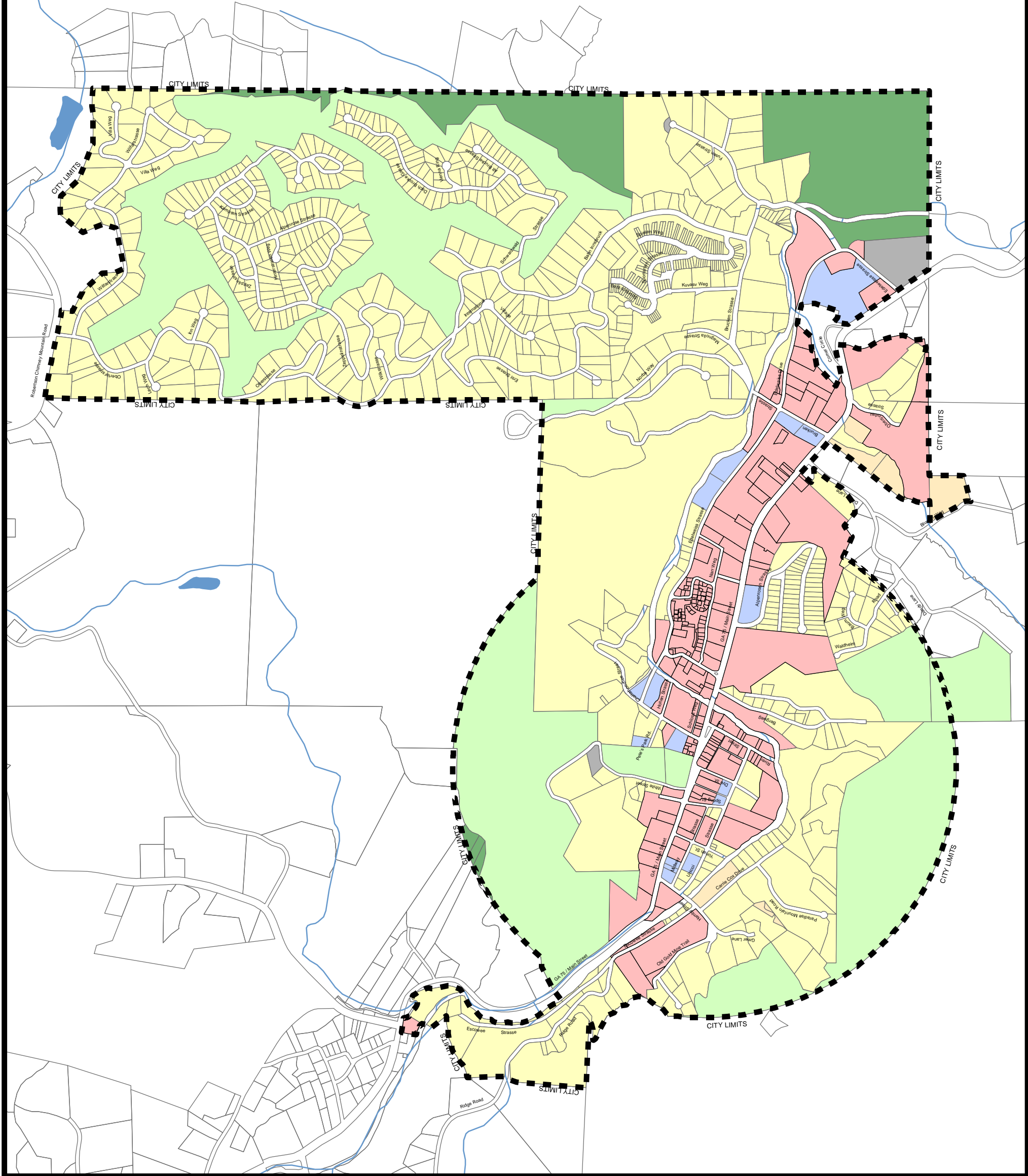
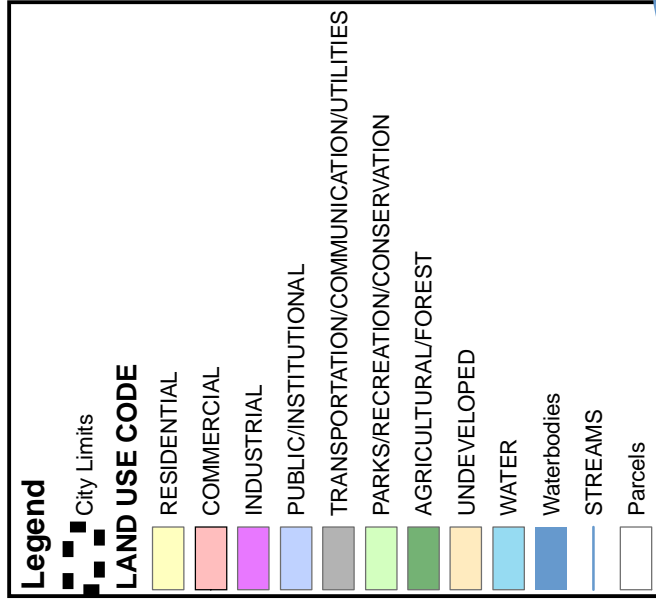
# Cleveland, Georgia Generalized Future Land Use Map

8

Legend							
Cleveland By-Pass	Unincorporated	Multifamily	Duplex	Industrial	TCU	Mixed Residential	City Limits
Commercial Corridor	Residential	Mobile Home	Commercial	Public/Institutional	Agriculture/Forestry	Historic Commercial Business District	
		Undeveloped	Residential	Highway Commercial Node			



# CITY OF HELEN, GEORGIA GENERALIZED FUTURE LAND USE MAP



## **IDENTIFICATION OF ISSUES AND OPPORTUNITIES**

This section provides a summary listing and discussion of potential issues and opportunities identified during the Analysis of Supporting Data. These items may be modified through additional analysis or require further study, but they must be considered as the communities complete the Community Agenda.

### **Population**

The foremost task of any government is to promote the welfare of the existing and future populations. This is the basis for all strategies involved in economic development, capital improvement projects, and land use regulation. The hope is that any changes can be managed such that opportunities exist for economic expansion without diluting the quality of services provided. Achieving this requires an understanding the characteristics of both the present and future populations of the region; their traits, needs, and capabilities. Much of this begins with identifying trends within the population, to help explain current conditions and gain insight into probable future conditions.

- The county population is expected to more than from 2000 to 2015. Both cities will experience higher growth rates than the county over the same time frame.
- The majority of the population growth is expected to occur in age groups 55+ as the baby boom generation retires.
- There is a direct correlation between the increasing age of the population and the number of calls for emergency response.
- Cleveland will continue to serve at the social and economic center in the county, therefore focusing its services on the functional population. In peak tourist season, the county, including the City of Helen may have as many as 70,000 visitors a day undertaking a variety of activities at various locations.
- Income levels in the City of Cleveland are significantly lower than the rest of the county. One fourth of the children under age 18 in Cleveland live below the poverty level.
- Education levels have dramatically increased. They are expected to continue to rise as additional higher education opportunities come forward through Truett-McConnell becoming a four-year institution and North Georgia Technical College having two campuses adjacent to White County and a satellite location in the county.

## Community Facilities and Services

Public facilities and services are those elements vital to a population's health, safety, and welfare that are most effectively provided by the public sector, such as sewerage, law enforcement and school services. This element examines the community's ability to adequately serve the present and projected demands for such services, identifying concerns with the spatial distribution and conditions affecting service delivery. These assessments can then assist in projecting future demands and in planning future capital improvement projects.

- Increased water permit withdrawals and treatment capacity will be needed for beyond the next five years. There is also a need for increased raw water storage and treated storage for all three local governments in White County.
- There is very little sewer capacity available for growth. Capacity is severely limited due to an antiquated treatment facility and an aging collection system.
- The cumulative placement and use of septic systems in higher density areas in the county may cause long-term water quality problems, especially in areas where extremely steep slopes exist.
- There is an immediate need for space in the Sheriff's Department. By 2020 the Dept. will need an additional space of over 22,000 square feet for offices and detention.
- Based on projected growth, to maintain the same level of service the City of Cleveland will need to employ an additional five officers (total 16 officers) at the year 2010 and 23 total officers by the year 2020, not including any clerical positions that may be needed for administrative purposes. The Police Dept. will need to increase their space need to 2,200 square feet by 2010 and to 3,100 square feet by 2020.
- Fire station # 1 in Cleveland should be replaced/relocated immediately. An eighth fire station should be located somewhere in the south part of the county along U.S. 129. Based on projected growth the county will need three additional stations by the year 2020. Additional full-time personnel are needed as well.
- The county health department severely limited due to extremely limited space in their current facility. A new health department facility is needed to accommodate the current population as well as the anticipated population growth. Such a facility should also include enough space to adequately house mental health services as well.
- The anticipated increase in the elderly population within White County over the next twenty years will increase the need for assisted living facilities and nursing homes.
- White County has an extremely low crime rate, which makes it an attractive place to live and visit. Anticipated Federal and State Homeland Security initiatives more than likely will have an impact on Public Safety personnel, facilities and equipment.

- As the mean age of the population increases, so does the number of requests for emergency response.
- The County Courthouse is at capacity for courts and administrative space and requires either expanded or new facilities. The county should address the needs as they are presented to the Board of Commissioners.
- The City of Cleveland is in need of administrative space.
- By 2025, the county will need to add 118.1 developed acres of parks and recreation land to its inventory. Some of this need can be offset by the presence of State and federal lands for recreational purposes, where opportunities for passive recreation is excellent for citizens and visitors due to the abundance of the mountains and streams.
- The student population growth will be accommodated per the White County Board of Education Five-Year Facility Plan as required by the State Board of Education.
- Opportunities for higher education, bachelor degrees, now exist in White County with the expansion of the curriculum at Truett-McConnell College.
- There is an immediate need for an additional 5,000 square feet for library space in White County. Growth projections show that space needs for the library will increase by more than 20,000 square feet of additional space by the year 2020.
- Civic or community meeting space is extremely limited in the county. Beside the facility at Unicoi State Park, there is not a facility available that could host a large convention, concert, meeting, etc.

## **Transportation**

- Complete a Corridor Transportation Management Study for SR 11/US 129, SR 75 and SR 75 ALT, SR 115 & SR 384.
- Complete a Corridor Transportation Management Study for downtown Cleveland and Helen.
- Engage in Pedestrian and/or Bike Planning for Cleveland, Helen, and White County. Complete a comprehensive pedestrian and/or bike community plan, if possible.
- Implement the recommended project for White County in the Regional Bicycle and Pedestrian Plan. Seek the assistance of Transportation Enhancement funding to help implement the proposed project.
- Consider new or additional routes for traffic flow within and through White County.
- Develop an effective implementation strategy for needed road projects.

## **Housing**

Housing is a critical issue to every community as a primary factor of quality of life. The costs and availability of quality housing is a key gauge in calculating local costs of living and one measure in defining the long-term sustainability of the resident population. The housing element of the comprehensive plan is used to evaluate whether existing and projected development will meet the county's housing needs with respect to supply, affordability, and accessibility.

- Single-family housing is the dominant use in the county with very little multi-family housing. Most multi-family housing opportunities are found in Cleveland and Helen where the appropriate infrastructure is available providing necessary support.
- A very high percentage of the housing units in the county are for seasonal or second home purposes, creating lower than normal housing occupancy rates or high vacancy rates. Many of the housing units are projected to become primary residences over the next twenty years, thus contributing to high population growth.
- The value and cost of housing is expected to continue.
- Land values continue to double about every four years, escalating to the point where it could contribute to housing affordability issues.
- Adjustments need to be made to local development regulations that will provide more housing options and innovations, including affordable housing opportunities.
- More multi-family housing opportunities are needed in appropriate areas.

## **Economic Development**

Economic development analyses inventory a community's functional conditions and achievements to identify the strengths, weaknesses and needs of native businesses. This portrait of a region's economic state is the foundation for assessing the performance of wages and job skills, employment and industry patterns, and the programs and efforts designed to improve local economies.

- Agriculture and tourism are the two largest contributors to the local economy. Helen is the tourism center for all of North Georgia.
- Additional tourism opportunities are emerging through heritage tourism venues and agricultural related tourism venues. The county and cities should develop programs to enhance these venues and promote them.
- Economic promotion and enhancement should always include agricultural production. Poultry, livestock, and row crops continue to be a strong contributor to the local economy. Promotion would help keep these farms active, valuable and contributing to the local economy and not developed for residences.

- The county should pursue new agricultural and horticultural opportunities such as the development of vineyards, corn mazes and nurseries for ornamental plants. These types of operations can double as agri-tourism operations.
- The county and cities should continue to focus its commercial and industrial recruitment and growth on small business entrepreneurs who need smaller spaces and want to be a part of the community.
- The county should obtain designations such as Entrepreneur Friendly and Community Work Ready in order to provide assistance in the development of business and industry.
- The City of Cleveland should finalize and officially obtain the Better Home Town designation to assist in the revitalization and promotion of downtown activities.
- The City of Helen was hit by a tornado in 2005, but continues to rebound well in its rebuilding efforts of tourism facilities, its wastewater spray fields and restoration of the river.
- A coordinated effort and plan should be developed to create a community and visitor pedestrian corridor from Robertstown to the Hardman Farm, with future linkage to the Sautee Junction area.
- Both cities should continue to plan and update their infrastructure to serve and concentrate commercial development in the appropriately designated areas.
- Opportunities should be sought to high-speed information and communications throughout the county, particularly wireless communication applications.
- Encourage the development of a medium to large size conference facility.

## **Natural Resources**

A community's natural resources are the native conditions and elements that contribute to the local character and livelihood. As the rivers and lakes supplying public water, mineral deposits that support local industry, or a scenic park serving locals and tourists alike, these resources can serve a community's health, culture and economy when properly managed. Because these sites and conditions are highly susceptible to disturbance from human activity, they are regarded environmentally sensitive and need to be preserved for public benefit.

- The county has adopted all of the Part V criteria for environmental protection. Neither the City of Cleveland nor Helen have adopted any of the criteria.
- Water supply sources for the both the county and cities are sufficient for the next five to seven years. However, with the projected rate of growth and the length of time it take to develop water resources all three local governments should be planning the development of additional water resources.



- The majority of White County is covered with moderate to steep slopes, therefore placing severe limitations, challenges and costs on development opportunities.
- Associated with steep slopes are shallow and sensitive soils placing additional limitations on development opportunities.
- The local climate, slopes and clay soils in White County are ideal for growing grapes and the development of vineyards.
- Soils in bottoms lands should continue to serve as floodplain and for agriculture. Development within the flood plain should be discouraged.
- Though mountain and hillside protection measures are place the view sheds in the county continue to be a resource that should be closely monitored.
- The preservation of cool water habitat for trout should be addressed in local regulations beside the Erosion and Sedimentation Control law.
- Stormwater management measures are needed to address future commercial development and residential areas with moderate to high densities.
- Prime agricultural areas in the county are threaten by the pressure of future residential development. A program and measures may be need to preserve farmland and maintain farm operations.
- Both the City of Helen and the City of Cleveland should become Tree Cities.

## **Historic Resources**

Historic resources are those man-made sites, structures and resources that contribute to the identity of a community and are considered to have a worth beyond their direct economic value. Historic resources are typically defined as buildings, objects or sites that are listed, or eligible for listing, in the National Register of Historic Places because of their associations with certain times and people in history.

- The City of Cleveland should obtain the Better Home Town Designation.
- The City of Cleveland needs to develop and adopt measure to protect and enhance its historic building on the downtown square and areas adjacent to the square.
- An update historic resources survey is needed.
- There are no protection or preservation measures for the Sautee and Nacoochee Valleys, which are National Register districts. There are also historic five church camps in White County that also do not have any protection or preservation measure either.

- Historic and cultural resources are an important part of the community and are ideal as local heritage tourism sites. They should be enhance and promoted as such.

### **Intergovernmental Relations**

Many government services and facilities are managed through cooperative arrangements with other entities and/or neighboring communities. To ensure the local government is maximizing the benefits of these relationships it should inventory and evaluate the structure of such arrangements, keeping them up-to-date and based on informed assessment of local conditions.

- The current methodology for resolving land disputes and for coordinating planning activities, via regional hearings for local planning and communication large-scale developments, DRI reviews, works well for White County, Cleveland and Helen.
- The White County level of need with the Appalachian Regional Commission is skewed by the higher income retirement population that is locating to the area. This is a population that does not work and does not contribute directly into the community. There are several low and moderate-income households who are in need of training and jobs.
- A better methodology needs to be developed that will help the federal government understand the enormous loss in tax base in White County and increase their annual reimbursement to a fair value.
- Neither the City of Cleveland nor the City of Helen has a history of aggressive annexation. As required by the minimum standards for this plan, the future land use map for both cities presents land use designations on property that could potentially be annexed into their jurisdiction. This does not mean the cities will undertake annexation of those lands. These uses are in all likelihood consistent with future land uses identified by White County.
- Forecasted population and areas of future development for the Cities and County to determined future levels of service should be coordinated with the water authorities or utilities for permitting purposes and fire protection purposes, and with the White County Board of Education in their Five –Year Facilities Planning as required by the State BOE.
- Currently the White County Service Delivery Strategy for coordinating local government services and related program is functioning adequately. As the cities and county more forward with land development regulations or new/expanded services and programs, the strategy may need to be amended.

## Land Use

Land use and transportation are the main factors of community development planning. Ensuring the best balance of land uses, levels of accessibility and the overall sustainability of a community requires an understanding of development trends and issues.

- Vast amounts of White County are undeveloped, forested lands under the management of the United States Forest Service.
- The county consists of scattered rural residential and agricultural land uses. The largest concentrations of residential and other development occur in and surrounding the Cities of Cleveland and Helen, and also along the corridors of 129 and 75.
- Topography and steep slopes are major factors in the placement of developments throughout the County. In the northern half of White County especially, topography forces all land uses to co-exist in narrow mountain valleys.
- Careful planning of mountains, valleys and corridors for a variety and mixture of land uses is the most significant challenge. Local regulations currently meet many of these challenges, however, additional requirements are likely needed to address other concerns.
- "Second" homes are expected to continue developing around streams, lakes, and ridgetops with scenic views and within the City of Helen.

## CHAPTER TWO

### COMMUNITY PARTICIPATION PROGRAM

#### Introduction

This chapter, the Community Participation Program, is the second major component of the White County Joint Comprehensive Plan. It outlines the basic public involvement process used to ensure the goals and objectives of the Comprehensive Plan represent the values and desires of the communities' residents. The information presented in the Community Assessment (Chapter 1) was presented to the open public and various stakeholder groups. Their responses were used to refine the information, prioritize the issues and goals and identify the preferred alternatives for achieving those goals.

#### The Goal-Oriented Planning Approach

It is the intent of the White County Commission to base the Comprehensive Plan on a set of established community goals. Previous planning efforts have established such a set of community goals. However, the passing of time and changing community perceptions necessitate a re-examination and reformulation of community goals. The goals to be achieved are those that the community and its citizens desire.

#### Citizen Participation Process

In accordance with the desire to achieve broad based citizen support for the Comprehensive Plan and a goal oriented planning approach, the White County Commission, the City of Cleveland and the City of Helen established a Planning Advisory Board composed citizens (approximately 50 persons) representing a general cross-section of the population of each local government. The Planning Advisory Board met regularly to review data and discuss significant findings. The board also provided guidance and input in the formulation of goals, objectives and policies that are found in this plan.

## **PLANNING ADVISORY BOARD MEMBERS**

### **CITY OF CLEVELAND**

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Mr. Rush Mauney	177 Old Clarkesville Road, Cleveland, GA 30528
Mrs. Annie Sutton	P. O. Box 887, Cleveland, GA 30528
Conchita Black	155 Pine Hill Drive, Cleveland, GA 30528
Bill Black	85 S. Main Street, Cleveland, GA 30528
Mrs. Jan Hayes	42 Ridgewood Drive, Cleveland, GA 30528
Mrs. Nadine Wardinger	174 Old Clarkesville Hwy, Cleveland, GA 30528
Mrs. Judy Lovell	P. O. Box 61, Cleveland, GA 30528

### **CITY OF HELEN**

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Greg Ash	c/o. P. O. Box 280, Helen, GA 30545
David Livingston	P. O. Box 724, Helen, GA 30545
Charlie Knowles	P. O. Box 965, Helen, GA 30545
Jerry Elkins	P. O. Box 280 Helen, GA 30545
Heinz Potcheka	P. O. Box 524, Helen, GA 30545
Dick Gay	P. O. Box 355, Helen, GA 30545
David Greear	P. O. Box 252, Helen, GA 30545

### **WHITE COUNTY**

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Chris Nonnemaker	59 S. Main Street, Suite A, Cleveland, GA 30528
Dennis Bergin	59 S. Main Street, Suite A, Cleveland, GA 30528
Craig Bryant	59 S. Main Street, Suite A, Cleveland, GA 30528
Ward Gann	c/o P. O. Box 849, Cleveland, GA 30528
Alton Brown	59 S. Main Street, Suite A, Cleveland, GA 30528
John Jordan	145 Starlight Drive, Sautee, GA 30571
Ann Banke	99 Teresa Drive, Sautee, GA 30571
Larry Allen	6500 N. Hwy 129, Cleveland, GA 30528
Ron Cantrell	P. O. box 864, Cleveland, GA 30528

## **CITIZEN APPOINTEES**

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Ken Satterwhite	320 Asbestos Road, Cleveland, GA 30528
Judy Walker	122 N. Main Street, Cleveland, GA 30528
Rita Morgan	P. O. Box 730, Helen, GA 30545
Shirley McDonald	P. O. Box 335, Cleveland, GA 30528
Lark Hutto	348 Magnolia , Sautee, GA 30571
Allan Boggs	P. O. Box 3095, Cleveland, GA 30528
Ray Meaders	1163 Post Road, Cleveland, GA 30528
Gary White	c/o Ga. Forestry Comm, 1241 Helen Hwy, Suite 140A , Cleveland, GA 30528
Sharon Lee	c/o 28 Lotheridge Rd, Cleveland, GA 30582
George Chard	784 Cedar Hollow Rd, Cleveland, GA 30528
Steve Hashimoto	54 Louise Rd. Sautee, GA 30571
Connie Keck	276 Blackberry Lane, Cleveland, GA 30528
Brian Alexander	P. O. Box 1514, Cleveland, GA 30528
Michael Mays	1254 Duncan Bridge Rd, Sautee, GA 30571
Dennis Wydra	323 River Forest Run, Cleveland, GA 30528
Tom McLean	113 N. Brook Street, Cleveland, GA 30528
Ted Doll	P. O. Box 561, Sautee, GA 30571

An initial public hearing was held to announce the planning effort and to solicit citizen input. The planning process was presented explaining the opportunities that public would have to participate in the development of the plan. In addition, some basic socio-demographic data was presented at the hearing and comments were received from the public.

A community survey, including questions on land use, economic development and community facilities was prepared by the Advisory Board. Upon approval of the survey form, the Planning Advisory Board decided to seek as large a response from community citizens as possible, as opposed to completion only by the Board Members themselves.

The survey was mailed to every address in White County (12,597). The results of the survey were then tabulated and the information obtained was used in development of the community goals and objectives. Complete results of the survey are found at the end of this chapter.

Another citizen's participation effort included 40 individuals representing a wide cross section of interests from the cities and county invited by the White County Commission to participate in a planning retreat. The group had a facilitator that guided them through a number of community visioning exercises in which they were to produce an illustration of what White County would be like in ten years. The group considered strengths, weaknesses, opportunities and threats. The group then prioritized the issues to be used in the formulation of community goals and objectives in the plan. Complete results of the retreat are found in the appendix of this plan.

To gain additional input in the Comprehensive Plan, White County hosted a DCA Quality

Growth Resource Team visit. The resource team was made up of numerous specialists in planning, real estate development, urban design, historic preservation, architecture, resource conservation, and housing. The team spent approximately a week in White County, Cleveland and Helen touring the community, speaking with local leaders, reviewing ordinances, conducting field surveys, preparing schematic solutions, and formulating recommended policy. The Resource Team also hosted a White County Stakeholders meeting that invited the public to identify and discuss the issues that were most important to them. The teams finding were cumulated into a Resource Team Report that is found in the appendix of this plan. Also included are the results of the stakeholder meeting that the team hosted.

**Community Survey Responses**

City of Cleveland	116	13.7%
City of Helen	48	5.7%
<u>Unincorporated White County</u>	<u>681</u>	<u>80.6%</u>
Total Responses	845	
<u>Total Responses</u>	<u>845</u>	<u>6.7%</u>
Total Surveys Distributed	12,597	

**How many years have you lived in White County**

822 responses to this question (809 are full time residents -- 13 are part time residents)

- 1-5 years- 197 or 24 %
- 5-15 years- 278 or 34%
- 16-20 years- 66 or 8 %
- Over 21 years- 274 or 34%
- Own or Rent- 741 responses**
- 702 of these own their home or 95 %
- 39 rent or 5 %

**Do you work in White county-837 responses to this question**

- 329 said yes or 38 %
- 165 said no or 20 %
- 343 are retired or 41 %

The counties listed for out of county workers are Banks (2), Clark (1), Habersham (20), Barrow (1), Hall (54), Gwinnett (9), Forsyth Co. (3), Fulton (6), Atlanta (2), Dekalb Co. (1), Gilmer (1), Dawson (2) , Towns (1), Lumpkin Co. (5), Stephens (1), Rabun Co. (2)

**How far do you drive to work- 425 responses to this question**

135 or 32% said they travel 1-5 miles  
125 or 29% said they travel 6-10 miles  
38 or 9% said they travel 11-15 miles  
127 or 30% said they travel over 15 miles to work

**How many school age children - 763 responded to this question**

628 or 82% have no children  
108 or 14% have 2-3 children  
26 or 3% have 3-5 children  
1 or <1% have more than 5 children

**County/City should provide tax incentives to encourage new business/industry to locate in our community. -745 responded to this question**

483 or 65% agreed that incentives should be used  
219 or 29% disagreed  
43 or 6% had no opinion

**County/City should attract/develop the following business types: (listed in order of preferences)**

- a) Retail Trade- 502
- b) Light Manufacturing- 483
- c) Technology based business- 448
- d) Tourism -388
- e) Agricultural/forestry based business-279
- f) Service Trades -269
- g) Finance, Insurance, Real Estate -68
- h) Other - 6  
(suggestions for other included medical, assisted living facilities, restaurants, and “whatever we can secure to provide employment”.)

**County/City should encourage more:**

- 8) Housing developments for the senior citizens  
483 or 60% agree  
192 or 24% disagree  
124 or 16% have no opinion
- 9) Multi-family Housing developments  
193 or 25% agree  
468 or 61% disagree  
110 or 14% have no opinion



10) Housing for first time homeowners

388 or 48% agree  
287 or 35% disagree  
141 or 17% have no opinion

11) Manufactured home developments

94 or 13% agree  
544 or 75% disagree  
87 or 12% have no opinion

12) Mixed Use villages (residential and neighborhood commercial areas with access to employment centers)

388 or 50% agree  
266 or 34% disagree  
125 or 16% have no opinion

13) Health Care Facilities

692 or 80% agree  
112 or 13% disagree  
57 or 7% have no opinion

14) Libraries

439 or 57% agree  
188 or 25% disagree  
138 or 18% have no opinion

15) Recreational facilities

590 or 70% agree  
157 or 19% disagree  
94 or 11 % have no opinion

16) Cultural Facilities

494 or 66% agree  
149 or 20% disagree  
103 or 14% have no opinion

**County/City should adopt impact fees or Sales tax increases or property tax increases, to insure that new development pays for new/expanded services**

646 or 72 % said Impact Fees  
218 or 24% said Sales Tax Increases  
38 or 4% said Property Tax Increases

**County should adopt more development guidelines**

671 or 77% agreed  
162 or 19% disagreed  
35 or 4% had no opinion

**County should develop conventional land use restrictions. (i.e. Comprehensive Zoning)**

588 or 72% agreed  
184 or 23% disagreed  
44 or 5% had no opinion

**County should develop limited land use restrictions.  
(i.e. Corridor standards or area character standards)**

591 or 69% agreed  
198 or 23% disagreed  
69 or 8% had no opinion

**County/City should encourage more preservation of agricultural and forested lands**

709 or 83% agreed  
98 or 11% disagreed  
51 or 6% had no opinion

**County should adopt tree preservation standards.**

584 or 73% agreed  
164 or 20% disagreed  
58 or 7% had no opinion

**White County should expand water services for all residents.**

436 or 52% agreed  
247 or 30% disagreed  
149 or 18% had no opinion

**Transportation**

**Bike networks should be developed along less traveled roads/streets to link neighborhoods/communities together.**

417 or 51% agreed  
257 or 31% disagreed  
146 or 18% had no opinion

**Sidewalks or pathways should be developed in residential and commercial areas.**

547 or 67% agreed  
192 or 23% disagreed  
79 or 10% had no opinion

**County/City should require the use of shared driveways to minimize “curb cuts” and improve traffic flow and safety.**

311 or 38% agreed  
353 or 43% disagreed  
155 or 19% had no opinion

**County/City should create a tourist train or shuttle system to link areas of attraction and to reduce congestion.**

383 or 48% agreed  
299 or 37% disagreed  
125 or 15% had no opinion

**The Proposed Cleveland By-pass should be developed with frontage roads (limited access) and a planting scheme.**

611 or 78% agreed  
125 or 16% disagreed  
48 or 6% had no opinion

#### **Vision of Tomorrow**

**County/City should strive to create distinct character image area(s) to create a strong sense of uniqueness.**

558 or 69% agreed  
164 or 20% disagreed  
90 or 11% had no opinion

**County/City should develop appropriate architectural guidelines to maintain unique community characteristics.**

493 or 61% agreed  
229 or 29% disagreed  
83 or 10% had no opinion

**County/City should adopt ordinances to regulate outdoor materials storage (i.e. Automobiles, automobile parts, metals, used lumber, etc.)**

723 or 75% agreed  
170 or 21% disagreed  
33 or 4% had no opinion

**Citizens of Cleveland Residents -116 total responses**

**The City should encourage annexations.**

46 or 44% agreed  
30 or 29% disagreed  
28 or 27% had no opinion

**The City should adopt a tree ordinance for private property development.**

72 or 64% agreed  
27 or 24% disagreed  
13 or 12% had no opinion

**The City should increase fees to support curbside recycling.**

40 or 27% agreed  
48 or 45% disagreed  
19 or 18% had no opinion

**The City should extend water and sewer lines beyond city limits.**

52 or 34% agreed  
79 or 51% disagreed  
23 or 15% had no opinion

**The City should enforce strict guidelines to create/maintain a downtown theme or harmonious images**

82 or 75% agreed  
19 or 17% disagreed  
8 or 7% had no opinion

**City of Helen Residents - 48 Responses**

**The City should encourage annexations**

22 or 48% agreed  
20 or 43% disagreed  
4 or 9% had no opinion

**The City should adopt a tree ordinance for private**

34 or 74% agreed  
11 or 24% disagreed  
1 or 2% had no opinion

**The City should increase fees to support curbside recycling**

29 or 60% agreed  
17 or 35% disagreed  
2 or 5% had no opinion

**The City should extend water and sewer lines beyond city limits**

19 or 40% agreed  
15 or 32% disagreed  
13 or 28% had no opinion

**The City should enforce strict guidelines to create/maintain a downtown theme or harmonious images**

43 or 91% agreed  
1 or 2% disagreed  
3 or 6% had no opinion

Development of the Community Agenda

After the public survey process and the Quality Growth Resource Team exercise, the planning staff and Planning Advisory Board worked to prioritize the list of issues and opportunities and establish the goals and objectives for each community. This included several open public meetings for the purposes and of creating and revising the Community Agenda and related work programs. Each community then finalized their character areas, general vision and goals before a final public review process. Upon completion of the goal formulation and review process by the Planning Advisory Board, a draft Comprehensive Plan was submitted to the White County Planning Commission, who hosted a public hearing prior to submittal of the plan for review and approval by the Georgia Department of Community Affairs

## CHAPTER THREE

### POPULATION ELEMENT

Included in this chapter is an inventory and analysis of the population and related demographics for the Cities of Cleveland, Helen, and White County, Georgia. An understanding of population growth and other population characteristics is an important first step in the development of a comprehensive plan. The dynamics of the population have an impact on all other elements found within the comprehensive plan. This element serves as the foundation for policy and goal development and implementation addressing the needs for growth. Analysis of this data allows communities to see the changes that have occurred in population over time. Historic population data, and the accompanying trends, enable managers to evaluate previous population growth or decline in perspective as they evaluate the other planning elements.

### INVENTORY AND ASSESSMENT OF THE POPULATION

#### TOTAL POPULATION

Current population figures enable communities to make decision about community facility and public service adequacy. Informed decisions can be made, based on current population data, concerning housing stock and employment opportunities, among other things. If changes need to be made to accommodate growing numbers, the community can plan accordingly to bring the revealed inadequacies up to an acceptable level.

TABLE 3-1  
POPULATION TRENDS, 1980-2000  
WHITE COUNTY, CLEVELAND, HELEN

AREA	1980	1985	1990	1980-1990 % CHANGE	1995	2000	1990-2000 % CHANGE
Cleveland	1,578	1,610	1,653	4.8	1,769	1,907	15.4
Helen	265	281	300	13.2	358	430	43.3
White County	10,120	11,491	13,006	28.5	16,218	19,944	53.3

Source: U.S. Bureau of Census.

White County continues to experience increased growth (Table 3-1). The county population grew by 28.5% from 1980 to 1990 to a population of 13,006. The following decade, 1990 to 2000, the county rate of growth almost doubled to 53.3% and to a total population of 19,944. During this decade, White County was one of the fifty fastest growing counties in the nation. The growth rate solely for unincorporated White County during the decade was almost 60%. The 2000 population figure also reveals that the county grew by almost 100% from 1980 to 2000. This type of growth places an increased demand for county services that is difficult to keep up with.

The municipalities in White county experienced little to mild growth from 1980 to 1990. However, the City of Helen also saw a large change in the their population. From 1990 to 2000, the city resident population grew from 300 to 430, a growth rate of 43.3%. The City of Cleveland experienced a more moderate rate of growth of 15.4% from 1990 to 2000, which makes the planning and delivery of municipal services much more manageable. What is significant about the growth that both of these cities have seen over the last decade is that most of their growth came from within the existing boundaries. Often times, municipalities grow through annexation. While cities desire to grow, this type of expansion can sometimes stress the delivery of municipal services to new areas. Both Cleveland and Helen have not aggressively annexation property during the past ten years. This means that healthy and profitable development opportunities have been available and are taking place within the existing city limits. It also shed light on the fact that the city’s delivery of services are functioning to the point that they are encouraging economic/residential investment within their boundaries.

Tables 3-2 and 3-3 compare the rate of growth for Cleveland, Helen and White County to surrounding communities and to the State of Georgia. White County and its municipalities compare similarly to most of the cities in counties in the Georgia Mountains Region. All are experiencing tremendous growth at a rate higher than the State of Georgia. Some of the other cities in the region have grown significantly due to annexation of areas on the periphery of their boundaries.

**TABLE 3-2  
POPULATION TRENDS  
WHITE COUNTY AND THE STATE OF GEORGIA, 1990-2000**

AREA	1990 POPULATION	2000 POPULATION	GROWTH RATE	ACTUAL CHANGE
<b>White County</b>	13,006	19,944	53.3	6,938
<b>State of Georgia</b>	6,478,216	8,186,453	26.4	1,708,237

Source: U.S. Bureau of Census.

**TABLE 3-3  
POPULATION TRENDS COMPARISON, 1990-2000**

<b>AREA</b>	<b>1990 POPULATION</b>	<b>2000 POPULATION</b>	<b>GROWTH RATE</b>	<b>ACTUAL CHANGE</b>
Cleveland	1,653	1,907	15.4	254
Helen	300	430	43.3	130
Blairsville	564	659	16.8	95
Clarkesville	1151	1248	8.4	97
Cornelia	3219	3674	14.1	455
Clermont	402	603	50.0	201
Dahlonega	3086	3638	17.9	552
Hiawassee	547	808	47.7	261
White County	13,006	19,944	53.3	6,938
Lumpkin County	14,573	21,016	44.2	6,443
Habersham County	27,622	35,902	30.0	8,280
Towns County	6,754	9,319	38.0	2,565
Union County	11,993	17,289	44.2	5,296

Source: U.S. Bureau of Census.

**TABLE 3-4  
LOCATION OF POPULATION  
DISTRIBUTION BY CENSUS DIVISION (BLOCK NUMBER AREA)  
1990 AND 2000**

<b>AREA</b>	<b>POPULATION</b>				
	<b>1990</b>	<b>2000</b>	<b>2000 Share</b>	<b>1990-2000 % CHANGE</b>	<b>1990-2000 % CHANGE</b>
<b>9501</b>	1,777	2,255	11.3%	478	26.9
<b>9502</b>	7,590	11,934	59.8%	4,344	57.2
<b>9503</b>	3,639	5,755	28.7%	2,116	58.1
<b>TOTAL</b>	13,006	19,944	100%	6,938	53.3

Source: U.S. Bureau of Census.



White County is divided into three Census Block Number Areas (BNA) or census tracts (Table 3-4). The census areas essentially divide the county into thirds from north to south. The northern most area is 9501, which includes the City of Helen. Block Number Area 9502 contains the central part of the county, which includes the City of Cleveland. The south third of the county makes up Block Number Area 9503.

Looking at where the population is located in the county should help public officials determine where local services and facilities are most needed and most likely should be planned to accommodate future growth and demand.

Observing growth within the BNA's reveals more detail as to where the growth is exactly occurring in White County. BNA 9502, which includes the City of Cleveland, is the most populated area in the county with 59.8% of the county living within its boundaries. However, BNA 9503, which is the south part of the county, is growing at faster rate. Growth in the part of the county can be attributed to lower land prices as well as its proximity employment areas in Cleveland, Hall County and Habersham County. The White County Water Authority also expanded its services into this part of the county during the recent decade as well, thus improving the development potential in the area. This growth trend is expected to continue during the next ten years and should shed light on where county services may need to be planned and expanded. While BNA 9501 is growing, it has not grown as quickly as the other two BNAs in White County. Part of this is attributed to the large presence of public land that is not available for development. Much of the terrain in this part of the county is not ideal for development with steep slopes and sensitive soils. While these factors do not completely prevent development from occurring the cost to build is generally more. In addition, much of the residential development in the northern third of the county is for vacation and second homes.

These trends are projected to continue at least for the next ten years. Second home development will continue to take place in the northern third of the county with modest resident population growth. The City of Cleveland will continue to be the economic and population center of White County. The majority of the infrastructure and public services are located in the central portion of the county, which is most attractive for growth. It is also fiscally beneficial to keep the growth concentrated in and around where the infrastructure exists. Because of its proximity to regional employment centers, the southern part of the county will continue to grow rapidly and could possibly become a bedroom community to Hall and Habersham Counties.

## **FUNCTIONAL POPULATION**

The emphasis on planning and delivery of services for both of the cities focuses more on the functional population, which is the visitor and employment population that takes place during the day.

Each year hundreds of thousands of visitors travel to and through the City of Helen. According to Convention and Visitor Bureau data, the daytime population in Helen fluctuates throughout the year to anywhere between 5,000 visitors to more than 50,000 daily visitors during peak season.

The City of Cleveland serves as the county seat of White County and therefore is the center of local economic activity and serves as the traditional cultural center of the county. Most local business services and industry are located in Cleveland, which requires workers to travel to Cleveland and spend their day within the city limits. Some of the White County school facilities are located in Cleveland as well as Truett-McConnell College. These facilities also increase Cleveland's functional population. Estimates show that about two-thirds of the local workforce (6,340) is employed within the Cleveland city limits and approximately 2,000 students attending various schools in the city. This would put the functional or daytime population for the City of Cleveland at slightly over 10,000. In addition to this population, Cleveland also has its share of tourists traveling to or through the city, which is estimated between 500 to 3,000 persons per day.

It is important to note here that the functional population in the cities also has an impact on White County as well, particularly as it relates to the visiting or tourist population. This means that during the peak of the tourist season there can be as many as 70,000 persons in White County, including its resident population and its cities, during the day. During the non-peak season, the current functional population is estimated to fluctuate between 30,000 to 35,000 per day.

With functional and seasonal population, estimates the cities and county can adequately prepare, schedule and fund the delivery of public services.

### **POPULATION PROJECTIONS**

Population projections, based on past trends, further serve local planning efforts. The projectors figures are not exact predictors, but they do allow for better planning practices. Plans for future provisions of services, facilities, jobs, and housing can be better made from projected numbers of future population. One of the primary functions of the planning process is to help communities set goals and policies and establish programs to help ensure a high quality of life for its existing and future residents. Population projections help to facilitate this process.

**TABLE 3-5  
PAST POPULATION ESTIMATES AND  
POPULATION PROJECTIONS, 1980-2025  
WHITE COUNTY, CLEVELAND, HELEN**

<b>YEAR</b>	<b>CLEVELAND</b>	<b>HELEN</b>	<b>WHITE COUNTY</b>
<b>1970</b>	1,353	252	7,742
<b>1980</b>	1,578	265	10,120
<b>1990</b>	1,653	300	13,006
<b>2000</b>	1,907	430	19,944
<b>2001</b>	2,008	461	20,981
<b>2002</b>	2,134	493	22,045
<b>2003</b>	2,225	527	22,815
<b>2004</b>	2,316	567	23,595
<b>2005</b>	2,402	614	25,570
<b>2006</b>	2,475	644	26,464
<b>2007</b>	2,561	676	27,392
<b>2008</b>	2,651	710	28,350
<b>2009</b>	2,745	746	29,343
<b>2010</b>	2,859	784	31,865
<b>2015</b>	3,396	956	40,670
<b>2020</b>	4,020	1,134	51,910
<b>2025</b>	4,744	1,292	64,014

Source: U.S. Bureau of Census. Projections are GMRDC estimates.

Table 3-5 presents the projected populations for White County, Helen, and Cleveland through the year 2025. County population is expected to increase by 59.8% over the next decade (2010) to 31,865 persons. This trend is expected to increase to a 63% growth rate, from 2010 to 2020, making the total population in 2020, 51,910.

The City of Cleveland population is expected to grow by approximately 50% to 2,859 by the year 2010 and then to 4,744 by the year 2025. This means the city population is projected to more than double over the next twenty years.

The City of Helen is projected to increase its resident population by almost three times the current population by the year 2025, to 1,292 persons. Most of the Helen's residential growth will come as the baby boom generation retires and relocates into the city and through annexation of areas adjacent to the city.

### **AGE DISTRIBUTION OF THE POPULATION**

This section includes a discussion of age distribution as well as numerical tables including information on age distribution by numbers or percentage for White County and the cities of Cleveland and Helen. The age distribution data assists communities in determining their present and future needs for all age groups including small children, teen-agers, middle-aged, and elderly residents.

**TABLE 3-6**  
**MEDIAN AGE OF PERSONS, 1970-2000**  
**WHITE COUNTY, CLEVELAND, HELEN AND THE STATE OF GEORGIA**

<b>YEAR</b>	<b>WHITE COUNTY</b>	<b>CLEVELAND</b>	<b>HELEN</b>	<b>STATE OF GEORGIA</b>
<b>1970</b>	28.0	26.6	N/A	25.9
<b>1980</b>	32.0	N/A	N/A	28.6
<b>1990</b>	36.8	32.6	43.9	31.6
<b>2000</b>	38.3	32.0	41.6	33.4

Source: U.S. Bureau of Census.

When compared with the State of Georgia, the median ages of White County and Helen are much higher. It is quite possible that this trend will continue as the baby boom generation moves into retirement and finds that White County and the Helen area are attractive places to live. It is interesting to note that the median age in Helen decreased from 1990 to 2000. This could be the result of younger people are moving to Helen to work or start businesses, or from persons retiring early and relocating to the city.

The median age for the City of Cleveland is slightly lower than the State median age. Part of this is due to the fact that most of the jobs in White County are located in Cleveland and people tend to locate close to their places of employment. Cleveland also has more affordable housing opportunities for young and growing families. Truett McConnell College is also located in Cleveland and which includes a younger population of college students.

**TABLE 3-7  
PAST AND PROJECTED  
POPULATION BY AGE 1980-2025  
WHITE COUNTY**

<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>0 – 4 Years Old</b>	678	730	781	1,014	1,246	1,616	1,936	2,298	2,812	3,785
<b>5 – 13 Years Old</b>	1,344	1,508	1,671	2,161	2,650	3,370	3,891	5,069	6,248	7,587
<b>14 – 17 Years Old</b>	747	643	539	633	726	1116	1406	1755	2068	2326
<b>18 – 20 Years Old</b>	662	691	720	836	952	1,290	1,428	1,589	1,851	2,248
<b>21 – 24 Years Old</b>	611	605	599	743	887	1,177	1,349	1,538	2,047	2,121
<b>25 – 34 Years Old</b>	1,473	1,663	1,853	2,187	2,520	3,017	3,615	4,460	5,904	7,100
<b>35 – 44 Years Old</b>	1,269	1,576	1,882	2,454	3,026	3,861	4,895	6,281	7,867	8,979
<b>45 – 54 Years Old</b>	1,010	1,308	1,606	2,178	2,750	3,577	4,503	5,993	7,544	10,027
<b>55 – 64 Years Old</b>	1,019	1,218	1,417	1,851	2,285	2,886	4,025	5,630	7,273	9,810
<b>65 and over</b>	1,307	1,623	1,938	2,420	2,902	3,660	4,817	6,057	8,296	10,031
	<b>10,120</b>	<b>11,565</b>	<b>13,006</b>	<b>16,477</b>	<b>19,944</b>	<b>25,570</b>	<b>31,865</b>	<b>40,670</b>	<b>51,910</b>	<b>64,014</b>

Source: U.S. Bureau of Census. Projection made by Georgia Mountains Regional Development Center, 2004

Projected population by age for White County shows that the trend that older age categories are growing and making up the largest part of the county population. It is projected that by the year 2025, about thirty-one percent of the county population will be over the age of fifty-five. The 35-44 age group and the 45-54 age group also will grow quickly due to the total population growth. These two age groups are working age groups and will make up most of the labor force in White County.

It is important that the county realize that there is a direct correlation between the increasing age and size of the population and the number of calls for emergency response. Proper planning for these types of services will need to be scheduled in accordance with the growth as it occurs.

**TABLE 3-8  
PAST AND PROJECTED  
POPULATION BY AGE 1980-2025  
CLEVELAND**

<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
0 – 4 Years Old	87	79	71	83	95	146	165	188	213	231
5 – 13 Years Old	176	176	175	196	216	286	336	369	401	447
14 – 17 Years Old	96	79	61	65	69	82	105	140	179	208
18 – 20 Years Old	274	281	288	285	282	337	392	425	467	513
21 – 24 Years Old	88	87	85	110	134	173	222	263	305	355
25 – 34 Years Old	200	196	191	201	210	266	313	358	394	423
35 – 44 Years Old	188	191	193	205	217	255	293	329	344	367
45 – 54 Years Old	145	174	203	201	198	231	264	307	430	527
55 – 64 Years Old	137	137	137	160	183	242	321	388	480	564
65 and over	187	218	249	276	303	384	448	629	811	1,109
	<b>1,578</b>	<b>1,618</b>	<b>1,653</b>	<b>1,782</b>	<b>1,907</b>	<b>2,402</b>	<b>2,859</b>	<b>3,396</b>	<b>4,024</b>	<b>4,744</b>

Source: U.S. Bureau of Census. Projection made by Georgia Mountains Regional Development Center, 2004.

The City of Cleveland shows a much more even distribution of age groups the population is projected over the next twenty years. This is because of the good variety the city offers in its housing stock, which is also due to the availability of infrastructure. Also, Cleveland is the economic and cultural center of White County, which means that most jobs and activities are and will continue to be concentrated around the city. Ultimately this translates into a younger population that is working and living in the city.

**TABLE 3-9  
PAST AND PROJECTED  
POPULATION BY AGE 1980-2025  
HELEN**

<b>Category</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
<b>0 – 4 Years Old</b>	12	17	21	25	28	36	44	55	67	75
<b>5 – 13 Years Old</b>	24	26	28	39	49	60	70	79	88	96
<b>14 – 17 Years Old</b>	16	14	12	12	11	14	18	22	27	31
<b>18 – 20 Years Old</b>	10	8	5	9	13	16	21	26	30	33
<b>21 – 24 Years Old</b>	17	12	6	11	16	29	38	48	56	60
<b>25 – 34 Years Old</b>	34	41	47	47	46	52	62	70	79	85
<b>35 – 44 Years Old</b>	30	33	36	55	74	96	118	132	156	174
<b>45 – 54 Years Old</b>	33	37	41	54	67	94	101	135	159	184
<b>55 – 64 Years Old</b>	37	43	48	53	57	88	122	156	192	230
<b>65 and over</b>	52	54	56	63	69	129	190	234	280	324
	<b>265</b>	<b>285</b>	<b>300</b>	<b>368</b>	<b>430</b>	<b>614</b>	<b>784</b>	<b>956</b>	<b>1,134</b>	<b>1,292</b>

Source: U.S. Bureau of Census. Projection made by Georgia Mountains Regional Development Center, 2004.

The City of Helen population growth reflects a trend seen throughout the Georgia Mountains Region. The city resident population growth is heavily impacted by the retirement of the baby boom generation. The bulk of the city’s growth will arrive in the 55-64 and 65 plus age groups. By the year 2025, these two age groups are projected to make up about forty-three percent of the city population.

As with the county, city will need to plan for its delivery of local services focusing on the older population.

**TABLE 3-10  
RACE OF POPULATION 1990-2000  
WHITE COUNTY**

RACE	WHITE COUNTY			
	1990	%	2000	%
<b>White</b>	12,522	96.3	18,979	95.2
<b>Black</b>	360	2.8	432	2.2
<b>Indian, Eskimo or Aleut</b>	37	0.3	80	0.4
<b>Asian or Pacific Islander</b>	71	.05	138	0.7
<b>Other-Race</b>	17	.01	315	1.6
<b>Hispanic Origin</b>	98	0.6	311	1.6
<b>TOTAL</b>	13,006	100	19,944	100

Source: U.S. Bureau of the Census.

The population in White County is still predominantly made of persons that are white. The percentage of the race slightly declined over the past ten years, but still makes up more than 95% of the population. While the total number of persons who are black increased from 1990 to 2000, the percentage the race as a part of the total population decreased. This means that other minority populations are increasing more quickly in White County than the black population. This is manifested in the data that shows that the Asian or Pacific Islander population increased significantly as well as persons of other race. Most likely persons of other race are those of Hispanic origin who do not considered themselves black or white.



**TABLE 3-11  
RACE OF POPULATION 1990-2000  
CLEVELAND**

RACE	CLEVELAND			
	1990	%	2000	%
<b>White</b>	1,412	85.4	1,651	86.6
<b>Black</b>	217	13.1	204	10.7
<b>Indian, Eskimo or Aleut</b>	2	0.1	5	0.3
<b>Asian or Pacific Islander</b>	22	0.1	7	0.4
<b>Other-Race</b>	0	1.3	40	2.1
<b>Hispanic Origin</b>	1	0.1	38	2.0
<b>TOTAL</b>	1,653	100	1,907	100

Source: U.S. Bureau of the Census.

Population by race in the City of Cleveland showed a slight increase in the white population and a slight decrease in the black population from 1990 to 2000. These two races 97.3% of the total population. Other minorities in city slightly increased in the city over the same time frame.

**TABLE 3-12  
RACE OF POPULATION 1990-2000  
HELEN**

RACE	HELEN			
	1990	%	2000	%
<b>White</b>	300	100	355	82.6
<b>Black</b>	0	0.0	22	5.1
<b>Indian, Eskimo or Aleut</b>	0	0.0	1	0.2
<b>Asian or Pacific Islander</b>	0	0.0	45	10.4
<b>Other-Race</b>	0	0.0	4	1.0
<b>Hispanic Origin</b>	0	0.0	13	3.0
<b>TOTAL</b>	300	100	430	100

Source: U.S. Bureau of the Census.

According to the 2000 Census, in Helen, 82.6% of the residents were white and 5.1% were black. Asian or Pacific Islander residents composed 10.4% of Helen's total population. In addition, Hispanic origin, which can be identified as being of any race in the Census data, made up 3% of Helen's population. This is significant because in 1990, there was no minority population reported in the census for the City of Helen. This means part of the growing population in the city includes minorities seeking employment and business opportunities as well as retiring to the area.

**TABLE 3-13  
POPULATION BY GENDER 1990-2000  
WHITE COUNTY**

<b>GENDER</b>	<b>WHITE COUNTY</b>			
	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
<b>Male</b>	6,330	48.7	9,880	49.5
<b>Female</b>	6,676	51.3	10,064	50.5
<b>TOTAL</b>	13,006	100	19,944	100

Source: U.S. Bureau of the Census.

The composition of White County by gender did not change significantly over the last decade. The countywide female population decreased by just eight tenths of a percent during the ten year period to make up 50.5% of the total population of White County. (Table 3-13)

**TABLE 3-14  
POPULATION BY GENDER 1990-2000  
CLEVELAND**

<b>GENDER</b>	<b>CLEVELAND</b>			
	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
<b>Male</b>	757	45.8	877	46.0
<b>Female</b>	896	54.2	1,030	54.0
<b>TOTAL</b>	1,653	100	1,907	100

Source: U.S. Bureau of the Census.

In Cleveland, the gender make up of the population remained relatively unchanged from 1990 to 2000. (Table 3-14)

**TABLE 3-15  
POPULATION BY GENDER 1990-2000  
HELEN**

GENDER	HELEN			
	1990	%	2000	%
Male	132	44	205	47.7
Female	168	56	225	52.3
<b>TOTAL</b>	300	100	430	100

Source: U.S. Bureau of the Census.

In Helen, the female population decreased during the last decade to make up 52.3% of its total population in 2000. (Table 3-15)

### **HOUSEHOLD CHARACTERISTICS**

**TABLE 3-19  
HOUSEHOLD AND GROUP QUARTERS POPULATION  
1980, 1990 AND 2000  
WHITE COUNTY, CLEVELAND, HELEN**

AREA	TOTAL PERSONS IN HOUSEHOLDS			TOTAL PERSONS IN GROUP QUARTERS		
	1980	1990	2000	1980	1990	2000
White	21,035	22,738	24,494	559	519	948
Cleveland	8,891	8,291	8,884	202	30	439
Helen	327	214	311	0	0	0

Source: U.S. Bureau of the Census.

In White County there were 24,494 persons living in households in the year 2000, which is 96.3% of its total population. In the same year there were 948 persons, or 3.7% of the total population, were residing in-group quarters. In 2000, Cleveland, the county seat, saw a major increase in the group quarters population from 1990, while 95.3% of its total population resided in households. Helen has no group quarters within their boundaries, meaning, 100% of their residents live in households. (Table 3-19)

**TABLE 3-20**  
**HOUSEHOLDS AND SELECTED HOUSEHOLD CHARACTERISTICS**  
**1980, 1990 AND 2000**  
**WHITE COUNTY, CLEVELAND, HELEN**

AREA	TOTAL HOUSEHOLDS			FAMILY HOUSEHOLDS			NON-FAMILY HOUSEHOLDS			PERSONS PER HOUSEHOLD		
	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
White County	7,773	8,949	9,951	3,145	6,633	7,070	1,628	2,316	2,881	2.71	2.54	2.46
Cleveland	3,507	3,493	3,879	2,530	2,385	2,445	977	1,108	1,434	2.54	2.37	2.29
Helen	116	82	127	96	61	85	20	21	42	2.82	2.61	2.45

Source: U.S. Bureau of the Census.

The total number of households in White County increased from 7,773 in 1980, to 8,949 in 1990, to 9,951 in 2000. This is a 28.1% increase in the number of total households in that twenty-year period. The numbers of family and non-family households, in the county, have risen since 1980. Family households are up to 7,070 in 2000, from 6,633 in 1990, and 3,145 in 1980. Over that same twenty-year period, the percentage of family households, in relation to total households, has increased to 71% in 2000, from 40.6% in 1980. Accordingly, non-family households grew from 20.9% to 28.9% of total households from 1980 to 2000. The number of persons per household has steadily decreased over the last twenty years from 2.71 persons per household in 1980 to 2.46 persons in 2000. Helen's total households have increased from 82 in 1990 to 127 in 2000. The number of total households in Cleveland has steadily risen up to 3,879, since 1980, when the figure was 3,507. (Table 3-20) However, the total number of family households has decreased slightly over the same time frame. This is most likely due to the development of multi-family dwellings over the past twenty years where persons who are single are renting these types of housing facilities.

**TABLE 3-21**  
**HOUSEHOLDS BY NUMBER OF PERSONS**  
**PER HOUSEHOLD, 1980, 1990 AND 2000**  
**WHITE COUNTY**

NUMBER OF PERSONS IN HOUSEHOLD	1980	%	1990	%	2000	%
1 Person	1,556	20	2,131	23.8	2,544	25.5
2 Persons	2,544	32.7	3,070	34.3	3,456	34.7
3 Persons	1,528	19.7	1,661	18.5	1,780	17.9
4 Persons	1,242	15.9	1,339	14.9	1,388	13.9
5 Persons	579	7.5	536	5.9	606	6.0
6 Persons or more	324	4.2	212	2.4	195	2.0
TOTAL	7,773	100	8,949	100	9,969	100

Source: U.S. Bureau of the Census.

The number of persons per household continues to grow smaller in White County. The percentage of one and two person households increased from 1990 to 2000, while households with larger numbers of persons decreased over the same time frame. (Table 3-21)

**TABLE 3-22**  
**HOUSEHOLD SIZE ESTIMATES AND PROJECTIONS, 1980-2025**  
**WHITE COUNTY, CLEVELAND, HELEN**

	1980	1990	2000	2005	2010	2015	2020	2025
<b>White County</b>	2.71	2.54	2.46	2.44	2.41	2.38	2.36	2.32
<b>Cleveland</b>	2.53	2.36	2.29	2.27	2.24	2.20	2.18	2.17
<b>Helen</b>	2.10	2.34	2.45	2.36	2.29	2.23	2.20	2.14

Source: Georgia Mountains RDC Projection, 2004.

Household size projections have been based on anticipated household populations in White County, Cleveland, and Helen. Each community's household size is projected to be lower than the current figures for 2000 show, thus steadily decreasing over the next twenty-years. (Table 3-22)

### **EDUCATIONAL CHARACTERISTICS**

The education levels of a community can indicate several things, including:

- Literacy- a general idea of the number of residents with the ability to read and write with understanding.
- Educational Attainment- the number of years of education that residents have obtained and the economic base that results. Implications include an evaluation of local public educational programs, technical schools or training encouraged, and/or additional programs to assure a strong and qualified labor force for existing and future economic base.

An analysis of the educational attainment of White County, Cleveland, Helen reveals that the education level is increasing in those communities. In 1990, almost 38% of the county had less than a high school education. That percentage has decreased to 24% of the county's population, in 2000. Over the same time frame, the percentage of high school graduates has increased from 30.3% to 35.3%. (Tables 3-23, 3-24, 3-25, and 3-26) The number and percentage of those with post-secondary education has also increased significantly over the past 20 years. This figure has increase from 32% in 1990 to almost 41% in 2000.

**TABLE 3-23**  
**COMPARISON OF EDUCATIONAL ATTAINMENT PERSONS 25 YEARS AND OVER, 1990**  
**(By Years of School Completed)**

AREA	ELEMENTARY SCHOOL	HIGH SCHOOL (1-3)	HIGH SCHOOL (4)	COLLEGE (1-3)	COLLEGE (4+)	TOTAL
White County	1,574	1,640	2,624	1,656	1,177	8,671
Cleveland	160	175	281	220	124	960
Helen	23	21	81	55	54	234
Lumpkin County	1,754	1,681	2,628	1,604	961	8,628
Habersham County	3,544	3,553	5,188	2,958	2,084	17,327
State of Georgia	483,755	686,060	1,192,935	684,109	777,158	4,023,420

Source: U.S. Census Bureau.

**TABLE 3-24**  
**COMPARISON OF EDUCATIONAL ATTAINMENT PERSONS 25 YEARS AND OVER, 1990**  
**BY PERCENTAGES**

AREA	ELEMENTARY SCHOOL (0-8)	HIGH SCHOOL (1-3)	HIGH SCHOOL (4)	COLLEGE (1-3)	COLLEGE (4+)
White Co.	18.1	18.9	30.3	19.1	13.6
Cleveland	16.7	18.2	29.3	22.9	12.9
Helen	9.8	9.0	34.6	23.5	23.0
Lumpkin County	20.3	19.4	30.5	18.6	11.1
Habersham County	20.5	20.5	29.9	17	12
State of Georgia	12	17	29.6	17	19.3

Source: U.S. Bureau of Census.

**TABLE 3-25**  
**COMPARISON OF EDUCATIONAL ATTAINMENT PERSONS 25 YEARS AND OVER, 2000**  
**(By Years of School Completed)**

AREA	ELEMENTARY SCHOOL	HIGH SCHOOL (1-3)	HIGH SCHOOL (4)	COLLEGE (1-3)	COLLEGE (4+)	TOTAL
White County	1,189	1,999	4,679	3,369	2,028	13,264
Cleveland	104	139	382	305	182	1,112
Helen	6	33	92	108	89	328
Lumpkin County	1,352	2,107	3,789	2,987	2,234	12,469
Habersham County	3,113	3,733	7,931	5,006	3,718	23,501
State of Georgia	393,197	718,152	1,486,006	1,328,432	1,260,178	5,185,965

Source: U.S. Census Bureau.

**TABLE 3-26**  
**COMPARISON OF EDUCATIONAL ATTAINMENT PERSONS 25 YEARS AND OVER, 2000**  
**BY PERCENTAGES**

AREA	ELEMENTARY SCHOOL (0-8)	HIGH SCHOOL (1-3)	HIGH SCHOOL (4)	COLLEGE (1-3)	COLLEGE (4+)
White Co.	8.9	15.0	35.3	25.4	15.3
Cleveland	9.3	12.5	34.3	27.4	16.4
Helen	1.8	10.1	28.0	32.9	27.1
Lumpkin County	10.8	16.9	30.4	24.0	17.9
Habersham County	13.3	15.9	33.7	21.3	15.8
State of Georgia	7.6	13.9	28.7	25.6	24.3

Source: U.S. Bureau of Census.

White County still lags behind surrounding counties and the State of Georgia when it comes to college graduates with a Bachelors degree or higher. This may be reflected because in the year 2000 there was not a four-year college located in White County. With Truett-McConnell College becoming a four-year institution, this statistic will most likely increase and have an impact on the education and skill levels in the county.

**TABLE 3-27**  
**EDUCATIONAL ATTAINMENT PERSONS 25 YEARS AND OVER, 1980, 1990, AND 2000**  
**WHITE COUNTY**

EDUCATIONAL ATTAINMENT	1980		1990		2000	
	#	%	#	%	#	%
Total Persons, 25 Years and Over	6,076	100	8,671	100	13,264	100
Percent High School Graduate or Higher	48.1		63.0		76.0	
Percent Bachelor's degree or higher	9.5		13.6		15.3	

Source: U.S. Bureau of Census.

Emphasis on educational attainment and the necessity of higher education to compete in the job market is reflected in the population of White County. The percentage of the age twenty-five plus population with post-secondary education, including some college, Associates, Bachelors, Graduate or Professional degrees increased from 20.6% in 1980, to 32.7% in 1990, to 41.0% in 2000. (Table 3-27). The percentage of the population with a Bachelors degree or higher has increase from 9.5% to 15.3% over the same time frame.

**TABLE 3-28  
EDUCATION STATISTICS  
WHITE COUNTY**

<b>CATEGORY</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>H.S. Graduation Test Scores (All Components)</b>	80%	81%	75%	67%	61%	74%	64%
<b>H.S. Dropout Rate</b>	14.8%	11.1%	6.9%	5%	10%	8.4%	6%
<b>Grads Attending Georgia Public Colleges</b>	17.0%	19.8%	19.5%	17.6%	19.3%	--	--
<b>Grads Attending Georgia Public Technical Schools</b>	10.3%	11.8%	27.9%	11.9%	14.7%	15.7%	--

Source: Georgia Department of Education.

Between 1995 and 2000, the White County school system reported to the Georgia Department of Education, an average high school dropout rate of 8.8%, for students in grades 9 to 12. Statewide, this rate is 7.3% for the same period of time. From viewing Georgia Department of Community Affairs data, it should be noted here that White County spent an average of \$5,372 per student for public education each year between 1996 and 2000. This expenditure was greater than the statewide average of \$5,285. Also noteworthy from that same data source was: Based on the 2000 graduating class for White County school system, 50.5% of the students were eligible for the HOPE Scholarship Program. The scholarship is available to eligible students to attend a post-secondary school in Georgia. Statewide, 57.9% of the graduating students were eligible for the HOPE scholarship. In White County, 19.3% of its high school graduates were attending public colleges in Georgia. (Table 3-28)



**TABLE 3-29**  
**2000 SCHOOL ENROLLMENT**  
**PERSONS THREE YEARS AND OVER ENROLLED IN SCHOOL**  
**WHITE COUNTY**

TYPE OF SCHOOL	NUMBER OF PERSONS
Preprimary School	252
Elementary or High School	3,284
College	970

Source: U.S. Bureau of Census.

Table 3-23 indicates that there are 4,506 persons in White County enrolled in some type of educational institution. There are 252 children attending pre-primary school, 3,284 students in elementary school, and 970 persons attending post-secondary institutions. (Table 3-29)

**INCOME CHARACTERISTICS**

**TABLE 3-30**  
**PER CAPITA INCOME (\$) - 1980, 1990-2000**  
**WHITE COUNTY**

AREA	1980	1990	1991	1992	1993	1994
White Co.	6,941	14,268	14,814	15,668	16,469	17,210
Georgia	8,474	17,722	18,201	19,170	19,886	20,841
% Of State	81.9	80.5	81.4	81.7	82.8	82.6

AREA	1995	1996	1997	1998	1999	2000
White Co.	18,118	19,192	20,117	20,955	21,170	22,302
Georgia	21,806	23,055	23,911	25,447	26,499	27,794
% Of State	83.08	83.24	84.13	82.35	79.89	80.24

Source: Bureau of Economic Analysis, Regional Economic Accounts, 2004.

The White County per capita personal income in 2000 was \$22,302, as compared with \$27,794 for Georgia. In 2000, the county had a per capita income that was 80.24% of the State's per capita income. The gap between White County's per capita income and the State's has shown fluctuation, but maintained relatively constant, since 1980. (Table 3-30) This gap is reflected in the types of industries that are located in White County which pay lower wages. Local efforts should include increasing the skill levels of the labor force in order to attract industries with higher paying jobs. Some of this also results from an aging population that is retiring and has limited income versus other areas of the state (metro Atlanta) where the working population is actually increasing.

**TABLE 3-31  
PER CAPITA INCOME (\$) – 1990 AND 2000  
CLEVELAND AND HELEN**

<b>AREA</b>	<b>1990</b>	<b>2000</b>
<b>Cleveland</b>	10,145	14,942
<b>Helen</b>	15,273	15,008

Source: The U.S. Bureau of Census.

In Cleveland, The per capita income has grown from \$10,145 in 1990 to \$14,942 in 2000. In Helen, the per capita income has decreased slightly from \$15,273 in 1990 to \$15,008 in 2000. (Table 3-31). The level of per capita income in the municipalities is significantly lower than the county and the State.

**TABLE 3-32  
1990 INCOME CHARACTERISTICS  
WHITE COUNTY, CLEVELAND, HELEN AND GEORGIA**

<b>CHARACTERISTIC</b>	<b>WHITE</b>	<b>CLEVELAND</b>	<b>HELEN</b>	<b>GEORGIA</b>
<b>Median Household</b>	24,234	22,639	22,917	29,021
<b>Median Family</b>	27,830	29,286	38,750	33,529

Source: The U.S. Bureau of Census.

Income characteristics for White County, Cleveland, and Helen from 1990 to 2000 show a steady increase in median household and median family incomes. Median family income increased in the county from \$27,830 in 1990 to \$40,704 in 2000, a 46.2% increase. Median household income rose in the county from \$24,234 in 1990 to \$36,084 in 2000, a 48.9% increase. (Table 3-32 and 3-33) The median family and median household incomes in White County continue to be significantly less than the State.

**TABLE 3-33  
2000 INCOME CHARACTERISTICS  
WHITE COUNTY, CLEVELAND, HELEN AND GEORGIA**

<b>CHARACTERISTIC</b>	<b>WHITE</b>	<b>CLEVELAND</b>	<b>HELEN</b>	<b>GEORGIA</b>
<b>Median Household</b>	36,084	31,949	32,971	42,433
<b>Median Family</b>	40,704	37,417	40,781	49,280

Source: The U.S. Bureau of Census.

The median household incomes for both Cleveland and Helen have significantly increased by more than 40%. However, this is not the case when it comes to median family income. Though both jurisdictions saw an increase in total income, the percentage increase as compared to the county and State is less. This is due to the decreased size in family households and in the increase in the number of non-family household in the cities.

Distribution of household income in White County has shifted dramatically over the past twenty years. (Table 3-34) In 1980 about 74% of the households had an annual income of less than \$20,000. In 2000, nearly 45% of the household have an annual income of \$40,000 or more, and 31% of the households have an income of \$50,000 or more. Part of this is due to the shift in households going from one to two income sources. It is a positive that household wealth is increasing in White County. The down side is that it is taking more than one member of the household to provide this level of income.

The distribution of income in Cleveland is balanced. However, over 27% of the households in Cleveland have an annual income of less than \$20,000, and more than 46% have an income less than \$30,000 (Table 3-35).

Some of this statistic comes from the fact that Cleveland has a higher percentage of younger families and households that are in the beginning stages of income earning. Their education, experience and skill levels are lower there for earning less income.

**TABLE 3-34  
DISTRIBUTION OF HOUSEHOLDS BY INCOME  
WHITE COUNTY**

	<b>1990</b>	<b>2000</b>
<b>Total</b>	4,889	7,730
<b>Income less than \$9999</b>	882	779
<b>Income \$10000 - \$14999</b>	572	412
<b>Income \$15000 - \$19999</b>	481	604
<b>Income \$20000 - \$29999</b>	1,103	1,271
<b>Income \$30000 - \$34999</b>	379	662
<b>Income \$35000 - \$39999</b>	298	580
<b>Income \$40000 - \$49999</b>	456	1,028
<b>Income \$50000 - \$59999</b>	284	694
<b>Income \$60000 - \$74999</b>	246	831
<b>Income \$75000 - \$99999</b>	105	495
<b>Income \$100000 - \$124999</b>	32	185
<b>Income \$125000 - \$149999</b>	20	73
<b>Income \$150000 and above</b>	31	116

	1990	2000
<b>Total</b>	100.0%	100.0%
<b>Income less than \$9999</b>	18.0%	10.1%
<b>Income \$10000 - \$14999</b>	11.7%	5.3%
<b>Income \$15000 - \$19999</b>	9.8%	7.8%
<b>Income \$20000 - \$29999</b>	22.6%	16.4%
<b>Income \$30000 - \$34999</b>	7.8%	8.6%
<b>Income \$35000 - \$39999</b>	6.1%	7.5%
<b>Income \$40000 - \$49999</b>	9.3%	13.3%
<b>Income \$50000 - \$59999</b>	5.8%	9.0%
<b>Income \$60000 - \$74999</b>	5.0%	10.8%
<b>Income \$75000 - \$99999</b>	2.1%	6.4%
<b>Income \$100000 - \$124999</b>	0.7%	2.4%
<b>Income \$125000 - \$149999</b>	0.4%	0.9%
<b>Income \$150000 and above</b>	0.6%	1.5%

Source: U.S. Bureau of Census.

**TABLE 3-35  
DISTRIBUTION OF HOUSEHOLDS BY INCOME  
CITY OF CLEVELAND**

	1990	2000
<b>Total</b>	589	705
<b>Income less than \$9999</b>	123	79
<b>Income \$10000 - \$14999</b>	83	50
<b>Income \$15000 - \$19999</b>	46	63
<b>Income \$20000 - \$29999</b>	125	134
<b>Income \$30000 - \$34999</b>	40	73
<b>Income \$35000 - \$39999</b>	39	50
<b>Income \$40000 - \$49999</b>	35	92
<b>Income \$50000 - \$59999</b>	33	53
<b>Income \$60000 - \$74999</b>	38	59
<b>Income \$75000 - \$99999</b>	12	35
<b>Income \$100000 - \$124999</b>	6	8
<b>Income \$125000 - \$149999</b>	3	3
<b>Income \$150000 and above</b>	6	6

	1990	2000
<b>Total</b>	100.0%	100.0%
<b>Income less than \$9999</b>	20.9%	11.2%
<b>Income \$10000 - \$14999</b>	14.1%	7.1%
<b>Income \$15000 - \$19999</b>	7.8%	8.9%
<b>Income \$20000 - \$29999</b>	21.2%	19.0%
<b>Income \$30000 - \$34999</b>	6.8%	10.4%
<b>Income \$35000 - \$39999</b>	6.6%	7.1%
<b>Income \$40000 - \$49999</b>	5.9%	13.0%
<b>Income \$50000 - \$59999</b>	5.6%	7.5%
<b>Income \$60000 - \$74999</b>	6.5%	8.4%
<b>Income \$75000 - \$99999</b>	2.0%	5.0%
<b>Income \$100000 - \$124999</b>	1.0%	1.1%
<b>Income \$125000 - \$149999</b>	0.5%	0.4%
<b>Income \$150000 and above</b>	1.0%	0.9%

Source: U.S. Bureau of the Census (SF3)

The City of Helen too has a large percentage of its population in the lower income categories. Like Cleveland, many of the households are smaller and are considered non-family households. However, in Helen many of the households are retirees living on limited incomes (Table 3-36).

**TABLE 3-36  
DISTRIBUTION OF HOUSEHOLDS BY INCOME  
CITY OF HELEN**

	1990	2000
<b>Total</b>	148	224
<b>Income less than \$9999</b>	28	32
<b>Income \$10000 - \$14999</b>	23	14
<b>Income \$15000 - \$19999</b>	15	18
<b>Income \$20000 - \$29999</b>	20	42
<b>Income \$30000 - \$34999</b>	4	16
<b>Income \$35000 - \$39999</b>	12	22
<b>Income \$40000 - \$49999</b>	7	21
<b>Income \$50000 - \$59999</b>	0	15
<b>Income \$60000 - \$74999</b>	10	19
<b>Income \$75000 - \$99999</b>	16	6
<b>Income \$100000 - \$124999</b>	2	5
<b>Income \$125000 - \$149999</b>	8	0
<b>Income \$150000 and above</b>	3	14

	1990	2000
<b>Total</b>	100.0%	100.0%
<b>Income less than \$9999</b>	18.9%	14.3%
<b>Income \$10000 - \$14999</b>	15.5%	6.3%
<b>Income \$15000 - \$19999</b>	10.1%	8.0%
<b>Income \$20000 - \$29999</b>	13.5%	18.8%
<b>Income \$30000 - \$34999</b>	2.7%	7.1%
<b>Income \$35000 - \$39999</b>	8.1%	9.8%
<b>Income \$40000 - \$49999</b>	4.7%	9.4%
<b>Income \$50000 - \$59999</b>	0.0%	6.7%
<b>Income \$60000 - \$74999</b>	6.8%	8.5%
<b>Income \$75000 - \$99999</b>	10.8%	2.7%
<b>Income \$100000 - \$124999</b>	1.4%	2.2%
<b>Income \$125000 - \$149999</b>	5.4%	0.0%
<b>Income \$150000 and above</b>	2.0%	6.3%

Source: U.S. Bureau of the Census (SF3)

**TABLE 3-37**  
**2000 POVERTY CHARACTERISTICS**  
**WHITE COUNTY, CLEVELAND, HELEN**

<b>POVERTY CHARACTERISTIC</b>	<b>WHITE</b>	<b>CLEVELAND</b>	<b>HELEN</b>
<b>Total Persons</b>	2,042	258	38
<b>Below Poverty Level</b>			
<b>% Total Persons</b>	10.5	15.5	8.2
<b>Below Poverty Level</b>			
<b>Total Persons 65 Years and Over</b>	425	34	6
<b>Below Poverty Level</b>			
<b>Related Children Under 18 Years</b>	559	109	9
<b>Below Poverty Level</b>			
<b>% Related Children Under 18 Years</b>	12.3	25.6	8.1
<b>Below Poverty Level</b>			
<b>Total Families</b>	487	58	8
<b>Below Poverty Level</b>			
<b>Families Below Poverty Level</b>	187	36	5
<b>with Female Householder (No Husband Present)</b>			

Source: U.S. Bureau of Census.

During 2000, 10.5% of the county's population lived below the poverty level. Of these persons living below the poverty level, 425 or 15.4% of them are person 65 years of age or older. Approximately 12.3% of those living under the poverty line are children under the age of 18. (Table 3-37)

More than 15% of the population in Cleveland lived below the poverty level in 2000. Also, one in four related children under the age of 18 were living under the poverty level.

In the City of Helen, there were a total of 38 persons living under the poverty level, nine of which were children.

## CHAPTER FOUR

### HOUSING ELEMENT

The housing element of the comprehensive plan provide the local governments an inventory of the existing housing stock, an assessment of the housing stock's adequacy and suitability for serving current and future population needs, a determination of housing needs and a set of goals and objectives, policies and strategies for providing housing for all population sectors.

Upon completion of the housing inventory, the assessment is intended to determine whether existing housing is appropriate to local housing needs an demands, especially with respect to the type, supply, condition and affordability of the housing units in the community. In particular, an assessment is made of the existing or anticipated housing problems and issues and what actions might be taken to improve the situation.

#### Total Housing Units

In White County, the number of housing units has increased by 3,372 units from 1990 to 2000 bringing the total number of units to 9,454. This is an increase of 55.4% for the same decade. This is in contrast to the city of Cleveland, which had a slight decline of the total number of housing units from 22.6% (from 1980 to 1990) to 22.0% (from 1990 to 2000). From 1990 to 2000, Cleveland added 142 new housing units, which is a slight increase from the previous decade (119 units). Helen has had a dramatic downturn in the percentage changes in new housing units from 46.3 percent (1989 to 1990) to 25.8 % (1990 to 2000). This is in keeping with the fewer number of units built between 1990 to 2000 (66 units) and 1980 to 1990 (81 units).

**TABLE 4-1**  
**HOUSING TRENDS, 1980 – 2000**  
**WHITE COUNTY AND MUNICIPALITIES**  
**(Total Number of Housing Units)**

<b>AREA</b>	<b>1980</b>	<b>1990</b>	<b>1980-1990 % CHANGE</b>	<b>2000</b>	<b>1990-2000 % CHANGE</b>
White County	4,091	6,082	48.7	9,454	55.4
Cleveland	526	645	22.6	787	22.0
Helen	175	256	46.3	322	25.8

Source: U.S. Bureau of Census, 1980-2000.



## Types of Housing Units in White County

The predominant housing type in White County is the single-family detached housing unit (Table 4-2). The number of such units increased from 1990 with 4,337 units to 6,642 units in 2000. While the number of units has increased the percentage make up of single-family detached housing has decreased from 1990 when it was 71.3% percent of totally housing types to 70.3% in 2000. Mobile homes, RVs and other types of housing have had a steady increase with 745 units built between 1980 and 1990 and 801 units built between 1990 and 2000. While the number of units has steadily increased, the percentage make up has only had the largest gain between 1980 (16.8%) and 1990 (23.5%) followed by a marginal gain between 1990 and 2000 (23.6%).

Single-family attached housing has grown over the years with 44 units in 1980, 58 units in 1990 and 95 units in 2000. The percentage make up has remained fairly consistent with only a marginal gain from 1990 (0.9%) to 2000 (1.0%). Multi-family housing has had a steady increase in both numbers of units and the percentage make up from 1980 to 2000. From 1980 to 1990, there was approximately a 38% percent increase in the number of units from 100 in 1980 to 260 by 1990 and between 1990 and 2000, there was an approximate 53% percent increase in the number of housing units from 260 to 489. The percentage make up has increased as well nearly doubling from 1980 (2.4%) to 1990 (4.3%) and by 2000 multi-family housing comprised 5.1% of the housing percentage make up.

**TABLE 4-2  
TYPE OF HOUSING UNITS 1980-2000  
WHITE COUNTY**

<b>TYPE OF UNIT</b>	<b>1980</b>	<b>%</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Single Family, Detached	3,265	79.8	4,337	71.3	6,642	70.3
Single Family, Attached	44	1.0	58	0.9	95	1.0
Multi-Family	100	2.4	260	4.3	489	5.1
Mobile Home, RV, Other	682	16.8	1,427	23.5	2,228	23.6
<b>TOTAL</b>	<b>4,091</b>	<b>100</b>	<b>6,082</b>	<b>100</b>	<b>11,652</b>	<b>100</b>

Source: U.S. Bureau of Census, 1980-2000.

## Types of Housing Units in Cleveland

The predominant housing type in Cleveland is the single-family detached housing unit (Table 4-3). The number of units has increased from 433 units in 1980 to 437 units in 1990 and to 500 units in 2000. While the number of units has increased, their percentage make up has steadily decreased from 82.3% percent in 1980 to 63.5% in 2000. Mobile homes, RVs and other types of housing have decreased both in number of units and percentage make up from 1990 (78

units) to 2000 (65 units) after an increase from 1980 (47 units) to 1990. The percentage make up reflects this rise and decrease in units with the make up in 1980 at 8.9%, 1990 at 12.1% and 2000 at 8.3%.

Single-family attached housing has seen a decrease in the number of units and its percentage make up. In 1990 there were 14 units, the same number as 1980, and by 2000, there was a reduction of two units to 12 units. Even with the stagnant numbers from 1980 to 1990, the percentage make up decreased from 2.7% in 1980 to 2.1% in 1990 and decreased again to 1.5% by 2000. Multi-family housing is the only type of housing that has seen an increase in both the number of units and percentage make up. In 1980 there were 32 units (6.1% make up) more than tripling by 1990 to 116 units (18% make up) and more than doubling to 210 units (26.6 % make up).

**TABLE 4-3  
TYPE OF HOUSING UNITS 1980-2000  
CITY OF CLEVELAND**

<b>TYPE OF UNIT</b>	<b>1980</b>	<b>%</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Single Family, Detached	433	82.3	437	67.8	500	63.5
Single Family, Attached	14	2.7	14	2.1	12	1.5
Multi-Family	32	6.1	116	18.0	210	26.6
Mobile Home, RV, Other	47	8.9	78	12.1	65	8.3
<b>TOTAL</b>	<b>526</b>	<b>100</b>	<b>645</b>	<b>100</b>	<b>787</b>	<b>100</b>

Source: U.S. Bureau of Census, 1980-2000.

**Table 4-4: Types of Housing Units in Helen**

The predominant housing type in Helen is the multi-family housing unit (Table 4-4). This type of unit started out in 1980 far behind single-family detached housing units, 38 multi-family housing units versus 105 single-family detached housing units. By 1990 the unit numbers were similar between the two with single-family detached having 117 units and multi-family having 110 units, but by 2000 the multi-family housing units surpassed the single-family housing units, 154 units versus 134 units. The percentage make up also reflects this change with the multi-family housing comprising 47.8% of the housing stock versus the 41.6% for single-family housing stock in 2000.

Single-family attached housing units have nearly tripled in number from 1990 (12 units) to 2000 (32 units). There was a decline of units from 1980 (15 units) to 1990 (12 units). The percentage make up for single-family attached housing units reflects the decline of nearly 50% from 1980 (8.6% make up) to 1990 (4.7% make up) and then nearly doubling to 9.9% make up in 2000. Mobile Home, RVs and other units had a slight decline in number of units between 1980 (19 units) and 1990 (17 units) with a dramatic decline between 1990 and 2000 (2 units). These changes are mirrored by the percent make up, with the highest percentage in 1980 (10.8%) and dropping to the lowest point in 2000 (0.6%).

**TABLE 4-4  
TYPE OF HOUSING UNITS 1980-2000  
CITY OF HELEN**

<b>TYPE OF UNIT</b>	<b>1980</b>	<b>%</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Single Family, Detached	105	60.0	117	45.7	134	41.6
Single Family, Attached	15	8.6	12	4.7	32	9.9
Multi-Family	36	20.6	110	43.0	154	47.8
Mobile Home, RV, Other	19	10.8	17	6.6	2	0.6
<b>TOTAL</b>	<b>175</b>	<b>100</b>	<b>256</b>	<b>100</b>	<b>322</b>	<b>100</b>

Source: U.S. Bureau of Census, 1980-2000.

**Table 4-5: Type of Housing Units in the Georgia Mountains Region**

Throughout the Georgia Mountains Region, the single-family detached housing unit is the most predominant type with 139,685 units in 2000, up from 92,288 in 1990 (Table 4-5). This housing unit type has made moderate gains as a percentage make up of the housing unit types from 69.1% in 1990 to 73.0% in 2000. Single-family attached housing units also demonstrated moderate gains between 1990, with 1,244 units, and 2000, with 2,229 units. The percentage make up also reflects this modest growth between 1990 (0.9%) and 2000 (1.1%).

Multi-family housing has experienced an overall decline in the percentage make up while the overall number of units has increased in the Georgia Mountains Region. In 1990, there were 9,681 units and by 2000 that had grown to 13, 089 units. The percentage make had a slight dip from 7.3% in 1990 to 6.9% in 2000. Mobile homes, RVs and other housing units displayed a similar aspect in that while the number of units increased the percentage make up decreased. From 1990 to 2000 the numbers of units increased from 30,265 (1990) to 36,249 (2000). The overall percentage make up had a moderate drop from 1990 (22.7%) to 2000 (19.0).

**TABLE 4-5  
TYPE OF HOUSING UNITS 1990-2000  
GEORGIA MOUNTAINS REGION**

<b>TYPE OF UNIT</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Single Family, Detached	92,288	69.1	139,685	73.0
Single Family, Attached	1,244	0.9	2,229	1.1
Multi-Family	9,681	7.3	13,089	6.9
Mobile Home, RV, Other	30,265	22.7	36,429	19.0
<b>TOTAL</b>	<b>133,478</b>	<b>100</b>	<b>191,432</b>	<b>100</b>

Source: U.S. Bureau of Census, 1990-2000.

**Table 4-6: Types of Housing Units in the State of Georgia**

Single-family detached housing is the most predominant housing unit type in the State of Georgia from 1990 to 2000 (Table 4-6). In 2000, there were 2,107,317 single-family housing units an increase of 468,470 units from 1990 (1,538,847 units). The percentage make up of the single-family detached housing also reflects the modest gain in number of units with this housing unit type comprising 64.2% of the percentage make up in 2000 and 62.1% in 1990. Multi-family housing units also demonstrated a modest gain in the number of housing units with 681,019 units in 2000 and 598,271 in 1990. The percentage make up for the multi-family housing units type declined from 22.7% (1990) to 20.8% (2000).

In 2000, there were 399,251 mobile homes, RVs and other housing type units in the State of Georgia a marginal gain over 1990 with 327, 888 units. The percentage make up of these units displayed a marginal decline from 12.4% in 1990 to 12.2% in 2000. Single-family attached housing showed moderate growth from 1990 (73,412 units) to 2000 (94150 units) in the number of units. Despite the growth in the number of units, the percentage make up remained the same for 1990 and 2000 at 2.8%.

**TABLE 4-6  
TYPE OF HOUSING UNITS 1990-2000  
STATE OF GEORGIA**

TYPE OF UNIT	1990	%	2000	%
Single Family, Detached	1,638,847	62.1	2,107,317	64.2
Single Family, Attached	73,412	2.8	94,150	2.8
Multi-Family	598,271	22.7	681,019	20.8
Mobile Home, RV, Other	327,888	12.4	399,251	12.2
TOTAL	2,638,418	100	3,281,737	100

Source: U.S. Bureau of Census, 1990-2000.

**Table 4-7: Changes in the Type of Housing Units by Census Divisions in White County**

When looking at the number of units of the various types of housing (Table 4-7) tract 9502 has had the most growth with an increase of 2,126 units from 1990 to 2000. Tract 9501 had the smallest increase with 329 units being added from 1990 to 2000. Single-family detached housing is the most common housing unit type with 6,642 units for the three census tracts in 2000, up from 4,475 units in 1990. Mobile homes and RVs gained in total 933 units and multi-family housing nearly doubled from 242 units to 489 units from 1990 to 2000. Single-family attached housing grew at a marginally from 65 units in 1990 to 95 units in 2000.

Within tract, 9501 single-family housing units and multifamily housing units had marginal gains from 1990 to 2000. Mobile homes and RVs declined in their percentage makeup from 14.5 (1990) to 10.1 (2000). The largest growth for housing units in tract 9501 came from single-family attached housing which grew from 0.4% (1990) to 2.6% (2000). Tract 9502 had a decline in single-family detached housing units percentage make up from 72.7% (1990) to 69.8% (2000). Single-family attached housing for the same tract had a marginal decline from 1.8% (1990) to 1% (2000). Mobile homes and RVs displayed a marginal growth in their percentage make up of tract 9502 from 22% (1990) to 23.7% (2000). The largest gain in percentage make up for tract 9502 came from multi-family housing units which grew from 3.5% (1990) to 5.5% (2000). Tract 9503 recorded zero single-family attached units in 1990 and 2000. Multi-family housing units had a marginal growth in the percentage make up from 0.4% (1990) to 0.6% (2000) while the number of units more than doubled from 6 to 15. Mobile homes and RVs had large gain in the percentage make up of housing types from 25.4% (1990) to 32.1% (2000) and the numbers of units nearly doubled from 379 (1990) to 773 (2000).

**TABLE 4-7  
CHANGE IN TYPE OF HOUSING UNITS  
BY CENSUS DIVISION  
WHITE COUNTY 1990-2000**

CENSUS DIVISION	TOTAL		SINGLE FAMILY DETACHED		SINGLE FAMILY ATTACHED		MULTI-FAMILY		MOBILE HOME/RV	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
9501	1,229	1,558	924	1,190	5	41	122	170	178	157
9501 %	20.2	16.5	75.2	76.4	0.4	2.6	9.9	10.9	14.5	10.1
9502	3,360	5,486	2,443	3,830	60	54	119	304	738	1,298
9502 %	55.2	58.0	72.7	69.8	1.8	1.0	3.5	5.5	22.0	23.7
9503	1,493	2,410	1,108	1,622	0	0	6	15	379	773
9503 %	24.5	25.5	74.2	67.3	0.0	0.0	0.4	0.6	25.4	32.1

**Table 4-8 Types Housing Units in Census Divisions (by percentage)**

The latest census revealed that single-family detached housing remains the largest number of housing type in the three census tracts in White County with 6,737 units (Table 4-8). In the census tract 9501, which includes the City of Helen, multi-family housing makes the greatest percentage of housing type at 34.8% of the housing, followed by single-family housing at 18.3% and mobile homes and RVs at 7%. For tract 9502, which includes the city of Cleveland, mobile homes, RVs, and single-family housing units are nearly even in percentage amounts, 58.3% and 57.7% respectively. Multi-family housing comprised the remaining 62.2% percent of the housing make up for the census tract. In census tract 9503 the mobile home and RV comprise the largest percentage of the housing make up at 34.7% followed by single-family housing (24%) and multi-family housing (3%).

**TABLE 4-8  
TYPE OF HOUSING UNITS IN CENSUS DIVISION  
(by percentage)  
WHITE COUNTY, 2000**

<b>DIVISION</b>	<b>SINGLE FAMILY*</b>	<b>MULTI-FAMILY</b>	<b>MOBILE HOME/RV</b>
9501 include Helen	18.3	34.8	7.0
9502 include Cleveland	57.7	62.2	58.3
9503	24.0	3.0	34.7
<b>TOTAL UNITS</b>	6,737	489	2,228

Source: U.S. Bureau of Census, 2000. \*Includes single-family attached units.

**Table 4-9: Housing Units by Age**

Table 4-9 contains information on what percentage of the housing stock is at certain ages for White County, the Cities of Helen and Cleveland, the Georgia Mountains Region and the State of Georgia. In the year 2000, 59.9% of the housing stock in Helen was built in 1980 or after. 53.1% of Cleveland's housing stock was built in 1980 or later. For White County, the 66.2% percent of the housing stock was built in 1980 or later. For the Georgia Mountains Region, 61.4% of the housing stock was built in 1980 or later and for the State of Georgia 49.9% for the same time period.

**TABLE 4-9  
HOUSING UNITS BY AGE, 2000**

	<b>TOTAL UNITS</b>	<b>10 YEARS OR LESS</b>	<b>11 – 20 YEARS</b>	<b>21 – 40 YEARS</b>	<b>41 – 60 YEARS</b>	<b>MORE THAN 60 YEARS</b>
Helen	322	23.6	36.3	22.0	14.6	3.4
Cleveland	787	36.7	16.4	15.9	26.4	4.6
White County	9,454	42.2	24.0	16.1	13.3	4.3
GEORGIA MOUNTAINS REGION	191,432	39.6	21.8	24.6	9.5	4.5
STATE OF GEORGIA	3,281,737	27.9	22.0	31.2	13.0	5.9

Source: U.S. Bureau of Census, 2000.



**Table 4-10: Substandard Housing Characteristics, 1990 and Table 4-11: Substandard Housing Characteristics, 2000**

Tables 4-10 and 4-11 compare substandard housing characteristics; lacking complete plumbing facilities, lacking complete kitchen plumbing facilities, no heating fuel and over crowded occupied units, in White County, Helen and Cleveland. This data is compared to the percentage make ups found in the Georgia Mountains Region and to the State of Georgia for the years 1990 (table 4-11) and 2000 (table 4-12).

From 1990 to 2000, the total number of substandard housing units in White County decreased from 366 units to 291 units. Housing units with no heating fuel increased from 0 units (1990) to 2 units (2000), but their percentage make up remained the same at 0%, lower than the Regional percentage (0.6%) and State percentage (0.7%). Over crowded occupied units increased from 124 (1990) to 238 (2000), a net gain of 124 units. The percentage make up increased from 2% (1990) to 3.1% (2000), but remained below the Regional percentage make up (1990 was 4% and 2000 was 4.8%) and the State percentage make up (1990 was 4.1% and 2000 was 4.4%). Housing lacking complete plumbing facilities showed a dramatic decrease from 1990 (143 units) to 2000 (22). In 1990, the percentage make up was 2.4%, higher than the Regional Percentage of 1.3% and the State percentage of 1.1%. By 2000 the percentage make up dropped to 0.3%, lower than the Regional percentage of 0.6% and the State percentage of 0.5%. Housing lacking complete kitchen facilities dropped from 99 units in 1990 to 29 units in 2000 with the percentage make reflecting this drop from 1.6% (1990) to 0.4% (2000).

In Cleveland, from 1990 to 2000, the total number of substandard housing units marginally decreased from 21 units to 20 units. In 1990, data for over crowded occupied units was not available, yet in 2000, 11 units were reported comprising 1.6% percent of the housing stock. This fell below both the Regional average of 4.8% and the State average of 4.4 %. Zero units were reported to have no heating fuel for both 1990 and 2000. Housing lacking complete plumbing facilities dropped by more than 50% from 12 units (1990) to 5 units (2000). The percentage make up also dropped from 1.9% in 1990, which was marginally higher than the Regional average of 1.3% and the State average of 1.1%, to 0.7% in 2000, marginally higher than the Regional average of 0.6% and the State average of 0.5%. Housing lacking complete kitchen facilities decreased in the number of units from 9 (1990) to 4 (2000). The percentage make up also decreased from 1.4 % in 1990, which was marginally lower than the Regional average of 1.5% and marginally higher than the State average of 1.3%. By 2000, the percentage make up decreased to 0.6%, marginally higher than the Regional average of 0.5% and double the State average of 0.3%.

In 1990, Helen reported zero substandard housing units in all categories except for over crowded occupied units, which data was not available. In 2000, there were 2 units lacking complete kitchen facilities, 2 units having no heating fuel and 7 units were over crowded occupied units existed. Zero units were report to be lacking complete plumbing facilities. The percentage make up of units lacking complete kitchen facilities equaled 1% of the housing stock, double the Regional average and triple the State average. Housing units having no heating fuel comprised 1% of the housing stock, more than triple of both the Regional and State average of 0.3%. Over crowded occupied units comprised 3.4% of the percentage make up, lower than the Region's 4.8% and the State average of 4.4%.

The percentage make up of the Georgia Mountains Region in 1990 showed that it was marginally above the state average in housing lacking complete plumbing facilities 1.3% versus the State's 1.1% and for housing lacking complete kitchen facilities 1.5% versus the State's 1.3%. The averages for housing having no heating fuel in the Region was 0.6% marginally below the State average of 0.7% and for over crowded occupied units the Region's average was 4%, again, marginally below the State average of 4.1%.

In 2000, the Region's percentage for housing with heating fuel equaled the State's average at 0.3%. For housing lacking complete plumbing facilities, the Region's percentage make up (0.6%) was marginally higher than the State's percentage make up (0.5%). The Georgia Mountain's Region was marginally higher than the State's percentage make up in the areas of housing lacking complete kitchen facilities, 0.5% versus 0.3%, and for over crowded occupied units the Region was marginally higher, 4.8% versus 4.4%.

**TABLE 4-10  
SUBSTANDARD HOUSING CHARACTERISTICS, 1990**

	WHITE COUNTY		CLEVELAND		HELEN		REGION	GEORGIA
	UNITS	%	UNITS	%	UNITS	%	%	%
Lacking complete plumbing facilities	143	2.4	12	1.9	0	0.0	1.3	1.1
Lacking complete kitchen facilities	99	1.6	9	1.4	0	0.0	1.5	1.3
No heating fuel	0	0.0	0	0.0	0	0.0	0.6	0.7
Over crowded occupied units *	124	2.0	N/A	N/A	N/A	N/A	4.0	4.1

Source: U.S. Bureau of Census, 1990. \* 1.01 or greater occupants per room.

**TABLE 4-11  
SUBSTANDARD HOUSING CHARACTERISTICS, 2000**

	WHITE COUNTY		CLEVELAND		HELEN		REGION	GEORGIA
	UNITS	%	UNITS	%	UNITS	%	%	%
Lacking complete plumbing facilities	22	0.3	5	0.7	0	0.0	0.6	0.5
Lacking complete kitchen facilities	29	0.4	4	0.6	2	1.0	0.5	0.3
No heating fuel	2	0.0	0	0.0	2	1.0	0.3	0.3
Over crowded occupied units *	238	3.1	11	1.6	7	3.4	4.8	4.4

Source: U.S. Bureau of Census, 2000. \* 1.01 or greater occupants per room.

**Table 4-12: Total Occupied Housing Units**

Table 4-12 compares the total occupied housing units in 1980, 1990 and 2000 for White County, Helen, and Cleveland and the Georgia Mountains Region and the State of Georgia. White County, Cleveland and Helen have experienced moderate growth rates from 1980 to 2000, but the percentage total of units has decreased for the same time frame. This is in contrast with the Georgia Mountains Region, which saw an increase of 49,010 units from 1980 to 1990, and in 1990 percentage of total units was 84.3%. The State of Georgia faced a similar growth to that of the Georgia Mountains Region. From 1980 to 1990, 496,921 units were added and from 1990 to 2000 an additional 639,754 units were added. The percentage total for the State of Georgia was 89.6% in 1990, slightly higher than the percent totals for White County (80.7%), Helen (57.4%) and the Georgia Mountains Region (84.3%). The City of Cleveland had the highest percent total of units in 1990 (92.7%).

White County’s total number of units grew from 1980 to 1990 (1,408 units) and from 1990 to 2000 the number of units doubled from the previous decade (2,824 units). Despite this growth, the percentage of total units declined from a high of 85.5% in 1980 down to 81.1% in 2000. Helen saw a minimal gain in the number of units from 1980 (145 units) to 1990 (147 units). During this time, the percentage of total units decreased by 25.5% from 82.9% in 1980 to 57.4% in 1990. From the 1990 to 2000, the number of units increased to 208 units, an addition of 61 units. The percentage of total units increase from 1990 (57.4%) to 2000 (64.6%) but is still lower than the 1980 percentage (82.9%). Cleveland had a steady growth from 485 units in 1980 to 598 units in 1990 to 729 units in 2000. Despite this growth, the percentage of total units had minimal changes from 1980 (92.2%) to 1990 (92.7%) to 2000 (92.6%).

**TABLE 4-12  
TOTAL OCCUPIED HOUSING UNITS, 1980 – 2000**

AREA	1980		1990		2000	
	TOTAL OCCUPIED	% OF TOTAL UNITS	TOTAL OCCUPIED	% OF TOTAL UNITS	TOTAL OCCUPIED	% OF TOTAL UNITS
White County	3,499	85.5	4,907	80.7	7,731	81.1
Cleveland	485	92.2	598	92.7	729	92.6
Helen	145	82.9	147	57.4	208	64.6
Region	84,468	N/A	133,478	84.3	166,287	86.9
Georgia	1,869,754	N/A	2,366,615	89.6	3,006,369	91.6

Source: U.S. Bureau of Census, 1980 - 2000.

### Table 4-13: Tenure of Housing Units

Table 4-13 compares the tenure of owner and renter occupied housing units from 1980 to 2000 for White County, Helen, and Cleveland and the Georgia Mountains Region and the State of Georgia. White County has seen growth in both areas of owner occupied units, from 2,861 units (1980) to 6,122 units (2000) and renter occupied units from 638 units (1980) to 1,609 units (2000). The percentage total for owner occupied units had a marginal increase from 1980 (81.7%) to 1990 (82.0%) and then decline in 2000 (79.2%). Renter occupied units had a marginal decrease from 1980 (18.3%) to 1990 (18.0%) and then a slight increase in 2000 (20.8%). White County's percentages for owner occupied units remained above the percentages for the Georgia Mountains Region for 1990 and 2000 (White County: 82.0% and 79.2%; Georgia Mountains Region 64.5% and 78.3%). When compared to the State's percentage of total units for 1990 (64.9%) and 2000 (67.5%), White County's owner occupied units surpassed the State for both decades (1990 was 82.0% and 2000 was 79.2%). The percentage total for renter occupied units for White County in 1990 (18.3%) and 2000 (20.8%) was below the Regional average of 35.5% (1990) and 21.7% (2000) and the State average of 35.1% (1990) and 32.5% (2000). No data was available for the State or Region for 1980.

The City of Cleveland saw marginal increases in the number of owner occupied housing units from 1980 (384 units) to 1990 (412 units) and from 1990 to 2000 (428 units). The number of renter occupied units grew from a modest 101 units (1980) to 186 units (1990). The substantial growth came from 1990 (186 units) to 2000 (301) with 115 units being added. From 1980 to 1990 the percentage total of owner occupied units decreased by slightly more than 10% from 79.2% (1980) to 68.9% (1990) and the overall percentage dropped by slightly more than 10% from 68.9% (1990) to 58.7% (2000). The percentages for renter occupied units increased by 10.3% from 1980 (20.8%) to 1990 (31.1%) and from 1990 to 2000 (41.3%) there was another increase of 10.2%, a marginal decrease from the previous decade. The City of Cleveland's percentage total of owner occupied units for 1990 (68.9%) was slightly higher than the percentage for the Georgia Mountains Region (64.5%) and The percentage for the State (64.9%). For 2000, Cleveland's percentage total for owner occupied units (58.7%) well below the percentage for the Region (78.3%) and moderately below the percentage for the State (67.5%). Percentage total for owner occupied units was not available at the Regional or State level for 1980. The percentage total for the renter occupied units in Cleveland increased from 1980 (20.8%) to 1990 (31.1%) by 10.3% and from 1990 to 2000 (41.3%) by 10.2%. When compared to the Region's total percentage in 1990 (35.5%) and the State's total percentage in 1990 (35.1), Cleveland (31.1%) was moderately below both other percentages. By 2000, Cleveland (41.3%) was well above the Regional total percentage (21.7%) and above the State's total percentage (32.5%). Percentage total for renter occupied units was not available at the Regional or State level for 1980.

The City of Helen had a marginal decrease of owner occupied housing units from 1980 (78 units) to 1990 (73 units) followed by a sizeable increase of 31 units in 2000 (104 units). Renter occupied units had a marginal increase of units from 1980 (67 units) to 1990 (74 units) totaling 7 units and from 1990 to 2000 Helen increased the number of units to 104, an increase of 30 units. The percent total of owner occupied units from 1980 (53.8%) to 1990 (49.7%) decreased by 4.1% and from 1990 to 2000 (50.0%) marginally increased by 0.3%. When compared to the Regional percentage for owner occupied units in 1990 (64.5%) and 2000 (78.3%), Helen's percentage was below the Regional percentages by 14.8% and 28.3% respectively. Comparing the City of Helen's percentage totals for owner occupied units to the State's percentage of owner occupied units for 1990 (64.9%) and 2000 (67.5%) revealed that Helen was 15.2% (1990) and 17.5% (2000) below the State's percentages. Percentage total for owner occupied units was not available at the Regional or State level for 1980. The percentage total for renter occupied units in Helen in 1990 (50.3%) was moderately higher than the Region's percentage of 35.5% and the State's percentage total of 35.1%. By 2000, the percentage for renter occupied units in Helen (50.0%) was significantly higher than the State's percentage (32.5%).

**TABLE 4-13  
TENURE OF HOUSING UNITS, 1980 – 2000**

	TOTAL OWNER OCCUPIED UNITS						TOTAL RENTER OCCUPIED UNITS					
	1980	%	1990	%	2000	%	1980	%	1990	%	2000	%
White County	2,861	81.7	4,022	82.0	6,122	79.2	638	18.3	882	18.0	1,609	20.8
Cleveland	384	79.2	412	68.9	428	58.7	101	20.8	186	31.1	301	41.3
Helen	78	53.8	73	49.7	104	50.0	67	46.2	74	50.3	104	50.0
Region	64,763	N/A	86,057	64.5	130,235	78.3	19,705	N/A	26,510	35.5	36,052	21.7
Georgia	1,215,206	N/A	---	64.9	---	67.5	654,548	N/A	---	35.1	---	32.5

Source: U.S. Bureau of Census, 1980- 2000.

#### **Table 4-14: Vacancy Characteristics of Housing Units**

Table 4-14 looks at the vacancy characteristics of seasonal units (numbers of units and their percentages), the owner vacancy rate and the renter vacancy rate of White County, Helen, Cleveland, the Georgia Mountains Region and the State of Georgia. In White County from 1980 to 1990, the number of seasonal units more than doubled from 334 to 700, for a net gain of 366 units. From 1990 to 2000, 304 units were created bringing the total units to 1,004. This growth is at a slightly lower rate than from 1980 to 1990 when 336 units were created. The percentage of vacant seasonal units declined slightly from 1980 (60.0%) to 1990 (59.6%) and again from 1990 to 2000 (58.3%). Compared to the Region in 1990 (51.5%) and 2000 (51.8%), White County retained a marginally higher percentage of seasonal housing units (1990 was 59.6% and 2000 was 58.3%). No Regional data was available for 1980. When looking at the State for the 1990 (12.4%) and 2000 (18.2%) time frame, White County's percentages of vacant seasonal housing units was approximately 4.5 times higher than the State's percentage in 1990 and more than 3 times higher than the State's percentage in 2000. No State data was available in 1980.

The owner vacancy rate for White County shows a moderate drop from 1980 (6.6%) to 1990 (2.8%) and there was a marginal drop in the vacancy rate from 1990 to 2000 (2.2%). When comparing White county to the Region for 1990 (2.5%) to 2000 (2.5%), White was marginally higher than the Region in 1990 (2.8% versus 2.5%) and in 2000 White County was marginally lower than the Regional average (2.2% versus 2.5%). There was no Regional data available for 1980. The renter vacancy rate declined substantially from 1980 (28.7%) to 1990 (17.2%) and there was a slight drop form 1990 to 2000 (15.1). When comparing this rate to the Region's rate for 1990 (11.4%) and 2000 (8.2%), White County has a higher rate in 1990 (17.2% versus 11.4%) and in 2000, the White County rate is nearly double the Region's rate (15.1% versus 8.2%). There was no Regional data available for 1980. The State's renter vacancy rate for 1990 (12.2%) and 2000 (8.2%) was lower than White County's rate for the same time period; White County was 17.2% in 1990 and 15.1% in 2000. No State data was available for 1980.

In Cleveland, the number of seasonal housing units grew by 33% from 1980 (6 units) to 1990 (9 units) and there was a marginal growth in the number of units 1990 to 2000 (14 units). The vacancy rate for seasonal units in Cleveland had a slight drop from 1980 (21.4%) to 1990 (19.1%) and there was a marginal drop from 1990 to 2000 (17.7%). Compared to the Region for 1990 (51.5%) and 2000 (51.8%), Cleveland was substantially lower (1990 was 19.1% and 2000 was 17.7%). There was no Regional data for 1980. The State's vacancy rate for seasonal units for 1990 (12.4%) was higher than Cleveland's rate (19.1%) and in 2000, the State's rate (18.2%) was marginally higher than Cleveland's rate (17.7%). No State data was available for 1980.

The owner vacancy rate for Cleveland increases slightly from 1990 (2.1%) to 2000 (3.2%). There is no data for 1980. When comparing the owner vacancy of Cleveland to that of the Region in 1990 (2.5%) and 2000(2.5%), Cleveland was marginally higher in 1990 (2.1) and slightly higher in 2000 (3.2). The State's owner vacancy rate for 1990 (2.5%) and 2000 (1.9%) was marginally higher than Cleveland's rate in 1990 (2.1%) and lower than Cleveland's rate in 2000 (3.2%). No State data was available for 1980. The renter's vacancy rate for Cleveland climbed from 8.4% (1990) to 9.3% (2000). No data was available for 1980. When comparing Cleveland's renter vacancy rate to the Region's rate in 1990 (11.4%) and 2000 (8.2%) shows that Cleveland was below the Region's rate in 1990 and marginally above the Region's rate in 2000. The State's renter vacancy rate in 1990 (12.2%) was higher in Cleveland's rate (8.4%)

and in 2000 (8.4%) and in 2000 Cleveland was only marginally higher than Cleveland was only marginally higher than State's rate (9.3% versus 8.2%).

Helen's seasonal housing units more than tripled from 1980 (18) to 1990 (60) and from 1990 to 2000 the growth continued, but at a slower pace, with the addition of 13 units bringing the net total to 73. The vacancy rate for seasonal units grew from 55.1% (1990) to 65.8% (2000). There was no data available for 1980. When comparing the seasonal vacancy rate for Helen to the Region's rate in 1990 (51.5%) and 2000 (51.8%), Helen is moderately higher in 1990 (55.1%) and significantly higher than the State by 14%. There was no State level data available for 1980.

The owner vacancy rate for Helen decreased from 9.9% (1990) to 2.2% (2000). No data was available for 1980. When looking at Helen's rate compared the Region's owner vacancy rate for 1990 (2.5%) and 2000 (2.5%), Helen is significantly higher in 1990 (9.9% compared the State's 2.5%) and only marginally higher in 2000 (2.8% versus the State's 2.5%). No data was available on the Regional level for 1980. The State's owner's vacancy rate for 1990 (2.5%) and 2000 (1.9%) showed Helen was significantly higher in 1990 (9.9% versus 2.5%) and declined, but still remained higher in 2000 (2.8% versus 1.9%). No data was available on the State level for 1980. The renter vacancy rate for Helen declined by 8% from 1990 (35.1%) to 2000 (23.5%). Looking at Helen's rate compared to the Region's rate for 1990 (11.4%) shows Helen was more than 4 times higher than Regional rate. By 2000, the Regional level (8.2%) was just under one-third of Helen's rate (23.5%). No Regional level information was available for 1980. The State renter vacancy rate for 1990 (12.2%) was more than half of Helen's rate (35.1%) and by 2000, the State's renter vacancy rate (8.2%) was just under one-third of Helen's rate (23.5%).

**TABLE 4-14  
VACANCY CHARACTERISTICS OF HOUSING UNITS, 1990-2000**

AREA	SEASONAL UNITS			SEASONAL % OF VACANT UNITS			OWNER VACANCY RATE			RENTER VACANCY RATE		
	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
White County	334	700	1,004	60.0	59.6	58.3	6.6	2.8	2.2	28.7	17.2	15.1
Cleveland	6	9	14	21.4	19.1	17.7	N/A	2.1	3.2	N/A	8.4	9.3
Helen	18	60	73	60.0	55.1	65.8	N/A	9.9	2.8	N/A	35.1	23.5
Region	N/A	10,773	13,047	N/A	51.5	51.8	N/A	2.5	2.5	N/A	11.4	8.2
Georgia	N/A	33,637	50,064	N/A	12.4	18.2	N/A	2.5	1.9	N/A	12.2	8.2

Source: U.S. Bureau of Census, 1990, 2000.



**Table 4-15: Seasonal Housing Units (by census tracts)**

Table 4-15 compares seasonal housing unit numbers and percentage make up in the three census tracts in White County for the years of 1990 and 2000. For census, tract 9501 64 units were added from 1990 (335 units) to 2000, bringing the total number of units to 399 units. With this modest increase in the number of units, the percentage make up shows a modest decrease from of 6.7% from 1990 (46.4%) to 2000 (39.7%). Census tract 9502 had a substantial increase in the number of units from 1990 (327 units) to 2000 (600 units), with this increase in the number of units came an increase of 13.1% in the percentage make up of the units from 46.7% (1990) to 59.8% (2000). Census tract 9503 decreased in the number of units from 1990 (48 units) to 2000 (5 units) by 89.5%. This dramatic reduction is mirrored in the percentage make up with a high of 6.9% dropped to 0.5% in 2000.

**TABLE 4-15  
SEASONAL HOUSING UNITS, 1990-2000**

<b>DIVISION</b>	<b>1990</b>	<b>1990 %</b>	<b>2000</b>	<b>2000 %</b>
9501	335	46.4	399	39.7
9502	327	46.7	600	59.8
9503	48	6.9	5	0.5
TOTAL	700	100	1,004	100

Source: U.S. Bureau of Census, 1990, 2000.

**Table 4-16: Owner to Renter Ratio for Occupied Units, 1990-2000 and Table 4-17: Owner to Renter Ratio of Vacancy, 2000**

Ratios for “owner to renter for occupied units” and for “owner to renter of vacancy” are presented in Table 4-16 and Table 4-17. This data provides a statistical snapshot of the total occupied units and the total vacant units in a jurisdiction. The owner to renter ratio for occupied units is the number of owner occupied units divided by the number of renter occupied units. The owner to renter ratio of vacancy refers the number of vacant units for sale in the area versus the number of units for rent.

For owner to renter ratio for occupied units in White County there is a marginal decline from 1990 (4.54) to 2000 (3.80). When comparing White County’s ratio for 1990 (4.54) to Georgia Mountains Region’s ratio for 1990 (3.25), White County is slightly higher than the Region. In 2000, White County (3.80) is still marginally higher than the Region (3.81). White County’s ratio for occupied units in 1990 (4.54) was nearly two and half times higher than the Georgia ratio for occupied units (1.85). In 200, the Georgia ratio of occupied units (2.08) was moderately lower than White County (3.80). In 2000, White County’s owner to renter ration of vacancy was 0.53. This is one third of the ratio number for occupied units for the same year (3.80), lower than the Region’s ratio of 1.45, and marginally lower than the Georgia ratio of 0.51.

The City of Cleveland had a minimal reduction in the owner to renter ratio for occupied units from 2.22 (1990) to 1.42 (2000). The 1990 ratio is slightly lower than the Region’s ratio (3.25) and slightly higher than the State’s ratio of 1.85. In 2000, Cleveland’s ratio (1.42) was lower than the Region’s ratio (3.61) and slightly lower than the Georgia ratio (2.08). The ratio of owner to renter ratio of vacancy in 2000 (0.37) was moderately lower than the 2000 ratio of owner to renter for occupied units (1.42). Cleveland’s ratio (0.37) is moderately lower than the Region’s ratio (1.45) and marginally lower than the Georgia ratio (0.51).

The City of Helen saw a marginal increase in the owner to renter ratio for occupied units from 1990 (0.99) to 2000 (1.00). The 1990 ratio (0.99) is substantially lower than the Region’s ratio (3.25) and lower than the Georgia ratio (1.85). In 2000, Helen’s ratio (1.00) was still substantially lower than the Regional ratio (3.61) and lower than the Georgia ratio (2.08). The owner to renter ratio of vacancy for 2000 was substantially lower than the 2000 owner to renter ratio for occupied units (0,09 versus 1.00). The Helen ratio is substantially lower than the Region’s ratio (1.45) and the Georgia ratio (0.51).

**TABLE 4-16  
OWNER TO RENTER RATIO FOR OCCUPIED UNITS, 1990 – 2000**

<b>AREA</b>	<b>1990</b>	<b>2000</b>
White County	4.54	3.80
Cleveland	2.22	1.42
Helen	0.99	1.00
Region	3.25	3.61
Georgia	1.85	2.08

Source: U. S Bureau of Census, 1990, 2000.

**TABLE 4-17**  
**OWNER TO RENTER RATIO OF VACANCY, 2000**

AREA	2000
White County	0.53
Cleveland	0.37
Helen	0.09
Region	1.45
Georgia	0.51

Source: U. S Bureau of Census, 2000.

**Table 4-18: Average Household Size of Occupied Units by Tenure**

Table 4-18 presents the average household size of occupied units by tenure for owner occupied units and renter occupied units. White County had a marginal decline of 0.07 persons in the average household size for owner occupied units from 1990 (2.59) to 2000 (2.52). When compared to the Georgia's average household size for owner occupied units for 1990 (2.76) and 2000 (2.73), White County remained below the State average for both 1990 and 2000. The average number of persons per renter occupied unit in White County had a marginal increase of 0.12 persons from 1990 (2.35) to 2000 (2.47). Comparing White County's averages to Georgia's averages persons per renter occupied unit in 1990 (2.49) and 2000 (2.47), the State shows a marginal decline of 0.02 persons, while White County increased the number of persons, matching Georgia's average in 2000.

Cleveland had a 0.3 person increase in the average number of persons per renter occupied units from 1990 (1.92) to 2000 (2.22). Georgia's average number of persons per renter occupied unit declined by 0.02 persons from 1990 (2.49) to 2000 (2.47). When comparing the Georgia averages to the Cleveland averages, Cleveland has a lower number of persons per renter unit, but the average number of persons increased while the Georgia average decreased. The average number persons per owner occupied units in Cleveland decreased by 0.05 persons from 1990 (2.38) to 2000 (2.33). Georgia's aver number of persons per owner occupied unit decreased by 0.03 persons from 1990 (2.76) and 2000 (2.73)

Helen had a loss of 0.62 persons in the average number of persons per owner occupied units from 1990 (2.79) to 2000 (2.17). Georgia's average number of persons per owner occupied unit declined by 0.03 persons from 1990 (2.76) to 2000 (2.73). The decline of persons per unit was greater in Helen and the average number of persons per owner occupied unit in Helen was below the Georgia average in 2000 (2.17 versus 2.73). From the 1990 to 2000, the average number of persons per renter occupied unit in Helen increase by 0.25 persons from 1.71 to 1.96. The Georgia average for number of persons per renter occupied unit decreased by 0.02 persons from 1990 (2.49) to 2000 (2.47). Helen's average is still below the State average for both 1990 and 2000, yet Helen has seen tremendous growth while Georgia's average has decreased.

**TABLE 4-18**  
**AVERAGE HOUSEHOLD SIZE OF OCCUPIED UNITS BY TENURE**

<b>AREA</b>	<b>PERSONS PER OWNER OCCUPIED UNIT</b>		<b>PERSONS PER RENTER OCCUPIED UNIT</b>	
	<b>1990</b>	<b>2000</b>	<b>1990</b>	<b>2000</b>
Cleveland	2.38	2.33	1.92	2.22
Helen	2.79	2.17	1.71	1.96
White County	2.59	2.52	2.35	2.47
Georgia	2.76	2.73	2.49	2.47

Source: U. S Bureau of Census, 1990, 2000.

#### **Table 4-19: Median Home Value, 1980-2000**

Table 4-19 presents the median home value for White County, Cleveland, Helen and the Georgia Mountains Region and the State of Georgia. White County's median home value doubled from \$33,800 (1980) to \$68,800 (1990), a median value increase of \$35,000. From 1990 to 2000 the median value increased by \$35,400 to \$104,200 (2000). These figures show a steady increase in the median home value from 1980 (\$33,800) to 2000 (\$102,400). Looking at White County's median home value to that of the Region in 1990 shows the Region and White County having the same median home value, \$68,800. From 1990 to 2000, the Region's median home value increase by \$45,800, \$10,400 more than White County's increase of median value for the same time (\$35,400). There was no Region data available for 1980. In Georgia the median home value from 1980 (\$36,900) to 1990 (\$71,300) raised by \$34,000, marginally lower than White County for same time (\$35,000). From 1990 to 2000, Georgia median home values grew by \$29,300 to \$100,600 in 2000, below White County's increase of \$35,400 from 1990 to 2000.

Cleveland's median home value increased from \$39,260 (1980) to \$65,200 (1990) equaling a median value increase of \$25,940. From 1990 to 2000 the median value increased by \$26,300 to \$91,500 (2000). These figures show a marginal increase in the median home value from 1980 to 2000. Looking at Cleveland's median home value to that of the Region in 1990 shows the Region had a higher median home value than Cleveland (\$65,200 versus \$68,800). From 1990 to 2000, the Region's median home value increased by \$45,800 to \$114,600 in 2000, a substantial increase over the City of Cleveland median home value for 2000 (\$91,500). There was no Region data available in 1980. In Georgia the median home value from 1980 (\$36,900) to 1990 (\$71,300) increase by \$34,000, substantially higher than Cleveland's \$25,940 median home value increase from 1980 to 1990. From 1990 to 2000, Georgia median home values grew by \$29,300 to \$100,600 in 2000, marginally higher than Cleveland's increase of \$26,300 to \$91,500 in 2000.

Helen's median home value doubled from \$47,900 (1980) to \$121,400 in 1990. From 1990 to 2000, Helen's median home value had a moderate increase of \$18,400, one-fourth of the previous median value increase, to \$139,800. Comparing the growth of Helen in 1990 (\$121,400) to the Region in 1990 (\$68,800) shows that Helen's median home value was \$52,600 higher than the Region's average. From 1990 to 2000 The Region's median home value increased from \$71,300 (1990) to \$114,600 in 2000. The 2000 median home value is lower than Helen's 2000 median home value of \$139,800. The State of Georgia saw an increase of the median home values of \$34,400 from 1980 (\$36,900) to 1990 (\$71,300). This increase is less than half of Helen's median home value increase of \$73,500 from 1980 (\$47,900) to 1990 (\$121,400). From 1990 to 2000 the Georgia's median home value increased by \$29,300 to \$100,600. Helen also displayed a smaller increase in the median home values from 1990 (\$121,400) to 2000(\$139,800), with an increase of \$18,400 for a total median value of \$139,800. Helen's 2000 median value was \$39,2000 higher than the State of Georgia's value for the same year.

**TABLE 4-19**  
**MEDIAN HOME VALUE, 1980 - 2000**

AREA	1980(\$)	1990 (\$)	2000 (\$)
White County	33,800	68,800	104,200
Cleveland	39,260	65,200	91,500
Helen	47,900	121,400	139,800
Region	N/A	68,800	114,600
Georgia	36,900	71,300	100,600

Source: U.S. Bureau of Census, 1980 - 2000

### **Table 4-20 and Table 4-21: Specified Owner Occupied Housing Units by Value Class**

Table 4-20 and Table 4-21 chart the specified owner occupied housing units by value for 1990 and 2000. The number of specified owner occupied units for Cleveland increased 46 units to a total of 362 units in 2000. Housing units less than \$50,000 decreased by 78 units from 99 units in 1990 to 21 units in 2000. Units costing between \$50,000 and \$99,999 increased by 76 units from 134 units in 1990 to 210 units in 2000. The \$100,000 to \$149,000 owner occupied housing units increased by 29 units from 60 units in 1990 to 89 units in 2000. In the \$150,000 to \$199,999 range the owner occupied units increased by 11 units for a total of 24 units in 2000. Owner occupied housing units for the \$200,000 to \$299,999 range doubled in the number of units to 12 units in 2000. The \$300,000 and up owner occupied housing units grew by 50% from 1990 (4 units) to 6 units in 2000.

Helen had an increase of 15 units in the number of owner occupied housing units from 1990 (50 units) to 2000 (65 units). Housing units in the \$50,000 and under range had a decline of 50% from 4 units in 1990 to 2 units in 2000. Owner occupied units in the \$50,000 to \$99,999 category decreased 50% from 17 units in 1990 to 9 units in 2000. A 100% increase in the number of units occurred in the \$100,000 to \$149,999 housing unit category, from 10 units in 1990 to 20 units in 2000. The number of units from the \$150,000 to \$199,999 range increased from 6 units (1990) to 16 units (2000) for an increase of over 100%. For the housing units in the \$200,000 to \$299,999 category, there was a 33% decrease in the housing units from a high of 9 units in 1990 down to 6 units in 2000. For housing in \$300,000 and more, the number of housing units tripled from 4 units in 1990 to 12 units in 2000.

White County experienced a 90% growth boom in owner occupied housing units from 2,142 units in 1990 to 4,063 units in 2000. The only category of housing units to see a reduction in units was the under \$50,000 housing, declining by approximately 58% from 570 units in 1990 to 243 units in 2000. Housing in the \$50,000 to \$99,999 range experienced a 27% increase in the number of units from 1,100 units in 1990 to 1,397 units in 2000. This was the area with the smallest increase. For housing units in the \$100,000 to \$149,999 range, there was a 325% growth from 323 units in 1990 to 1,371 units in 2000. The \$150,000 to \$199,999 housing unit range also experienced a phenomenal growth boom of 546% from 100 units in 1990 to 646 units in 2000. The \$200,000 to \$299,999 category grew by 660%, from 37 units in 1990 to 281 units by 2000. The category with the largest growth percentage is the \$300,00 and up category with a 945% growth rate, from 12 units 1990 to 125 units in 2000.

**TABLE 4-20  
1990 SPECIFIED OWNER OCCUPIED HOUSING UNITS BY VALUE CLASS**

<b>AREA</b>	<b>SPECIFIED OWNER OCCUPIED UNITS</b>	<b>LESS THAN \$50,000</b>	<b>\$50,000- \$99,999</b>	<b>\$100,000- \$149,999</b>	<b>\$150,000- \$199,999</b>	<b>\$200,000- \$299,999</b>	<b>\$300,000 OR MORE</b>
Cleveland	316	99	134	60	13	6	4
Helen	50	4	17	10	6	9	4
White County	2,142	570	1,100	323	100	37	12

Source: U.S. Bureau of Census, 1990.

**TABLE 4-21  
2000 SPECIFIED OWNER OCCUPIED HOUSING UNITS BY VALUE CLASS**

<b>AREA</b>	<b>SPECIFIED OWNER OCCUPIED UNITS</b>	<b>LESS THAN \$50,000</b>	<b>\$50,000- \$99,999</b>	<b>\$100,000- \$149,999</b>	<b>\$150,000- \$199,999</b>	<b>\$200,000- \$299,999</b>	<b>\$300,000 OR MORE</b>
Cleveland	362	21	210	89	24	12	6
Helen	65	2	9	20	16	6	12
White County	4,063	243	1,397	1,371	646	281	125

Source: U.S. Bureau of Census, 2000



**Table 4-22 and Table 4-23: Selected Monthly Owner Costs as a Percentage of Household Income in 2000**

Table 4-22 and Table 4-23 examine selected monthly owner costs as a percentage of household income to determine cost burdened levels. Owners that spend 30% to 49% of their monthly household income to costs of the house are considered cost burdened. Those that spend at least 50% of their monthly income household expenses are considered severely cost burdened. Cleveland had the highest percentage of owners not considered cost burdened at 81.2% (294 units). This percentage was higher than both the State of Georgia's percentage (78.1%) and the Georgia Mountains Region's percentage (77.8%). Helen had the second highest group of people not cost burdened at 78.5%, marginally higher than the Region's percentage (77.8%) and Georgia's Percentage (78.1%). White County had the lowest percentage of non-cost burdened people at 76.8%, marginally lower than the Region's percentage (77.8%) and Georgia's Percentage (78.1%).

For people in the cost burdened category, Helen had the highest percentage at 18.5%, moderately below both the Regional percentage (21.4%) and Georgia's percentage (21.0%). White County had the second highest percentage of cost burdened people at 15.6%, moderately below both the Regional percentage (21.4%) and Georgia's percentage (21.0%). Cleveland had the lowest percentage of people considered cost burdened at 14.9%, well below both the Regional percentage (21.4%) and Georgia's percentage (21.0%).

For those in the severely cost burdened category, White County had the highest percentage at 7.6%, well below the Georgia percentage of 13.2%. Cleveland had the second highest percentage of those severely cost burdened at 3.9%, which is one-third of the Georgia percentage (13.2%). Helen had the lowest percentage of people in the severely cost burdened range at 3.0%. This is one-third of the Georgia percentage (13.2%). There is no data available for people severely cost burdened in the Georgia Mountains Region.

On the average, median monthly owner's costs as a percentage of the household income is highest in White County at 17.2%, marginally lower than the Georgia percentage of 18.6%. Helen has the second highest median monthly owner costs at 16.3%, slightly lower than the State percentage of 18.2%. Cleveland was marginally lower than Helen at 13.9%.

**TABLE 4-22**  
**SELECTED MONTHLY OWNER COSTS AS A**  
**PERCENTAGE OF HOUSEHOLD INCOME IN 2000**

Monthly Owner Cost as a Percentage of Household Income	CLEVELAND		HELEN		REGION	STATE
	SPECIFIED OWNER OCCUPIED UNITS	%	SPECIFIED OWNER OCCUPIED UNITS	%	%	%
Less than 30 % (not cost burdened)	294	81.2	51	78.5	77.8	78.1
30 to 49% (cost burdened)	54	14.9	12	18.5	21.4	21.0
50% or more (severely cost burdened)	14	3.9	2	3.0	N/A	13.2
Total Specified Owner Occupied Housing Units	362	100	65	100	100	100
Median Monthly Owner Cost as Percentage of Household Income	13.9		16.3		---	18.6

Source: U.S. Bureau of Census, 2000.

**TABLE 4-23**  
**SELECTED MONTHLY OWNER COSTS AS A**  
**PERCENTAGE OF HOUSEHOLD INCOME IN 2000**

Monthly Owner Cost as a Percentage of Household Income	WHITE COUNTY		REGION	STATE
	SPECIFIED OWNER OCCUPIED UNITS	%	%	%
Less than 30 % (not cost burdened)	3,118	76.8	77.8	78.1
30 to 49% (cost burdened)	635	15.6	21.4	21.0
50% or more (severely cost burdened)	310	7.6	N/A	13.2
Total Specified Owner Occupied Housing Units	4,063	100	100	100
Median Monthly Owner Cost as Percentage of Household Income	17.2		---	18.6

Source: U.S. Bureau of Census, 2000.

#### **Table 4-24: Median Rent, 1980-2000**

Table 4-24 displays the median rents from 1980 to 2000, by decade. Overall the median rent for White County, from 1980 to 2000, increased from \$106 (1980) to \$418 (2000), a 418% increase. This percentage increase was much higher than Georgia's median rent for the same time frame (302%). Median rent, for White County, from 1980 to 1990 increased 137% to \$251. The State of Georgia from 1980 to 1990 increased 125% to \$344. White County grew at higher percentage, but the median rent is still lower than Georgia's median rent. From 1990 to 2000, White county's median rent increase from \$251 to \$418 for a 67% increase. This increase is substantially lower than the 1980 to 1990 increase. The Georgia Mountains Region grew from \$442 (1990) to \$661 (2000), for a 49.75% gain, moderately lower than White County's for the same time period. From 1990 to 2000, Georgia's median rent grew by \$269 to for a total of \$613, a 79% increase in median rent. Georgia's median values are higher than White County and the percentage change for the State was higher than White County.

Cleveland has seen the median rent value increase from \$163 in 1980 to \$387 in 2000, a 387% increase. Georgia's median rent went from \$153 (1980) to \$613 (2000), a 302% increase. The median rent for Cleveland went from \$163 in 1980 to \$227 in 1990, a 39.5% increase. This increase is substantially lower than the State crease of 125% (\$153 in 1980 to \$344 in 1990). Cleveland's median rent increased from 1990 (\$227) to 2000 (\$387) by 70.5%. While the median rent amounts for Cleveland are much lower than the Region's amounts for 1990 (\$442) to 2000 (\$661), the increase percentage was much higher for Cleveland (70.5% versus the Region's 49.75%). Georgia's median rent increased 79% from 1990 (\$344) to 2000 (\$613). Cleveland's percentage growth was moderately lower than Georgia's (70.5% versus Georgia's 79%) and Cleveland median rent values were substantially lower than Georgia's.

Helen's median rent value increased \$290 between 1980 (\$137) and 2000 (\$427), a percentage increase of 427%. Georgia's median rent went from \$153 (1980) to \$613 (2000), with a 302% increase. The overall increase for Georgia is substantially lower than Helen. The median rent for Helen went from \$137 in 1980 to \$250 in 1990, an increase of \$113 (83%). This increase is substantially lower than the State crease of 125% (\$153 in 1980 to \$344 in 1990). Helen's median rent increased from 1990 (\$250) to 2000 (\$427) by 71%. While the median rent amounts for Helen are much lower than Region's amounts from 1990 (\$442) to 2000 (\$661), the median rent percentage increase was much higher than the Region's percentages (Helen's 71% versus the Region's 49.75%). Georgia's median rent increased 79% from 1990 (\$344) to 2000 (\$613). Helen's percentage value increase was moderately lower than the State (Helen's 71% versus Georgia's 79%) and Helen's median rent values for 1990 (\$250) and 2000 (\$427) were substantially lower than Georgia's (1990 was \$344 and 2000 was \$613).

**TABLE 4-24**  
**MEDIAN RENT, 1980 – 2000**

<b>CITY/COUNTY</b>	<b>1980 (\$)</b>	<b>1990 (\$)</b>	<b>2000 (\$)</b>
White County	106	251	418
Cleveland	163	227	387
Helen	137	250	427
Region	N/A	442	661
Georgia	153	344	613

Source: U.S. Census, 1980- 2000

**Table 4-25: 1990 Specified Renter-Occupied Housing Units by Range of Monthly Rent and  
Table 4-26: 2000 Specified Renter-Occupied Housing Units by Range of Monthly Rent**

Table 4-25 and Table 4-26 examine the range of cash rent paid on a monthly basis for White County, Cleveland and Helen in 1990 and 2000. Cleveland saw a 62% increase in the number of specified renter-occupied units from 162 units (1990) to 261 units (2000). Of the 162 units in 1990, 103 paid less than \$250 in monthly rent, which dramatically decline to 41 units by 2000. In the \$250 to \$499 range the number of units increased from 54 (1990) to 88 (2000). The most dramatic increase in the number of units is in the \$500 to \$749 range with 3 units in 1990 dramatically increasing to 103 units in 2000. In 1990 there were 2 units in the \$750 to \$999 range and increased five-fold to 10 units in 2000.

Helen saw a 67% increase in the in the number of specified renter-occupied units from 66 units (1990) to 110 units (2000). Of the 66 units in 1990, 50% paid less than \$250 in monthly rent, which dramatically declined to 10 units by 2000. In the \$250 to \$499 range the number of units increased by 93% from 26 units in 1990 to 50 units in 2000. The most dramatic increase came in the rental range of \$500 to \$749 with 6 units in 1990 dramatically increasing to 34 units in 2000. In 1990 there was 1 unit in the \$750 to \$999, which increased to 7 units in 2000.

White County saw a 140.5% increase in the number of specified renter-occupied units from 619 units (1990) to 1,488 units (2000). Of the 619 units in 1990, 308 of the units paid less than \$250 in monthly rent, which dramatically fell to 116 units in 2000. In the \$250 to \$499 ranges the number of units increased from 289 units (1990) to 425 units (2000). In 1990 there were 19 units in the \$500 to \$749, which dramatically increased to 626 in 2000. Another area of dramatic increase was in the \$750 to \$999, which saw an increase from 3 units in 1990 to 115 units in 2000. In the category of monthly rent being over \$1,000, White County saw an increase from 0 units in 1990 to 19 units in 2000.

**TABLE 4-25**  
**1990 SPECIFIED RENTER-OCCUPIED HOUSING UNITS**  
**BY RANGE OF MONTHLY RENT**

<b>AREA</b>	<b>SPECIFIED RENTER- OCCUPIED UNITS PAYING CASH RENT</b>	<b>LESS THAN \$250</b>	<b>\$250 - \$499</b>	<b>\$500 - \$749</b>	<b>\$750 - \$999</b>	<b>\$1000 OR MORE</b>
Cleveland	162	103	54	3	2	--
Helen	66	33	26	6-	1	--
White County	619	308	289	19	3	--

Source: U.S. Census, 1990.

**TABLE 4-26**  
**2000 SPECIFIED RENTER-OCCUPIED HOUSING UNITS**  
**BY RANGE OF MONTHLY RENT**

<b>AREA</b>	<b>SPECIFIED RENTER- OCCUPIED UNITS PAYING CASH RENT</b>	<b>LESS THAN \$250</b>	<b>\$250 - \$499</b>	<b>\$500 - \$749</b>	<b>\$750 - \$999</b>	<b>\$1000 OR MORE</b>
Cleveland	261	41	88	103	10	--
Helen	110	10	50	34	7	--
White County	1,488	116	425	626	115	19

Source: U.S. Census, 2000.

**Table 4-27: Monthly Gross Rent as a Percentage of Household income in 2000 and Table 4-28: Monthly Gross Rent as a Percentage of Household income in 2000 for White County**

In 2000, Cleveland had a total specified renter occupied housing units of 261 units. 17 of the units were not computed in determining cost burdened levels. 51.7% (135 units) were not cost burdened, which is lower than the Region (56.4%) and the State of Georgia (56.0%). Cleveland's non-cost burdened level is marginally lower than Helen's 52.5% and moderately higher than White County's 50.1%. The 63 (24.1%) units that fall in the cost burdened category for Cleveland equals the same percentage for White County (359 units) and is moderately higher than Helen's 21.8% (24 units). Cleveland's cost burdened percentage is substantially lower than the Region's 31.5% and Georgia's 35.4%. Cleveland's percentage of renters that are severely cost burdened was the highest percentage at 17.6%, Helen was marginally lower at 17.3% and White County was the lowest at 11.8%. Cleveland's percentage of severely cost burdened renters was moderately higher than the Region's percentage (13.6%) and marginally higher than Georgia's percentage (16.5%).

Helen had a total specified renter occupied housing units of 110 units, 9 of which were not computed. Helen had 58 units (52.5%) that were not cost burdened. This is the highest percentage when compared to Cleveland and White County and is moderately lower than the Region's percentage (56.4%) and the State of Georgia's percentage (56.0%). The 24 units (21.8%) that comprise the cost burdened renters is the lowest percentage when compared to Cleveland and White County, which both had 24.1%. Helen is substantially lower than the Regional percentage (31.5%) and the Georgia percentage (35.4%). Helen's renters that were severely cost burdened, 19 units (17.3), marked the second highest percentage when compared to Cleveland (17.6%) and White County (11.8%) and is moderately higher than the Regional percentage of 13.6% and marginally higher than Georgia's 16.5%.

White County had a total specified renter occupied housing units of 1,488 units, 208 units were not computed. 50.1% (746 units) of the renters were not cost burdened; this is the lowest percentage when compared to Cleveland (51.7%) and Helen (52.5%). White County's percentages are moderately lower than the Regional percentage (56.4%) and Georgia's percentage (56.0%). The 24.1% of renters that are cost burdened equaled the percentage found in Cleveland and is moderately higher than the percentage of cost burdened in Helen (21.8%). The percentage is also moderately lower than both the Regional percentage (31.5%) and Georgia's percentage (35.4%). Severely cost burdened renters comprised 11.8% (175 units). When compared to Cleveland (17.6%) and Helen (17.3%), White County had the lowest percentage and is moderately lower than the Regional percentage (13.6%) and Georgia's percentage (16.5%).

Median gross rent as percent of household income for Cleveland was 28.1%, the highest, followed by White County (27.0%) and finally Helen (26.6%). All of these percentages are higher than the Georgia percentage of 24.9%.



**TABLE 4-27**  
**MONTHLY GROSS RENT AS A**  
**PERCENTAGE OF HOUSEHOLD INCOME IN 2000**

Monthly Gross rent as a Percentage of Household Income	CLEVELAND		HELEN		REGION	STATE
	SPECIFIED RENTER OCCUPIED UNITS	%	SPECIFIED RENTER OCCUPIED UNITS	%	%	%
Less than 30 % (not cost burdened)	135	51.7	58	52.5	56.4	56.0
30 to 49% (cost burdened)	63	24.1	24	21.8	31.5	35.4
50% or more (severely cost burdened)	46	17.6	19	17.3	13.6	16.5
Total Specified Renter Occupied Housing Units	261	100	110	100	100	100
Units Not Computed	17	---	9	---	4,182	83,149
Median Gross Rent as Percent of Household Income	28.1		26.6		---	24.9

Source: U.S. Bureau of Census, 2000.

**TABLE 4-28**  
**MONTHLY GROSS RENT AS A**  
**PERCENTAGE OF HOUSEHOLD INCOME IN 2000**

Monthly Gross rent as a Percentage of Household Income	WHITE COUNTY		REGION	STATE
	SPECIFIED RENTER OCCUPIED UNITS	%	%	%
Less than 30 % (not cost burdened)	746	50.1	56.4	56.0
30 to 49% (cost burdened)	359	24.1	31.5	35.4
50% or more (severely cost burdened)	175	11.8	13.6	16.5
Total Specified Renter Occupied Housing Units	1,488	100	100	100
Units Not Computed	208	---	4,182	83,149
Median Gross Rent as Percent of Household Income	27.0		---	24.9

Source: U.S. Bureau of Census, 2000.

**Table 4-29: Units in Structure by Gross Rent as a Percentage of Household Income; City of Cleveland 2000, Table 4-30: Units in Structure by Gross Rent as a Percentage of Household Income; City of Helen 2000; and Table 4-31: Units in Structure by Gross Rent as a Percentage of Household Income, White County, 2000**

Tables 4-30, 4-31, 4-32 show the number of units that are cost burdened or severely cost burdened for specific renter occupied housing units in the City of Cleveland, the City of Helen and White County for the year 2000. Cleveland had a total of 109 units of which 26 were single-family rental housing units, comprising 23.85% of the total units. The multi-family housing rental units comprised 64 units, 58.71%, and rental mobile homes comprised 17.43% (19 units). Helen had 13 (28.8%) single-family rental-housing units, 32 multi-family rental units (71.1%) and no rental mobile homes. White County had 130 (24.34%) single-family rental-housing units, 142 (26.59%) multi-family rental units and 262 rental mobile homes (49.06%).

Multi-family rental housing is the most common cost burdened or several cost burdened unit in Helen (71.11%) and Cleveland (58.71%), followed by single-family rental housing (28.8% for Helen and 23.85% for Cleveland). Rental mobile homes made up the most common cost burdened or severely cost burdened unit in White County (49.06%), followed by multi-family rental housing (26.59%).

**TABLE 4-29  
UNITS IN STRUCTURE BY GROSS RENT  
AS A PERCENTAGE OF HOUSEHOLD INCOME  
CITY OF CLEVELAND, 2000**

Gross Rent as a Percentage of Household Income	SPECIFIED RENTER OCCUPIED HOUSING UNITS			
	SINGLE FAMILY	MULTI-FAMILY	MOBILE HOME	TOTAL UNITS
30% or more. Total cost burdened or severely cost burdened	26	64	19	109

Source: U.S. Bureau of Census, 2000.

**TABLE 4-30**  
**UNITS IN STRUCTURE BY GROSS RENT**  
**AS A PERCENTAGE OF HOUSEHOLD INCOME**  
**CITY OF HELEN, 2000**

Gross Rent as a Percentage of Household Income	SPECIFIED RENTER OCCUPIED HOUSING UNITS			
	SINGLE FAMILY	MULTI-FAMILY	MOBILE HOME	TOTAL UNITS
30% or more. Total cost burdened or severely cost burdened	13	32	0	45

Source: U.S. Bureau of Census, 2000.

**TABLE 4-31**  
**UNITS IN STRUCTURE BY GROSS RENT**  
**AS A PERCENTAGE OF HOUSEHOLD INCOME**  
**WHITE COUNTY, 2000**

Gross Rent as a Percentage of Household Income	SPECIFIED RENTER OCCUPIED HOUSING UNITS			
	SINGLE FAMILY	MULTI-FAMILY	MOBILE HOME	TOTAL UNITS
30% or more. Total cost burdened or severely cost burdened	130	142	262	534

Source: U.S. Bureau of Census, 2000.

**Table 4-32: Percentage Comparison of Income and Housing Costs from 1990 to 2000**

Table 4-33 compares the percentage increases for median home values, median rent, weekly wages, household income, and per capital income of Cleveland, Helen, White County and Georgia from 1990 to 2000. The largest increase in median home values is White County with a 51.5% increase, substantially higher than Georgia's increase of 41%. Median rent increased the most in Helen with a 70.8% increase, marginally higher than Cleveland's 70.5% increase, moderately lower than Georgia's 78% increase. Weekly wages raised the same amount for Cleveland, Helen and White County, 46.5%, substantially lower than Georgia's 56% increase. Household income raised the most in White County with a 48.9% increase, substantially higher than the Georgia's 27% increase. Per capital income increased the most in White County with a 52.5% increase, substantially lower than Georgia's 62% increase. There was no data available for Helen's per capital increase.

**TABLE 4-32  
PERCENTAGE COMPARISON OF INCOME  
AND HOUSING COSTS FROM 1990 TO 2000  
(all are percentage increases)**

	<b>Cleveland</b>	<b>Helen</b>	<b>White County</b>	<b>Georgia</b>
Median Home Value	40.3	15.2	51.5	41
Median Rent	70.5	70.8	66.5	78
Weekly Wages	46.5	46.5	46.5	56
Household Income	41.1	43.6	48.9	27
Per Capital Income	27.8	N/A	52.5	62

Source: U.S. Bureau of the Census, 1990 – 2000.

## PROJECTED HOUSING NEEDS

Table 4-33 presents projected housing needs for Cleveland, Helen and White County. This projection is based on the population growth, the expected percentage of persons living in households and the projected number of persons per household.

By the year 2010, the City of Cleveland is projected to need 1,174 housing units to accommodate projected population growth. This is almost a 50% increase in housing within the city limits over the ten-year period. Housing needs are projected to increase to 1,641 by 2020 and to 1,923 by 2025.

Housing projections for the City of Helen are based on resident population needs. Several housing units already exist in the city, but are used for vacation rental purposes. Some of the vacation housing may be converted to full time residency, but new housing for both visitors and residents will continue to take place. Helen will need a minimum of 329 housing units by 2010 to house the projected population and will need 592 units by 2025.

White County is projected to need 12,958 units by the year 2010. This is a 37.1% increase in the number of units that were recorded in the 2000 Census. County housing needs will increase to 26,216 units by the year 2025. It is interesting to note that the population is projected to increase at a higher rate than the housing. It must be noted that part of the population growth in White County will come from second homes and vacation homes being converted into full-time residences. Currently slightly more than 10% of the county housing stock is used as seasonal units. This particular percentage is expected to increase as the second home market in the area continues to boom. Therefore the total number of housing units in the county will always exceed the number of units needed to accommodate projected population growth. A more detailed housing study of the second home market, may be needed to determine the actual number of housing units that will be constructed over the next twenty to twenty-five years. This study should not only identify the expected number of housing units, but also the types of services this population will require from the county.

**TABLE 4-33  
PROJECTED HOUSING UNITS 2005-2025  
(Total Number of Housing Units Need for Population Growth)**

<b>CITY/COUNTY</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Cleveland	978	1,174	1,404	1,641	1,923
Helen	338	351	429	510	592
White County	10,270	12,958	16,575	21,116	26,214

Source: Georgia Mountains Regional Development Center, 2004.

## **CHAPTER FIVE**

### **ECONOMIC DEVELOPMENT**

The future of any community is tied to its economic health. Few issues have such a tremendous bearing on the welfare of the community and of individual citizens. The economy has a very direct effect on such planning elements as housing and population and also, supplies funding for desirable endeavors such as the preservation of historic sites and wetlands. Many would argue, as a result, that economic development is at the heart of comprehensive planning. This Element analyses the current state of Cleveland, Helen, and White County's economy and attempts to use existing trends to forecast the future of that economy. It also suggests ways of maximizing economic growth without damaging natural resources and the environment.

#### **ECONOMIC BASE**

##### **5.1 Employment**

This section describes the employment trends for each economic sector of Cleveland, Helen, and White County. These employment trends are described in terms of occupation and type of industry jobs. They serve to indicate strengths and weaknesses within the industrial base and assist in formulating strategies for future development.

According to the U.S. Census reports in Table 5-1, White County had a 68 percent increase in numbers of people employed from 6,225 in 1990 to 9,176 in 2000. Table 5-2 indicates a percentage loss in eight of the 13 employment sector categories including manufacturing with the largest decline followed by farming. The increases were led by services followed by closely by construction, retail sales/ finance, insurance, and real estate.

These employment trends follow the other rural counties in Georgia of loss of farms and closing of manufacturing plants (Table 5-3). White county does have the advantage of a growing tourism industry that has helped to support growth in the service and retail trade categories. Both categories are projected to continue to grow at a steady pace with the increase in tourism as well as the influx of retirees.

Table 5-1

White County: Employment by Sector										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total</b>	4,121	5,089	6,225	8,228	9,176	10,139	11,307	12,657	14,206	15,991
<b>Farm</b>	498	471	478	462	447	415	398	385	373	362
<b>Agricultural Services, Other</b>	25	62	83	82	105	122	133	144	154	163
<b>Mining</b>	0	0	4	6	5	7	9	11	14	17
<b>Construction</b>	276	467	598	942	1,013	1,087	1,171	1,265	1,371	1,495
<b>Manufacturing</b>	888	894	738	981	1,049	1,018	1,024	1,041	1,060	1,077
<b>Trans, Comm, &amp; Public Utilities</b>	99	130	134	190	241	270	295	317	336	352
<b>Wholesale Trade</b>	36	84	147	271	111	113	116	121	127	133
<b>Retail Trade</b>	726	948	1,333	2,000	2,114	2,552	3,060	3,639	4,301	5,061
<b>Finance, Insurance, &amp; Real Estate</b>	305	380	373	400	722	763	806	850	897	946
<b>Services</b>	656	918	1,506	1,915	2,351	2,730	3,186	3,726	4,367	5,130
<b>Federal Civilian Government</b>	17	19	36	36	43	46	48	50	51	53
<b>Federal Military Government</b>	42	55	57	64	69	70	71	72	72	72
<b>State &amp; Local Government</b>	553	661	738	879	906	946	990	1,036	1,083	1,130

Source: Woods & Poole Economics, Inc.

Table 5-2

White County: Employment by Sector (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm</b>	12.08%	9.26%	7.68%	5.61%	5-87%	5-09%	3.52%	3.04%	2.63%	2.26%
<b>Agric. Services</b>	0.61%	1.22%	1.33%	1.00%	1.14%	1.20%	1.18%	1.14%	1.08%	1.02%
<b>Mining</b>	0.00%	0.00%	0.06%	0.07%	0.05%	0.07%	0.08%	0.09%	0.10%	0.11%
<b>Construction</b>	6.70%	9.18%	9.61%	11.45%	11.04%	10.72%	10.36%	9.99%	9.65%	9.35%
<b>Manufacturing</b>	21.55%	17.57%	11.86%	11.92%	11.43%	10.04%	9.06%	8.22%	7.46%	6.74%
<b>Trans, Comm, &amp; Public Utilities</b>	2.40%	2.55%	2.15%	2.31%	2.63%	2.66%	2.61%	2.50%	2.37%	2.20%
<b>Wholesale Trade</b>	0.87%	1.65%	2.36%	3.29%	1.21%	1.11%	1.03%	0.96%	0.89%	0.83%
<b>Retail Trade</b>	17.62%	18.63%	21.41%	25-31%	23.04%	25.17%	27.06%	28.75%	30.28%	31.65%
<b>Finance, Insurance, &amp; Real Estate</b>	7.40%	7.47%	5.99%	5-86%	7.87%	7.53%	7.13%	6.72%	6.31%	5.92%
<b>Services</b>	15.92%	18.04%	25-19%	23.27%	25.62%	26.93%	28.18%	29.44%	30.74%	32.08%
<b>Federal Civilian Government</b>	0.41%	0.37%	0.58%	0.44%	0.47%	0.45%	0.42%	0.40%	0.36%	0.33%
<b>Federal Military Government</b>	1.02%	1.08%	0.92%	0.78%	0.75%	0.69%	0.63%	0.57%	0.51%	0.45%
<b>State &amp; Local Government</b>	13.42%	12.99%	11.86%	10.68%	9.87%	9.33%	8.76%	8.19%	7.62%	7.07%

Source: Woods & Poole Economics, Inc.

Table 5-3

Georgia: Employment by Sector (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm</b>	3.51%	2.55%	2.01%	1.63%	1.39%	1.24%	1.11%	1.00%	0.90%	0.82%
<b>Agricultural Services, Other</b>	0.60%	0.76%	0.85%	1.06%	1.13%	1.15%	1.16%	1.17%	1.17%	1.16%
<b>Mining</b>	0.32%	0.32%	0.29%	0.22%	0.20%	0.18%	0.17%	0.17%	0.16%	0.15%
<b>Construction</b>	5.07%	6.11%	5.75%	5.58%	6.10%	6.05%	5.94%	5.80%	5.66%	5.52%
<b>Manufacturing</b>	19.25%	17.53%	15.51%	15.27%	12.63%	12.07%	11.56%	11.03%	10.50%	9.97%
<b>Trans, Comm, &amp; Public Utilities</b>	5.55%	5.51%	5.86%	5.72%	6.10%	6.17%	6.19%	6.16%	6.09%	5.97%
<b>Wholesale Trade</b>	6.34%	6.65%	6.18%	5.73%	5.69%	5.74%	5.73%	5.71%	5.69%	5.66%
<b>Retail Trade</b>	15.84%	16.13%	16.44%	17.14%	16.80%	17.08%	17.32%	17.51%	17.65%	17.76%
<b>Finance, Insurance, &amp; Real Estate</b>	7.28%	6.98%	6.64%	6.36%	7.12%	7.05%	6.98%	6.91%	6.83%	6.76%
<b>Services</b>	18.30%	20.61%	23.75%	26.61%	28.63%	29.27%	30.10%	31.07%	32.16%	33.35%
<b>Federal Civilian Government</b>	3.08%	2.87%	2.79%	2.33%	1.90%	1.76%	1.63%	1.53%	1.43%	1.35%
<b>Federal Military Government</b>	3.36%	3.05%	2.46%	2.24%	1.93%	1.82%	1.71%	1.61%	1.51%	1.42%
<b>State &amp; Local Government</b>	12.51%	10.92%	11.46%	11.11%	10.39%	10.44%	10.40%	10.33%	10.22%	10.10%

Source: Woods & Pool Economics, Inc.

## 5-2 Earnings

Historic and percentages of total payroll earnings by sector are given in Table 5-4 and Table 5-5 for White County and in Table 5-6 for the state. From 1990 to 2000, the largest increases in earnings came in the services sector followed by the retail trades and the manufacturing sectors. The percentages of earning by sectors for White County (Table 5-5) were similar to the state figures (Table 5-6) with the services sector showing a large increase and the farming sector continuing to decline. One exception is manufacturing with White County showing a slight increase over the past ten years and the state showing a continuing decline.



Table 5-4

White County: Earnings by Sector										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total (1996 \$)</b>	\$61,521,000	\$103,224,000	\$122,656,000	\$162,090,000	\$199,538,000	\$227,534,000	\$261,953,000	\$302,404,000	\$349,498,000	\$404,520,000
<b>Farm (1996 \$)</b>	\$618,000	\$11,850,000	\$18,498,000	\$19,407,000	\$18,250,000	\$18,700,000	\$19,754,000	\$21,001,000	\$22,322,000	\$23,691,000
<b>Agricultural Services, Other (1996 \$)</b>	\$449,000	\$772,000	\$663,000	\$659,000	\$951,000	\$1,172,000	\$1,353,000	\$1,537,000	\$1,729,000	\$1,929,000
<b>Mining (1996 \$)</b>	\$0	\$83,000	\$0	\$0	\$1,116,000	\$1,476,000	\$1,889,000	\$2,364,000	\$2,910,000	\$3,538,000
<b>Construction (1996 \$)</b>	\$4,041,000	\$8,830,000	\$10,604,000	\$18,269,000	\$21,733,000	\$24,157,000	\$26,843,000	\$29,872,000	\$33,351,000	\$37,408,000
<b>Manufacturing (1996 \$)</b>	\$18,301,000	\$27,554,000	\$19,135,000	\$23,513,000	\$32,639,000	\$33,920,000	\$36,398,000	\$39,345,000	\$42,448,000	\$45,576,000
<b>Trans, Comm, &amp; Public Utilities (1996 \$)</b>	\$2,626,000	\$4,307,000	\$3,037,000	\$4,316,000	\$6,348,000	\$7,556,000	\$8,748,000	\$9,914,000	\$11,044,000	\$12,131,000
<b>Wholesale Trade (1996 \$)</b>	\$942,000	\$1,410,000	\$4,477,000	\$9,689,000	\$3,922,000	\$4,089,000	\$4,330,000	\$4,624,000	\$4,955,000	\$5,322,000
<b>Retail Trade (1996 \$)</b>	\$11,257,000	\$15,553,000	\$19,483,000	\$27,437,000	\$33,510,000	\$41,473,000	\$50,966,000	\$62,107,000	\$75,183,000	\$90,588,000
<b>Finance, Insurance, &amp; Real Estate (1996 \$)</b>	\$1,518,000	\$4,441,000	\$5,391,000	\$7,139,000	\$12,641,000	\$14,568,000	\$16,642,000	\$18,879,000	\$21,290,000	\$23,895,000
<b>Services (1996 \$)</b>	\$9,839,000	\$12,284,000	\$20,529,000	\$26,511,000	\$37,362,000	\$46,817,000	\$58,642,000	\$73,364,000	\$91,700,000	\$114,590,000
<b>Federal Civilian Government (1996 \$)</b>	\$679,000	\$845,000	\$1,290,000	\$1,559,000	\$1,891,000	\$2,075,000	\$2,255,000	\$2,430,000	\$2,598,000	\$2,761,000
<b>Federal Military Government (1996 \$)</b>	\$293,000	\$642,000	\$636,000	\$716,000	\$884,000	\$938,000	\$992,000	\$1,045,000	\$1,097,000	\$1,148,000
<b>State &amp; Local Government (1996 \$)</b>	\$10,958,000	\$14,653,000	\$18,913,000	\$22,875,000	\$28,291,000	\$30,593,000	\$33,141,000	\$35,922,000	\$38,871,000	\$41,943,000

Source: Woods & Poole Economics, Inc.

Table 5-5

White County: Earnings by Sector (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total (1996 \$)</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm (1996 \$)</b>	1.00%	11.48%	15.08%	11.97%	9.15%	8.22%	7.54%	6.94%	6.39%	5.86%
<b>Agricultural Services, Other (1996 \$)</b>	0.73%	0.75%	0.54%	0.41%	0.48%	0.52%	0.52%	0.51%	0.49%	0.48%
<b>Mining (1996 \$)</b>	0.00%	0.08%	0.00%	0.00%	0.56%	0.65%	0.72%	0.78%	0.83%	0.87%
<b>Construction (1996 \$)</b>	6.57%	8.55%	8.65%	11.27%	10.89%	10.62%	10.25%	9.88%	9.54%	9.25%
<b>Manufacturing (1996 \$)</b>	29.75%	26.69%	15.60%	15-51%	16.36%	15-91%	13.89%	13.01%	12.15%	11.27%
<b>Trans, Comm, &amp; Public Utilities (1996 \$)</b>	5-27%	5-17%	2.48%	2.66%	3.18%	3.32%	3.34%	3.28%	3.16%	3.00%
<b>Wholesale Trade (1996 \$)</b>	1.53%	1.37%	3.65%	5.98%	1.97%	1.80%	1.65%	1.53%	1.42%	1.32%
<b>Retail Trade (1996 \$)</b>	18.30%	15.07%	15.88%	16.93%	16.79%	18.23%	19.46%	20.54%	21.51%	22.39%
<b>Finance, Insurance, &amp; Real Estate (1996 \$)</b>	2.47%	5-30%	5-40%	5-40%	6.34%	6.40%	6.35%	6.24%	6.09%	5.91%
<b>Services (1996 \$)</b>	15.99%	11.90%	16.74%	16.36%	18.72%	20.58%	22.39%	25-26%	26.24%	28.33%
<b>Federal Civilian Government (1996 \$)</b>	1.10%	0.82%	1.05%	0.96%	0.95%	0.91%	0.86%	0.80%	0.74%	0.68%
<b>Federal Military Government (1996 \$)</b>	0.48%	0.62%	0.52%	0.44%	0.44%	0.41%	0.38%	0.35%	0.31%	0.28%
<b>State &amp; Local Government (1996 \$)</b>	17.81%	15-20%	15.42%	15-11%	15-18%	13.45%	12.65%	11.88%	11.12%	10.37%

Source: Woods & Poole Economics, Inc.

Table 5-6

Georgia: Earnings by Sector (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total (1996 \$)</b>	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Farm (1996 \$)</b>	0.16%	1.27%	1.36%	1.40%	0.98%	0.93%	0.89%	0.85%	0.82%	0.79%
<b>Agricultural Services, Other (1996 \$)</b>	0.37%	0.41%	0.46%	0.53%	0.59%	0.60%	0.61%	0.62%	0.62%	0.62%
<b>Mining (1996 \$)</b>	0.65%	0.48%	0.36%	0.29%	0.27%	0.25%	0.22%	0.21%	0.19%	0.18%
<b>Construction (1996 \$)</b>	5.66%	6.57%	5.82%	5.39%	6.00%	5.86%	5.67%	5.46%	5.26%	5.06%
<b>Manufacturing (1996 \$)</b>	22.54%	20.03%	17.51%	16.84%	15-86%	15-45%	15-05%	13.59%	13.08%	12.53%
<b>Trans, Comm, &amp; Public Utilities (1996 \$)</b>	9.33%	8.85%	8.75%	9.43%	9.89%	9.99%	10.01%	9.96%	9.84%	9.63%
<b>Wholesale Trade (1996 \$)</b>	8.87%	9.04%	8.86%	8.17%	8.44%	8.36%	8.21%	8.05%	7.88%	7.71%
<b>Retail Trade (1996 \$)</b>	10.33%	10.64%	9.17%	9.08%	8.99%	8.97%	8.93%	8.87%	8.80%	8.71%
<b>Finance, Insurance, &amp; Real Estate (1996 \$)</b>	5.44%	5.59%	6.43%	6.86%	7.57%	7.66%	7.73%	7.78%	7.81%	7.82%
<b>Services (1996 \$)</b>	15.63%	17.36%	21.95%	25-33%	26.77%	27.78%	29.02%	30.44%	32.02%	33.73%
<b>Federal Civilian Government (1996 \$)</b>	5.64%	5.11%	5-66%	5-17%	3.39%	3.11%	2.87%	2.67%	2.49%	2.33%
<b>Federal Military Government (1996 \$)</b>	3.72%	3.68%	2.69%	2.49%	2.06%	1.94%	1.83%	1.72%	1.62%	1.53%
<b>State &amp; Local Government (1996 \$)</b>	11.67%	10.97%	11.97%	11.01%	10.18%	10.10%	9.95%	9.78%	9.58%	9.37%

Source: Woods & Pool Economics, Inc.

### 5-3 Wages

Though wages have increased over the past 10 years in all but 2 categories the average weekly wage rates for all industries in White County of \$422 (Table 5-7) is far below the state average of \$629 (Table 5-8). Agriculture, Forestry, Fishing are above.

Table 5-7

White County: Average Weekly Wages											
Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	\$272	\$288	\$317	\$327	\$325	\$344	\$329	\$375	\$409	\$412	\$422
Agri, Forestry, Fishing	NA	NA	NA	NA	NA	336	328	353	399	393	395
Mining	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Construction	NA	310	326	364	351	328	356	389	401	488	491
Manufacturing	NA	374	494	498	439	539	399	477	527	487	546
Transportation, Comm, Util	NA	NA	400	NA	407	420	392	431	453	468	431
Wholesale	NA	NA	297	341	297	365	593	754	1300	1339	427
Retail	NA	215	219	220	221	225	231	258	270	285	303
Financial, Insurance, Real Estate	NA	306	306	NA	360	NA	NA	NA	NA	NA	NA
Services	NA	215	237	244	274	253	257	282	312	322	335
Federal Gov	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
State Gov	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Local Gov	NA	NA	NA	329	327	NA	NA	NA	NA	NA	NA

Source: U.S. Bureau of Labor Statistics

Table 5-8

Georgia: Average Weekly Wages											
Category	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Industries	\$404	\$424	\$444	\$471	\$480	\$488	\$509	\$531	\$562	\$598	\$629
Agri, Forestry, Fishing	267	276	285	297	304	312	322	336	347	373	390
Mining	561	589	605	NA	NA	698	734	741	781	832	866
Construction	NA	434	439	451	461	479	508	534	556	590	623
Manufacturing	NA	450	473	503	511	531	555	588	620	656	684
Transportation, Comm, Util	NA	603	635	689	709	720	737	769	805	842	895
Wholesale	NA	603	632	669	695	711	729	762	809	873	932
Retail	NA	236	244	255	260	267	275	286	299	318	335
Financial, Insurance, Real Estate	NA	544	569	627	648	648	693	741	799	872	900
Services	NA	414	439	464	471	475	501	519	551	580	611
Federal Gov	NA	543	584	612	651	667	666	701	774	791	808
State Gov	NA	451	462	460	471	NA	493	517	533	561	579
Local Gov	NA	387	401	401	410	420	440	461	480	506	523

## 5-4 Personal Income

The following Table 5-9 and Table 5-10 for White County and Table 5-11 for the state reflect sources of personal income by type and percentage. The figures indicate that from 1990 to 2000, the percentage of change for White County was very similar to the percentage of change for the state. Wages and salaries was the largest type source of income although the percentage was less for White County due to a large residence adjustment as a type of income.

Table 5-9

White County: Personal Income by Type										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
<b>Total (1996 \$)</b>	\$119,820,000	\$186,240,000	\$239,712,000	\$310,194,000	\$406,254,000	\$481,334,000	\$569,203,000	\$669,998,000	\$785,138,000	\$916,971,000
<b>Wages &amp; Salaries (1996 \$)</b>	\$44,869,000	\$63,273,000	\$76,415,000	\$104,223,000	\$126,724,000	\$145,230,000	\$167,830,000	\$194,480,000	\$225,644,000	\$262,227,000
<b>Other Labor Income (1996 \$)</b>	\$4,642,000	\$8,151,000	\$10,417,000	\$13,796,000	\$13,917,000	\$15,737,000	\$17,946,000	\$20,519,000	\$23,488,000	\$26,924,000
<b>Proprietors Income (1996 \$)</b>	\$12,010,000	\$31,800,000	\$35,824,000	\$44,071,000	\$58,897,000	\$66,567,000	\$76,177,000	\$87,405,000	\$100,366,000	\$115,369,000
<b>Dividends, Interest, &amp; Rent (1996 \$)</b>	\$21,197,000	\$37,643,000	\$51,617,000	\$64,272,000	\$92,437,000	\$115,771,000	\$141,347,000	\$169,222,000	\$199,422,000	\$231,943,000
<b>Transfer Payments to Persons (1996 \$)</b>	\$19,299,000	\$23,541,000	\$36,047,000	\$53,002,000	\$68,578,000	\$87,580,000	\$109,608,000	\$135,163,000	\$164,872,000	\$199,475,000
<b>Less: Social Ins. Contributions (1996 \$)</b>	\$2,800,000	\$5,010,000	\$6,351,000	\$9,464,000	\$11,113,000	\$13,218,000	\$15,869,000	\$19,013,000	\$22,699,000	\$27,010,000
<b>Residence Adjustment (1996 \$)</b>	\$20,603,000	\$26,842,000	\$35,743,000	\$40,294,000	\$56,814,000	\$63,667,000	\$72,164,000	\$82,222,000	\$94,045,000	\$108,043,000

Source: Woods & Poole Economics, Inc.

Table 5-10

White County: Income by Type (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total (1996 \$)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Wages & Salaries	37.45%	33.97%	31.88%	33.60%	31.19%	30.17%	29.49%	29.03%	28.74%	28.60%
Other Labor Income	3.87%	5-38%	5-35%	5-45%	3.43%	3.27%	3.15%	3.06%	2.99%	2.94%
Proprietors Income	10.02%	17.07%	15-94%	15-21%	15-50%	13.83%	13.38%	13.05%	12.78%	12.58%
Dividends, Interest, & Rent	17.69%	20.21%	21.53%	20.72%	22.75%	25-05%	25-83%	25.26%	25.40%	25.29%
Transfer Payments to Persons	16.11%	12.64%	15.04%	17.09%	16.88%	18.20%	19.26%	20.17%	21.00%	21.75%
Less: Social Ins. Contributions	2.34%	2.69%	2.65%	3.05%	2.74%	2.75%	2.79%	2.84%	2.89%	2.95%
Residence Adjustment	17.19%	15-41%	15-91%	12.99%	13.98%	13.23%	12.68%	12.27%	11.98%	11.78%

Source: Woods & Poole Economics, Inc.

Table 5-11

Georgia: Income by Type (%)										
Category	1980	1985	1990	1995	2000	2005	2010	2015	2020	2025
Total (1996 \$)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Wages & Salaries	65-10%	62.15%	60.36%	59.07%	61.18%	61.09%	61.00%	60.94%	60.92%	60.92%
Other Labor Income	8.41%	8.72%	8.68%	8.63%	6.84%	6.71%	6.60%	6.48%	6.38%	6.28%
Proprietors Income	6.51%	6.97%	7.11%	7.96%	8.65%	8.52%	8.43%	8.34%	8.26%	8.19%
Dividends, Interest, & Rent	13.05%	15.79%	17.34%	16.31%	16.80%	16.76%	16.70%	16.61%	16.49%	16.34%
Transfer Payments to Persons	11.72%	10.73%	10.94%	12.62%	11.13%	11.25%	11.43%	11.66%	11.93%	12.25%
Less: Social Ins. Contributions	3.54%	5-10%	5-33%	5-45%	5-49%	5-67%	5-86%	5.04%	5.19%	5.33%
Residence Adjustment	-0.25%	-0.25%	-0.10%	-0.15%	-0.11%	0.33%	0.70%	1.00%	1.21%	1.35%

Source: Woods & Pool Economics, Inc.

## 5-5 Planned or Community-Level Activity

Major employers in White County include:

White County Board Of Education	463
Freudenberg-NOK (Oil Seal/Valve Stem Mfgr.)	400
Truett McConnell College (Four-year College)	136
Ingles Supermarket (Grocery Store)	100
North Georgia Hardwood (Wood Products)	86
Cobb-Vantrees (Poultry Incubator)	80
Yonah Mountains Mfgr. (Small Engine Switches)	75

Mount Vernon Mills, a textile plant producing weave cloth, recently closed leaving 100 unemployed. The House of Tyrol also closed with a lost of 50 jobs.

Ingles Supermarket is currently undergoing an expansion of its operations and will be adding a number of new jobs upon completion of the project. A new bank has just opened and another is scheduled to open in the near future.

The Nacoochee Village Project is proposed for an 856-acre site near Helen, Georgia. Two assets of the property are the more than a mile of Chattahoochee River running through it, and the stretch of Georgia Highway 75 running through it. The Alpine Village of Helen is known for having more hotel rooms than permanent residents. Most of the acreage east of the river will be developed into residential lots for individual houses. The acreage west of the river will be developed into commercial, professional and higher density residential properties. The Project will also include a winery that will allow the development of profitable hospitality resources around the winery. Fifty jobs will be created. Timing on the Project depends upon the ability to secure a state grant for regional economic assistance for infrastructure, the relocation of Georgia Highway 75, and the availability of water and sewer. Negotiations are continuing with the Georgia Department of Natural Resources (DNR) to develop a walking trail connecting the Hardman Farm (a working farm open to tourist), and the City of Helen.

## **5-6 Special or Unique Activity**

In order of volume, the largest employers by sector include: services, retail and manufacturing. Tourism, however, fuels the economy and has grown consistently over the past decade.

Many are drawn to Cleveland by the traditional tourist attractions of Babyland General, home to the famous “Cabbage Patch Kids” and the original White County Court House and historical museum. The beautiful Bavarian Village of Helen complete with 200 import and specialty shops, theme restaurants, and 2,000 quality rooms and accommodations attracts others. On the outskirts of Helen is the Unicoi State Park and Lodge which feathers cozy cottages, campsite, and a meeting lodge. Guest can enjoy miles of hiking and a 53-acre lake. Nearby is Anna Ruby Falls, the famous “double waterfall”. The Smithgall Woods-Duke Creek Conservation Area is a must see heritage preserve with 5,600 acres of hardwoods, trout streams, and wildlife. There are also several streams in White County where you can still mine gold like prospectors did with success in the early 1820’s.

The early arts and crafts of the pioneer forefathers and the Cherokee Indians have been passed down, and the historic treasures reflect their lasting influence. This is perhaps best demonstrated at the Santee-Nacoochee Community Center. The Center houses a 100-seat theatre, history museum, art gallery, dance studio and environmental education resource center in its renovated 1928 school building. The Nacoochee Valley, near where the town of Helen is located, once was a meeting place and commercial crossroads for the Cherokees. Several ceremonial mounds state as mute testimony to this historic fact. Tourists to the area will soon be able to visit the Hardman Estate a working farm with an interpretive center as well as an exhibit of Native American history in the area. The property includes 173 acres of land, an Italianate farmhouse, and 20 buildings, whose history dates back to 1870.

Annual tourism expenditures were \$128 million in 2001, spread among lodging, food, retail, recreation and transportation facilities. The tourism industry is the 2<sup>nd</sup> largest in the region, following Hall County (Gainesville and Lake Lanier Islands). Estimated visitors to the area are 2.2 million yearly.

## **LABOR FORCE**

### **5-7 Employment by Occupation**

The following five tables contain information on percentages of employment by occupation/types of jobs held. Table 5-12 indicates that in Cleveland, the County Seat, the top 3 employment categories by percentage are Services, Clerical and Administrative, and Sales. This is indicative of a retail sales base of jobs. Table 5-13 indicates that the top 3 employment categories in the tourism town of Helen are Executive, Administrative, Managerial (not farm), Sales, and Professional and Technical Specialty. This indicates a pattern of commuters, who live in the mountain community, to jobs outside the community and sales jobs for the many tourism related businesses. Table 5-14 indicates that in White County the top 3 employment categories are Machine Operators, Clerical and Administrative, and Professional and Technical. This is indicative of industry/skills based jobs. Both Table 5-15, State, and 5-16 United States, indicate the top 3 job categories by percentage as Professional and Technical, Executive, Administrative and Managerial (not farm), and Clerical and Administrative. Of these top 3 common categories, Cleveland falls in only 1 (Clerical and Administrative); Helen falls in 2 (Executive, Administrative, and Managerial (not farm), and Professional and Technical); White County falls in 2 (Professional and Technical and Clerical and Administrative).

Table 5-12

<b>Cleveland city: Employment by Occupation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	100.00%	100.00%
<b>Executive, Administrative and Managerial (not Farm)</b>	7.53%	12.21%
<b>Professional and Technical Specialty</b>	12.21%	13.64%
<b>Technicians &amp; Related Support</b>	1.17%	NA
<b>Sales</b>	16.49%	15-30%
<b>Clerical and Administrative Support</b>	13.90%	15.51%
<b>Private Household Services</b>	0.91%	NA
<b>Protective Services</b>	3.38%	NA
<b>Service Occupations (not Protective &amp; Household)</b>	12.86%	15.51%
<b>Farming, Fishing and Forestry</b>	2.34%	1.76%
<b>Precision Production, Craft, and Repair</b>	9.74%	9.79%
<b>Machine Operators, Assemblers &amp; Inspectors</b>	7.79%	9.13%
<b>Transportation &amp; Material Moving</b>	5-81%	5.83%
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	6.88%	NA

Source: U.S. Bureau of the Census



Table 5-13

<b>Helen city: Employment by Occupation(%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	100.00%	100.00%
<b>Executive, Administrative and Managerial (not Farm)</b>	28.46%	21.70%
<b>Professional and Technical Specialty</b>	18.46%	17.45%
<b>Technicians &amp; Related Support</b>	2.31%	NA
<b>Sales</b>	22.31%	19.81%
<b>Clerical and Administrative Support</b>	12.31%	12.74%
<b>Private Household Services</b>	0.00%	NA
<b>Protective Services</b>	0.00%	NA
<b>Service Occupations (not Protective &amp; Household)</b>	6.15%	16.04%
<b>Farming, Fishing and Forestry</b>	0.00%	0.00%
<b>Precision Production, Craft, and Repair</b>	2.31%	1.89%
<b>Machine Operators, Assemblers &amp; Inspectors</b>	5.38%	5.66%
<b>Transportation &amp; Material Moving</b>	2.31%	1.89%
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	0.00%	NA

Source: U.S. Bureau of the Census

Table 5-14

<b>White County: Employment by Occupation(%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL All Occupations</b>	100.00%	100.00%
<b>Executive, Administrative and Managerial (not Farm)</b>	9.20%	11.91%
<b>Professional and Technical Specialty</b>	11.17%	13.49%
<b>Technicians &amp; Related Support</b>	2.59%	NA
<b>Sales</b>	12.61%	13.07%
<b>Clerical and Administrative Support</b>	13.21%	15-33%
<b>Private Household Services</b>	0.47%	NA
<b>Protective Services</b>	1.48%	NA
<b>Service Occupations (not Protective &amp; Household)</b>	10.16%	12.72%
<b>Farming, Fishing and Forestry</b>	5.37%	1.27%
<b>Precision Production, Craft, and Repair</b>	12.85%	11.04%
<b>Machine Operators, Assemblers &amp; Inspectors</b>	10.21%	15.70%
<b>Transportation &amp; Material Moving</b>	5-84%	5.20%
<b>Handlers, Equipment Cleaners, helpers &amp; Laborers</b>	5.84%	NA

Source: U.S. Bureau of the Census

Table 5-15

Georgia: GA Employment by Occupation (%)		
Category	1990	2000
TOTAL All Occupations	100.00%	100.00%
Executive, Administrative and Managerial (not Farm)	12.26%	15.03%
Professional and Technical Specialty	12.39%	18.68%
Technicians & Related Support	3.58%	NA
Sales	12.28%	11.64%
Clerical and Administrative Support	16.00%	15.14%
Private Household Services	0.51%	NA
Protective Services	1.70%	NA
Service Occupations (not Protective & Household)	9.77%	11.57%
Farming, Fishing and Forestry	2.20%	0.64%
Precision Production, Craft, and Repair	11.86%	9.02%
Machine Operators, Assemblers & Inspectors	8.50%	10.83%
Transportation & Material Moving	5.60%	6.63%
Handlers, Equipment Cleaners, helpers & Laborers	5.34%	NA

Source: U.S. Bureau of the Census

Table 5-16

All of United States: US Employment by Occupation (%)		
Category	1990	2000
TOTAL All Occupations	100.00%	100.00%
Executive, Administrative and Managerial (not Farm)	12.32%	13.45%
Professional and Technical Specialty	15.11%	20.20%
Technicians & Related Support	3.68%	NA
Sales	11.79%	11.25%
Clerical and Administrative Support	16.26%	15.44%
Private Household Services	0.45%	NA
Protective Services	1.72%	NA
Service Occupations (not Protective & Household)	11.04%	12.01%
Farming, Fishing and Forestry	2.46%	0.73%
Precision Production, Craft, and Repair	11.33%	8.49%
Machine Operators, Assemblers & Inspectors	6.83%	9.45%
Transportation & Material Moving	5.08%	6.14%
Handlers, Equipment Cleaners, helpers & Laborers	3.94%	NA

Source: U.S. Bureau of the Census

Between 1990 and 2000, the totals for males and females in the labor force increased. The City of Cleveland's totals increased by 14 percent (Table 5-17); the City of Helen's totals increase by 33 percent (Table 5-18); and, White County's totals increased by 35 percent (Table 5-19). The total number of participants in the labor force increased in Cleveland by 2 percent and in Helen by 3 percent. In White County the number of participants decreased by 1.6 percent. The decrease in White County most likely reflects the increase in the numbers of retirees moving into the county but not participating in the labor force. This compared to the state of Georgia's decrease in labor force participation of .82 percent (Table 5-20) and the US decrease of 1.36 percent (Table 5-21) during the same time period.

Table 5-17

<b>Cleveland city: Labor Force Participation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	1375	1573
<b>In Labor Force</b>	815	953
<b>Civilian Labor Force</b>	815	953
<b>Civilian Employed</b>	770	909
<b>Civilian Unemployed</b>	45	44
<b>In Armed Forces</b>	0	0
<b>Not in Labor Force</b>	560	620
<b>TOTAL Males</b>	629	714
<b>Male In Labor Force</b>	392	512
<b>Male Civilian Labor Force</b>	392	512
<b>Male Civilian Employed</b>	376	483
<b>Male Civilian Unemployed</b>	16	29
<b>Male In Armed Forces</b>	0	0
<b>Male Not in Labor Force</b>	237	202
<b>TOTAL Females</b>	746	859
<b>Female In Labor Force</b>	423	441
<b>Female Civilian Labor Force</b>	423	441
<b>Female Civilian Employed</b>	394	426
<b>Female Civilian Unemployed</b>	29	15
<b>Female In Armed Forces</b>	0	0
<b>Female Not in Labor Force</b>	323	418

Source: U.S. Bureau of the Census

Table 5-18

<b>Helen city: Labor Force Participation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	241	362
<b>In Labor Force</b>	138	219
<b>Civilian Labor Force</b>	138	219
<b>Civilian Employed</b>	130	212
<b>Civilian Unemployed</b>	8	7
<b>In Armed Forces</b>	0	0
<b>Not in Labor Force</b>	103	143
<b>TOTAL Males</b>	107	155
<b>Male In Labor Force</b>	76	111
<b>Male Civilian Labor Force</b>	76	111
<b>Male Civilian Employed</b>	71	104
<b>Male Civilian Unemployed</b>	5	7
<b>Male In Armed Forces</b>	0	0
<b>Male Not in Labor Force</b>	31	44
<b>TOTAL Females</b>	134	207
<b>Female In Labor Force</b>	62	108
<b>Female Civilian Labor Force</b>	62	108
<b>Female Civilian Employed</b>	59	108
<b>Female Civilian Unemployed</b>	3	0
<b>Female In Armed Forces</b>	0	0
<b>Female Not in Labor Force</b>	72	99

Source: U.S. Bureau of the Census

Table 5-19

<b>White County: Labor Force Participation</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	10361	15824
<b>In Labor Force</b>	6686	9954
<b>Civilian Labor Force</b>	6684	9948
<b>Civilian Employed</b>	6367	9668
<b>Civilian Unemployed</b>	317	280
<b>In Armed Forces</b>	2	6
<b>Not in Labor Force</b>	3675	5870
<b>TOTAL Males</b>	4992	7704
<b>Male In Labor Force</b>	3613	5528
<b>Male Civilian Labor Force</b>	3611	5522
<b>Male Civilian Employed</b>	3436	5336
<b>Male Civilian Unemployed</b>	175	186
<b>Male In Armed Forces</b>	2	6
<b>Male Not in Labor Force</b>	1379	2176
<b>TOTAL Females</b>	5369	8120
<b>Female In Labor Force</b>	3073	4426
<b>Female Civilian Labor Force</b>	3073	4426
<b>Female Civilian Employed</b>	2931	4332
<b>Female Civilian Unemployed</b>	142	94
<b>Female In Armed Forces</b>	0	0
<b>Female Not in Labor Force</b>	2296	3694

Source: U.S. Bureau of the Census

When compared with the state and national percentages of labor force participation, Cleveland is at 61 percent, Helen is at 61 percent, and White County is at 63 percent while the state is at 66 percent and the US is at 64 percent participation.

Table 5-20

<b>Georgia: GA Labor Force Participation (%)</b>		
<b>Category</b>	<b>1990</b>	<b>2000</b>
<b>TOTAL Males and Females</b>	100.00%	100.00%
<b>In Labor Force</b>	67.89%	66.07%
<b>Civilian Labor Force</b>	66.41%	65.00%
<b>Civilian Employed</b>	62.60%	61.43%
<b>Civilian Unemployed</b>	3.80%	3.57%
<b>In Armed Forces</b>	1.48%	1.07%
<b>Not in Labor Force</b>	32.11%	33.93%
<b>TOTAL Males</b>	100.00%	100.00%
<b>Male In Labor Force</b>	76.65%	73.11%
<b>Male Civilian Labor Force</b>	73.87%	71.20%
<b>Male Civilian Employed</b>	70.07%	67.65%
<b>Male Civilian Unemployed</b>	3.80%	3.55%
<b>Male In Armed Forces</b>	2.78%	1.91%
<b>Male Not in Labor Force</b>	23.35%	26.89%
<b>TOTAL Females</b>	100.00%	100.00%
<b>Female In Labor Force</b>	59.88%	59.43%
<b>Female Civilian Labor Force</b>	59.59%	59.15%
<b>Female Civilian Employed</b>	55.78%	55.57%
<b>Female Civilian Unemployed</b>	3.81%	3.59%
<b>Female In Armed Forces</b>	0.29%	0.28%
<b>Female Not in Labor Force</b>	40.12%	40.57%

Source: U.S. Bureau of the Census

Table 5-21

All of United States: US Labor Force Participation (%)		
Category	1990	2000
TOTAL Males and Females	100.00%	100.00%
In Labor Force	65.28%	63.92%
Civilian Labor Force	65-39%	63.39%
Civilian Employed	60.34%	59.73%
Civilian Unemployed	5-05%	3.66%
In Armed Forces	0.89%	0.53%
Not in Labor Force	35-72%	36.08%
TOTAL Males	100.00%	100.00%
Male In Labor Force	75-48%	70.75%
Male Civilian Labor Force	72.82%	69.81%
Male Civilian Employed	68.18%	65.81%
Male Civilian Unemployed	5-63%	3.99%
Male In Armed Forces	1.66%	0.94%
Male Not in Labor Force	25.52%	29.25%
TOTAL Females	100.00%	100.00%
Female In Labor Force	56.79%	57.54%
Female Civilian Labor Force	56.60%	57.39%
Female Civilian Employed	53.10%	55-04%
Female Civilian Unemployed	3.51%	3.35%
Female In Armed Forces	0.19%	0.15%
Female Not in Labor Force	43.21%	42.46%

Source: U.S. Bureau of the Census

### 5-8 Employment/ Unemployment

The United States unemployment rate for 2000 was 5-0 percent (Table 5-22) while the State of Georgia figure was 3.7 percent (5-23). The unemployment rates for White County have shown a steady decline over the past 10 years to the 2000 rate of 3.7 percent (Table 5-24). This figure compares to surrounding counties as follows: Hall with 2.3 percent (Table 5-25); Lumpkin with 1.8 percent (Table 5-26); Habersham with 3.4 percent (Table 5-27); Union with 3.4 percent (Table 5-28); Towns with 3.4 percent (Table 5-29).

Table 5-22

United States: Labor Statistics												
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Labor Force (thousands)	125,840	126,346	128,105	129,200	196,814	132,304	133,943	136,297	137,673	139,368	140,863	141,815
Employed (thousands)	118,793	117,718	118,492	120,259	123,060	124,900	126,708	129,558	131,463	133,488	135,208	135,073
Unemployed (thousands)	7,047	8,628	9,613	8,940	7,996	7,404	7,236	6,739	6,210	5,880	5,655	6,742
Unemployment Rate	5.6%	6.8%	7.5%	6.9%	6.1%	5.6%	5.4%	5-9%	5-5%	5-2%	5-0%	5-8%

\*Source: U.S. Bureau of Labor Statistics

Table 5-23

Georgia: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	3,300,380	3,263,876	3,353,566	3,467,191	3,577,505	3,617,165	3,738,850	3,904,474	4,014,526	4,078,263	4,173,274
Employed	3,118,253	3,099,103	3,119,071	3,265,259	3,391,782	3,440,859	3,566,542	3,727,295	3,845,702	3,916,080	4,018,876
Unemployed	182,127	164,772	234,495	201,932	185,722	176,306	172,308	177,179	168,824	162,183	154,398
Unemployment Rate	5.5%	5.0%	7.0%	5.8%	5.2%	5-9%	5-6%	5-5%	5-2%	5-0%	3.7%

Source: Georgia Department of Labor

Table 5-24

White County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	6,863	7,048	7,760	8,081	8,398	8,690	9,176	9,409	9,079	9,348	9,237
Employed	6,539	6,683	7,322	7,735	8,048	8,415	8,860	9,014	8,725	8,927	8,891
Unemployed	324	365	438	346	350	275	316	395	354	421	346
Unemployment Rate	5-7%	5.2%	5.6%	5-3%	5-2%	3.2%	3.4%	5-2%	3.9%	5-5%	3.7%

Source: Georgia Department of Labor

Table 5-25

Hall County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	52,773	52,720	55,133	58,734	62,551	63,149	64,562	67,600	70,127	71,482	74,460
Employed	49,822	50,183	51,798	56,110	60,215	60,880	62,469	65,575	68,077	69,634	72,727
Unemployed	2,951	2,537	3,335	2,624	2,336	2,269	2,093	2,025	2,050	1,848	1,733
Unemployment Rate	5.6%	5-8%	6.0%	5-5%	3.7%	3.6%	3.2%	3.0%	2.9%	2.6%	2.3%

Source: Georgia Department of Labor

Table 5-26

Lumpkin County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	7,226	7,378	7,583	7,679	8,019	8,378	8,408	9,540	10,106	10,702	11,225
Employed	6,854	7,011	7,177	7,329	7,792	8,060	8,138	9,244	9,786	10,468	11,025
Unemployed	372	367	406	350	227	318	270	296	320	234	200
Unemployment Rate	5.1%	5.0%	5.4%	5-6%	2.8%	3.8%	3.2%	3.1%	3.2%	2.2%	1.8%

Source: Georgia Department of Labor



Table 5-27

Habersham County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	14,129	13,971	14,130	14,339	14,300	14,465	14,597	15,105	15,447	15,745	15,864
Employed	13,387	13,294	13,379	13,710	13,680	13,876	13,873	14,339	14,839	15,183	15,328
Unemployed	742	677	751	629	620	589	724	766	608	562	536
Unemployment Rate	5.3%	5-8%	5.3%	5-4%	5-3%	5-1%	5.0%	5.1%	3.9%	3.6%	3.4%

Source: Georgia Department of Labor

Table 5-28

Union County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	5,194	5,482	5,884	6,041	6,201	6,251	6,787	7,126	7,215	7,653	7,808
Employed	4,956	5,242	5,485	5,671	5,941	6,005	6,389	6,716	6,928	7,395	7,541
Unemployed	238	240	399	370	260	246	398	410	287	258	267
Unemployment Rate	5-6%	5-4%	6.8%	6.1%	5-2%	3.9%	5.9%	5.8%	5-0%	3.4%	3.4%

Source: Georgia Department of Labor

Table 5-29

Towns County: Labor Statistics											
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Labor Force	2,836	2,593	2,594	2,749	2,994	3,129	3,456	3,776	3,848	4,037	4,336
Employed	2,652	2,456	2,406	2,529	2,849	3,000	3,257	3,402	3,663	3,877	4,188
Unemployed	184	137	188	220	145	129	199	374	185	160	148
Unemployment Rate	6.5%	5.3%	7.2%	8.0%	5-8%	5-1%	5.8%	9.9%	5-8%	5-0%	3.4%

Source: Georgia Department of Labor

## 5-9 Commuting Patterns

One of the most important factors in industrial development is the ability to provide an adequate labor force. The data collected, such as low unemployment rates, indicate that the Cities of Cleveland, Helen, and White County have such a labor force. Table 5-30 indicates the commuting patterns of persons working in White County by county of residence. Table 5-31 indicates the commuting patterns of residents of White County by county where employed. White County residents comprise more than 52 percent of the total number of employed workers. More than 68 percent of the employed residents remain in White County while 10 percent travel to Habersham County and 6 percent travel to Hall County to work. The remainder of the other workers travels primarily to the 6 surrounding counties for employment.

Table 5-30

Commuting Patterns		
Persons Working in White County		
County of Residence	Number	Percent of Total
White County	4,951	52.3
Hall County	2,124	22.4
Habersham County	788	8.3
Lumpkin County	335	3.5
Gwinnett County	200	2.1
Fulton County	197	2.1
Forsyth County	98	1.0
Dawson County	90	1.0
Other	680	7.2
<b>Total Residents</b>	<b>9,463</b>	<b>100.0%</b>

Source: GA DOL/ US Census Bureau- 2000 County-To-County Worker Flow Files

Table 5-31

Commuting Patterns		
Employed Residents of White County		
County Where Employed	Number	Percent of Total
White County	4,951	68.8
Habersham County	737	10.2
Hall County	431	6.0
Lumpkin County	252	3.5
Towns County	139	1.9
Union County	103	1.4
Banks County	93	1.3
Gwinnett County	93	1.3
Other	416	5.8
<b>Total Resident</b>	<b>7,195</b>	<b>100.0%</b>

Source: GA DOL/ US Census Bureau- 2000 County-To-County Worker Flow Files

## **LOCAL ECONOMIC DEVELOPMENT RESOURCES**

### **5-10 Agencies**

Economic development agencies in White County include:

White County Chamber of Commerce

White County Development Authority

Cleveland Better Home Town, Inc.

White County Industrial Building Authority

Alpine Helen White County Convention and Visitors Bureau

## 5-11 Programs and Tools

Goods producing industries in White County continued to decline over the past decade as indicated earlier in Table 5-1. There were 149 industries in 2000 according to the Georgia Labor Department (Table 5-25). These firms employed more than 26 percent of White County's employed citizens. Farming continues to decrease as White County continues to experience more residential and commercial development. Construction comprised 8.8 percent of the employment in 2000. This industry will continue to depend on new home purchases and low interest rates.

There were 38 manufacturing industries employing 13.5 percent of the White County citizens in 2000 (Table 5-25). The largest number of employed was in the Wood producing and manufacturing industry.

Service producing industries account for 52.8 percent of the employed with 3,167 workers (Table 5-25). Retail trade industries are the largest employers at 18 percent followed by accommodation and food industries at 13.4 percent. Finance and insurance as well as health care/social services employees are also large number of the service-producing workers in White County.

The private sector industries employ 79.8 percent of the workers with local, state, and federal government employing 20.2 percent. Government jobs have also been on the decline over the past decade as indicated in Table 5-2.

The Telford-Hulsey Business Park is a private development with fifty percent of the park occupied. There are 80 acres available for development. Another private park is the Whitehall Park with one building on site. The Appalachian Community Enterprise (ACE) Program employ five people and makes loans to small businesses.

White County has two previously used buildings that are considered speculative buildings for new or expanding firms: Mount Vernon textile plant building with 175,000 sq. ft. and the Tylon Corporation building on 105 acres with a 67,000 sq. ft. building.

Table 5-32

## INDUSTRY MIX

2000

INDUSTRY	NUMBER OF FIRMS	WHITE EMPLOYMENT		WEEKLY WAGE
		NUMBER	PERCENT	
<b>Goods Producing</b>	<b>149</b>	<b>1,594</b>	<b>26.6</b>	<b>\$561</b>
Agric, forestry & fishing	*	*	*	*
Construction	104	528	8.8	484
<b>Manufacturing</b>	<b>38</b>	<b>810</b>	<b>13.5</b>	<b>626</b>
Food manufacturing	7	42	0.7	243
Textile mills	*	*	*	*
Wood product mfg.	10	100	2.7	390
Machinery manufacturing	4	18	0.3	584
Furniture & related mfg.	7	13	0.2	335
<b>Service Producing</b>	<b>424</b>	<b>3,167</b>	<b>52.8</b>	<b>408</b>
Wholesale trade	13	41	0.7	709
Retail trade	125	1,085	18.1	396
Trans & warehousing	12	38	0.6	561
Information	8	42	0.7	517
Finance and insurance	20	162	2.7	644
Real estate/ rental/ leasing	32	64	1.1	403
Prof., scientific/tech	33	115	1.9	391
Administrative and waste	20	73	1.2	358
Health care/social services	28	176	2.9	429
Accommodation and food	72	804	13.4	209
Other services (except Government)	43	179	3.0	329
<b>Unclassified – industry not Assigned</b>	<b>15</b>	<b>28</b>	<b>0.5</b>	<b>243</b>
<b>Total – Private Sector</b>	<b>587</b>	<b>4,788</b>	<b>79.8</b>	<b>458</b>
<b>Total – Government</b>	<b>31</b>	<b>1,214</b>	<b>20.2</b>	<b>539</b>
Federal government	4	48	0.8	629
State government	14	381	6.2	525
Local government	14	785	13.1	541
<b>ALL INDUSTRIES</b>	<b>618</b>	<b>6,003</b>	<b>100.0</b>	<b>\$474</b>

Source: GA Department of Labor. The data represents jobs that are covered by unemployment insurance laws.

## 5-12 Education and Training Opportunities

Education and training opportunities are important factors in promoting economic development. As technology continues to change, so must the skills and knowledge of the labor force. The present of Truett McConnell in White County provides a variety of liberal arts educational opportunities. Truett McConnell is in the process of being accredited as a four-year college under the Southern Association of Colleges and Schools. They have a four-year bachelors degree in Music and are seeking approval for a Bachelors of Business and a Bachelors

in Theology. The North Georgia Technical College campus in Habersham is within a thirty-minute drive and the Lanier Technical College campus in Hall County is within a one-hour drive for most residents. Table 5-31 provides a breakdown of the White County area residents who have graduated from one of the programs offered through one of these facilities. The largest number of graduates has been in the Customer Services program with 136 graduates followed by the health related field with Emergency Medical Technicians having 102 graduates.

The most critical education levels are the primary and secondary. These levels represent the future labor force and are the levels where the Cities and County can have the most influence. White County has six public schools with 251 teachers, 3700 students, and 194 high school graduates. There is also one private school. A new grammar school recently, and plans are being made to open another grammar school and a second high school to meet the growing population needs. According the U.S. Census reports, White County was the 51<sup>st</sup> fastest growing county in the nation in 2003.

Table 5-31

**Technical College Graduates, 2001-2002**

**White County Area**

<u>PROGRAM</u>	<u>GRADUATES</u>
<b>AGRICULTURE/NATURAL RESOURCES TECH.</b>	
Golf Course Management	7
<b>BUSINESS TECHNOLOGIES</b>	
Accounting	60
Business and Office Technology	102
Computer Information Systems	75
Marketing Management	16
Microcomputer Specialist	15
Networking Specialist	20
<b>HEALTH TECHNOLOGIES</b>	
Dental Hygiene	13
Medical Assisting	23
Medical Laboratory Technology	8
Paramedic Technology	22
Practical Nursing	41
Surgical Technology	8
 <u>PROGRAM</u>	
<b>INDUSTRIAL TECHNOLOGIES</b>	
Air Conditioning Technology	18
Auto Body/Collision Repair	7
Automotive Technology	6
Commercial Photography	13
Drafting	9
Electrical Technician	8
Electronics	23
Industrial Maintenance	17
Machine Tool Technology	28
Manufacturing Technology	9

Marine Engine Technology	7
Motorsports Engine Technology	7
Printing and Graphics Technology	10
<b>PERSONAL/PUBLIC SERVICE TECHNOLOGIES</b>	
Cosmetology	30
Criminal Justice	18
Culinary Arts	11
Early Childhood Care and Education	24
Fire Science	6
<b>TECHNICAL CERTIFICATES</b>	
A+ Technician	13
Air Conditioning Technology	10
Auto Body/Collision Repair	8
Automotive Technology	36
Business Management	7
CAD Operator	21
Child Development Associate	7
Cisco Specialist	58
CNC Set Up and Programming	7
Commercial Truck Driving	62
Computer Applications	42
Construction	25
Culinary Arts	7
Customer Service Specialist	136
Data Entry	30
Electrical Technician	6
Emergency Medical Technician	102
Entrepreneurship	38
Graphic Arts	11
Health Care Technician	20
Hospitality Industry Fundamentals	8
Industrial Maintenance	6
Leadership Development	55
Manufacturing Specialist	65
Medical Office Administration	32
Microcomputer Applications	29
Motor Control Technician	11
Nurse Assistant	11
Office Accounting	15
PC Maintenance Technician	8
PC Operations	11
Telecommunications Service Technician	17
Warehouse and Distribution Specialist	11
Web Site Designer	17
Welding	6
Wiring	9

**Definitions:** All graduates except those listed as technical certificates are diploma and degree graduates. Diploma and degree programs are one to two years in length. Technical certificates are less than a year in length.

**Source:** Office of Technical Education; Georgia Department of Technical and Adult Education Program Enrollment Exits/Placement Analysis

Source: Office of Technical Education; GDTAE Program Enrollment Exits/Placements Analysis

### **5-13 Assessment of Current and Future Needs**

One word that can be used to summarize the current environment status of White County, is the word “change”. The county is located in one of the state’s fastest-growing geographic areas and is experiencing all of the associated issues that always accompany such rapid growth.

The future rests with optimizing the natural tourism potential of the area while simultaneously encouraging more service-related businesses. An organized effort by the community-at-large to promote more homegrown businesses through entrepreneurial development programs would be of great potential. Infrastructure improvements are of immediate concern and are needed as a necessary component of business growth and expansion particularly water, sewer, roads and communication links via fiber optic.

### **5-14 Articulation of Community Goals/ Program**

The White County Community needs to formulate a sound economic development program and strategy.

In order to produce a workable economic plan analysis of trends and characterization of existing and future population growth, economic trends need to be articulated.

Future economic development needs should focus on outreach to existing business, expanding infrastructure, such as water, sewage and utilities, including high-speed Internet hook ups.

Site development, as well as an aggressive public relations drive should be a priority in order to attract new businesses.

The greatest opportunity in expanding employment in the short term is in the area of tourism, which includes the possibility of constructing a medium size conference center. This could help in making tourism/conference visitors a more solid year round source of steady employment.

Two additional tourist attractions are already in different development stages, Hardman Farm and the Nacoochee Village development.

Serious consideration should be given to building designated parking areas on the Southside of Helen, with free transportation provided by means of old fashioned looking coaches (streetcars), built on an automobile chassis, between the 3 main tourist attractions, Helen, Nacoochee Village and Hardman Farm. This should reduce automobile traffic making the entire area much more pedestrian friendly. A River Boardwalk and walking trails along the Chattahoochee River between Helen and the south end of Nacoochee Village will contribute even more and enhance the retail trade in the area.

Another community goal should be to aggressively pursue “clean” businesses, such as operational office centers for small to medium size service industries and the construction of office centers with possible commonly shared and centralized support staffing.

Any economic development plan should protect the agricultural base of White County and where possible, expand the opportunities. White County’s beauty in large can be contributed to the farming community.



## CHAPTER SIX

### NATURAL RESOURCES ELEMENT

This chapter provides an inventory of the natural and historic resources in White County, assesses the natural environmental limitations posed on future development, and establishes a set of goals and objectives designed to protect and preserve the natural and historic resources of the County.

#### **Weather and Climate**

The climate of White County is strongly influenced by mountainous terrain. Summers are mild and winters are quite cold. Generous precipitation occurs throughout the year with heavier amounts in winter and early spring.

The complex terrain and contrasting elevations of White County creates highly variable weather conditions. High elevation mountain areas are commonly 5 to 10 degree colder during the day than valley bottoms. In the evening, cold air flows off the high slopes into the valleys. In these bottomlands, early morning temperatures can be 10 to 15 degrees colder than surrounding areas. Precipitation varies as well. High elevations receive more rainfall and snow than lowlands, as air is forced to rise and cool as it pushed over mountains. Elevation changes alone can increase annual precipitation by 10 inches or more, when compared to nearby lowlands. Microclimates at high elevations are common, and lead to greater biodiversity than surrounding counties that have only low elevations.

The Southeast Regional Climate Center's Clarkesville and Helen stations have weather and climate records from 1961 to 2000. Maximum summer temperatures during this time averaged in the middle to high 80's. July is the warmest month, with the average highs of 86-5 degrees. Lows during the summer are comfortable, and average between the high 50's and low 60's.

Average high temperatures during the winter months are in the low to middle 50's. January is the coldest month with an average high temperature of 50.9, and an average low temperature of 29.4. Average low temperatures throughout the winter months range from the high 20's to the high 30's.

Precipitation in White County follows a winter maximum regime with a second peak of precipitation during summer months. In the Town of Cleveland, December through March are the wettest months, during which time the city receives between 5.71 and 6.94 inches of precipitation per month. July and August also see considerable rainfall. During these months, Cleveland receives a monthly average of 5.64 and 5.37 inches of rain. Snowfall can occur during winter months, especially at higher elevations. Cleveland averages 2.6 inches a year while Helen's average snowfall is 3.4 inches. The fall and early summer are the driest periods. During this time, monthly precipitation averages between 4.24 and 5.19 inches of rain.

## **Physiography**

White County lies within two physiographic provinces: the Blue Ridge District and the Piedmont District. The north and northwest sections of the County are within the Blue Ridge Mountains District, which consists of rugged mountains and ridges ranging in elevation from 3,000-4,700 feet. The southern boundary of the Blue Ridge Province abuts the Piedmont Province at approximately the 1,700 ft. elevation where a sharp contrast in regional slope occurs.

The portion of White County that falls within the Piedmont Province can be subdivided into three different districts. A small middle-western portion of the County lies within the Dahlonega Upland District, which is a rough and hilly section standing 1,500 to 1,700 feet above sea level. Streams in this district flow south out of the Blue Ridge Mountains District and have cut deep, narrow valleys 500 to 600 feet below the surrounding surface. Running in a southwest to northeast direction in the southwest and central portions of White County, at a width of approximately five miles, is the Hightower-Ridges District. This district contains a series of low, linear, parallel ridges separated by narrow valleys. The Hightower Ridges range in elevation from 1,000 feet in the southwest to 1,500 feet in the northeast. The remainder of White County (southern and eastern portions) lies within the Central Uplands District, which encompasses a series of low, linear ridges 1,300 to 1,500 feet above sea level separated by broad, open valleys. Streams flowing through this section occupy valleys 150 to 200 feet below the ridge crests. (Source: Georgia Department of Natural Resources, Geologic and Water Resources Division. Physiographic Map of Georgia. 1976-)

## **Geology**

Georgia is divided into three geologic provinces based on rock types. These geologic regions conform to the physiographic provinces except that the Blue Ridge and Piedmont physiographic provinces are combined in the Piedmont-Mountain geologic province, within which White County is located.

The Piedmont-Mountain province is underlain by metamorphic and igneous rocks, commonly known as crystalline rocks. The metamorphic rocks are the most extensive in the province and include biotite gneiss, muscovite schist, slate, quartzite, and marble. The igneous rocks are composed primarily of granite. Above the solid rock is a mantle of weathered soil or regolith (decayed rock), which ranges in thickness from 5 to 80 feet, depending upon the type of rock. This mantle of decayed rock is usually thickest in valleys and thinnest on hilltops. (Source: Department of Mines, Mining and Geology, State Division of Conservation, Bulletin Number 65, The Availability and Use of Water in Georgia. 1956-)

## **Mineral Resources**

White County has a variety of mineral resources. Two areas within the County contain granite and related rock outcrops: One area in the mid-northwest section and one area in the extreme northeast portion of the County. An area of gold deposits, approximately four miles wide by fifteen miles long, bisects the central portion of White County running southwest to northeast in the same general pattern as the Hightower Ridge. This area is known as the

"Dahlongega Belt". Paralleling the span of gold deposits to the south is a broken concentration of granite and related rocks. There is also a concentration of mica (colored or transparent mineral silicates that separate into thin leaves and used dry in roofing materials, joint cement, well drilling compounds and paint) located east of State Route 75 and north of State Route 254.

Other mineral resources found in lesser quantities in White County are: corundum (a very hard mineral that consists of aluminum oxide and which is used as an abrasive); feldspar (crystalline minerals consisting of aluminum silicates which is ground and used in the manufacture of glass, pottery, enamels and abrasives); iron and manganese; sulfide deposits (iron, copper, etc.); talc (a soft mineral that is a basic magnesium silicate and which is used as a filler in rubber); asbestos (a mineral supposed to be inextinguishable when set on fire, used for chemical filters and plastics); sillimanite (a mineral consisting of aluminum silicate which has uses in the production of high temperature refractories); quartzite (a compact granular rock composed of quartz and derived from sandstone); and soapstone (a soft stone having a soapy feel and composed of talc, chlorite and magnetite). (Sources: Georgia Department of Mines, Mining and Geology, The Common Rocks and Minerals of Georgia. Information Circular No. 5, 1934, Revised 1964. Georgia Department of Natural Resources, Georgia Geologic Survey, Mineral Resources Map. 1969.)

A deposit study of mineral deposits in White County was completed in 1964. This study concluded, among other things, that the "volume and grade of gravels in the Nacoochee Valley, Sautee Creek, Bean Creek and Dukes Creek warrant a dredging operation," and that "other economic materials which might be worked are asbestos, mica and soapstone."

Although there is a variety of mineral resources located in White County, mining and quarrying operations are limited to fill material, gold and sand-construction commodities.

### **Soil Types**

An analysis of the types of soils in White County and their suitability for certain land uses is an important component of the Comprehensive Plan. White County has a broad range of soils, which are listed by symbol and name in Table 6-2, along with the limitations of each soil type on crop cultivation, dwelling foundations, septic tank utilization, and commercial structures. Map 6-1 provides a generalized distribution of major soil types in White County.

Of the 55 soil types indicated in Table 6-2, there are 17 soil types, which have been identified with an asterisk (\*) as suitable for intensive crop cultivation. The soils most suitable for crop cultivation are found on lesser slopes (2-10%). Most of the soils in White County have limitations for intensive crop cultivation because of steep slopes, severe erosion hazards, flooding, low natural fertility, low organic matter content, shallow depth of rooting zone, rock outcrops, and/or surface stones. Although only 17 soil types are found suitable for intensive crop cultivation, other soil types can be and are cultivated for crops. Furthermore, many of the soils not identified as suitable for intensive crop cultivation are suitable for other agricultural uses such as pasture and woodlands. The vast majority of land areas in White County have soils, which pose severe limitations on dwelling foundations and septic tank utilization. The Masada soil association (MoB, MoB2, MoC2, MoD2) is the most suitable soil for these uses. Approximately 28,190 acres, or 18% of the total County land area, have only slight to moderate limitations on dwelling foundations and septic tank utilization. Even less of the County land area

has soils suited for commercial and light industrial uses without extensive adjustments; approximately 26,365 acres, or 17% of the total County land area, contain soils with only moderate limitations on commercial structures.

White County lies within the Upper Chattahoochee River Soil and Water Conservation District along with Dawson, Forsyth, Hall, Habersham and Lumpkin Counties. Soil and water conservation districts were formed in Georgia by 1957 with the purpose of providing local direction to federal conservation efforts. In addition to basic duties such as coordinating programs and developing annual and long-range plans, the districts sponsor demonstration projects and conservation workshops. (Source: Georgia Soil and Water Conservation Committee, Georgia Resource Conservation Program and Action Plan.)

**TABLE 6-1 Limitations of Soils  
on Development**

SYMBOL	SOIL NAME (% SLOPE)	FOUNDATION FOR DWELLINGS	SEPTIC TANK UTILIZATION	COMMERCIAL STRUCTURES
AcG	Ashe stony loam (60-90)	Se	Se	Se
AEE	Ashe/Edneville stony loam (10-25)	Se	Se	Se
AEF	Ashe/Edneville stony loam (26-60)	Se	Se	Se
AmC2*	Appling sandy loam (6-10)	Sl	M	M
AWB**	Augusta fine sandy loam (2-6)	Se	Se	Se
AwC	Augusta fine sandy loam (6-10)	Se	Se	Se
Bfs	Buncombe loamy sand	Se	Se	Se
BvF	Burton loam (16-50)	Se	Se	Se
Cac**	Cartersville complex	Se	Se	Se
CCF	Chandler loam (26-60)	Se	Se	Se
Con*	Conagree/Starr soils	Se	Se	Se
EPD	Edneville/Porters loams (10-15)	M	M	Se
EPE	Edneville/Porters loams (16-25)	Se	Se	Se
EPF	Edneville/Porters loams (26-60)	Se	Se	Se
EPG	Edneville/Porters loams (60-80)	Se	Se	Se
FaB*	Fannin fine sandy loam (2-6)	Sl	M	M
FaC*	Fannin fine sandy loam (6-10)	Sl	M	M
FaE	Fannin fine sandy loam (10-25)	MtoSe	Se	Se
FbC2*	Fannin sandy clay loam (6-10)	Sl	M	M
FbE2	Fannin sandy clay loam (10-25)	Se	Se	Se
FcF	Fannin soils (26-60)	Se	Se	Se
Gut	Gullied land		Not Rated	
HIB*	Havesville sandy loam (2-6)	Sl	M	M
HIC*	Havesville sandy loam (6-10)	Sl	M	M
HIE	Havesville sandy loam (10-25)	MtoSe	Se	Se

**TABLE 6-1 (Continued)**  
**Limitations of Soils on Development**

SYMBOL	SOIL NAME (% SLOPE)	FOUNDATION FOR DWELLINGS	SEPTIC TANK UTILIZATION	COMMERCIAL STRUCTURES
HJC3*	Hayesville sandy clay loam (6-10)	Sl	M	M
HJE3	Havesville sandv clay loam (10-25)	Se	Se	Se
HKC3	Havesville/Rabun clay loam (6-10)	Sl	M	M
HLC*	Havesville/Rabun loams (6-10)	Sl	M	M
HLD	Havesville/Rabun loams (10-15)	M	Se	Se
HLF	Havesville/Rabun loams (26-60)	Se	Se	Se
HSC*	Hiwassee loam (2-10)	Sl	SltoM	M
HSD*	Hiwassee loam (10-15)	M	M	M
HSF	Hiwassee loam (16-40)	Se	Se	Se
MCE	Musella cobblv loam (6-25)	Se	Se	Se
MCG	Musella cobblv loam (26-70)	Se	Se	Se
MoB*	Masada fine sandv loam (2-6)	Sl	Sl	M
MoB2*	Masada fine sandv loam (2-6)	Sl	Sl	M
MoC2*	Masada fine sandv loam (6-10)	Sl	Sl	M
MoD2*	Masada fine sandv loam (10-15)	M	M	Se
MuE2	Musella gravellv clay loam (10-25)	MtoSe	Se	Se
RaE	Rabun loam (16-25)	M	Se	Se
RbD3	Rabun clay loam (10-15)	M	M	Se
RbE3	Rabun clay loam (16-25)	Se	Se	Se
Sta*	Starr fine sandv loam	Se	Se	Se
TbE	Tallapoosa cobblv fine sandv loam (6-25)	Se	Se	Se
TcE	Tallapoosa fine sandv loam (10-25)	MtoSe	Se	Se
TdG	Tallapoosa soils (26-70)	Se	Se	Se
TIC*	Tusquitee loam (6-10)	Sl	Sl	M
TID	Tusquitee loam (10-25)	MtoSe	MtoSe	Se
TIF	Tusquitee loam (26-60)	Se	Se	Se
TmE	Tusquitee stonv loam (10-25)	Se	Se	Se
TmF	Tusquitee stonv loam (26-60)	Se	Se	Se
Toe* (**)	Toccoa soils (0-2)	Se	Se	Se
Wed**	Wehadkee soils (0-2)	Se	Se	Se
WgC*	Wickham fine sandv loam (6-10)	Sl	Sl	M
WgD	Wickham fine sandv loam (10-25)	MtoSe	MtoSe	Se
WgF	Wickham fine sandv loam (26-50)	Se	Se	Se
WnD3	Wickham sandv clay loam (10-15)	M	M	Se

Notes: \* - Suitable for farming (cultivated crops) without fertilization, drainage or other adjustments. \*\* - Hydric soils, according to Soil Conservation Service.  
Se - Severe limitations, extensive adjustments are needed before the soil is suitable for the specified purpose. M - Moderate limitations, some adjustments needed for use. Sl - Slight limitations, little or no adjustments needed for use.

SOURCE: Soil Survey of Dawson, Lumpkin and White Counties, Georgia U.S. Department of Agriculture, Soil Conservation Service, 1972.

Table 6-2 provides acreage estimates for the most frequent soil types in White County, as well as total acreage estimates of soils with certain characteristics (hydric soils, steep slopes, etc.).

**TABLE 6-2**  
**Acreage And Percent Of Total County Land By**  
**Most Frequent And Selected Composite Soil**  
**Types**

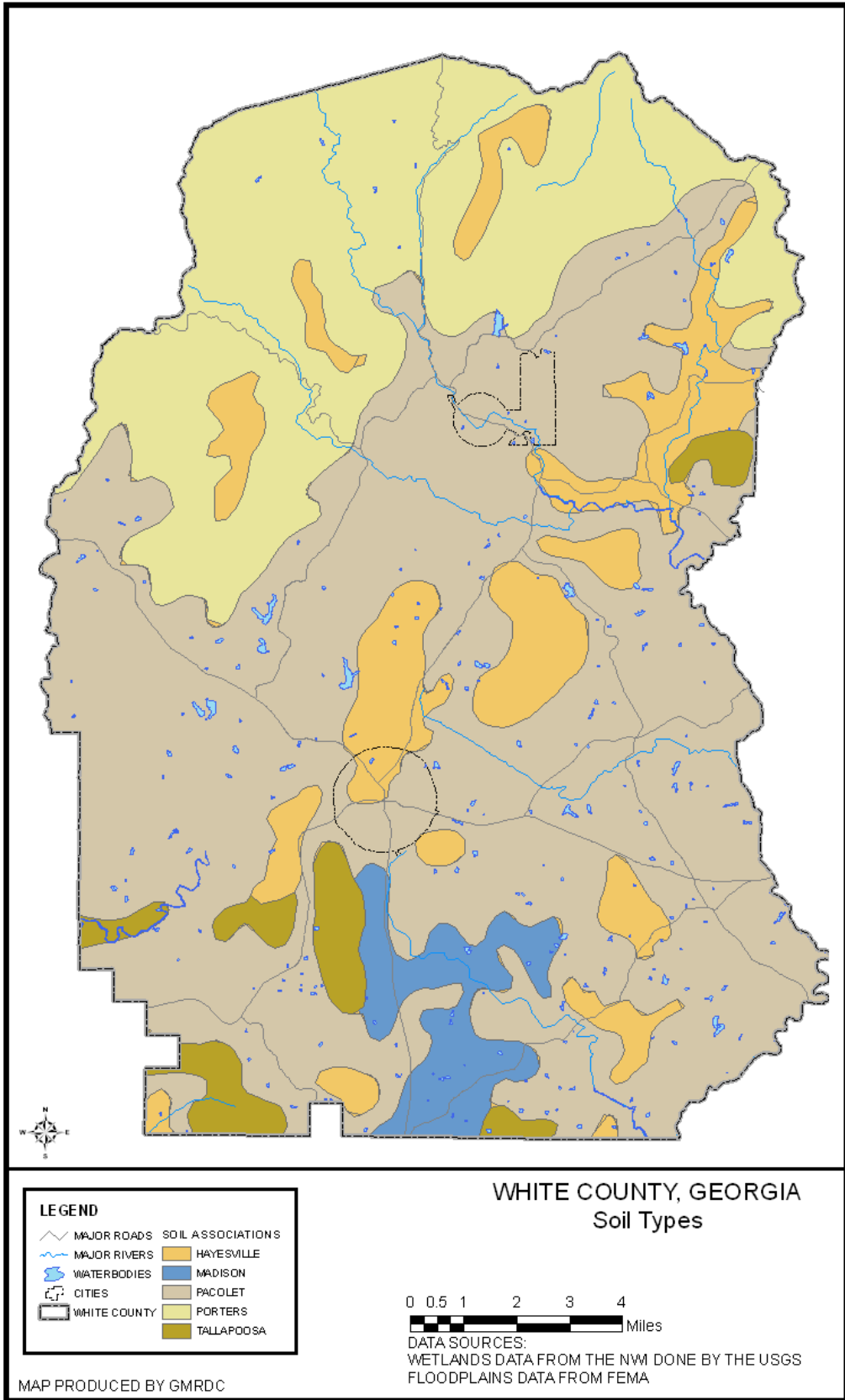
SYMBOL	SOIL NAME (% SLOPE)	TOTAL ACRES	% TOTAL COUNTY ACREAGE
TdG	Tallapoosa soils (26-70)	20,825	13.39
HIE	Havesville sandy loam (10-25)	15,485	9.96
EPF	Edneville/Porters loams (26-60)	11,035	7.10
FaE	Fannin fine sandy loam (10-25)	7,610	4.89
TID	Tusquitee loam (10-25)	6,600	4.24
HJE3	Havesville sandy clay loam (10-25)	6,580	4.23
AEF	Ashe/Edneville stony loams (26-60)	5,820	3.74
TmF	Tusquitee stony loam (26-60)	4,995	3.21
FbE2	Fannin sandy clay loam (10-25)	4,220	2.71
FPF	Edneville/Porters loams (16-25)	4,065	2.61
HIC	Hayesville sandy loam (6-10)	3,880	2.49
Cac	Cartecav complex	3,630	2.33
Toe	Toccoa soils	3,615	2.32
TIF	Tusquitee loam (26-60)	3,270	2.10
HJC3	Havesville sandy clay loam (6-10)	3,230	2.07
AcG	Ashe stony loam (60-90)	3,055	1.96
WgD	Wickham fine sandy loam (10-25)	3,055	1.96
—	OTHER SOILS	44,550	28.69
TOTAL	HYDRIC SOILS	8,385	5.39
TOTAL	PRIME AGRICULTURAL SOILS*	28,655	18.43
TOTAL	<u>SOILS WITH 25% SLOPE OR MORE</u>	54,225	34.87
TOTAL	<u>SOILS SUITABLE FOR SEPTIC TANKS**</u>	28,190	18.13
TOTAL	<u>SOILS SUITABLE FOR COMMERCIAL STRUCTURES**</u>	26,365	16.95
TOTAL WHITE COUNTY		155,520	100.0%

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SOURCE: Soil Survey of Dawson, Lumpkin and White Counties, Georgia. U.S.  
Department of Agriculture Soil Conservation Service, 1972.

NOTES: \*Excludes the Toccoa soil type, which is considered a hydric soil and therefore not included as prime agricultural soil. \*\*With only slight or moderate limitations.

Map 6-1





## Steep Slopes

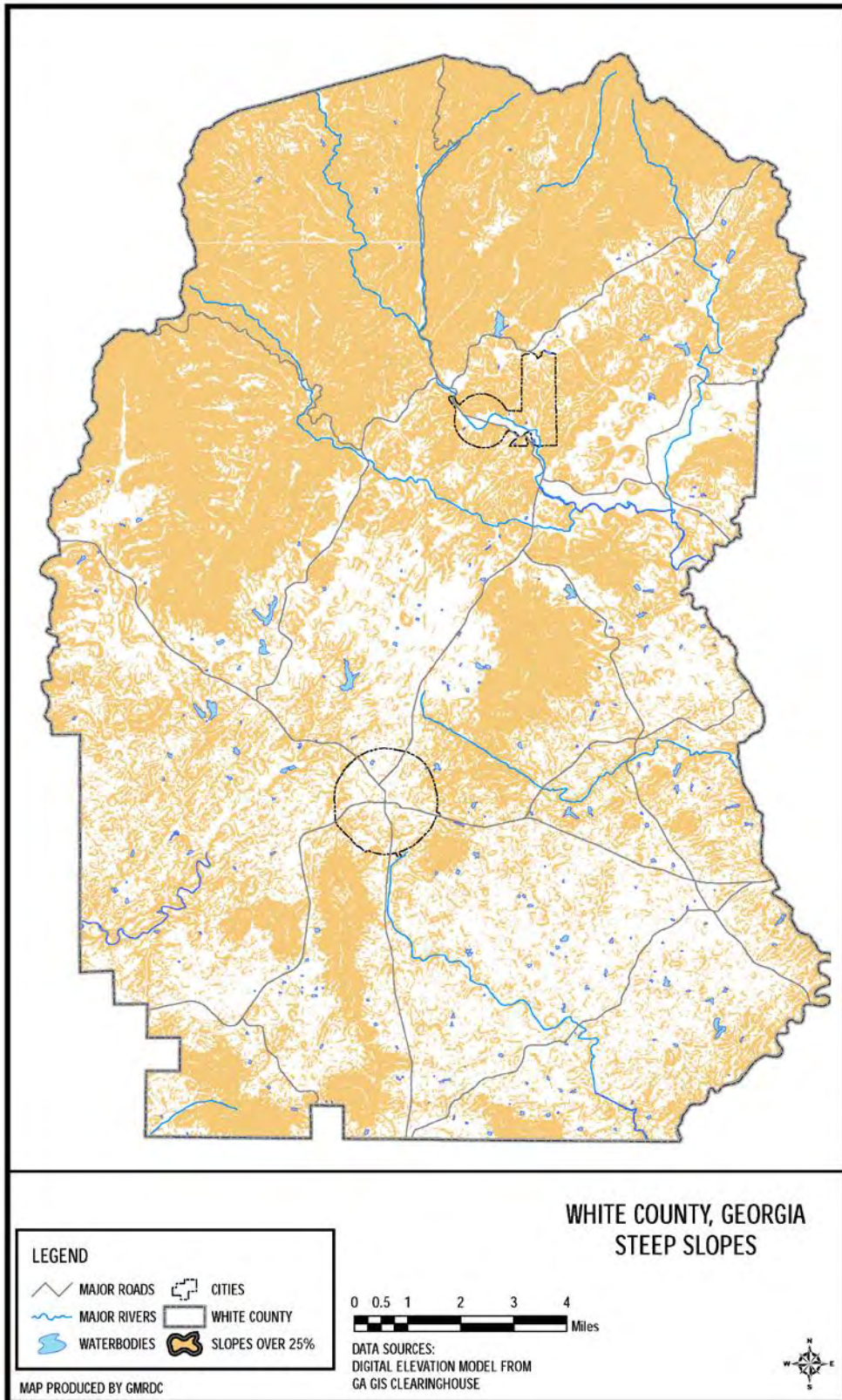
Due to its location in the Blue Ridge and Piedmont Physiographic provinces, White County has a number of mountains, which pose limitations on development. A total of 34.87 percent (54,225 acres) of the County area qualifies as steep slopes. The highest elevations in White County are located along the northern county boundary with Lumpkin, Union, Towns, and Habersham Counties. This county line also forms the Tennessee Valley Divide, which separates the Chattahoochee River Basin from the Tennessee River Basin. The Tennessee Valley Divide contains some of the highest elevations in North Georgia. Table 6-3 provides a listing of mountains by planning area with approximate elevation.

**TABLE 6-3 Mountains In  
White County By Planning  
Area and Approximate  
Elevation**

Name of Mountain	Planning Area	Approximate Elevation
Tatum Mountain	Blue Creek	1615'
Sal Mountain	Blue Creek	2270'
Collins Mountain	Blue Ridge	2120'+
Horse Range Mountain	Blue Ridge	3162'
White Oak Mountain	Blue Ridge	3040'+
Pinnacle Mountain	Blue Ridge	3133'
Little Buzzard Mountain	Blue Ridge	2560'+
Allison Mountain	Blue Ridge	2920'+
Piney Mountain	Blue Ridge	3121'
Rocky Mountain	Blue Ridge	3532'
Adams Bald	Blue Ridge	3620'
Wildcat Mountain	Blue Ridge	3760'+
Cowrock Mountain	Blue Ridge	3590'
Yonah Mountain	Mount Yonah	3156'
Pink Mountain	Mount Yonah	2623'
Leadpole Mountain	Mount Yonah	2130'
Skitt Mountain	Mossy Creek	2076'
Trav Mountain	Nacoochee	4430'
Chimney Mountain	Nacoochee	3357'
Lynch Mountain	Nacoochee	2080'+
Hickory Nut Mountain	Robertstown	2780'
Little Hkv. Nut Mountain	Robertstown	2681'
Stony Knob	Robertstown	2888'
Poor Mountain	Robertstown	3612'
Sheep Rock Top	Robertstown	3572'
Trail Ridge	Robertstown	2690'
York Ridge	Robertstown	3422'
Smith Mountain	Robertstown	2800'+
Piney Mountain	Shoal Creek	2314'
Walker Mountain	Shoal Creek	2585'
Long Mountain	Shoal Creek	2249'
Ash Mountain	Tesnatee	2142'
Allison Ridge	Tesnatee	2368'
Long Ridge	Tesnatee	3200'+
Tatum Mountain	White Creek	1615'
Gerrell Mountain	White Creek	1725'
Dean Mountain	White Creek	1980'

SOURCES: Georgia Department of Transportation, General Highway Map for White County, 1983.  
United States Geological Survey. 7.5 Minute Quadrangle Maps for White County Area.

The complex terrain of White County results in a significant area that is impacted by steep slopes. As noted earlier, the greatest occurrence of steep slopes is found in the northern portion of White County. The U.S. Forest Service's Chattahoochee National Forest, and a number of Wildlife Management Areas already protect much of this area. Despite large areas of already protected land, steep slopes are located throughout the area and need special consideration (See Map 6-2). Development on steep slopes can be problematic because of issues relating to environmental quality and public health and safety. Steep slopes are generally composed of thin soils that are easily eroded. If development occurs on steep slopes, eroded sediment enters streams and impacts surface water quality and aquatic habitat. Steep slopes commonly contain distinctive natural settings because of high elevations, unique aspect to sun angles, and other factors that lend themselves to particular habitats of threatened or endangered species. Along with these environmental reasons, excessively steep slopes are also not suited for development. Development has the potential to induce landslides, and the operational capability of septic drain fields is reduced, and may create health and safety concerns for local residents. To some extent, a septic system can overcome issues associated to steep slopes, but the system must be designed with slope considerations in mind. The building permitting process is a useful measure in maintaining citizen's general welfare during development periods, and it should address septic placement on steep slopes. Further, development on steep slopes creates accessibility problems for emergency vehicles and places increased demands on infrastructure. For example, considerably larger pumps are mandatory to overcome gravitational forces in order to supply water to sites located on steep slopes.



## **Mountain Protection**

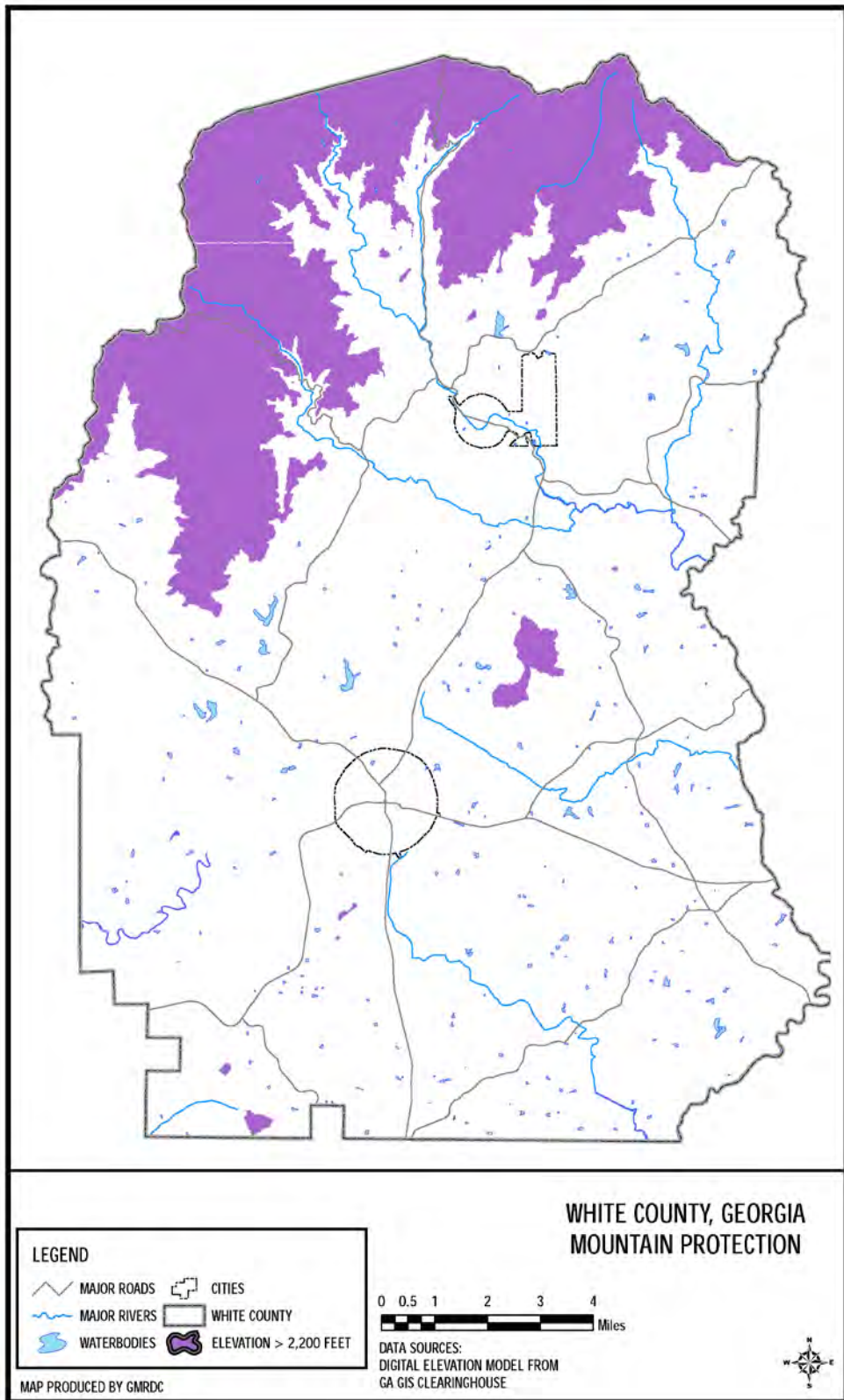
The fragile nature of mountain areas, with their sensitive environmental setting and intrinsic visual qualities, has created the need for special protection of these locations. Mountain Protection is included in the DNR's minimum planning standards, which local governments must develop and implement. Areas to be designated under mountain protection in White County include all locations with all areas that have slopes of 25 percent or greater. Ridge tops, crests, and summits that are located on a protected mountain site still fall within this designation, even if they do not meet the established conditions. The areas within White County that fall within the Mountain Protection area are shown on Map 6-3.

Local governments have the responsibility to develop and adopt a Mountain Protection Plan that address the effects of activities that are located within the Mountain Protection designation. Specific concerns of the Mountain Protection Plan include the health, safety, welfare, and private property rights of county constituents. Unique features of the mountain habitat including threatened or protected plants and animals, visual qualities, ground-water and surface-water resources, and the plan's influence on surrounding natural areas should be addressed. Finally, the duration, or time scale, of activities that are, or will occur, in the designated area need to be incorporated into the plan. The criteria for mountain protection are as follows.

An overlay of the area designated as "Protected Mountains" with property parcels indicates that some mountain areas in White County have been subdivided and are, or could be, developed. The overlay identified numerous areas of heavy development with the "Protected Mountain" designation, and include: the Piney and Wauka Mountain areas, Long Mountain, Leadpole Mountain, the Northwest and East faces of Yonah Mountain, the area between Unicoi State Park and US 17 and 255, and the upper reaches of Towns Creek, and the headwaters of York Creek. Moderate development of mountain areas is permitted. Nonetheless, excess development of these areas is not in the best interests of the natural environment and the community in general.

The County recently adopted a mountain protection ordinance that satisfies the minimum criteria set forth by the Department of Natural Resources.

Map 6-3



## **Plant and Animal Habitat**

### **Protected Plants and Animals**

Georgia's Protected Species Program began in 1973 with the enactment of two state laws: the Endangered Wildlife Act and the Wildflower Preservation Act. These laws provide protection for more than 50 species of plants and about 20 species of animals. Under the Natural Heritage Inventory Program, the Georgia Department of Natural Resources has completed an inventory of rare plants, animals, and natural habitats in Georgia warranting state and federal protection.

According to a report by the Georgia Department of Natural Resources, the natural environment of White County is conducive to three (3) species of protected wildlife and eight species of concern.

#### **Threatened Species:**

Bluestripe Shiner (Cyprinella callitaenia)- This threatened fish is found only in the Chattahoochee Watershed and prefers flowing areas in large creeks and medium sized rivers over rocky substrates.

Highscale Shiner (Notropis hypsilepis)- This threatened shiner prefers habitats of streams flowing over sand or bedrock substrates.

Northern Pine Snake (Pituophis melanoleucus melanoleucus)- This threatened snake grows to between 48 and 68 inches and is identified by its black and dull white to yellowish or light gray color. It is found in dry pine or pine-hardwood forests.

#### **Species of Concern:**

Coal Skink (Eumeces anthracinus)- This lizard grows from 5 to 7 in. in length and can be found in mesic forests near streams, springs or bogs.

Blue Ridge Two-lined Salamander (Eurycea wilderae)- This small salamander is distinctive because of its two stripes that run the length of its body, but break apart into spots that cover its tail. The Blue Ridge Two-lined Salamander is found in high elevation springs and seeps that are adjacent to hardwood forests.

Four-toed Salamander (Hemidactylium scutatum)- This salamander, as the name implies, has four toes instead of the common five toes on the hind feet. The four toed salamander is found in swamps and boggy streams and ponds, located near hardwood forests.

Greater Jumprock (Scartomyzon lachneri)- The Greater Jumprock is a sucker that can be found in small to large streams in swift current over rocky substrate.

Masked Shrew (Sorex cinereus)- This shrew has a dark gray coat, with lighter gray underbelly. The Masked Shrew can be found in high elevation mesic forests, field edges, swamps, or mountain bogs.

Pygmy Shrew (Sorex hoyi)- The Pygmy Shrew's habitat includes mountain bogs and grassy openings in high elevation forests. It is an insectivore that grows up to two inches in length.

Red Squirrel (Tamiasciurus hudsonicus)-

The Diana Fritillary (Speyeria Diana)- is a colorful butterfly whose habitat includes openings and fields in wet, rich, forested valleys and mountainsides. Other animals that are not on the Department of Natural Resources protected species list for White County, but could potentially be found in the area include:

Florida Cougar (Felis concolor cougar)- This cat is also commonly known as the panther and mountain lion, is a large unspotted cat with a small, rounded head and long tail. The cougar may exist in northern Georgia (the northern two-thirds of White County) within vast tracts of undisturbed land. Although the environment may be suitable for cougar habitat, no sightings have been reported. However, sightings have been reported in Towns County and within the Warwoman Management Area in Rabun County in 1977.

Indiana Bat (Myotis Sodalis)- The Indiana Bat is a nocturnal insectivore with fine and fluffy, dark gray fur. Its preferred habitat is caves with moderately cool temperatures and high humidity. No sightings have been reported in White.

Red Cockaded Woodpecker is an endangered species that feeds in the upper regions of large pines and nests in over mature pines. Although the species can occur state-wide, no sightings have been reported in White.

Southern Bald Eagle, an endangered species, is a bird of inland waterways and estuarine systems. It requires wetland areas for hunting and has declined in population due to habitat destruction. A sighting of the Southern Bald Eagle has been reported in White County.

(Source: Georgia Department of Natural Resources, Game and Fish Division, Endangered Wildlife Program. 1977. Georgia's Protected Wildlife.)

Fish are also an important part of wildlife in the mountains. The cold-water streams support rainbow, brown and brook trout, of which only the brook trout species is native to the State of Georgia. The Department of Natural Resources maintains listings of primary and secondary trout streams. Primary trout streams have environmental conditions that are most favorable for trout, and the trout are able to both survive and reproduce in these waters. In secondary trout streams, trout are able to survive without assistance but are unable to reproduce naturally, and thus require stocking to maintain their populations. Trout are commonly used as indicator species because of their sensitivity to environmental changes such as sedimentation, insect populations, and water temperature. The State of Georgia protects trout streams through the Erosion and Sedimentation Act, which provides a 50-foot stream buffer on all trout streams with an average annual discharge of greater than 25 gallons per minute. A 25 foot buffer is applied to all streams with an annual discharge of less than 25 gallons per minute. In White County, primary trout streams include: the Cathey Creek watershed upstream from the

Arrowhead Campground Lake, the Chattahoochee River watershed upstream from Georgia Hwy. 255 Bridge, and the Town Creek watershed upstream from the mouth of Jenny Creek. Secondary trout streams include: the Chattahoochee River watershed upstream from the Georgia Hwy. 115 to the Georgia Hwy. 255 Bridge, the Little Tesnatee Creek watershed upstream from the mouth of Turner Creek, and the Turner Creek watershed (except those sections listed as primary trout streams).

The mountain region of North Georgia contains a multiplicity of climatic and soil conditions that stimulate the growth of many trees and plants. The slopes, soils, and annual average rainfall are principal natural factors controlling the vegetation of the area. These varied natural conditions have led to habitat for numerous plant species with federal or state protection which include:

Biltmore Sedge (Carex biltmoreana)- This perennial grass like herb is found at high elevations on seepy cliff crevices in partial shade to full sun at high elevations. Notable features include its stout, brittle, scaly stolons and its narrowly tapered, bluish green drooping leaves.

Manhart's Sedge (Carex manhartii)- This perennial grass like herb can be found in loose clumps with leafy shoots. Commonly found at elevations ranging from 2,000 to 4,000 ft, this plant prefers the acidic soils of cove hardwoods.

Pink Ladyslipper (Cypripedium acaule)- The Pink Ladyslipper is a perennial herb that is known for its showy flower and pair of basal leaves, and is found acidic soils of pinelands, rhododendron thickets, and mountain bogs.

Large-flowered Yellow Ladyslipper (Cypripedium parviflorum var. pubescens)- This small perennial has small white leafy stems and elliptic leaves with 1 to 2 yellow flowers. This Yellow Ladyslipper prefers upland oak-hickory-pine forests and mixed hardwood forests.

Florida Torreya (Torreya taxifolia)- This small evergreen tree can be found beneath magnolia forests and mixed hardwood forests on middle to steep slopes with permanent seepage.

Species of Concern:

Sweet-fern (Comptonia peregrina)

Minniebush (Menziesia pilosa)

A Moss (Hypnum cupressiforme var. filiforme)  
(Melanthium latifolium)

Broadleaf Bunchflower

Butternut (Juglans cinerea)  
quinquefolius)

American Ginseng (Panax

Naked-fruit Rush (Juncus gymnocarpus)

Dwarf Ginseng (Panax trifolius)



Climbing Fern (Lygodium palmatum)

Staghorn Sumac (Rhus typhina)

Wild Coffee (Triosteum aurantiacum)

Woodland Bulrush (Scirpus expansus)

Habitats of Concern:

The Georgia DNR has also identified the Shrub Bald and Heath Bald as threatened natural communities. These areas are located on the highest of peaks in Georgia including Tray Mountain, Brasstown Bald, Standing Indian, and Blood Mountains. These balds are composed of a wide variety of plants including Catawba rhododendron, mountain ash, and dwarf willow. A GAP analysis performed by the US Geological Survey Biological Resources Division identified only 281 acres of Heath Bald in Georgia (Source: Georgia Department of Natural Resources, Game and Fish Division. Georgia's Protected Species.)

Efforts are being made to protect the rare, endangered and protected species of plants in Georgia. Public and private groups such as the University of Georgia and the Georgia Plant Conservation Alliance are studying and attempting to preserve rare plants and attempting to return them to their original landscapes. Even with these efforts though, rare species continue to be lost for many reasons, including the drying of wetlands and heavy growth of rhododendrons, mountain laurel and other shrubby plants that shut out light and inhibit reproduction (Source: Georgia Conservation Alliance).

Major Forest Types and Vegetation

Table 6-5 provides a general overview of the major forest types based on ranges of elevation in White County. Table 6-6 also offers a listing of 60 tree species, which are native to Georgia and found in the mountain and piedmont areas. The various tree species listed in Table 6-6.

**TABLE 6-5 General  
Forest Types By  
Elevation**

FOREST TYPE	LOCALE	APPROXIMATE ELEVATION RANGE
Oak Ridge	Along crests of Blue Ridge Exposed	3600' -
Open Oak-	south or north-facing slopes Moist	4000'
Pine	valley floors Dry ridge slopes of	2100'-
Mixed	Piedmont	3800'

SOURCE: Institute of Community and Area Development, University of Georgia. The Atlas of Georgia.

TABLE 6-6 Native Trees In The Region

Common Tree Name	Frequent Locations Found	Common Tree Name	Frequent Locations Found
Eastern White Pine	Cool, moist coves and valleys	White Oak	Dry, sandy soils in piedmont and mountains
Loblolly Pine	Abundant in piedmont	Post Oak	Plentiful in poor or dry soils
Shortleaf Pine	Heavy clay soils in upper piedmont	Chestnut Oak	Moist, fertile soils near streams in piedmont
Virginia Pine	Mountains and upper piedmont	Northern Red Oak	Stream banks and low rocky hillsides of lower mountains
Pitch Pine	Dry mountain ridges and slopes	Southern Red Oak	Dry, gravelly uplands but not in high mountains
Table Mountain Pine	Dry mountain ridges and slopes	Black Oak	Hillsides in piedmont and lower mountains
Hemlock	Along mountain streams and fertile slopes	Water Oak	Fertile valleys and hillsides
Eastern White Pine	Fertile soils in piedmont and mountains	Scarlet Oak	Moist, deep, fertile soils of mountain coves
Loblolly Pine	Streams and swamps in fertile soils	Blackjack Oak	Stream banks and rich, damp soils in mountains
Shortleaf Pine	Low, flat woods and river bottoms	American Elm	Moist soils usually near streams only in mountains
Virginia Pine	Common on well drained soils	Slippery Elm	Deep, rich, moist soils throughout state
Pitch Pine	Poor soils on uplands	Winged Elm	Typical of abandoned fields on dry soils
Table Mountain Pine	Sandy soils in piedmont	Georgia Hackbeny	Occasional on hillsides or rich moist soil in piedmont
Hemlock	Mountain valleys, streams and swamps in piedmont	Red Mulberry	Stream banks throughout state except higher mountains
Black Walnut	Stream banks	Cucumber Tree	Stream banks throughout state
Shagbark Hickory	Stream banks	Umbrella Magnolia	Best growth in rich soils of mountain coves
Carolina Hickory	Stream banks of lower mountains and piedmont	Mountain Magnolia	Various species throughout state
Mockernut Hickory	Cool, rich soils in mountains	Yellow Poplar	Old fields, ditch and stream banks throughout state
Pignut Hickory	Streams and fertile lowlands in piedmont and mountains	Sassafras	Most abundant on mountain slopes
Sand Hickory	Low grounds and stream banks in piedmont and mountains	Sweetgum	Fertile, well drained soils on hillsides and valleys
Bitternut Hickory	Moist soils usually along streams	American Sycamore	Rich, moist soils throughout state
Black Willow	Piedmont and mountains, originally abundant	Service Berry	Valleys and hillsides in piedmont and mountains
Eastern Cottonwood	Upland woods on dry, sandy soils	Black Cherry	Moist, deep soils near streams, mostly in piedmont
River Birch	Rich uplands or moist bottom lands in piedmont	Hawthorne	Fertile hillsides in eastern part of state
Sweet Birch	Dry gravelly uplands	Honey Locust	Deep, moist soils in mountains and piedmont
Blue Beech	Upland soils on rocky ridges and bluffs	Black Locust	Steep hillsides in mountains
Eastern Hophornbeam	Small streams, edges of low grounds	Eastern Redbud	Fertile, well-drained soils throughout the state
American Beech	Common upland tree throughout state	American Holly	Fertile, well-drained soils throughout state
American Chestnut*	Common upland tree throughout state	Red Maple	Wooded slopes and stream banks in mountain and
Allegheny Chinkapin	Stream banks and low ground in Piedmont	Boxelder	Moist, fertile soils throughout state

\*Endangered due to Chestnut Blight, a bark disease.

SOURCE: Georgia Forestry Commission. Native Trees of Georgia.

Note: The above source describes only 92 of about 250 tree species native to the State of Georgia.

The mountain areas of steep and moderately steep slopes tend to be somewhat dry because of the high degree of water run-off due to a very short standing time in which water can be absorbed. The mountains were once covered by deciduous forest stands existing in a condition known as "climax forests," typified by a high deciduous leaf canopy with little or no undergrowth. These original forest stands have almost completely disappeared due to clear-cutting for commercial timber purposes. This clear cutting has caused the highland slopes to become drier and encouraged more drought-resistant trees to cover the area. The American Chestnut species once filled the mountain region but has now all but disappeared due to drought and blight. Among the tree species now found on these drier, steep slopes are: Pitch Pine, Table Mountain Pine, Allegheny Chinkapin, Post Oak, Chestnut Oak, Scarlet Oak, and Blackjack Oak.

Areas of moderate and lower slopes receive various degrees of sunlight through the day and vary between warm and cool temperatures with moderate to slightly moist soil conditions. In these areas, the Red Maple, Blue Beech, Sweetgum, Black Oak, and certain species of pines, among others, are common.

The lower slopes receive more direct and intense sunlight and tend to contain upland water flowing into the area. These areas sustain a wide variety of tree species listed in Table 6-6 as well as many types of ferns.

The lowest lying areas along stream banks and within floodplains generally remain wet or moist year round and support Hickory, Black Willow, Eastern Cottonwood, River Birch, Sweet Birch, American Beech, Elms, Magnolias, American Sycamore, White Ash, and other tree types as indicated in Table 6-6.

## **Major Park, Recreation, and Conservation Areas**

### **Chattahoochee National Forest**

According to the United States Forest Service, there are 41,276 acres (64.5 square miles) of land that is managed by the Chattahoochee National Forest in White County. The Chattahoochee National Forest's land holdings encompass 26-5 percent of the total 243 square miles in White County.

The National Forest land is located in the northern half of the County. With such a large amount of land under national ownership and management, a detailed description of the Chattahoochee National Forest and the policies of the United States Forest Service is warranted.

The Chattahoochee National Forest encompasses a total of 749,689 acres (1,171 square miles) in northern Georgia and attracts many visitors each year due to its mountain vistas, whitewater streams and scenic landscapes. In addition to its recreational opportunities, the Chattahoochee National Forest has valuable resources of timber, fuel wood, and minerals.

The Chattahoochee National Forest as a whole is comprised mostly of cove hardwoods and upland hardwoods forest types, dominated by tree stands aged 40 to 80 years. Major tree species include white and red oak, hickory, yellow poplar, shortleaf pine, Virginia pine, and eastern white pine. Table 6-7 provides habitat information for the Chestatee and Chattahoochee Wildlife Management Areas.

**TABLE 6-7 Wildlife Management Areas Habitat Information By Percentage (In % of Land Within Wildlife Management Area)**

TYPE OF HABITAT	CHESTATEE	CHATTAHOOCHEE
Upland hardwood	55%	54%
Yellow pine	13%	18%
White pine	6%	13%
Mixed pine-hardwood	5%	4%
Mixed hardwood-pine	5%	3%
Cove hardwood	9%	5%
Regeneration (cut-over) areas	7%	3%
Wildlife openings	41 acres	44 acres
TOTAL	100%	100%

SOURCE: United States Department of Agriculture, Forest Service, And Southern Region.

Over 500 species of wildlife are known to exist in the Chattahoochee and Oconee National Forests, including major game such as deer, turkey, squirrel, grouse, quail, raccoon, fox, dove, woodcock and bear. Table 6-8 provides game population data for the Chestatee and Chattahoochee Wildlife Management Areas.

**TABLE 6-8 Wildlife Management Areas Game Populations (In Number of Animals Per Acre/Square Mile)**

Type of Game	Chestatee	Chattahoochee
Deer	21/square mile	15/square mile
Dove	2/square mile	2/square mile
Ducks	Negligable	Negligable
Grouse	15/square mile	15/square mile
Quail	1/100 acres	1/100 acres
Rabbit	1/30 acres	1/30 acres
Squirrel	1/3 acres	1/3 acres
Turkey	5/square mile	10/square mile
Bear	1/2 square mile	1/1.5 square mile

SOURCE: United States Department of Agriculture, Forest Service, And Southern Region.

\* Data for 2001: Chattahoochee National Forest Management Indicator Species Population and Habitat; 2003.

The Chattahoochee National Forest contains numerous trout streams that support wild populations of brook, brown and rainbow trout. There are 19,352 acres of public lakes in the Chattahoochee National Forest. Significant trout streams located in White County are Smith Creek, Chattahoochee River, Dukes Creek, Towns Creek, and Tesnatee Creek. To help maintain fishing quality, many streams within the forest are stocked with hatchery-reared fish.

Recreation areas and sites are composed of "dispersed" recreation (hiking, camping, picnicking, fishing, hunting and riding) and "developed" recreation (camping, picnicking, swimming and boating). A description of major recreational areas within the Chattahoochee National Forest is listed below and land areas are identified in Table 6-9.

Appalachian Trail- The Appalachian Trail runs 79.5 miles through the state of Georgia, from its beginning (or ending) point at Springer Mountain to the North Carolina state line near Tate City, Georgia. In all, the Appalachian Trail is 2,170 miles in length, and was conceived by Benton McKaye and constructed with the help of the Civilian Conservation Corps and the Forest Service. Today, the trail is maintained by a group of volunteers and clubs that is organized by the Appalachian Conference. The Appalachian Trail became the first national scenic trail authorized by Congress in 1968.

Raven Cliffs Wilderness- This area was designated a wilderness in 1986, and covers a total of 9,115 acres. The area is known for its many streams, hardwood forests, and waterfalls and mountainous terrain. Elevations range from 1,800 feet to 3,846 feet. Raven Cliffs Wilderness provides 41 miles of trout streams, and habitat for deer, black bear, grouse, turkey, other species. The Appalachian Trail follows the highest ridges for 6-6 miles through the Wilderness, and the 2.6-mile Raven Cliffs Falls Trail is also located within the area. Surrounding Raven Cliffs Wilderness is the Chestatee and Chattahoochee Wildlife Management Areas.

Tray Mountain Wilderness- Tray Mountain Wilderness is a 9,700 acre tract that was established in 1986. The area contains forests that are 60 years or older, mountains that reach up to 4,430 feet (Tray Mountain), 41 miles of trout streams, and 16-5 miles of the Appalachian Trail.

Mark Trail Wilderness- Created in 1991, the Mark Trail Wilderness totals 16,880 acres. The area is home to 65 miles of trout streams that provide habitat for rainbow, brown, and brook trout. Horsetrough Mountain is the highest peak in the Wilderness, and stands at 4045 feet. The Appalachian Trail follows the high ridges that make up the northern and western edges of White County for 14 miles.

Anna Ruby Falls- This 1,600 acre area is located northeast of Helen, and is famous for its double waterfall that is created from Curtis and York Creeks. Curtis and York Creeks begin on the slopes of Tray Mountain before cascading down the 153 and 50 foot drops, respectively, that compose Anna Ruby Falls. From the confluence of the two streams at the falls, Smith Creek then flows into Unicoi Lake, and later into the Chattahoochee River.

Unicoi State Park- Unicoi State Park is located northeast of the City of Helen, and encompasses a 1,050 acre area. The park offers a number of opportunities for the sightseer and outdoor enthusiast, including 12 miles of hiking trails, 8 miles of mountain biking trails, fishing, canoeing, and pedal boat rental on the site's 53 acre lake. Unicoi State Park also provides cultural and historical programs. Unicoi State Park received 1,134,297 visitors in 1989, making it one of the most heavily visited state parks in Georgia.

Smithgall Woods- Donated to the State by Charles Smithgall Jr., this 5,555 acre conservation area has recovered from a troubled past of mining and logging to become a Heritage Preserve. Smithgall Woods includes activities such as biking, hiking, and fishing on Dukes Creek, which was voted as “one of the Top 100 Trout Streams in the U.S” by Trout Unlimited.

Andrews Cove- Andrews Cove is located in northern White County, on the east side of State Route 17/State Route 75, and provides camping, hiking and fishing opportunities along mountain streams.

**TABLE 6-9  
Major Areas And  
Recreational Sites Of The  
Chattahoochee National  
Forest Located in White  
County By Type And  
Acreage**

Chattahoochee Wildlife Management Area	25,000
Chestatee Wildlife Management Area*	25,000
Raven Cliffs Wilderness Area	9,115
Tray Mountain Wilderness Area	9,700
Mark Trail Wilderness Area	16,880
Dukes Creek Falls Recreation Site	4,500
Anna Ruby Falls Scenic Area	1,600
Appalachian National Scenic Trail	79.5 (miles in Georgia)
Unicoi State Park	1,050
Smithgall Woods	5,555

Total, Chattahoochee National Forest in White County 41,226 acres

\* Located in northeast Lumpkin and northwest White Counties

### Chattahoochee National Forest Plan

The Land and Resource Management Plan (Forest Plan) for the Chattahoochee and Oconee National Forests establishes long-range goals and objectives, specific

management prescriptions for 10-15 year time periods, standards and guidelines for management, and monitoring procedures to assure plan implementation. The Forest Plan should be referenced for information relating to the management of National Forest Lands within White County (source: United States Department of Agriculture, Forest Service, Southern Region. Land and Resource Management Plan, Chattahoochee and Oconee National Forests. (Revised January 2004).

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## **Water Resources**

Surface water resources include the water in rivers, smaller streams, lakes, ponds and man-made reservoirs. Rivers within the Blue Ridge physiographic province generally have small drainage areas but relatively high water yields. The rivers in this province have steep, rocky channels and flow swiftly over many rapids and waterfalls. The most important surface water resource in White County is the Chattahoochee River, or "river of the painted rocks."

The Chattahoochee River originates in the Blue Ridge Mountains just above White County and flows in a southerly direction through the Piedmont and Coastal Plain. It is the longest river in Georgia - 436 miles from its source in northeastern Georgia to the Florida line. The drainage area of the Chattahoochee River in the Georgia Mountains region is 1,179 square miles, including all of White County and portions of Hall, Habersham, Lumpkin, Dawson and Forsyth Counties. Smaller tributaries to the Chattahoochee River in the region include Dukes Creek, and Smith, Sautee, and Blue Creeks. The river is dammed to form Lake Lanier south of Gainesville, the first of several impoundments on the river. Below Buford Dam, the Chattahoochee is very heavily used by local governments in the Atlanta region, and supplies 70 percent of metropolitan Atlanta's water needs and over half of the State's residents. The Chattahoochee River is thus a major water resource not only to White County, but the region, State of Georgia and other states as well.

In the headwater region in the Blue Ridge physiographic province, the Chattahoochee River and its tributaries provide recreational opportunities, but are lightly used as sources of water for municipal and industrial facilities. The Upper Chattahoochee River Basin is typified by small streams as well as limited groundwater, making its physical capability for water use quite limited.

Small communities in the upper basin often use groundwater wells, surface water supplies, or a combination. The crystalline rock underlying this area greatly limits groundwater availability.

Groundwater in the upper Chattahoochee River Basin is supplied by the Crystalline Rock Aquifer System, which consists of a complex of igneous and metamorphic rocks that have been folded and fractured. Groundwater occurs in the fractures in the rocks as well as in the pore spaces in the overlying soil, which was derived from the weathering of underlying rocks. Well yields in this aquifer range from one to more than 200 gallons per minute. Water can be found from depths of ten to more than 400 feet. Recharge in the aquifer system is localized.

## Water Quality

The overall water quality of the Chattahoochee River in White County is very good. There is a significant number of headwater tributaries classified as primary or secondary streams. In the early 1980s, a dramatic increase in the level of tourism in the City of Helen resulted in discharges from the Helen Water Pollution Control Plant in excess of its permit limitation. The problem of hydraulic overloading has since then been decreased by placement of chemical toilets in public use areas, an upgrading of the Helen Water Pollution Control Plant, and construction of a land application system. Despite the efforts that have been made, some problems can occur. The Chattahoochee River Basin Watershed Protection Plan specifically identifies the headwaters of the Chattahoochee River as susceptible to sediment contamination associated with development on steep slopes. The study also found that the headwaters of the Chattahoochee are susceptible to non-point sources of pollution including metals, fecal coliform bacteria, erosion and sedimentation, and nutrient loading (Source: Chattahoochee River Basin Watershed Protection Plan 1997).

## Water Resources Management

As mentioned previously, White County lies within the Upper Chattahoochee River Soil and Water Conservation District. In addition, White County lies within the Chestatee-Chattahoochee Resource Conservation and Development Area, which was established in 1971. The Resource Conservation and Development Areas are local projects in which residents work to improve their economy and the environment through conservation, development, and better utilization of natural resources. Various other agencies such as the U.S. Army Corps of Engineers and the Georgia Department of Natural Resources play major roles in the management and conservation of natural resources in White County.

## **Public Water Supply Sources**

The White County Water Authority is the largest public water provider for the County, and serves approximately 1,400 people in White County. The system contains 72 miles of main line, which follows the major roadways in the county including routes 129, 75, Alt 75, and 115, and provides water to adjacent developments. The system contains two storage tanks of 500,000 gallons and 300,000 gallons. White County Water Authority acquires its water from the Turner Creek surface water intake. Water withdrawal from Turner Creek is 1.8 Million Gallons per Day (MGD). The Department of Natural Resources places special requirements on the areas surrounding a surface water intake. This information is discussed in the Water Supply Watershed section.

Expansion of the White County Water Authority is anticipated in the future to meet the needs of its expanding customer base. The Authority will continue to install lines throughout White County, it is estimated that new storage tanks will be needed in the next 3 to 5 years, and groundwater wells may be installed to increase water capacities in the future.

The cities of Helen and Cleveland use groundwater wells as their water supply sources. Groundwater storage occurs when precipitation infiltrates into the soil. In north Georgia, groundwater supplies come from either shallow regolith (unconsolidated soils)



or the crystalline rock aquifer. Shallow regolith stores water in its pore spaces and has the capacity to receive and accumulate enough water to supply small, single family wells. These shallow wells do not have the yield capacity to sustain municipal water demands, are susceptible to contamination, and should not be used for public water supplies. The deeper crystalline rock aquifers are found throughout the Piedmont and Blue Ridge and have variable yields. Well productivity depends on the on the location and depth of the borehole in relation to fractures in the crystalline bedrock. Because water is transferred and stored in bedrock fractures, a productive well's borehole must cross a combination of either a number of small fractures, or a single large fracture. Determining the location of these fractures is exceptionally difficult. Cleveland and Helen both use groundwater wells that tap into the crystalline rock aquifer as their water supply sources. The City of Helen utilizes four wells, which have an average withdrawal rate of .350 Million Gallons per Day (MGD). The City of Helen recently renewed their permit with Georgia EPD. The City of Cleveland employs four wells that have a withdrawal permit for .841 MGD. The average daily withdrawal for the city is .450 MGD. The renewal date Cleveland's permit is June 15, 2013.

### **Waste Water Facilities**

The majority of White County uses septic systems for wastewater treatment, with the exception of the Cities of Cleveland and Helen, which are served by sewer systems.

Properly functioning septic systems are necessary for public health and welfare. The majority of soils found in White County are classified as having severe limitations for septic systems. Steep slopes are the prominent limiting factor for septic systems in the County. Areas of steep slopes are defined as any slope with an angle of 25 percent or greater. The Department of Human Resources discourages the use of septic tanks on slopes greater than 35 percent. Many developments in White County are currently platted, if not already developed, on steep slopes. Low and moderate density neighborhoods have been developed throughout unincorporated White County, many of which are located on the previously mentioned steep slopes. Proper functioning septic systems require drain fields of varying sizes depending on the soil and slope characteristics.

While high-density development and development on steep slopes can occur, the maintenance of a quality septic system is essential for the public well-being. It is recommended that basic regulations regard the limitations of septic systems throughout White County.

### **Water Supply Watersheds**

White County has adopted a Water Supply Watershed Ordinance that is intended, among other purposes, to protect areas of land upstream from governmentally owned public drinking water intakes and water supply reservoirs through adoption of watershed protection plans. This section briefly describes the county's water supply watershed ordinance; however, the ordinance should be referenced for any development activity.

Water supply intakes and their watersheds, as defined by the DNR, was obtained in part from DNR's Water Supply Watershed Maps (Map 6-4). The only existing public

surface water intake in White County is located on Turner Creek, which has a drainage area of 8.3 square miles. This facility is managed by the White County Water and Sewer Authority, and has a permitted capacity of 1.8 million gallons a day (MGD). The Turner Creek watershed constitutes a "small" watershed according to the "Part V" standards, because it is less than 100 square miles in area. The perennial streams within the Turner Creek Watershed include Turner Creek, Cathey Creek, Tom White Branch, and Ledford Branch. Lake Qualatchee is also included within the Turner Creek water supply watershed area.

#### Watershed Protection for Tuner Creek Water Supply Watershed

- A buffer shall be maintained for a distance of one hundred (100) feet on both sides of the stream as measured from the stream Banks
- No impervious surface shall be constructed within a one hundred fifty (150) foot setback area on both sides of the stream as measured from the stream banks
- Septic tanks and septic tank drain fields are prohibited in the setback area of 2) above.
- Hazardous waste treatment or disposal facilities are prohibited in the Watershed Protected area, including, but not limited to hazardous materials of the types listed in Section 312 of the Resource Conservation and Recovery Act of 1976
- Only land-disturbing activities that are permitted by this resolution and are approved by the White County Planning Commission through use of Best Management Practices or that have an approved Erosion and Sedimentation Control Plan from the Upper Chattahoochee Soil and Water Conservation District will be allowed within the watershed drainage area of the intake
- All permitted and acceptable land disturbing activities will be properly vegetated or re-vegetated immediately with appropriate grasses or legumes.
- No sanitary landfills, hazardous waste treatment or disposal facilities will be allowed in the watershed drainage area.
- Harvesting of forest products will be performed in accordance with a harvesting plan agreed to by the Georgia State Forestry Commission and an Erosion and Sediment Control Plan approved by the Upper Chattahoochee Soil and Water Conservation District.
- Forestry management within the watershed drainage area will follow the Georgia State Forestry Commission's Best Management Practices Guidelines for Streamside Management Zones, Stream Crossings, Access Road and Their Construction, Timber Harvesting, Site Preparation, Reforestation and Forest Protection (Prescribed Burning, Firelines, and Chemical Fire Retardant).
- No new land application of animal or poultry waste will be allowed without

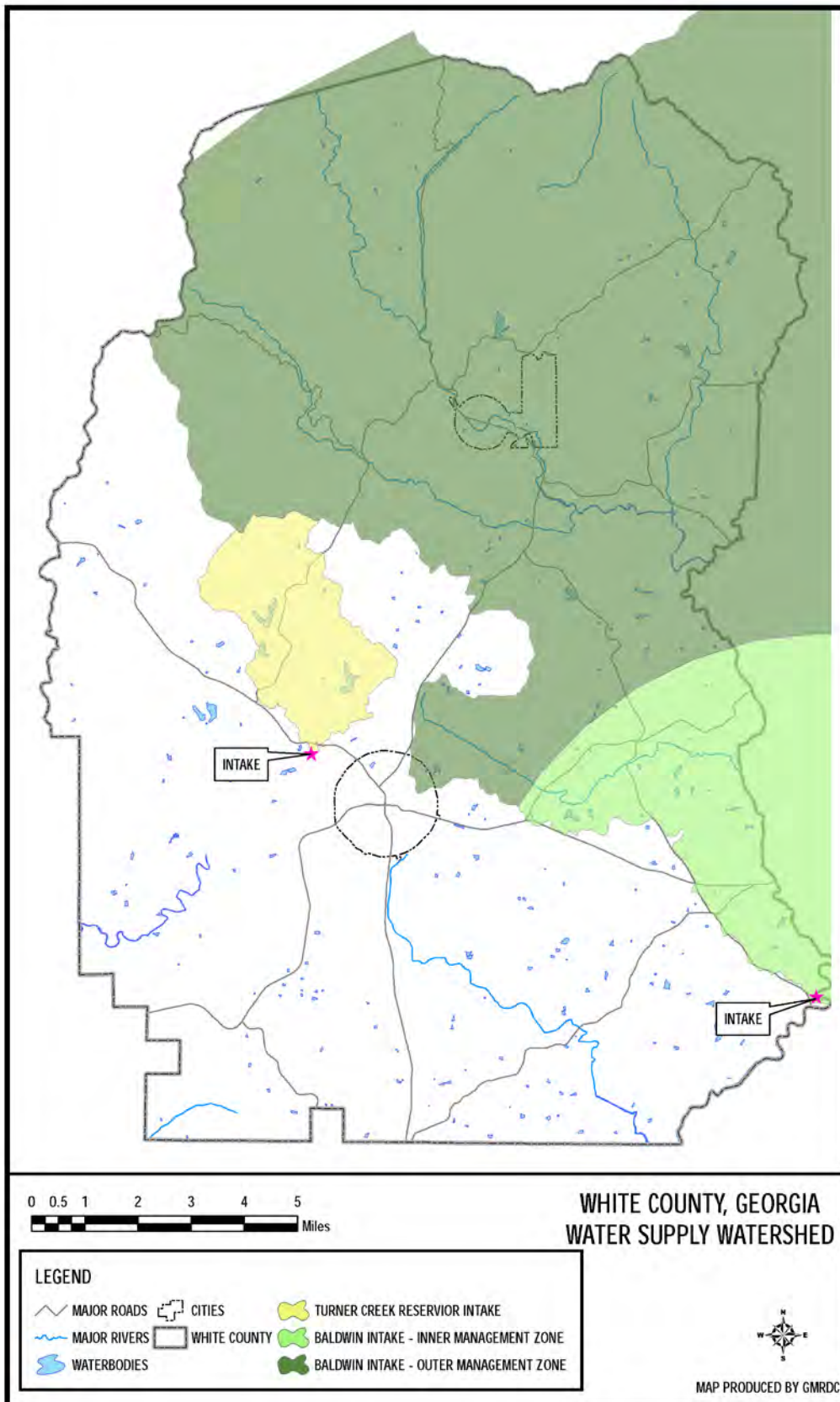
approved nutrient management plan. Such plan will be prepared by either the *Natural Resource Conservation Services* or UGA Cooperative Extension Service.

- Broad use of chemical agents such as pesticides are prohibited within the buffer.
- Fires or burning on the stream banks are not authorized.
- No new industrial development will be allowed in the Watershed drainage area. New commercial developments shall be restricted to a 25% impervious surface area and a lot size minimum of five (5) acres within the Watershed drainage area.
- It shall be the responsibility of every land owner, developer or builder to submit plans for land use alterations within the watershed drainage area to the White County Planning Commission for approval.
- The impervious surface area, including all public and private structures, utilities, or other facilities, of the entire water supply watershed shall be limited to twenty-five (25) percent or existing use, whichever is greater.

A large water supply watershed (drainage area of 100 sq/mi or greater) necessitates different management strategies than small watersheds such as the Turner Creek watershed. White County has developed different standards for the protection of these large watersheds, which follows the recommendations established by the DNR for the protection of large water supply watersheds. The City of Baldwin operates a water intake that is located on the Chattahoochee River, immediately downstream from the confluence with the Soque River. The intake drains approximately 316 square miles upstream of the intake and is therefore classified as a large water supply watershed. The majority of northern and eastern White County falls within the management of this water supply watershed protection area. Within this area, hazard waste facilities are prohibited.

Neither the City of Cleveland or the City of Helen lie within a protected waters supply watershed that require additional water protection standards than the state minimum for water quality protection.

Map 6-4



## **Flood Plains**

Flood Plains are the areas along streams that are normally dry, but become covered with water during flood conditions. Although all streams occasionally become flooded, the condition of a stream's watershed is a major influence on the magnitude of the flooding. Activities such as logging or development may increase the possibility of flooding downstream of the disturbance. Structures erected within the floodplain are at risk of damage during floods. Similarly, they change the pattern of water flow and can increase flooding and damage on adjacent property. Besides being a storage area for excess floodwater, floodplains are important habitat areas and perform a critical role as an area of filtration for water entering into the mainstream channel (SOURCE: "Floods and Flood Plains", USGS, 1993).

The National Flood Insurance Program, which is administered through FEMA, offers flood hazard insurance to residents that reside in communities that have adopted floodplain management ordinances. These ordinances include corrective and preventative measures to minimize the safety and economic costs associated with flooding and include zoning, subdivision, and building requirements. Unincorporated White County, Cleveland, and Helen are all members of the National Flood Insurance Program.

Flood hazard mapping is performed through the National Flood Insurance Program. These Flood Insurance Rate Maps (FIRMS) are used to identify areas of flood hazard. Map 6-5 identifies several surface waters in White County are known to contain flood hazard areas, including the Chattahoochee River, Dukes Creek, Bean Creek, Chickamauga Creek, Cathey Creek, Tesnatee Creek, Turner Creek, Mossy Creek, Flat Creek, Shoal Creek, and White Creek. While the National Flood Insurance Program offers a level of protection from flood hazards, all of these areas should continuously be monitored to ensure proper protection from flood hazards. The City of Helen is particularly at risk from flood hazards because the majority of the city lies within the flood plain. Much of the tourist related development are located within the flood plain. Any development that occurs in these areas requires engineered no-rise certification to be approved by the U. S Army Corp of Engineers.

## **River Corridor Protection**

The river corridor is essential to maintain the proper functioning of a stream and its associated natural environments. The river corridor serves as a filtration system for storm water entering into the stream, an area to store excess floodwaters, and habitat for numerous plant and animal species. These areas also serve as significant educational, scenic, and recreational opportunities.

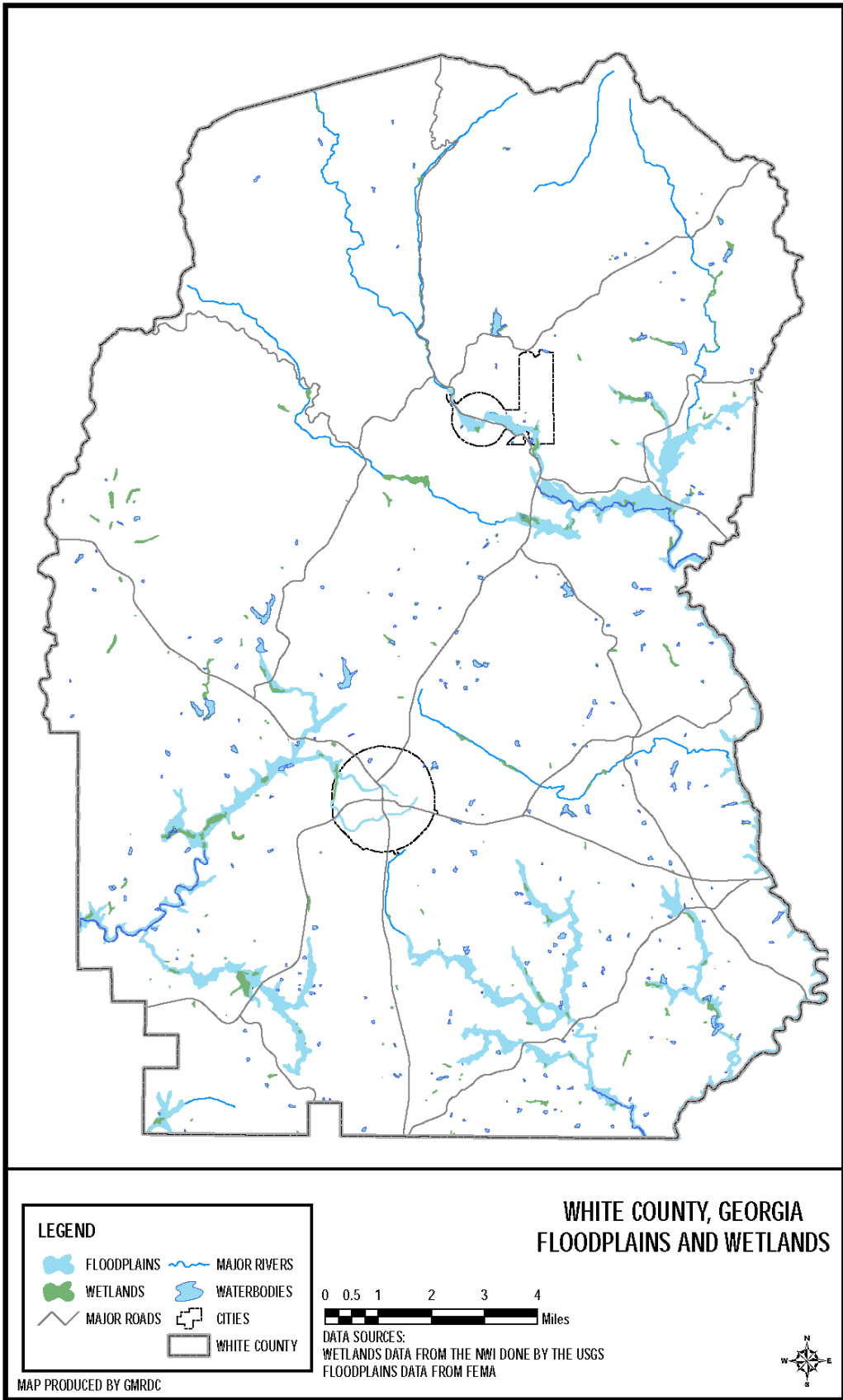
The Department of Natural Resources (DNR) has established criteria for river corridor protection. Based on the criteria for river corridor protection, White County has designated the Chattahoochee River from Smith Island downstream to Hall County as a protected river corridor, as shown in Map 6-6. The following section provides a summary of the river corridor protection ordinance for White County.

River corridor protection measures:

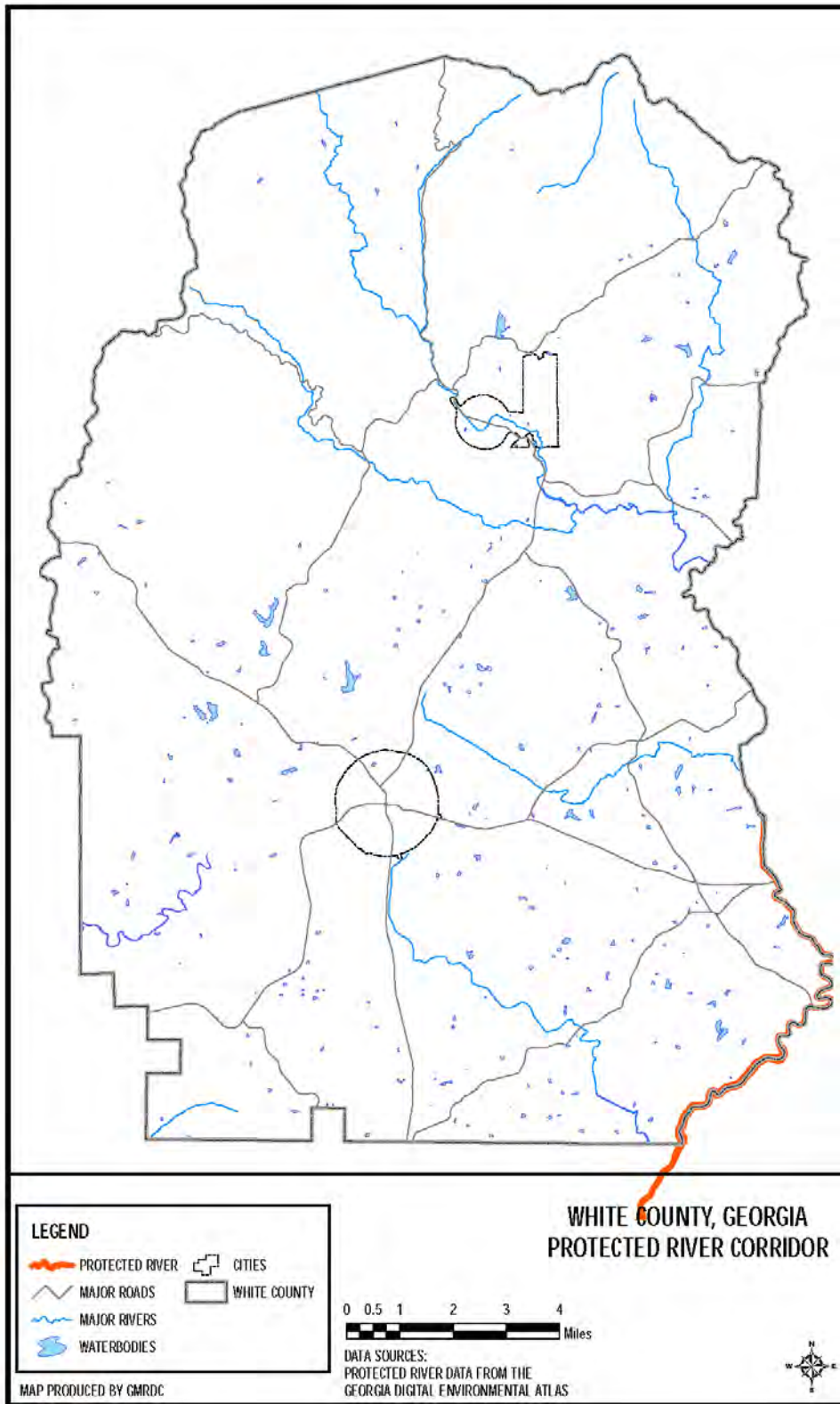
- A one hundred (100) ft. natural vegetative buffer shall be maintained at all times within the protected river corridor except as otherwise provided herein.
- Septic tanks and septic tank drainfields are prohibited within the river corridor, except as provided in Section 4.1 (d) of this ordinance.
- The natural vegetative buffer shall be restored as quickly as possible following any land-disturbing activity within the river corridor.

The ordinance also identifies a number of prohibited activities within the corridor, which include:

- Hazardous waste or solid waste landfills, or construction and demolition (C&D) landfills.
- Commercial or industrial uses that involve handling hazardous materials other than wastes.
- Handling area for the receiving and storage of hazardous waste.
- Construction within the river corridor is prohibited unless specifically identified as a permitted activity.



Map 6-6





## **Groundwater Recharge Areas**

In the Piedmont and Blue Ridge geologic province, rocks have little porosity, with most groundwater being stored in the overlying soils. The significant recharge areas overly locations with thick soils (a density of two or more geologic contacts per four square miles, and slopes lower than 8%). The significant recharge areas have been mapped by the Georgia Department of Natural Resources in Hydrologic Atlas 18 (1989 edition), and are illustrated in map 6-7. The DNR's determination of significant recharge areas indicates that there are only two such areas in White County: an area west of Mount Yonah, and an area southeast of Cleveland.

White County has developed a ground water protection ordinance for significant recharge areas, which includes both a site plan requirement for locations in the groundwater recharge area and additional protection standards for development of these areas. This groundwater recharge ordinance satisfies DNR's criteria for groundwater recharge protection.

The site plan requirements are summarized below:

- A map or maps, drawn to scale of 1 inch = 100 feet or other approved scale, showing all planned improvements including the width, depth and length of all existing and proposed structures, roads, water courses and drainage ways, water lines, wastewater and storm water facilities, and utility installations, shall be provided by the applicant.
- Location, dimensions and area of all impervious surfaces, both existing and proposed, on the site.
- The orientation and distance from the boundaries of the proposed site to the nearest bank of an affected perennial stream of water body. Delineation of all defined or suspected wetlands, if applicable, should be included.
- Elevations of the site and adjacent lands within 200 feet of the site at contour intervals of no greater than ten (10) feet.
- All proposed temporary disruptions or diversions of local hydrology.
- A map of all planned land disturbance activity shall bear the signature/seal of a registered or certified professional in engineering, architecture, landscape architecture, land surveying, or erosion and sedimentation control, or a County Surveyor, and shall conform to current guidelines as set forth in the Erosion and Sediment Control Ordinance of 1975 as amended.
- Activities to comply with site plan. All development activities or site work conducted after approval of the site plan shall conform with the specifications of said site plan. Significant changes to the site plan that would alter the amount and velocity of storm-water runoff from the site, increase the amount of impervious surface within the development, alter the overall density of development, result in a considerable increase in the

amount of excavation, fill or removal of vegetation during construction or otherwise result in an alteration of the overall appearance of the development as proposed, can be amended only with the approval of White County. Minor changes, such as the realignment of streets or minor alterations to drainage structures and other infrastructure to meet unexpected conditions are exempted from this requirement.

The protection standards for groundwater recharge areas include:

- For all pollution susceptibility areas, new waste disposal facilities must have synthetic liners and leachate collection systems.
- New agricultural impoundments shall meet the following requirements:
  - For areas of high susceptibility, a liner shall be constructed that is, at a minimum, of compacted clay having a thickness of one-foot and a vertical hydraulic conductivity of less than  $5 \times 10^{-7}$  cm/sec or other criteria established by the Natural Resources Conservation Service.
  - For areas of medium susceptibility, an NRCS approved liner, as described in 5.2.1, shall be provided if the site exceeds 15 acre-feet.
  - For areas of low susceptibility, a NRCS approved liner, as described in Section 5.2.1, shall be provided if the site exceeds 50 acre-feet.
- No land disposal of hazardous waste shall be permitted within any Significant Groundwater Recharge Area.
- For all Significant Groundwater Recharge Areas, the handling, storage and disposal of hazardous materials, as listed in Section 312 of the Resource Conservation and Recovery Act of 1976,( excluding underground storage tanks) and in the amounts of 10,000 pounds or more on any one day, shall take place on an impermeable surface having spill and leak protection approved by the Georgia Department of Natural Resources, Environmental Protection Division (EPD), and conforming to local fire prevention code requirements.
- For all Significant Groundwater Recharge Areas, new above ground chemical or petroleum storage tanks having a minimum volume of 660 gallons must have secondary containment for 110 percent of tank volume or 110 percent of the largest tanks in a cluster of tanks. Such tanks used for agricultural purposes are exempt, provided they comply with all federal requirements.
- For all Pollution Susceptibility Areas, new wastewater treatment basins shall have an impermeable liner approved by EPD.
- For all Pollution Susceptibility Areas, no new storm water infiltration basins may be constructed.

- For all Pollution Susceptibility Areas, wastewater spray irrigation systems of land spreading of wastewater sludge shall be practiced in accordance with Department of Natural Resources criteria for slow rate land treatment with amendments and technical publications to site specific information submitted by a registered professional engineer. An application for a new development permit for activities involving wastewater spray irrigation or land spreading of wastewater sludge must be accompanied by proof that the applicant has received a Land Application System permit from EPD.

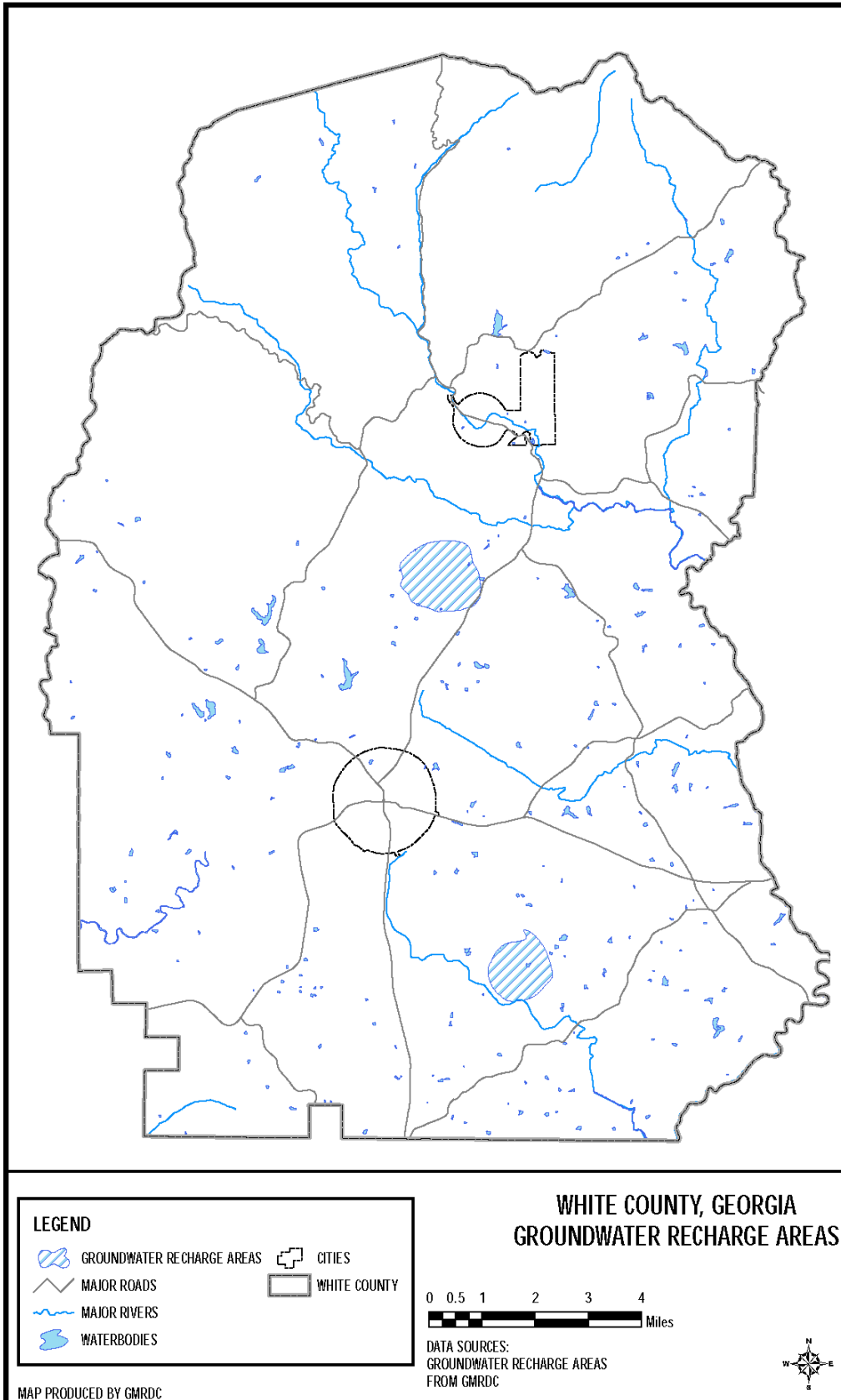
- **Minimum lot sizes and septic systems-** No construction may proceed on a building or mobile home to be served by septic tank unless the White County Health Department first approves the proposed septic tank installations as meeting the requirements of the Georgia Department of Human Resource for On-site Sewage Management (hereinafter DHR) Manual, and the following requirements:

- New homes served by a septic tank/drainfield system shall be on lots having a minimum size limitations as follows:

- A) 150% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a high pollution susceptibility area;
- B) 125% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a medium pollution susceptibility area;
- C) 110% of the subdivision minimum lot size calculated based on application of DHR Table MT-1 if they are within a low pollution susceptibility area.

- New mobile home parks served by septic tank/drainfield systems shall have lots or spaces having minimum size limitations as follows:

- A) 150% of the subdivision minimum lot or space size calculated based on application of DHR Table MT-2 if they are within a high pollution susceptibility area;
- B) 125% of the subdivision minimum lot or space size calculated based on application of DHR Table MT-2 if they are within a medium pollution susceptibility area;
- C) 110% of the subdivision minimum lot or space size calculated based on application of DHR Table Mt-2 if they are within a low pollution susceptibility area.



## Wetlands

The United States Congress enacted the Clean Water Act to protect the nation's rivers, streams, estuaries, seas, ponds, lakes and wetlands. The term wetlands includes swamps, marshes, bogs and similar areas. The United States Army Corps of Engineers and the United States Environmental Protection Agency formally define wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." The Georgia Department of Natural Resources "'Part V" standards have adopted this definition.

Wetlands serve many functions and have a number of values. In their natural condition, wetlands temporarily store floodwaters, thereby preventing flood damage. Wetlands can also protect lands from erosion by reducing the velocity of water currents. Many wetlands are areas of groundwater discharge, and some wetlands may provide sufficient quantities of water for public use. A variety of natural products are produced in wetlands, including timber and fish and wildlife. Wetlands also have important environmental quality values such as improving water quality by intercepting stormwater run-off, preventing eutrophication of natural waters, and by supporting delicate aquatic ecosystems (nutrient retention and removal, food chain support, migratory waterfowl usage, etc).

Wetlands can be generally identified by analyzing vegetation, hydrology, and soils common to wetlands. The soils that occur in wetlands, called hydric soils, have characteristics developed under conditions where soil oxygen is limited by water saturation for long periods in the growing season. Hydric soils typically have the following characteristics: 1) they consist of decomposed plant materials (peats and mucks); 2) have a thick layer (8 inches or more) of decomposing plant material on surface; 3) a bluish gray or gray color at 10 to 12 inches below the surface; and 4) the odor of rotten eggs.

### Classification of Wetlands

The Georgia Department of Natural Resources has classified wetlands into the following categories:

1. Open water - areas of open water, primarily reservoirs, ponds, lakes, rivers and estuaries.
2. Non-forested emergent wetlands - freshwater marshes dominated by a variety of grasses, sedges, rushes, and broadleaved aquatics associated with streams, ponded areas, and tidally-influenced non-saline waters.
3. Scrub/shrub wetlands- non-forested areas dominated by woody shrubs, seedlings, and saplings averaging less than 20 feet in height; these wetlands may integrate with forested wetlands, non-forested emergent wetlands, and open water.

4. Forested wetlands - natural or planted forested areas having a dominant tree crown closure of hardwoods, pines, gums, cypress, or any combination of these types. These areas are usually in stream or river floodplains, isolated depressions, and drainways, and contain standing or flowing water for a portion of the year. Sub-categories:
  1. Hardwood floodplain forests
  2. Coniferous floodplain forests
  3. Mixed floodplain forests
  4. Non-alluvial forested wetlands.
5. Altered wetlands - areas with hydric soils that have been denuded of natural vegetation and put to other uses, such as pasture, row crops, etc., but that otherwise retain certain wetlands functions and values.

The National Wetlands inventory, developed by the U.S. Fish and Wildlife Service, provides information on wetland locations throughout the nation. The NWI also provides information on the status, extent, characteristics and functions of wetlands, riparian, deepwater and related aquatic habitats to promote the understanding and conservation of these resources. White County has been included in the NWI study. Findings show that the county is sporadically covered with small to moderate sized wetlands (Map 6-5). The highest concentrations of large wetlands are located along a southwest to northeast axis that stretches through the middle of the County. Total acreage figures for hydric soils are indicated in Table 6-3.

For the actual determination of wetlands on specific sites, the *Federal Manual For Identifying and Delineating Jurisdictional Wetlands* (U.S. Army Corps of Engineers, January 10, 1989) as well as a competent wetlands expert should be consulted.

#### Existence of Rare Wetlands

Certain wetlands represent particularly rare natural communities. The "mountain bog" is one notable example of a rare wetland. The mountainous areas in northern portion of the county generally have fewer wetlands than the lower elevations. Nonetheless, "mountain bogs" contain numerous rare or protected species, and some of the greatest species diversity of any habitat in Georgia.

Georgia's mountain bogs are very limited in both number and total acreage, and occur at the heads of streams, along seepage slopes and near springs in the mountains of North Georgia. They are characterized by acidic, peat-rich soils that are constantly saturated with water. The vegetative cover of these bogs varies greatly. Sites commonly contain shrubs, trees, or a diverse mixture of herbaceous species.

Rare species known to exist within mountain bogs include sheep laurel, northern pitcher plant, swamp-pink and the bog turtle. Other species typical of mountain bogs include blackgum, swamp azalea, alder, chokeberries, cinnamon fern, turtlehead and sphagnum mosses.

Only a few mountain bog sites are known. Because of their vulnerability to disturbance from activities such as ditching and drainage, livestock grazing and over collection of rare plants, the long term existence of some of Georgia's mountain bogs are in serious jeopardy. There is a need to protect various vegetation types comprising this broad wetland category. (Source: Ambrose, Jon. 1990 (Winter.) "Rare Wetlands". Georgia Department of Natural Resources Outdoor Report. Volume 5, Number 1, pp. 6-7.)

### Local Protection of Wetlands

In accordance with the DNR, White County has developed a wetlands protection ordinance as well as a general wetlands map. While the specific ordinance should be referenced before any development activity is to take place, a summary of the wetlands ordinance is provided in the following paragraphs. The wetlands map is provided to identify areas with a high likelihood of the presence of a wetland. The ordinance allows the Corps of Engineers to ultimately determine if the proposed project is located near or contains a wetland. The wetlands ordinance further establishes a permit requirement for development activities that disturb wetlands, or come within 50 feet of a wetland protection district boundary. Eventually both Cleveland and Helen will need to adopt an ordinance for the protection of wetlands as mandated by the state.

Prohibited uses within the protected wetlands district includes:

- No facilities for the handling, storage, and disposal of hazardous materials, toxic waste, or other contaminants shall be permitted within a Wetland Protection District.
- No hazardous or sanitary waste landfill shall be permitted within a Wetlands Protection District.
- Uses that are prohibited by other Ordinance or Resolution , of White County, are prohibited in a Wetlands Protection District.

Site plans are also necessary for development within the Generalized Wetlands Protection District. The requirements of the site plans include:

- A map of all planned land disturbance activity shall bear the signature/seal of a registered or certified professional in engineering, architecture, landscape architecture, land surveying, or erosion and sedimentation control or a County Surveyor, and shall conform to current guidelines as set forth in the Erosion and Sediment Control Ordinances of 1975 as amended.
- Location, dimensions and area of all impervious surfaces, both existing and proposed, on the site.
- The orientation and distance from the boundaries of the proposed site to the nearest bank of an affected perennial stream or water body.

- Elevations of the site and adjacent lands within 200 feet of the site at contour intervals of no greater than ten feet.
- Location and detailed design of any spill and leak collection systems designed for the purpose of containing accidentally released hazardous or toxic materials.
- All proposed temporary disruptions or diversions of local hydrology.

### Federal Protection of Wetlands

Section 404 of the Clean Water Act regulates the discharge of dredged and fill material into waters of the United States and establishes a permit program to ensure such discharges comply with environmental requirements. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency administer the Section 404 program. A U.S. Army Corps of Engineers permit is required for such activities that involve the discharge of soil into waters of the United States. If the discharge is predicted to have an "unacceptable adverse effect" on municipal water supplies, shellfish beds and fishery areas, wildlife, or recreational areas, the Environmental Protection Agency may prohibit or restrict such discharges.

In addition to regulatory practices, the United States Environmental Protection Agency (EPA) has prepared a "Wetlands Action Plan" (January 1989) in response to recommendations of the National Wetlands Policy Forum. This plan, which is a short-term agenda, supports the goal "to achieve no overall net loss of the nation's remaining wetlands base, as defined by acreage and function; and to restore and create wetlands, where feasible, to increase the quality and quantity of the nation's wetlands resource base."

To implement this goal, EPA has established seven objectives, including: 1) technical support in state wetlands conservation plans; 2) mechanisms to enhance state and local governments' wetlands protection efforts; 3) improvements in the Section 404 regulatory program; 4) adoption of policies for mitigation of unavoidable wetland impacts; 5) increased information and education; 6) assess the cumulative impacts of wetland loss and degradation; and 7) identify opportunities to restore and create wetlands.

Avoidance and minimization of impact is the primary objective of wetlands management. Local jurisdictions should institute whatever measures are possible to ensure that wetland mitigation or replacement projects are a last resort and not used to justify the destruction of wetlands. Table 6-10 provides a listing of typical wetland mitigation measures that can be applied in cases where alteration/impact of wetlands cannot be completely avoided.



**TABLE 6-10 Typical  
Wetland Mitigation  
Measures**

- 
1. Limit wetland uses to those with minimal impact on natural values (e.g., parks, growing of natural crops)
  2. Limit development densities (e.g., require large lot sizes)
  3. Cluster development on upland sites to protect sensitive and hazardous areas
  4. Elevate structures on pilings or other open works
  5. Route access roads, sewers, and water supply systems around the most sensitive areas
  - 6- Where appropriate, fence wetlands and floodplains to protect natural vegetation and water quality and to reduce erosion
  7. Replant wetland and other vegetation where destruction of vegetation cannot be avoided
  8. Reduce erosion in exposed areas through rip-rap or other measures
  9. Construct fish pools in channelization projects; install fish ladders at dams
  10. Manage game to enhance and reestablish species
  11. Use silt fences and similar measures to control run-off from construction sites; construct detention ponds to trap sediments
  12. Operate dams to provide sufficient flows for downstream fish and wildlife and to periodically flush wetlands
  13. Construct new wetlands and other wildlife areas by diking, land acquisition, or other means to compensate for unavoidable losses
- 

SOURCE: American Planning Association, Planning Advisory Service. Protecting Non-Tidal Wetlands. (Report Number 412/413)

### Summary of General Environmental Limitations By in White County

The following section provides a generalized summary of the various environmental limitations in areas of White County.

Areas considered within the Mountain Protection criteria are experiencing development. While some development at high elevations is acceptable, caution must be taken due to the environmental sensitivity of these areas. Locations of concern include: the Piney and Wauka Mountain areas, Long Mountain, Leadpole Mountain, the Northwest and East faces of Yonah Mountain, the area between Unicoi State Park and US 17 and 255, and the upper reaches of Towns Creek, and the headwaters of York Creek.

Because of the mountainous terrain in White County, steep slopes (25% or greater) pose at least moderate limitations on development in all planning areas. The Blue Ridge, Helen, Robertstown and Tesnatee planning areas have major limitations on development because of steep slopes. The White County mountain protection ordinance places protections on these areas and others throughout the county where 25% slope exists.

Five areas in the county have major limitations for agricultural crop cultivation: Blue Creek, Blue Ridge, Cleveland, Helen, Robertstown, Tesnatee and Town Creek. These limitations are based primarily on steep slopes and the unsuitability of crop cultivation in soils with steep slopes. However, there are scattered sites within these planning areas, which are suitable for crop cultivation. The Shoal Creek and White Creek planning areas have only moderate limitations on crop cultivation. The Mossy Creek planning area is in general the most suitable portion of the county for crop cultivation.

Although scattered about in the northern one-third of the county, rock land and rock outcrops pose relatively few limitations on development. The only planning area in which rock land and rock outcrops may have a moderate limitation on development is within the Tesnatee planning area.

Regarding soil suitability for septic tanks, the majority of the county has some serious type of limitations. It was noted previously that only 18% of the total County land area is suitably ideal for septic tank utilization without substantial adjustments. Four areas in the county have soils with only moderate limitations on the use of septic tanks: Mossy Creek, Mt. Yonah, Shoal Creek, and White Creek.

Wetlands pose moderate limitations throughout the except in Mossy Creek, where major limitations are imposed due to the prevalence of hydric soils. Due to the abundance of streams and rivers in White County, careful attention should be paid to the identification of wetlands prior to development.

Flood plains exist in varying degrees within White County, Cleveland and in Helen. However, because they exist mostly within narrow valleys and stream corridors, flood plains are considered to pose only moderate limitations in four planning areas: Mossy Creek, Nacoochee, Shoal Creek, and Town Creek. The City of Helen is at risk the most due much of the city and development lying within the flood plain.

As mentioned previously, "significant" groundwater recharge areas are relatively few in White County. Although two such areas have been identified: one in the Mt. Yonah area and a smaller site in Mossy Creek, groundwater recharge areas are anticipated to pose few limitations on development.

In summary, it can be said that the southern and centermost areas in the County (Cleveland, Mossy Creek, Mt. Yonah, Shoal Creek and White Creek) have the most moderate limitations on development, while the most mountainous planning areas (Blue Ridge, Helen, Robertstown, and Tesnatee) have environmental characteristics which pose the most significant limitations on development.

## CHAPTER SEVEN

### HISTORIC AND CULTURAL RESOURCES

#### History of White County

The Cherokee Indians are considered to be the first inhabitants of the area known today as White County, Georgia. However, one source indicates that the Creek Indians relinquished the Helen/Robertstown/Nacoochee Valley area to the Cherokee Indians. Many of the Indian names still remain today. The Town Creek section of the County was named "Tesnatee" (meaning "Wild Turkey") by the Cherokee Indians. "Yonah" was an Indian word that means "bear". The "Chattahoochee River" was an Indian name that means "river of painted rocks".

Nacoochee Valley was a prominent Cherokee Indian settlement. Indians were forcibly removed from the region around 1836. Claims have been made that Spaniards of the DeSoto expedition visited Nacoochee during May, 1540. However, these claims are basically unsubstantiated and disputed by consulted historical references.

Carolinians reportedly explored the area even before the founding of the Georgia Colony in 1733. However, the first Whites that settled in the area were sixty-one families, who originally came from Burke County and Rutherford County, North Carolina in 1822 or 1823 to Nacoochee Valley. These families spread across the County and their trades included carpentry, blacksmithing, masonry, farming, and preaching. The State of Georgia acquired the Nacoochee, Sautee and Helen areas in the Treaty of 1819 with the Cherokee Indians and used a "land lottery" to distribute the land and to hasten development. Present day White County was originally a part of the fourth land lottery in Georgia.

The Town Creek section of White County was settled earlier than 1822 by the Oxford and Owensby families in the area of Tesnatee. The Tesnatee Baptist Church is located in that early settled section of the County.

In 1828, the finding of gold in the area of Dukes Creek provided the impetus for rapid growth in population. Prospectors from North Carolina moved to the County and soon made other gold discoveries on the Chattahoochee River, Bean Creek and in the Loudsville Community.

Gold was mined for more than a century in White County, and more than one-third of Georgia's gold came from White County. A black servant of Major Frank Logan of Loudsville, Georgia, named James Witheroods, is credited for discovering the gold in 1828. The County contained nine gold mines as late as 1939. The largest gold nugget ever found in the United States east of the Mississippi River was found in the Hamby Mines in White County. Prospectors came from North Carolina diggings to participate in the White County gold rush. People came from England specifically to mine, including preachers and educators. The gold mines eventually began to be worked out and gold mining subsided. Asbestos was the only other mineral that was mined extensively in White County, although some iron was mined during the American Civil War to produce Joe Brown bayonets made in the County. Occupations of White Countians at the time of the Civil War included farming, cattle raising, spinning, weaving, corn milling, and

leather tanning. The County also contained eight distilleries, three jug factories, 30 grist mills, one flour mill, 20 sawmills, and three gold mines.

From the 1830's until 1925, the Logan Turnpike was a privately owned toll road and the only direct route south over the Blue Ridge Mountains for area farmers to market their produce. The turnpike was maintained by hand labor and the Logan family collected a toll at the gate near their home near Cleveland. The charge was 25 cents per wagon and five cents a head for livestock. The road was used by mountain people to drive cattle, sheep, and turkeys to market in Gainesville, Commerce, and Athens. The road continued in the Logan family management until 1922 when the state constructed Highway 19-129 over Neels Gap. The abandoned seven and one-half mile road is now part of the Chattahoochee National Forest and inaccessible to the public. The Unicoi Turnpike, chartered in 1821, ran through the Unicoi Gap and Nacoochee Valley to Clarkesville. During the Civil War in 1861, Mossy Creek Campground was the starting point for at least a few companies of Confederate soldiers.

White County was originally a part of Habersham County, which was the fifty-eighth County and which was organized in 1818. At the time of Habersham County's creation, it contained today's Stephens and White Counties. White County was a part of Habersham County for thirty-nine years until its official creation on December 22, 1857. The new County was named in honor of Col. White, a Georgia General Assembly member who achieved reconsideration and then approval of the incorporation bill at the same session it was introduced by William B. Shelton and failed. The County Seat, which prior to White County, was known as Mt. Yonah, was named "Cleveland" in honor of General Benjamin Cleveland, a General of the Militia, State Representative, and State Senator of Habersham County.

On December 11, 1858, a tri-weekly, two horseback mail line was established between Clarkesville and Dahlonega and passed through Cleveland on a road now known as Underwood Street. The post office at that time was kept in part of a building, which stood on the present County lot. Edwin P. Williams of Nacoochee was awarded the contract to build a courthouse and jail for the new County and construction on the courthouse was completed between 1859 and 1860. The jail was completed circa 1860 but was replaced by the present historic jail, circa 1900. Williams was paid \$10,000 in Confederate money for both projects. The sole Baptist Church in Cleveland stood on the site of the present Baptist Church and was named Mt. Yonah Baptist Church. School was taught in the building and court was held there until construction on the courthouse was complete.

In 1860, the Census reported a population in White County of 3,315, 263 of whom were considered slaves, and 11 free blacks. Population in 1820 was 3,145 while in 1830, during the gold rush in White County, the population jumped to 10,671.

In 1863, a small section of eastern Lumpkin County was added to White County. This addition to White County is apparently a source of controversy today in Lumpkin County.<sup>1</sup>

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<sup>1</sup> Residents of a small section within White County reportedly still consider themselves a part of Lumpkin County, to which they remain tax payers. This area within White County is known in Lumpkin County as "Little Lumpkin". [Historic Resources in White County](#)

In 1881, the National Forest Service was established and several years later, the Chattahoochee National Forest was defined, although little land was acquired until the 1920s. Today 41,000 acres of White County are part of the Chattahoochee National Forest.

The Lanier Meaders family from the Mossy Creek area began making pottery in 1893 and helped make White County and the Georgia Mountains known for its excellent folk pottery. Potters were drawn to the area because of the good clay and from 1920 to 1940, the Meaders' family supplied the pottery needs of local North Georgians. As early as the 1890s, White County was an attraction to summer visitors who stayed in Cleveland, Nacoochee and homes in various other portions of the County. One of Georgia's best known resorts in later years was the Mitchell Mountain Ranch Hotel in Helen, Georgia.

When the Pacelot Mills were first located in the community of New Holland near Gainesville, Georgia, many White County citizens located there for employment reasons. The result was a loss of more than 1,000 persons in a twenty-year period between 1890 and 1910.

The erection of lumber mills in the north section of the County around 1911 brought to White County banks, new businesses and by 1913, the Byrd-Matthews Lumber Mill brought the Gainesville-Northwestern Railroad. This railroad resulted in rapid development of Helen and Robertstown. This area apparently suffered some during World War I but continued to flourish until the Great Depression in the 1930s and the closing of lumber operations.

The first soldier from Georgia killed in action during World War I was Roy Head of White County, in whose honor the bridge on U.S. Highway 129 was named. In 1921, Benton McKaye proposed the Appalachian Trail as a community planning project designed as a countermeasure to the unplanned spread of the metropolitan environment. To McKaye, the purpose of the trail was not just for recreation, but to serve as a buffer between urban areas and open space and to "unravel the complexity of industrial civilization." McKaye had hoped that the trail would stimulate industrial workers who hiked the trail to view industrialism "as a means in life and not an end in itself." Although McKaye's initial proposal for the Appalachian Trail included the establishment of food and farm communities, camping communities and industrial communities, the concept developed as a hiking trail and the community planning aspects of the trail were forgotten. (Source: Ross, John R. 1975. "Benton McKaye: The Appalachian Trail." Journal of the American Institute of Planners. March, 1975.)

In 1968, Helen was a sleepy town with a population less than 200 with a dozen stores, compared to its booming lumber days of the early part of the twentieth century. A group of businessmen and artist, John Kollock, developed the concept of designing Bavarian fronts for the structures to attract tourists to the area. Compliance with the Bavarian theme was voluntary until 1978 when design guidelines were developed for the City.

### Historic Resources in White County

Historic resources include historic structures and sites, historic rural resources, community landmarks, archaeological and cultural sites, and the historic environment in which they exist. They serve as visual reminders of White County's past, providing a link to its cultural heritage and a better understanding of the people and events, which shaped the patterns of its development. Preservation of these important resources makes it possible for them to continue to

play an integral, vital role in the community. Because historic resources are irreplaceable, they should be protected from deterioration and the intrusion of incompatible land uses. Preservation can also provide White County with substantial savings in the cost of infrastructure through the re-use of facilities and utilities and is often less expensive than demolition and new construction.

### White County's Historic Properties

White County's historic properties have been categorized according to property type to help identify them more clearly. These categories include: residential structures, agricultural outbuildings, community landmark structures and historic districts, historic commercial buildings, and archaeological resources.

### Historic Residential Structures in White County

Most construction in White County, including residential, is wood, which is not surprising in a heavily forested County. Early handmade brick is present in some chimneys. Only one historic stone house was found in White County according to a survey of the County's historical resources in 1975, and the assumption is made that White County seems never to have had a major resident stonemason.

Urban styles came slowly to White County and were simplified. A few houses, such as the Nichols-Hardman Estate, exhibit elaborate highly styled features, but most historic residences in the County do not. Many houses show some traces of "gingerbread," shaped shingles or gable ends and decorative front gables.

By the early 20th-century, changes in residential construction included dropping the rear ell projection, square plans, and high pointed hipped roofs. These trends were seen in new construction in Helen and Robertstown and many other houses and schools around the County from about 1915 to 1925, and occasionally as late as 1940. Log construction still exists in White County but much of it is hidden behind weatherboard or other siding materials. Nineteenth century log was hand hewn of large timbers. A concentration of 1930's era log residences exists just west of Cleveland where smaller diameter logs were used.

Many of White County's historic residential structures presently suffer from demolition by neglect.

The historic residential structures in White County are significant for representing the various stages of settlement and development in the County. Although exact dates of construction are unknown for many of the County's historic residential structures, some may date to the early 19th century. Many good examples of house types exist in rural sections of the County and most exhibit local craftsmanship and utilization of local materials.

## Agricultural Outbuildings

Remaining historic outbuildings in White County are primarily simple, utilitarian structures and most lack stylistic or decorative ornamentation. Most exhibit the utilization of local building materials, craftsmanship, and construction techniques. Many log barns, cribs, shuck-pens, and smokehouses remain from the 19th-century.

## Community Landmark Structures and Historic Districts

A variety of historic landmark buildings exist in White County. Community landmark buildings house or once housed community institutions such as local governments, educational programs and civic organizations; or they are architecturally or historically significant residential or commercial structures that are particularly important to the County as a whole. These buildings range in appearance from the very simple, such as "Grandma Bell's House", to the more ornate such as the Williams-Shelby House.

Nearly all communities that developed in White County contained one or more community institutions such as schools, churches, or post offices. A few of these structures remain scattered throughout the County today and although the communities or functions they served may be long gone, these structures are important as they represent the one-time self-sufficient nature of these small communities.

It is important to note here that the landmark structures in White County listed below are not the only structures worthy of historic preservation. GMRDC consulted the five year preservation plan, "A Vision for the Future", developed by the Historic Preservation Section of the Georgia Department of Natural Resources in preparing these recommendations. It is beyond the scope of this study to address every single significant historical structure in White County. These landmark buildings are recognized as extraordinary to understanding White County's historical and physical past, but they should be considered in context with the rest of the County's historic resources as noted in the Department of Natural Resources' 1976 survey and subsequent historic resources surveys.

## Landmarks & Districts

Westmoreland House	Castleberry House
"Grandma Bell's" House	Loudsville Campground and Church
Bugg-Knight Log Cabin	Charles Roberts' House
Adairs Mill	Blue Creek (district)
Thomas Residence	Sautee-Nacoochee (district) Meaders Pottery & Residence
White County Courthouse	
White County Jail	Cooley-Hood-Smith House
Woodlawn School	Mossy Creek Campground
Yonah School	Merritt-Westmoreland-Wheeler House
Hulsey Farm	

### Westmoreland House:

This structure is significant architecturally and historically. A four over four ell plan with Victorian era stylistic details, the Westmoreland (c.1880) House exhibits high style architectural elements such as dentil mounding, oval beaded glass front door and matching sidelights (c. 1920) and hand cut porch balusters uncommon on historic residential structures in White County. The property also contains several intact agricultural outbuildings significant because they illustrate the predominant means of livelihood in White County in the late 19th-century. The Westmoreland family is an important one in White County's history.

### "Grandma Bell's" House:

This double pen cabin has retained its architectural integrity and is associated with James Cicero Bell, schoolteacher and Methodist minister who participated in the California Gold Rush of the 1840's and returned to White County. The interior of the house exhibits hand dressed planks, wooden latches, rock chimneys, and handmade paneled front doors. The house was moved (c. 1970) to its location across from the Tom Bell Reservation.



### Richard Lumsden House:

This house, located near Duke's Creek Bridge, may date to 1830 and is probably the oldest existing structure in White County. The house exhibits a two-story Georgian plan with a central hallway and two rooms on either side originally. The handmade brick chimneys with geometric designs are dated 1830. This structure is significant both architecturally and historically as one of White County's most important landmarks.

### White County Courthouse:

The historic White County Courthouse is easily one of the most important historic structures in the County and is listed in the National Register of Historic Places. It was constructed in 1859.

### Williams' - Shelby House:

This 1876 Carpenter Gothic style residence is important historically as it was constructed by Georgia Walton Williams, son of early White County settlers, who made his name as a South Carolina and Charleston Banker. This residence was constructed as a summer home for Williams' family. The structure exhibits high style characteristics for White County including fine moldings, small brackets, bay windows, and shutters. An English landscape architect from Charleston landscaped the property for Williams including fountains.

### Charles Roberts House:

This two-story Georgia plan house (c. 1884) contains four rooms on each floor with a central hallway with a two-room rear addition. The house also exhibits double galleries across the front of the house, latticework, and vernacular gingerbread work. Robertstown was named after Charles Roberts after his sudden death in 1907. The house is unique architecturally because the end chimneys are placed within end walls and surrounded by paneling while no other interior end chimneys are found in White County.

### Blue Creek Community:

The Blue Creek/Stovall Mill Community contained a sawmill, shingle mill, grist mill, cotton gin, corn crusher and a syrup mill in the late 19th-century. Today, the Stovall House remains along with a mill building, barn, and store/post office, which closed in the 1940's.

The house is two-story with a central hall, kitchen ell, and double gallery. The house also exhibits a boxed cornice and gable end returns indicating it may have been constructed around the 1860's.

Until 1962, the post office and store was known as Eastburn, Georgia. Also, in the area of the Blue Creek mill community is the Stovall Log House built by Alfred Stovall. The double pen log house (c. 1830's) with two front and rear doors contains square nails in the weatherboard, a tiny window beside the chimney in the gables at each end and no rear windows. A plain two-story house with a kitchen ell and shed porch built before 1895 is a part of the Stovall Estate.

This community is significant as an architecturally intact example of a typical mill community of White County that can be used as a teaching tool of the County's agricultural and milling heritage.

#### Meaders Residence and Pottery:

The Meaders family of White County is well known for their folk pottery made by all the Meaders descendants. J.M. Meaders built the Meaders House in 1876. The simple house contains a central hallway, rear ell and gabled kitchen across the rear. The original potting shed and chimney were built in 1887 and used by Quillian L. Meaders, 1887-1890. The enlarged shed (1890) is used by Cheever Meaders. A non-historic shop and kiln (1952) is used by Lanier Meaders.

#### Cooley-Hood-Smith House:

Mr. Cooley, a longtime landowner in White County, built the house in 1890 for his bride with two stories, two rooms on either side of a central hallway, a two-room rear ell, Eastlake style front and side doors, and a bay window in the living room. Because of the structure's architectural integrity, it is significant to the County and potentially eligible for the National Register.

#### Mossy Creek Campground:

Established in 1833, the campground has contained several brush arbors or tabernacles. Cabins, or "tents" arranged in a square around the tabernacle, some pro-dating 1900, are of rough construction with a stair or ladder to the sleeping loft, dirt floors, and shed porches. Camp meetings, held for a week during August, have been historically important religious and social events. The campground is representative of a typical religious institution in the Georgia Mountains region.

#### Hulsev Farm:

This agricultural complex, constructed circa 1908, is an excellent example of a farmhouse and outbuildings in near-original conditions. The house contains two rooms on each side of a central hall and a one-room rear gabled ell. The house also contains five chimneys, homemade doors, and simple mantels. Many of the extant outbuildings are log, some still with hand-split shakes. This complex contains the only blacksmith shop found remaining in White County and is an important landmark worthy of preservation.

#### Merritt-Westmoreland-Wheeler House:

This house, possibly built circa 1850 is in near original condition with pegged and handmade doors, hand-forged hardware, boxed cornice and return. The house is a good example of vernacular architecture in White County with a good deal of architectural integrity.

### Castleberry House:

This originally log house has been covered in weatherboard. The log portion of the house could be as old as 1853 and the frame section as left front dates before 1916. Although little is known about the history of this house, it is important as an example of an extant log structure in the County.

### Loudsville Campground and Church:

The campground and church was established in 1839 and the arbor has been replaced several times. The 45 "tents", most pre-dating 1900, are of rough construction with dirt floors. This site along with the Mossy Creek Campground is important to understanding the role of religion in the County's history.

### Bugg-Knight Log Cabin:

This log cabin, possibly dating to 1830-1850, is significant as one of the few remaining log structures in White County. The house, with a large stone chimney, purportedly served as an almshouse for indigents and paupers. At the rear of the property in the forest are said to be two Indian mounds and the remains of an old hotel.

### Adairs Mill:

The mill, said to have been constructed, circa 1830, by a Mr. Logan, was part of a mill community, which contained a trading post, granaries, and a post office. The house associated with the mill burned in 1918, but the soapstone chimney remains. The mill operated until the 1930's. The mill building is important to preserve as a remnant of the mill community, common in White County.

### Thomas Residence:

This house, possibly built circa 1850, contains a large fine cut rock chimney, hand-dressed-hewn timbers, square nails, and two front doors. Two upstairs porch rooms open onto a small center porch, while a full facade front is located on the first floor. Asbury Mill, now demolished, stood nearby. The house is significant as a resource, which has retained its architectural integrity and exhibits interesting architectural characteristics.

### White County Jail:

The brick jail constructed circa 1900 originally housed both the sheriff and his family on the first floor and prisoners on the second floor. The jail is significant as an intact historic White County institutional building and as a good example of vernacular Italianate architecture. Architectural characteristics include pilasters and quoins and segmental brick arches over the windows. The jail was listed on the National Register of Historic Places in 1985.

### Woodlawn School:

This school is significant architecturally and historically as an example of a typical White County school constructed in the 1920's. Because these small schools no longer function as such due to consolidation, the buildings remaining are important to preserve and to understand historic schooling practices in White County. This school building is especially important as it exhibits common characteristics of other early 20th-century schools such as four square rooms, large trip art windows and a small chimney for a stovepipe in each room. Remnants of blackboards also exist in some rooms.

### Yonah School:

This school, constructed in 1933 to replace a former school, contains two rooms with a central hall and hipped roof, and a bell tower above the front portico. Although only in use 20 years until consolidation with Cleveland in 1940, this building is important as an example of a school serving a small community in historic White County.

### Sautee-Nacoochee Valley Historic Districts:

While landmark buildings are usually physically isolated, historic districts contain a number of historic structures, which relate to one another historically and architecturally. Many structures that could qualify as landmarks are included in historic districts as well as less significant structures. Two historic districts have been recognized and listed in the National Register of Historic Places in White County: The Sautee and Nacoochee Valley Districts. The two districts contain a total of 86 historic sites with architectural styles including Italianate and Gothic Revival and a variety of house types including Plantation Plain, Double Pen, and Hall and Parlor. One of the most significant aspects of the Sautee and Nacoochee Valley Historic Districts is the relationship of the structures' setting, the valley landscape and distant views. This relationship is important to preserve and becomes more important than the architectural significance of the valleys' structures.

The historic districts contain several landmarks within their boundaries. All of the historic sites in the districts work together but several stand on their own architecturally and/or historically. These include the following:

- \* "West End" Nichols-Hunnicut-Hardman House with Indian mound gazebo
- \* Richardson-Lumsden House
- \* Crescent Hill Baptist Church
- \* Williams-Dyer House
- \* Glen-Kenimer House
- \* Alley House
- \* Sautee Store
- \* Wyly Roger House
- \* "Mountain Home" George Walton Williams House
- \* Henry Williams House
- \* The Nacoochee School - now Sautee-Nacoochee Community Association building

- \* Presbyterian Church
- \* Lumsden-Marsh-Crittendon House
- \* Lamar-Stovall-Walter House
- \* "Sautee Manor"
- \* Berrong House
- \* Orville West House

The preservation of the districts in their entirety is a top priority, but it is important to recognize the area's most significant sites and landscape qualities as well.

### Historic Commercial Buildings in White County

Only a few historic commercial structures remain standing in unincorporated White County. Most that remain are in fair to poor condition and some are in danger of being lost to neglect in the next several years, and many have already been lost since the Department of Natural Resources' historic resources survey of 1976. Those remaining and recognizable as historic commercial structures include the Sautee Store in the Sautee-Nacoochee Valley Historic District, the Old Lynch Mountain Store and Post Office, also in the Sautee-Nacoochee Historic District, the Old Robertstown Store and Post Office, the Henry Ledford Store (one-half mile from the Loudsville Campground), and the Old Kennedy Store off of Highway 115 west near Shoal Creek.

These structures are significant as they are representative of the small, rural White County communities they served, many of which are no longer recognized as such today. The rural community commercial structures are simple vernacular buildings significant as examples of vernacular commercial building design. Most remaining structures date from the early 20th-century.

### Archaeological Resources

The following archaeological resources were cited in the 1974 Georgia Mountains Area Planning and Development Commission Resource Study. They are by no means the only archaeological sites in White County but they are important to recognize as part of the County's historic resources that can be lost if not recognized and protected.

1. Indian Grave Gap, stone caroms on ridge about one mile west of Tray Mountain
2. Nacoochee Indian Mound
3. Village site on the Chattahoochee River
4. Mounds in Nacoochee Valley
5. Rock wall remains on Yonah Mountain
6. Mound on Loudsville Gold Mining Property, 6 miles west of Cleveland on east side of Tesnatee Creek
7. Indian mound at Cleveland
8. Mound on east side of Sautee Creek, one mile above Chickamauga Creek
9. Dukes Creek mining site
10. Loudsville mining site
11. Stovall Mill site - former covered bridge, dirt road south of Highway 255, east of Blue Creek Church

## Strategies for Historic Preservation in White County

The following are elements of a potential preservation plan for White County. They are suggested steps to follow to implement preservation in White County but are by no means a complete plan in themselves. Much more extensive research and time would be necessary to produce such a plan. Ideally, the community can pursue all of the following objectives, but it is wise to take one at a time to achieve long-lasting and community supported preservation.

### Survey

The most recent survey of White County's historic resources was undertaken by the Department of Natural Resources in 1976. This survey, while very good, is dated and needs to be updated. Many of the 182 historic resources surveyed have been demolished, either outright or by neglect. Also, the survey does not include many of the County's important agricultural outbuildings. An updated survey would most likely reveal more historic resources and more detailed information about the properties. The 1976 survey is accompanied by slides, which are more difficult to use than black and white photos that an updated survey could provide. A survey was begun in 1996 and has not been completed to date, therefore the 1976 information was used.

Surveys can be used to identify individual buildings and districts for possible listing in the National Register or Georgia Register of Historic Places; support local designations of buildings and districts; expedite environmental review by governmental agencies; aid preservation and land-use planning; and promote research of the state's history and architecture. Also, through the public's participation, encouraged by the Historic Preservation Section, Georgia's historic preservation office, surveys can increase awareness of, and interest in, a community's historic buildings. White County is fortunate to have a fairly comprehensive survey in place to use as a basis for further preservation action.

### Analysis and Recognition of Historic Resources

Once a community or county knows what its historic resources are, then it can begin to recognize these resources and bring community attention to their significance. One tool a community can use to achieve this is the National Register of Historic Places. The National Register of Historic Places is the nation's list of historic buildings, structures, sites, objects, and districts worthy of preservation. Although listing on the National Register does not protect properties from alteration or demolition, it serves as a good way to bring recognition of and pride in a community's historic properties. National Register landmarks and districts also serve to pinpoint areas in a community where preservation and local protection can be implemented.

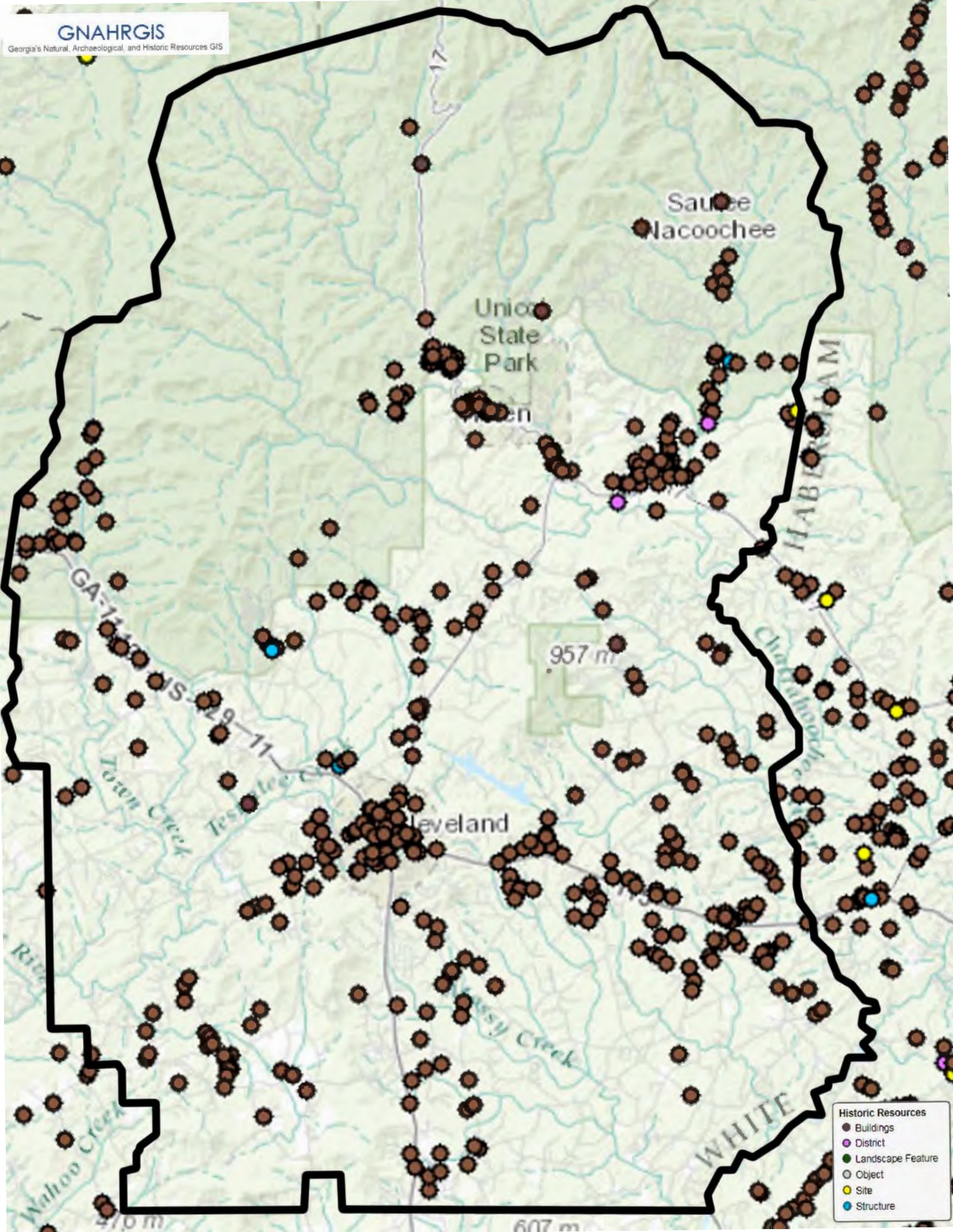
Presently, two districts and two landmarks in White County are listed on the National Register of Historic Places. These are the historic White County Courthouse and the historic White County Jail, both located in Cleveland. The Santee Valley Historic District and Nacoochee Valley Historic District are also listed on the National Register. All resources listed in this section are worthy of, and recommended for, nomination to the National Register in this plan.

The Georgia Mountains Regional Development Center's Preservation Program can assist the County in securing funds to both update the historic resource survey and to nominate all potential National Register properties.

Once all of the County's resources have been determined, the community needs to decide which of these resources are most important to preserve, usually those deemed worthy of National Register recognition, and they should be informed of the benefits of preservation including:

- \* Historic resources are top tourist destinations. Revitalized buildings and historic districts attract new businesses and tourists, stimulating retail sales and increasing sales tax revenues.
- \* Historic rehabilitation creates new jobs during construction and later in new offices, shops, and restaurants.
- \* Property values tend to increase in revitalized areas.
- \* Tax incentives are available for rehabilitation.
- \* Less energy is required to rehabilitate old buildings than to demolish and replace them with new construction. Goals and priorities should be set for the preservation of these resources. Such goals might include preserving specific rural areas of the County and making the community aware of their importance (such as has been accomplished in the Sautee and Nacoochee Valleys), protecting the most important historic resources in the County from demolition or demolition-by-neglect, or implementing a heritage education program in the County schools based on the County's archaeological and architectural resources. These are just a few possible goals.

The final step in developing a plan for preservation in White County is to implement the tools and actions needed to achieve the community's goals. These tools or actions may include survey, National Register designation, a countywide preservation ordinance, financial incentives, and community development programs.



**Historic Resources**

- Buildings
- District
- Landscape Feature
- Object
- Site
- Structure



## **CHAPTER EIGHT**

### **COMMUNITY FACILITIES AND SERVICES ELEMENT**

The community facilities element provides local governments the opportunity to inventory a wide range of community facilities and services, to assess their adequacy for serving the present and future population and economic needs, and to articulate community goals and an associated implementation program for providing the desired level of public facilities and services throughout the planning period. The purpose of this element is to assist local governments in coordinating the planning of public facilities and services in order to make most efficient use of existing infrastructure as well as future investments and expenditures for capital improvements and long-term operation and maintenance costs. Each local government must address in this element those facilities that provide service within its jurisdiction.

#### **INVENTORY**

##### **WATER SUPPLY AND TREATMENT**

There are three public water entities operating within White County: The City of Cleveland, the City of Helen and the White County Water Authority.

##### **Cleveland Water System**

The City operates a public water system under withdrawal permit # 154-0002 issued by the Georgia Department of Natural Resources, Environmental Protection Division. The system serves about 2,050 customers inside the city and just outside of town. The Cleveland system receives its raw water from four deep wells drilled into crystalline rock formation. The city permit is for up to 841,000 gallons per day, however, the city is only withdrawing an average of 450,000 gallon per day at the cure time. The City has two water tanks for storage.

The "State Permit to Use Groundwater" limits a groundwater well withdrawal to 400,000 G.P.D. on a monthly average and 250,000 G.P.D. on an annual average. Therefore, the City currently receives some of its drinking water from the Turner Creek Water Treatment Plant (Approximately 4 million gallons per month). To meet water demand and increase capacity the city plans to locate and construct at least one more well in the next five years.

##### **Helen Water System**

The City of Helen operates a public water system under withdrawal permit #3110001. The system serves approximately 1,000 customers. The system receives its raw water from three deep wells. The current permit allows the city to withdraw up to 400,000 gallons per day. Average daily use is 185,000 gallons per day. The water is sent to the treatment plant, which has a treatment capacity of 500,000 gallons per day. The City also purchases water from the White County Water Authority to supplement the daily demand. The city has three storage tanks that have a total storage capacity of 980,000 gallons.

The city has plans to add two new wells to their system to address water demand and reduce their dependence on water purchase from the White County Water Authority. The city also plans to increase their storage capacity by replacing one of their older, smaller tanks with a new, larger tank.

White County Water Authority

The White County Water Authority operates a public water supply system under Permit GA3110072 issued by GA DNR, EPD and serves about 1,400 customers throughout the county. The water system has about 110 miles of water line throughout the county. The Water Authority obtains its raw water from the Turner Creek Reservoir, a 45 acre reservoir about three miles north of the City of Cleveland. The Authority has a permit to withdraw up to 1.8 million gallons of water per day. Peak withdrawal during the dry season is approximately 500,000 gallons per day, but the average daily withdrawal is closer to 350,000 gallons per day. The water treatment plant is designed to produce up to 2.1 million gallons per day. The system has three storage tanks that have a storage capacity of 1.525 million gallons. The Water Authority is installing about ten miles of water lines per year into the system in order to drought proof the county.

The Authority is adding its first well and tank facility to the system. The Authority and is installing a new well and tank in the Bean Creek area. This area has had a history of many individual wells being contaminated and home owners were not able to have drinking water available in their own houses. This system will have a well that produces 50 gallons per minute, two miles of water lines and a storage tank that will hold 100,000 gallons of treated water.

This Authority currently does not provide any sewer service.

**WATER SERVICES IN WHITE COUNTY**

<b>AGENCY</b>	<b>RAW WATER SOURCE</b>	<b>CAPACITY PER DAY, M.G.D.</b>	<b>MAX. USE PER DAY, M.G.D.</b>	<b>AVE. USE PER DAY, M.G.D.</b>
City of Cleveland	4 wells	1.6	0.365	0.450
City of Helen	3 wells	0.5	0.400	0.185
White County Water Authority	Turner Creek Reservoir, 1 well	1.80	0.50	0.350

The water pressure of from 70 to 150 psi is in storage tanks with the following capacities in gallons are listed in Table 5-2.

## WATER STORAGE TANKS IN UNION COUNTY

Cleveland	Helen	White County Water Authority
400,000	980,000	1,525,000

### Assessment

According to all the water providers in White County, there is an ample water supply for approximately the next five years, increased permit withdrawals and treatment capacity will be needed beyond. Based on population projections, planning beyond the next five years should begin to take place almost immediately. All three water providers have stated a need for increased raw water sources and storage, especially in times of drought. A county-wide drought management study and plan would assist in determining the water needs for each provider as well as potential source of raw water that will accommodate anticipated growth.

Both the Cities of Cleveland and Helen are working with their consulting engineers to address long term plans for water treatment and distribution. These plans identify problems and concerns with water sources, production facilities and with the distribution system. Much of the distribution systems are older (50 years or more in some areas). Planning will itemize, date and determine the cost of the needed capital improvements to bring the facilities up to grade (A short and long term work program). Such plans should include a program on reducing water losses within the system due to broken or cracked pipes, etc, and include a contingency plan for dealing with major interruptions such as watermain breaks. The plan should also identify where water pressure and flow problems exist and need to be addressed and optimized for adequate service as well as for fire hydrant capacity. Incorporated in the plans are population and water use forecasts (including water conservation measures) as now called for by the Georgia Department of Natural Resources. Based on these forecasts and actual growth mechanisms the plans will identify when water withdrawal permits will need to be upgrade and will identify potential additional sources of water to meet growth needs.

The White County Water Authority should take the lead on the development of a county-wide drought management study and plan and use this opportunity to also develop a long-term water management strategy and plan for the unincorporated portions of White County.

Other than the Service Delivery Strategy, there needs to be a coordinating mechanism for future water provision within the county. All water providers within the county work within their own service areas and somewhat autonomous of one another. There are some water purchase agreements during times of drought or emergencies. However, there is no coordination or planning on system expansions within the county or areas where there may be no or inadequate water service. Coordination of an effort of this type could be managed as a function within a planning and development department in the county.

## **WASTEWATER**

White County provides no public waste water treatment services to county residents. Individual septic systems are the primary use for sewer disposal in the County. Approval of such systems come from the White County Health Department. The Health Department determines, based on soils, the area needed individual systems. There are many soil sensitive areas throughout White County associated with the type and shallowness of soils located on steep slopes. Sanitary sewer, provided by individual septic systems, may eventually become a problem for the County in the long term. Though beyond the horizon of this plan, as these areas are built upon the density of septic systems could become a serious public health issue.

The City of Cleveland operates a sewerage system serving the city and a few areas just outside the city limits (White County Schools). The city also has a sewer line extended down US 129 south to the industrial park. The current number of residential and commercial customers is just over 1,000. There are approximately 17 miles of collection lines in the ground, with 10 lift stations.

The City of Cleveland operates a wastewater aquaculture treatment system plant providing primary and secondary sewerage treatment

<b>CITY OF CLEVELAND</b>	
Surplus sewerage treatment capacity available for a new industry	0.400 MGD
System Design Capacity	0.750 MGD
Average Daily Flow	0.350 MGD
Permitted Treatment Capacity	0.900 MGD

\*MGD = Million Gallons per Day

The City of Helen operates a sewerage system serving the city. The system serves all commercial facilities within the city and approximately 83% of the households. The collection systems is approximately one mile in length and has three lift stations and one transfer station.

Helen also operates a wastewater plant that uses two double cell lagoons. Treated effluent is then transferred to 16.3 acres of spray fields two times a week. Approximately on half the spray fields were damaged in a tornado in 2005. However, the city has worked extremely hard at getting their facilities back on line at 100%.

<b>CITY OF HELEN</b>	
Surplus sewerage treatment capacity available for a new industry	0.350 MGD
System Design Capacity	0.620 MGD
Average Daily Flow	0.150 MGD
Permitted Treatment Capacity	0.500 MGD

\*MGD = Million Gallons per Day

### Assessment

At the current time, the neither the City of Cleveland and City of Helen plan to expand or provide sewer service outside their designated service area. Helen does not reserve any particular amount or percentage of its capacity for potential commercial service. The City of Cleveland allows for some reserve capacity on the line that serves US 129 south into White County. Tapping onto the system and purchasing into the existing available capacity is on a first come first serve basis. Both cities have in place mechanisms to identify when they should begin to work on an increase in plant treatment capacity and when to begin a permit application to request an increase their plant discharge.

Both Cleveland and Helen have been working with their respective consulting engineers on operation, maintenance or expansion plan for the waste water treatment facility and collection system. Planning includes a list of needed repairs and improvements, a management schedule of recommended system maintenance and updates, determining costs of improvements and identify what will be needed to expand treatment capacity according to forecasted growth. The plan will identify the level of treatment required, what type of permits will be needed and the necessary equipment to meet the treatment and permitting requirements. It is estimated that it will take the consulting engineer from six month to one year to develop the long term waste water plan.

Though no public sewer service is located and operated in White County, the county should investigate and consider all options available as to the need for wastewater treatment at certain locations in the county. Particularly in those areas that may lend themselves to commercial development or to clustered residential/conservation development.

### **SOLID WASTE DISPOSAL**

For waste disposal, White County contracts with Waste Management to operate a county-owned transfer station. Solid waste is hauled out of the County by the company. Waste Management charges \$41.80 per ton for commercial customers. For household garbage delivered to the transfer station the fee is \$2.00 for six bags and 50 cents per additional bag. White County operates an additional convenience center for residential solid waste that allows for drop off at the same rate as the transfer station. There is no public collection of solid waste in White County. The county, via the White County Comprehensive Solid Waste Management Plan, maintains the assurance that the county will continue to provide solid waste disposal services through the use of the transfer station and add additional, appropriately placed transfer stations as needed as growth occurs in the county.

To encourage waste reduction in the county, the transfer station and convenience center also accepts recyclables from residential users. No yard waste is accepted at the transfer station.

White County has an ordinance that requires all vehicles hauling solid waste to be suitably enclosed or covered to prevent littering.

The nearest hazardous waste disposal site are located in Alabama and South Carolina. Georgia is planning for one in Taylor County, approximately 200 miles south of Cleveland.

Currently, there is no municipal solid waste landfill in operation in White County. White County closed their municipal solid waste landfill in 1996. Closure requirements charge the County with long term monitoring and maintenance of the facilities. The County contracts with Holstraw Enterprises for monitoring services and reporting all resulting to the Georgia Department of Natural Resources. White County nor the Cities of Cleveland and Helen plan to open or operate a municipal solid waste landfill during the planning horizon of this plan.

White County employs an Environmental Enforcement Officer in the building department. The officer provides education on recycling. The office also enforces local and state laws pertaining to illegal dumping, scrap tire management, and littering.

Since there is not a public or private solid waste disposal site located or operated within White County there is no need for a capacity analysis and an assurance that there is adequate solid waste disposal capacity in the county. Assurances for capacity available to White County is made by the hauler, Waste Management, through the county solid waste management plan.

Additional details on solid waste data, goals and work items are found in the White County Comprehensive Solid Waste Plan. This plan, which is required to be updated at the same time as the general comprehensive plan provides a framework and addresses issues on the waste stream, collection, waste reduction, waste disposal, land limitations, education and public involvement, financing, implementation, and work program.

## **PUBLIC SAFETY**

### **SHERIFF'S DEPARTMENT**

Sheriff's Department responses can occur in both dwellings and businesses. White County's Sheriff Department responds to both the residential populations and businesses and institutions. Since both residential and nonresidential populations benefit from the sheriff's services, the distribution of costs and benefits must also consider the nonresidential population (i.e., some measure of business and institutions). Because the benefits and costs of such services are distributed between residential and nonresidential population (i.e., not only residents, but business owners), one cannot use total population (just residents) in the level of service measure. Instead, a "functional population" is used to reflect the costs and benefits associated with both the resident and nonresident components that receive services. The functional population is considered to be the total population plus employment. Thus, both residential and nonresidential developments receive benefits from public safety facilities.

The Sheriff's Department is a countywide service function. Although Cleveland and Helen have their own police forces, the two incorporated areas of the county are not excluded, since the Sheriff's Department continues to serve the incorporated areas. The service area for a sheriff facility is all of White County.

Sheriff's Department Facility Inventory

The White County Sheriff's Office and White County Detention Center building was constructed in 1995. It consists of approximately 21,000 square feet of space, which includes administration, investigations, patrol, and a 64-bed detention facility. The administration area, investigations, and patrol areas have approximately 4,000 square feet with the remainder of 17,000 square feet used by the detention facility, booking area, kitchen, and sally port (i.e., secured entry area).

The detention center is configured to house 8 female and 56 male inmates. It has two holding cells of 144 square feet each. It also includes a medical examination room of approximately 150 square feet and one medical isolation cell of approximately 100 square feet.

Existing Level of Service

The existing level of service is determined on the basis of square feet of sheriff's facilities per total county functional population. As noted above, the functional population is a combination of population and employment in the county. Functional population is the appropriate measure of the needs for sheriff's facilities, since the department is required to respond to both the residential population and businesses/institutions. The table below provides the existing level of service.

**EXISTING LEVEL OF SERVICE  
SHERIFF SPACE AND DETENTION CENTER**

<b>2005 Countywide Functional Population</b>	<b>2005 Existing Building Inventory (Square Feet)</b>	<b>2005 Existing Level of Service (Square Feet per Countywide Functional Population)</b>
30,803	21,000	0.68 sq. ft. per capita

Assessment of Existing Level of Service

Limited input from the Sheriff's Department has been obtained for this study. The existing level of service (current facility space) is not adequate, in that the Department notes that "an inability to provide adequate facilities for incarceration restricts the ability to classify and house detainees appropriately." In addition to that general statement, the following deficiencies are observed:

- There is currently no area set aside for detainees with mental problems that must be segregated from other inmate populations.
- Secured recreation facilities for inmates are inadequate. There are no hard and fast rules for recreation of detainees, which is dependent on the security of those housed.

Since no other specific deficiencies have been identified other than those above, it is suggested that the facilities are deficient by approximately 2,310 square feet, which would make the level of service standard 0.75 square feet per countywide functional population.

Level of Service Standards for Sheriff Facilities

It is recommended a level of service standard of 23,310 square feet for the current population, as shown in the table below:

**LEVEL OF SERVICE STANDARD  
SHERIFF SPACE AND DETENTION CENTER**

<b>2005 Countywide Functional Population</b>	<b>2005 Existing Building Inventory (Square Feet)</b>	<b>2005 Existing Level of Service (Square Feet per Countywide Functional Population)</b>
30,803	23,310	0.75 sq. ft. per capita

Projection of Needs, Sheriff’s Department Administrative Space

The following table provides an estimate of additional sheriff facility administrative space needs based on projections of the countywide functional population and the level of service standard of 0.75 square feet of sheriff’s facility space per capita (countywide functional population). At the proposed level of service standard of 0.75 square foot per capita, the Sheriff’s Department will need to add 7,139 square feet of additional office and detention space by the year 2010 and 13,299 square feet of space by 2015.

**PROJECTION OF SHERIFF FACILITY NEEDS, 2005-2025  
AT PROPOSED LEVEL OF SERVICE  
(0.75 SQUARE FEET PER COUNTYWIDE FUNCTION POPULATION)  
WHITE COUNTY**

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Countywide Functional Population	30,803	37,519	45,732	57,580	69,609
Square Feet Needed (@ 0.75 sq. ft. per capita)	23,310	28,139	34,299	43,185	52,206
Square Feet To Add To 2005 Building Stock	2,310	7,139	13,299	22,185	31,206



## Schedule of Improvements, Sheriff's Department

The schedule of improvements consists of two projects – an addition to the existing administrative facility of 4,200 square feet and a 1,500 square foot satellite facility in the northern part of the county. It is assumed that adequate land exists on the current site of the Sheriff's headquarters building to allow for building expansion. There is potential that the proposed satellite facility could be co-located with a fire station.

These two projects should give the Sheriff's Department additional space for the detention facility and office space in the headquarters building but also a small office facility in the northern part of the county. It is assumed that locating a satellite office in the north part of the county will help reduce response times there and take into account anticipated growth in that area. Beyond the five-year period, the Department should consider adding a satellite office in the southern part of the county.

## CITY OF CLEVELAND POLICE DEPARTMENT

The City Police department is a city-wide function within the Cleveland city limits. The Police Department is housed within city hall (upper floor) and occupies approximately 1,800 square feet for administrative space. A sub-station is operated for booking in downtown Cleveland with approximately 200 square feet. All prisoners or detainees are boarded of the White County Detention Center.

There are eleven positions within the department, including a Chief of Police, two Sergeants, one Corporal, and seven patrol officer positions. This equates to one officer per 174 residents in the city. Equipment for the department includes six fully equipped patrol cars and one speed detection device. Response times for the department average one to four minutes to emergency calls. Non emergency call average a response time of five to ten minutes.

Each officer receives a minimum of twenty P.O.S.T. certified training hours per year, while the Chief of Police receives a minimum of twenty P.O.S.T. certified executive training hours per year.

Based on projected population for Cleveland, to maintain the same level of service the city will need to employ and additional five officers (total 16 officers) at the year 2010 and 23 total officers by the year 2020. This does not include any clerical positions that may be needed for administrative purposes. The Police Department will need to increase their space need to 2,200 square feet by 2010 and to 3,100 square feet by 2020.

## CITY OF HELEN POLICE DEPARTMENT

The City of Helen Police Department is located in a portion (2,500 s.f.) of the new city hall located on Alpenrosen Strasse. In addition to administrative space, the department includes two holding cells. Detainees are boarded at the White County Detention Center.

The department employs nine full-time and six part-time patrol officers as well as a Police Chief and Captain. The department also includes four dispatchers. The department operates five fully equipped vehicles in their inventory. Response times to emergency calls average three minutes, while the non-emergency response is approximately ten minutes.

Each officer receives a minimum of twenty P.O.S.T. certified training hours per year, while the Chief of Police receives a minimum of twenty P.O.S.T. certified executive training hours per year.

While providing police protection to city residents is important much of the city's focus is service to the visiting population. This makes it a bit more difficult to determine the need for additional officers and space. The city may need to conduct a special study to determine their exact needs for police services based on the peaks and valley in the tourist season.

## **FIRE DEPARTMENT AND EMERGENCY MEDICAL SERVICES**

### **Beneficiaries of System Improvements**

Fires can occur in both dwellings and businesses. White County's Fire Department responds to both the residential populations and businesses and institutions. Since both residential and nonresidential populations benefit from fire services, the distribution of costs and benefits must also consider the nonresidential population (i.e., some measure of business and institutions). Because the benefits and costs of fire services are distributed between residential and nonresidential population (i.e., not only residents but business owners), one cannot use total population (just residents) in the level of service measure. Instead, a "functional population" is used to reflect the costs and benefits associated with both the resident and nonresident components that receive fire services. The functional population is considered to be the population plus employment.

Hence, in the case of fire facilities, both individuals (households) and businesses (firms) require and benefit from them (Nicholas and Nelson 1988a). Thus, both residential and nonresidential developments receive benefits from public safety facilities, and they both need to pay development impact fees.

### **Fire Department Facility Inventory**

The White County Fire Department operates seven (7) stations around the county. Station #1 is located within the City of Cleveland and is operated by the city. White County leases 1,000 square feet of space for operation of its fire department in Station #1. Each station maintains an ISO rating of 7/10. Personnel include 73 volunteer firefighters and two full-time employees including the Fire Chief.

**INVENTORY OF FIRE FACILITIES, 2005  
WHITE COUNTY**

Facility Name	Location	Land Area (acres)	Total Building Area (square feet)	Space Devoted to Storage of Apparatus (Square Feet)	Office and Storage Space (Square Feet)
Fire Station #1	City of Cleveland	(leased)	1,000	750	250
Fire Station #2	White Creek		2,700	1,800	900
Fire Station #3	Sautee	(leased)	1,900	1,500	400
Fire Station #4	Mossy Creek Westmoreland Road	1.0	3,150	2,400	750
Fire Station #5	Shoal Creek	1.0	2,400	1,200	1,200
Fire Station #6	Blue Ridge		3,150	2,400	750
Fire Station #7	Chimney Mountain		3,150	2,400	750
Helen Station	City of Helen		Excluded		
Total			17,450	12,450	5,000

Source: White County Fire Chief, January 2005. Space in #1 = county portion of city station. The county owns 21 vehicles, some of which are in need of replacing. Additional personnel are needed. Stations are in need of additional space to allow for new vehicles. A new facility is under construction for Station #3.

Service Areas

The City of Cleveland operates a fire department. White County's fire department operates out of the Cleveland fire department building. Because both the city and county respond to fire calls inside the Cleveland city limits, Cleveland residents are in essence served by both systems. Though the White County Fire Department routinely serves the city limits of Cleveland, the city of Cleveland can be excluded from the county's service area. The City of Helen operates a fire department that serves all of the city limits of Helen and some unincorporated area. That service area is referred to as the Helen Service Area. It is important to note that each service area must be clearly defined and a level of service established. Because the Helen Service Area is operated by a municipality (City of Helen) rather than White County.

The remainder of the county (less the Helen Service District and the Cleveland City Limits) is the primary White County Fire Department service area.

## Level of Service Measures Generally

The Insurance Services Organization (ISO) rates communities for fire service according to the adequacy of the water system and other factors such as the size and type of buildings in a community, the presence or absence of fire alarm systems, the way calls are received and handled, whether fire fighters are paid or volunteer, the size of water mains and capacity, and how long it takes to respond to a call. ISO ratings are based on a scale from one to ten, with a one being the best and ten being no fire protection.

A number of service indicators are used in evaluating the adequacy of fire facilities, most of which stem from Insurance Services Organization (ISO) ratings. These include: the number of structures within 1,000 feet of a fire hydrant; response time in minutes; water pressure available (for instance, the needed fire flow for White County is currently 2,500 gallons per minute); and backup responder availability in terms of rolling stock (fire trucks).

The speed of providing fire suppression services is essential. Therefore, response time is often one of the more important level of service standards. Speed is a function of distance, and therefore, radii or travel time distances are often plotted around fire stations as a measure of time as well as distance. Sometimes, average response time statistics can be used or standards established. The location of fire companies, or the radii around fire stations, are also considered by the ISO (i.e., the percent of the county's total area within 1.5, 2.5, and 5 miles of existing fire stations).

A five-minute response time for a fire call is considered an absolute maximum (standard) in some communities, because research indicates that temperature increases and the fire builds during the first few minutes—typically three or four. After four or five minutes, unrestrained fire growth leads to flashover or ignition of the total contents of the room (or rooms, or building). Furthermore, five minutes is not sufficient when one considers that an unconscious person with depleted oxygen will typically suffer permanent brain damage after approximately four minutes (Granito and Dionne 1988).

While some of the level of service measures used by ISO are relevant to the impact fee program (further discussion is provided below), most of these are not easily quantifiable and therefore are not useful as levels of service for calculating development impact fees.

## Primary Unincorporated Service Area Functional Population

Because the unincorporated area is split between the Helen fire service area and the rest of unincorporated White County, separate population projections are needed in order to calculate the existing level of service and project needs.

The service area population and employment are estimated by subtracting the population and employment estimated to exist within the unincorporated part of the Helen service area. As the map of service areas indicates, the Helen service area is small in terms of development and contains very little if any employment. It does not include Robertstown. The only populated unincorporated area within the Helen fire district is along SR 75 Alt. and Ridge Road. It is estimated that this area contains approximately 200 residents. The rest of the Helen fire service

area is almost exclusively uninhabited National Forest lands. Given these findings, the table below provides the estimated functional population for each service area.

**FUNCTIONAL POPULATION PROJECTIONS, 2000-2025  
CITY OF CLEVELAND, HELEN, AND PRIMARY UNINCORPORATED AREA**

<b>White County</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
City of Cleveland Area	2,969	3,599	4,230	4,861	5,492	6,123
Helen (Plus Unincorporated)	975	1,254	1,532	1,809	2,087	2,365
Primary Unincorporated Fire Service Area	21,785	25,950	29,732	39,062	50,001	61,121
Total County	25,729	30,803	31,755	45,732	57,580	69,609

Existing Level of Service Standard for Fire Stations

As noted in the inventory above, the primary unincorporated fire service area is served by seven stations, six in the unincorporated area and the Cleveland station (#1) which jointly houses city of Cleveland and White County fire equipment. The number of fire stations per “functional population” in the primary unincorporated service area is used as a level of service measure. The existing (2005) level of service is one fire station per 3,707 functional population in the service area (most of unincorporated White County).

**EXISTING FIRE FACILITY LEVEL OF SERVICE  
WHITE COUNTY PRIMARY UNINCORPORATED FIRE SERVICE AREA  
(Excludes City of Cleveland and Helen Fire Service District)**

Number of Fire Stations	2005 Functional Population, Primary Unincorporated Service Area	2005 Existing Level of Service, Fire Facilities
7	25,950	1 Fire Station per 3,707 functional population

Level of Service Standard for Fire Stations

In terms of the number of stations, White County adopts the existing level of service (1 Fire Station per 3,707 functional population) as a level of service standard.

**Relation of Fire Flow Requirements to Type of Vehicle**

Because fire flow requirements (i.e., 2,500 gallons per minute) have a direct impact on the number of vehicles and their pumping capabilities, consideration of a level of service standard for fire flow is important. As explained in the ISO Report provided by the Fire Chief, to meet 2,500 gallons per minute at any given fire call in the county, two 1,250 gallon-per-minute pumper trucks must respond to each call. At present, some of White County’s fire engines have a pumping capacity of only 1,000 gallons per minute, suggesting that a third vehicle is needed if one of the first two engines responding does not have 1,250 gallon-per-minute pumping capacity. As noted by the Fire Chief, it is more efficient to upgrade pumper

capacity so that all engines are 1,250 gallons per minute or more rather than having to maintain and dispatch a third vehicle (using precious additional volunteers).

The level of service standard for fire flow is 2,500 gallons per minute. This level of service standard is important in establishing the need for fire trucks, which are a capital item for which impact fees can be charged (as discussed further below).

#### Level of Service Standard for Equipment

Based on the foregoing analysis, each of White County's fire stations should be equipped with the following (adopted as a standard):

- One Class A fire engine, 1,250 gallon-per-minute (gpm) minimum pumper
- One Service Truck (LST ladder service (not ladder truck; may be a tanker)
- One Tanker (1,500 to 2,500 carrying capacity).
- One Class A reserve engine for every seven engines.
- Emergency service vehicle (ambulance).

When a new fire station is needed, the rolling stock necessary to equip the fire station is a capital item that will be included in the impact fee program. If upgrading equipment at an existing station, equipment purchases are not impact fee-eligible.

#### Assessment of Adequacy

The Fire Chief has evaluated future needs and has a number of recommendations that are integrated into this element.

The community facilities element of the comprehensive plan (adopted in 1992) set a framework for implementation of better fire services countywide in order to supplement the three fire stations (#1, #2, and #3) that existed then. The plan called immediately for four new stations, all of which were constructed and are operational (#4, #5, #6, and #7). In addition, the plan called for three more fire stations to be phased in over a three-year period from 1992 to 1995, as follows:

- Duncan Bridge Road near Panorama Estates (Mt. Yonah area).
- SR 75 Alt. near the entrance to Mountain Lakes.
- In the Town Creek planning area (Town Creek Road).

These fire stations have not been constructed, and it has been more than ten years since they were scheduled to be constructed.

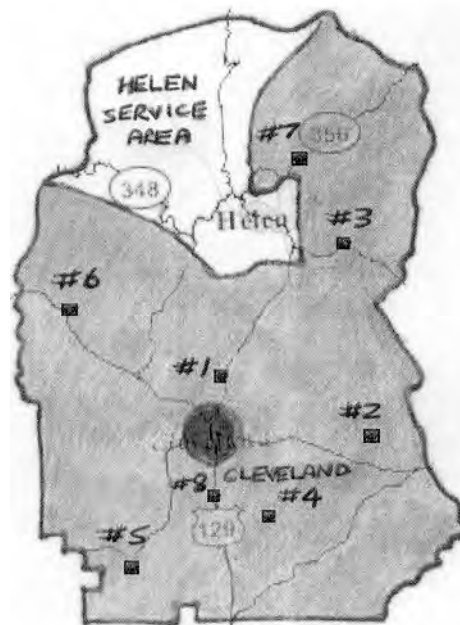
White County's fire stations are not sufficient and not optimally placed to reduce ISO ratings and provide desirable service. Fire stations are not located within three or five miles of each other, and they lack an even spread across the county. Further, some of the stations have 2.5 mile and 5 mile response areas that extend into adjacent counties or jurisdictions, and the county receives no credit for that in ISO ratings. Especially important is the observation of the Fire Chief that the impact of fire station #1 in Cleveland (in terms of ISO rating) is reduced because a

1.5-mile radius from station #1 consists almost entirely of the Cleveland city limits. In other words, station #1 does not receive all the credit it could attain if optimally located.

It is recommended by the Fire Chief in the ISO report that station #1 in Cleveland should be relocated to a new fire station north of Cleveland’s city limits, near SR 75 and Hulsey Road or further north on SR 75. Another station is needed south of Cleveland on US Highway 129 (#8). Hence, the county needs to build five new stations, the three mentioned above, plus a station south of Cleveland and relocate Fire Station #1 north of Cleveland.

**Projection of Needs for Fire Stations**

The table below projects facility needs based on the level of service standard of 1 station per 3,707 unincorporated functional population. At this level of service, the county will need to add four new stations during the twenty year period (one each five years). Also, the replacement of Fire Station #1 with a new station north of Cleveland is needed to improve service coverage and ISO ratings and would take place in the 2006-2010 time period. A new Fire Station #8 will be constructed in the next five years, Fire Station #3 will be relocated, and all other Fire Stations will be upgraded.



**Fire Station Locations in 2010**

**PROJECTION OF NEEDS BASED ON EXISTING LEVEL OF SERVICE  
PRIMARY UNINCORPORATED FIRE SERVICE AREA**

<b>White County</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Stations Needed	7	8	9	10	11
Additional fire stations to add from 2005 level of service (attributed to new growth)	0	1	2	3	4

**Level of Service Standards for Fire Station Space**

In addition to the number of stations, space is important. The functional population in the primary unincorporated service area will increase during the planning horizon. Although geographic coverage might be adequate by attaining the level of service standard for the number of fire stations, response would be degraded unless existing fire stations are enlarged and equipped per the equipment level of service standard. As additional persons and employees are added (i.e., as functional population increases), the frequency of fire calls increases. The fire

stations operate as a system and as such must be able to address simultaneous fire alarms. Hence, more stations, all properly equipped, will be needed as the service area grows.

Fire stations #4, #6 and #7 were built to a standard of 750 square feet of office space/storage and 2,400 square feet of fire apparatus space. The 2,400 square feet is not large enough to house the equipment specified above as the level of service standard for fire equipment, according to the Fire Chief. In addition, rather than 750 square feet of office space/storage, the Fire Chief indicates that each station should have 1,800 square feet of office space, storage, and living space. The additional space is needed to accommodate living space (3 firefighters per shift), laundry room, lockers, and storage for breathing apparatus and air compressors. Hence, every fire station is too small to meet this standard and therefore requires upgrading and in some cases replacement.

The Fire Chief recommends fire station space standards for each fire station as follows (4,800 square feet total):

- 3,000 square feet minimum for truck storage
- 1,800 square feet of office space, storage, and living space

#### Schedule of Improvements for Fire Stations

At the recommended level of service standard, the county will need to replace Fire Station #1 with a new 4,800 square foot facility and add one additional, 4,800 square foot fire station (#8) by 2010. Between 2010 and 2025, the county will need to add three stations. Based on the foregoing analysis, the schedule of improvements includes the following:

1. Relocate Fire Station #1. Relocate Fire Station #1 from inside the Cleveland city hall to the north side of Cleveland on SR 75. This project may or may not involve the purchase of land (an eligible expenditure for impact fees except in the case of a replacement fire station). This project, though providing new space, is a replacement project in the sense that White County is already leasing space for this fire station and it will be discontinued at its current location inside the city limits. This is a high priority project that needs to be included in the five-year schedule of improvements. As a replacement project, impact fees cannot be used to fund this station.

2. New Fire Station #8 south of Cleveland. The county needs to purchase land and construct a new fire station south of Cleveland on U.S. Highway 129. This is another high-priority project that should be included in the five-year schedule of improvements. Because this will be a new fire station (not replacing in whole or in part any other station), it can be fully funded with development impact fees.

3. Relocate/Replace Fire Station #3 in Sautee. Fire Station #3 (Sautee) is being relocated from leased space to a site, which has been purchased with funding from the Sautee-Nacoochee Association. Station #3 currently is the smallest station in the county and significantly undersized at that, with only 400 square feet of office/storage space and only 1,500 square feet of space for fire apparatus. This project will replace an existing (leased) station with a new fire station. It is also important that any new fire station in Sautee have construction that is compatible with the historic character of the Sautee community. This project does not include



land acquisition since a site has already been acquired. The project plans have recently been approved and is currently under construction.

4. Add Space to Existing Fire Stations. Fire Stations #2, #4, #5, #6, and #7 require upgrades with additional square footage to meet the level of service standard for available space in the fire stations (see Table 21). It is assumed that space can be added to each of these existing facilities. As this project would only add space to existing stations to bring them up to the level of service standard for fire station space, it is not eligible for impact fee funding.

**UPGRADE REQUIREMENTS FOR EXISTING FIRE STATIONS**

<b>Station #</b>	<b>Vehicle Storage Space Required</b>	<b>Existing Vehicle Space Provided</b>	<b>New Vehicle Space Needed</b>	<b>Office, Storage and Living Space Required</b>	<b>Existing Office, Storage, and Living Space Provided</b>	<b>Total Space Provided</b>	<b>Additional Space Required</b>
#2	3,000	1,800	1,200	1,800	900	2,700	2,100
#4	3,000	2,400	600	1,800	750	3,150	1,650
#5	3,000	1,200	1,800	1,800	1,200	2,400	2,400
#6	3,000	2,400	600	1,800	750	3,150	1,650
#7	3,000	2,400	600	1,800	750	3,150	1,650

5. New Fire Station #9 on Town Creek Road near Sandy Flats Road. In terms of coverage, this station is needed more than any others described below. Ideally, this station will be located near the intersection of Town Creek Road and Sandy Flats Road to maximize its service radius and decrease potentially unacceptable response times in the Town Creek area. This station (and the fire apparatus needed to equip it) is eligible for impact fee funding and is proposed to be constructed during the 2010-2015 time period with impact fees (100%). It is shown in the schedule of improvements as long range.

6. New Fire Stations #10 and #11. These are future projects that are not included in the schedule of improvements but which will be needed during the 2015 to 2020 and 2020 to 2025 time periods, respectively. The locations of these stations have not been pinpointed, and the location will depend on the future distribution of population and employment in the unincorporated area.

The table above shows the fire stations and equipment (incomplete) needed to bring up existing fire stations to the level of service standards, purchase new land and add new stations, and long-range (20-year) facility needs. Dedicated funding sources should be pursued to fund the fire department's deficiencies.

## E-911 Dispatch Center

An enhanced Emergency 911 system is in operation throughout White County. The E-911 Dispatch Center is located in the Mauney Building on Helen Highway. This office provides emergency dispatch services for all White County law enforcement and disaster agencies. All dispatchers are required to attend training and become certified by the State of Georgia.

In addition to dispatching for the Sheriff and municipal police departments, Fire and Rescue, Emergency Management Agency and volunteering fire departments, they monitor the Georgia Emergency Management Agency (GEMA) weather, forest service and other related state agencies. The office also monitors alarms, both silent and audible, and dispatch the appropriate agency for response.

The department is currently purchasing and installing up-to-date location and communication equipment, which enables them to quickly identify the locations of emergency callers. They are also linked to the State of Georgia and national crime centers. The office maintains recordings of all 911 calls and is often requested to testify in court proceedings.

As the mean age of the population increases, so does the number of requests for emergency response.

## Emergency Management Agency (Civil Defense)

The emergency management office is responsible for maintaining the County Emergency Operations Plan and for the overall management of any disaster that should befall the County. The office also responds to special types of emergencies such as persons lost or injured on trails. The office works closely with the Georgia Emergency Management Agency (GEMA), the American Red Cross, and other state and federal agencies.

In the recent past, the office has responded to two Federally declared disasters and received funds to address damage from blizzards and ice storms and a tornado.

The Emergency Management office is capable of assisting the police force during emergencies with the help of trained volunteer auxiliary police, fire and medical personnel.

## Animal Control

White County operates an animal control department through the Sheriff's office. The office's primary duty is to respond to residents calls concerning stray or injured animals and to enforce the County's Animal Control Ordinance. The office responds to and investigates animal bites and cases of animal cruelty, often appearing in court. A data base is also kept of lost and found animal.

The Animal Control Officer picks up stray animal and which are housed at the Smithgall Woods Animal Shelter. White County contracts with the shelter to provide a variety of services in a 5,500 square foot facility located on DNR, Smithgall Woods property on Helen Highway.

The shelter employs two full-time and one part-time positions and makes use of many volunteers.

Needs for the shelter are presented annually to White County to determine the level of services and funding from the county. The shelter is organized in such a way that they can solicit donations to help fund their operations.

## **HOSPITALS AND HEALTH CARE**

### Hospitals

No hospital facilities are located within White County. The county is surrounded by a number of local and regional hospitals that are located fifteen to thirty minutes from various locations in the county.

Surround hospital facilities include: Northeast Georgia Medical Center (regional facility) in Gainesville; Habersham Medical Center in Demorest, Chestatee Regional Hospital in Dahlonega, Union General Hospital located in Blairsville and Hiawassee (Chatuge Hospital).

A number of private medical services are offered in White County through approximately six physician offices.

### Nursing Homes or Health Assisted Facilities

There are two health assisted facilities located in White County. They include Friendship Health and Rehabilitation Center and Gateway Health and Rehabilitation Center. Both of these facilities are located off of U.S. 129 South. Friendship is an 89 bed nursing home facilities providing comprehensive nursing, assisted and rehabilitation services. Gateway is a 60 bed facility offering the same services.

During the planning process, some local interest was expressed in the provision of adequate health care facilities, particularly for the elderly. Much of the expected growth in White County will come from the baby boom generation as they retire to the area. The construction and operation of health facilities must receive state approval. As such, proposed facilities are subject to the certificate-of-need rules of the State Health Planning Agency. This oversight exists to prevent an oversupply of health facilities/services; such an oversupply tends to increase health care costs. The agency calculates allowances based on population projections of the Georgia office of Planning and Budget. The projections differ from GMRDC projections. Certificate-of-need rules for nursing homes allow 47 beds per 1,000 persons aged 65 and over. Furthermore, any new facility constructed must have a minimum of 60 beds.

Based on the number of persons age 65 and older in White County in 2005, there is a need for 175 beds in White County. This would justify the expansion of the existing facility, but not the construction of a new facility. However, by 2010 the projected population would support the need for a new facility of housing 76 beds.

### County Health Department

The White County Health Department's Health Center is under the operation of the State of Georgia District 2, Department of Human Resources. The department receives some operating funds from the County. The Center has many clinics to protect our community from health risks, to promote healthy behaviors and lifestyle and to prevent disease and disabilities. Prevention is the backbone of public health and the scope of service at this Center has a broad range. The department has ten full-time and five part-time employees.

Some of the clinics provided are: Women's Health, blood pressure screening, pregnancy testing, dental clinic, well-child clinic, hearing and vision testing, WIC program, X-ray clinic, nursing services, vital records, environmental health (water testing, rabies control, restaurant inspections, septic tank permitting), lab services and child safety seat programs.

The current facility for the health department is servicing beyond its capacity. The health department is occupying one half of the upper floor in the Mauney Building (approximately 4,500 square feet). This building houses several other county departments as well. Based on space estimates the department has maximized its existing space. The department plans to increase staff over the next ten years by up to ten employees. This translates into an additional 3,300 square feet of space for operations and administration. The county may need to look into developing an application to the State for a Community Development Block Grant (CDBG) to fund construction of a new facility large enough to provide for future population growth for the next ten to twenty years. The other alternative is to purchase an existing building that would have enough space to adequately house the department for the next ten to twenty years.

### Mental Health

The department is under the operation of the State of Georgia District 2, Department of Human Resources. The department receives some operating funds from the County. This service is also located in the Mauney Building located on Helen Highway.

The Mental Health Department provides a comprehensive system of diagnostic, in-patient, outpatient, day treatment, residential and employment services and treatment of options for County citizens who have mental health, mental retardation, and substance abuse disabilities. This department is also in need of additional space. It could be housed with the Health Department as space for a new facility is pursued.

## **PARKS AND RECREATION**

### **Beneficiaries of System Improvements**

While some nonresidential uses may benefit incrementally from parks and recreation facilities, the primary beneficiaries are residents.

### **Facility Inventory**

The White County Recreation Department operates a 39.13-acre facility, White County Park. The park consists of eight (8) baseball/softball/ soccer fields, one (1) basketball court, one (1) swimming pool, one (1) recreation building, two (2) picnic areas, three (3) restrooms and one (1) trail. In addition, the County has leased 15 acres from the White County Board of Education approximately two miles north of Cleveland on U.S. Highway 129. The 15-acre site recently opened as a sports complex (4 new football/soccer fields) constructed using Special Local Option Sales Tax (SPLOST) funds.

White County has a total of 54.13 acres of recreation facilities. In addition, the county also has 35 acres of land, which is leased from the Jekyll Island Authority, to which the county has full rights to construct additional parks and recreation facilities, according to the Parks and Recreation Department.

### **Service Area for Parks and Recreation**

Neither the City of Cleveland or the City of Helen have active parks and organized recreation activities. Cleveland does have one park (Woodman), which is used by the White County Parks and Recreation Department for soccer practices. Helen has Pete's Park and other properties, which are green spaces rather than active recreation. Therefore, the service area is unincorporated White County.

### **Existing Level of Service, Parks and Recreation**

The existing level of service for parks and recreation is most frequently determined on the basis of acres of parks and recreation lands per 1,000 population (in this case the unincorporated portion of White County). White County provides a level of service of 2.53 acres of developed park land per 1,000 residents.

**EXISTING LEVEL OF SERVICE  
DEVELOPED PARKS AND RECREATION LAND  
UNINCORPORATED WHITE COUNTY**

<b>2005 Unincorporated Population</b>	<b>2005 Park Land Acreage, Unincorporated</b>	<b>2005 Existing Level of Service (Developed Acres per 1,000 Unincorporated Population)</b>
21,363	54.13	2.53 acres per 1,000 unincorporated population

This level of service is well below standards typically recommended. For instance, national standards suggests that 10 acres of parkland per 1,000 residents is desirable. However, White County has Unicoi State Park, Buck Shoals Park, the Smithgall Woods, the Hardman Family Farm and abundant National Forest lands, suggesting that it does not require such a high level of service.

Level of Service Standard for Parks and Recreation

According to the White County Recreation Department, White County Park, the soccer complex, and the 35 acres leased from the Jekyll Island Authority (if developed) will provide a sufficient level of service for a service population of 28,000. Therefore, the level of service standard has been determined based on the assumption that all land owned/leased now for recreational facilities if developed would be adequate for a population of 28,000. This means a level of service standard of 2.97 developed acres per 1,000 unincorporated residents, as shown in the table below.

**LEVEL OF SERVICE STANDARD  
DEVELOPED PARKS AND RECREATION LAND  
UNINCORPORATED WHITE COUNTY**

<b>Unincorporated Population</b>	<b>2010 Developed Park Land Acreage, Unincorporated</b>	<b>Level of Service Standard (Developed Acres per 1,000 Unincorporated Population)</b>
28,000	83.16	2.97 acres per 1,000 unincorporated population

Projection of Needs

For 2010, the county will need not to develop additional acres of park and recreation land to correct the deficiency created by adopting a level of service standard (2.97 developed acres per 1,000 unincorporated population) that is higher than the existing level of service (2.53 developed acres per 1,000 unincorporated population). (This is assuming that the 35 acres leased from the Jekyll Island Authority is developed.)

By 2025, the county will need to add 118.1 developed acres of parks and recreation land to its inventory. Some of this need can be offset by the presence of state and federal lands for recreational purposes.

**PROJECTION OF PARK LAND NEEDS, 2005-2025  
AT THE LEVEL OF SERVICE STANDARD  
(2.97 DEVELOPED ACRES PER 1,000 POPULATION)  
WHITE COUNTY**

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Acres Needed (@ 2.97 acres per 1,000)	63.4	83.8	107.8	138.9	172.2
Existing Deficiency of Developed Park Acreage (2005)	--	--	--	--	--
Developed Acres Attributed To New Growth	0	20.4	44.4	75.1	118.1
Total acres to add to 2005 inventory	0.0	0.0	44.4	75.1	118.1

**Consideration of Improvements**

Community parks are usually 40-50 acres but can be much larger, and they typically have both active and passive facilities including outdoor courts, playgrounds and picnic facilities. Regional parks, which usually contain areas of 500 acres or more, are generally not as essential given the extensive amount of National Forest land in White County and the passive recreational opportunities those lands provide. Neighborhood parks, which usually consist of 15-30 acres and provide playgrounds and some ball courts, along with passive recreational activities such as trails, are less feasible given White County’s current facilities, which are concentrated in one location. Similarly, White County is still too rural to consider a number of smaller “mini-parks” (i.e., 4-5 acres with passive recreational opportunities), and such smaller tracts are considered costly to maintain.

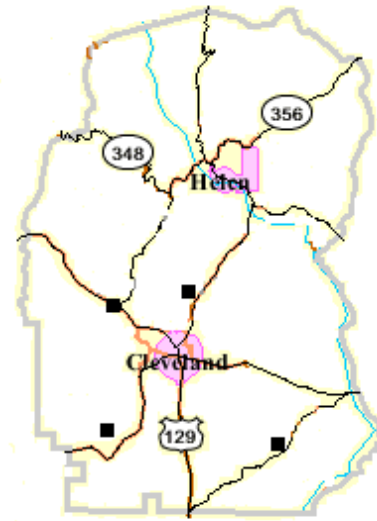
It is recommended that by 2025 the county develop two additional 20-acre neighborhood parks and 18.7 acres of the 35-acre site leased from the Jekyll Island Authority. There is a choice concerning which park lands will be developed first. Because the county’s facilities are already concentrated in one section of the county (north and northwest of Cleveland), and the cost of land will continue to increase over time, it is recommended that the county pursue development of the two neighborhood parks in the southern part of the county first, before developing additional park acreage behind White County Park.

Location considerations are important with parks and recreational facilities. The service area is the entire unincorporated area. The north end of the county is where most of the passive recreational land in the county is located, and White County Park is reasonably accessible to residents in the north end of the county. Adding developed park acreage to the rear of White County Park is convenient, but given the 15-acre sports complex on U.S. Highway 129 north of Cleveland, focusing efforts there would result in consolidation of all parks and recreation facilities in one area of the county.

It is recommended that new parkland should be sought in the south end of the county. One location, approximately southeast of Cleveland, near Lothridge Road, Webster Lake Road, and SR 254, would probably be well-balanced in terms of maximizing accessibility of all residents in the southeastern and eastern parts of the county. Another location, near the

intersection of State Routes 284 and 115, would provide for maximum accessibility to the residents of the southwestern portion of White County.

The proposal for two new parks (40 acres) is generally consistent with the community facilities element of the comprehensive plan (adopted in 1992), which recommends two 20-acre parks, one each in the Shoal Creek/Town Creek and Mossy Creek Planning Areas. If a park development program was pursued to acquire and develop two 20-acre parks in the south end of the county, such improvements would satisfy needs through the year 2025. In addition, the county could incrementally develop some (18.7 acres) of the leased land behind White County Park.



**System of 4 Parks by 2025 in Dispersed Locations**

#### Other Recreation Areas and Facilities

According to the United States Forest Service, there are 41,276 acres (64.5 square miles) of land that is managed by the Chattahoochee National Forest in White County. The Chattahoochee National Forest's land holdings encompass 26.5 percent of the total 243 square miles in White County. The National Forest land is located in the northern half of the County. The Chattahoochee National Forest contains numerous trout streams that support wild populations of brook, brown and rainbow trout. There are 19,352 acres of public lakes in the Chattahoochee National Forest. Significant trout streams located in White County are Smith Creek, Chattahoochee River, Dukes Creek, Towns Creek, and Tesnatee Creek. To help maintain fishing quality, many streams within the forest are stocked with hatchery-reared fish. Recreation areas and sites are composed of "dispersed" recreation (hiking, camping, picnicking, fishing, hunting and riding) and "developed" recreation (camping, picnicking, swimming and boating).

Unicoi State Park is located northeast of the City of Helen, and encompasses a 1,050 acre area. The park offers a number of opportunities for the sightseer and outdoor enthusiast, including 12 miles of hiking trails, 8 miles of mountain biking trails, fishing, canoeing, and pedal boat rental on the site's 53 acre lake. Unicoi State Park also provides cultural and historical programs. Unicoi State Park received 1,134,297 visitors in 1989, making it one of the most heavily visited state parks in Georgia.



Smithgall Woods- Donated to the State by Charles Smithgall Jr., this 5,555 acre conservation area has recovered from a troubled past of mining and logging to become a Heritage Preserve. Smithgall Woods includes activities such as biking, hiking, and fishing on Dukes Creek, which was voted as “one of the Top 100 Trout Streams in the U.S” by Trout Unlimited

## **GENERAL GOVERNMENT FACILITIES AND SERVICES**

White County is governed by a three-member Board of Commissioners. The Board of Commissioners office is located just south of the central City Square in Cleveland.

The White County Courthouse is also the location for county administration, all county court services and tax collection services as well. The courthouse was designed with a roof area that bridges over open areas around the building. This construction was done to enable easy expansion of the courthouse to accommodate future office space needs. It is estimated that this can add up to approximately 3,000 square feet, which will not be adequate to serve the long term needs for general government office space. The old jail and sheriff’s office is now occupied by the community development department, magistrate court, district attorney and maintenance.

A courthouse and annex needs assessment was conducted in 2003. It was determined that by 2010, administrative space needs for White County will be just less than 13,000 square feet, and judicial space needs will be approximately 29,000 square feet. This

The recently county purchased property behind the courthouse and old jail for future facilities. In addition, the White County Commission hired a consultant to prepare a conceptual plan for future courthouse needs, including a design for a 42,000 square foot facility determine long-term court and administrative needs. A citizens committee has been working with the White County Board of Commissioners to determine community desires and needs for such a facility.

### Other County Services

White County has a Building Department, which issues all building permits and provides inspection for commercial and residential construction and land disturbance in the county. The office also includes a code enforcement officer.

The Community and Economic Development Department administers all planning and development review in White County. The office conducts reviews for thirteen individual ordinances (including subdivision regulations), issues land disturbing permits, administer solid waste management activities, grant writing as well as planning and economic development activities in the county. Also within the department is the mapping division consisting of two employs that maintain the county Geographic Information system (GIS) and provide addressing for development as it occurs throughout the county.

The Tax Appraiser’s Office collect and maintain all data related to property owned in the County. They keep records of each individual parcel of property, which includes the evaluation

of the land and buildings on each parcel. This information is used to determine property tax bills, which are prepared by the Tax Commissioner.

Ad valorem tax, more commonly known as property tax, is the largest source of revenue for local government. This Tax Commissioner Office prepares and collects all ad valorem tax revenue. Ad valorem tax is figured on the fair market value of a property, which is established by the Tax Assessor the first of each year. The tax is levied on the assessed value of the property, which, by law, is established at 40% of fair market value. The amount of tax is determined by the tax rate (mill rate), which is levied by various entities (county, school, and state). (One mill is equal to \$1.00 for each \$1,000 of assessed value, or .001) The millage rate is set each year by the County Commissioner and the School Board. The office also collects revenue from hotel/motel taxes and tags and titles.

The Board of Elections was created in 2001 by the Georgia State Legislature. The legislations requires that two appointments be made from each of the two major political parties as determined by votes received in the most recent presidential election. The County Commission also has one appointment. Board members serve staggered terms. The Board is responsible for preparing all election materials, including the certification of qualified individuals, ballot preparation and the actual conducting of elections and certification of results.

The Clerk of Courts is responsible for all the civil and criminal filings made in the White County Superior Court. It also serves as the official recorder of real estate documents for the County maintaining records of deeds, plats, etc. The Clerk also provides the jury pool for Grand Jury and civil and criminal trials.

The Superior Court holds criminal and civil court in the White County Courthouse. White County is part of the Enotah Judicial Circuit, which also includes Lumpkin, Towns and Union Counties. There are two Superior Court Judges for White County.

The Magistrate Judge is an elected official in White County. The Magistrate Court office processes various criminal and civil matters and small claims up to \$15,000. The criminal section issues warrants, hold bonds, committal, dispossession and first appearance hearings for certain offenses. The civil section issues notices of foreclosure, garnishments and Fi-FA's.

The Judge of the Probate Court is an elected official. The office is the custodian of vital records that allows the issuance of certified copies of birth and death certificates. The office maintains marriage records and copies of the legal organ. The Probate Court is responsible for the probate and administration of estates along with guardianships of minors and incapacitated adults. The court also handles misdemeanor traffic violations for the county. The Probate Judge may also performs marriages.

The Juvenile Court handles all cases involving delinquent, unruly, and deprived children, as well as cases involving custody, child abuse, abortion notification, and termination of parental rights, and provides probation supervision of children on probation. Juvenile court also handles all traffic cases involving children under the age of 17, regardless of the jurisdiction of the incident.

An elected official, the District Attorney investigates criminal charges in the Enotah Judicial Circuit. The District Attorney represents the citizens of White County in the prosecution of all criminal cases in a manner, which best protects the public and best preserves justice for each citizen. The prosecution of any criminal case includes the presentation of a criminal case to the Grand Jury, and the litigation of a criminal case from the arrest of an accused throughout the appellate process conducted in each case.

The White County Coroner is an elected official in White County. The office responds to and investigates deaths at the request of local law enforcement officials. The office issues death certificates and maintains all county records as required by state law.

The White County Senior Center is located on Helen Highway adjacent to the Mauney Building. The center was constructed with county fund and fund assistance through a Community Development Block Grant. The Senior Center serves hot meals, provides transportation to the center, medical offices and facilities and drug stores. The senior center coordinates the Meals on Wheels program and provides activities and programs for senior citizens. Recently, the center reported a 65% increase in congregate clients and are in need of additional space for activities and administration.

#### City of Cleveland

The City of Cleveland has an elected mayor and city council members. City Hall is located at 85 South Main Street and houses city administrative offices (as well as the police department and as a fire hall. City council chambers are located in the city annex across the street from city hall. Administrative space in the building is slightly than 1,000 square feet for a total of six employees. There is no additional space available in the building, however, there is a need for additional administrative space. A couple of possibilities exist for additional space. The first possibility is the construction of a new city hall at another location. The second possibility could occur if the county relocates the fire station in city hall, then the city could make use of the space.

Cleveland City Hall also houses a fire station in the rear of the building. The department contains approximately 1,000 square feet for storage and parking two fire engines. The department mainly relies on the services of volunteers, but also employs two part-time firefighters. Future needs for the department cannot be determined until a decision is made whether the city and county plan to construct a new fire station in Cleveland. This ISO rating inside the city is six. Fire hydrants are located every 500 feet.

The public works department includes maintenance (shop) activities, streets, sanitation and water/sewer. The department is located on Jackson Heights and consists of approximately 10,000 square feet in two buildings as well as a shed. The department employs a total of sixteen persons. The facility is currently adequate for daily activities. However, the department is in need of some administrative space (about 500 square feet) and a storage area.

## City of Helen

The City of Helen recently relocated its city hall from downtown to the old Helen Baptist Church in 2005. The city renovated the building into 10,000 square feet of administrative offices, city council chambers, meeting and kitchen facilities and a police department. In addition storage facilities were constructed adjacent to the city hall. These excellent facilities are adequate to serve the city for the next fifteen years. Though the city currently has no definite plans for the 5,000 square foot space vacated in downtown, the facility is available for other city functions if needed.

The Public Works Department is housed in 4,000 square foot building on Unicoi Street. The building was constructed in 2001 and is adequate space for the department for the next ten years.

The Helen Fire Department constructed a new building in 2002. It is managed by one full-time firefighter, two EMTs and numerous volunteers. The fire station hosts three fire engines and one EMS vehicle. The department serves the City of Helen and a portion of unincorporated White County. Fire hydrants within the city are located every 500 feet. The city has an ISO rating of six.

The Helen Welcome Center houses the Convention and Visitors Bureau Office. Close to two million visitors come to the City of Helen throughout the year. The 4,500 square foot facility was constructed in 1997 with funds from the Economic Development Administration. The Welcome Center provides a wide array of information to visitors as they arrive in the city. In addition to extensive promotion, the CVB provides numerous services for travel groups interested in visiting the area.

**LIBRARY AND OTHER CULTURAL FACILITIES**

LIBRARIES

Library Facility Inventory

An inventory of library facilities is provided in the table below. The current (2005) inventory of library space is 10,000 square feet. All of the total library space is located within city limits.

**INVENTORY OF LIBRARY FACILITIES, 2005**

<b>Name and Type of Library</b>	<b>Location</b>	<b>Building Square Footage</b>	<b>Number of Volumes</b>
City of Cleveland Branch	City of Cleveland	6,000	28,679
City of Helen Branch	City of Helen	4,000	16,745
Total		10,000	45,424

Library Service Area

Library facilities act as a countywide system. Everyone has access to all holdings regardless of their location in any given library. Therefore, the service area for libraries is the entire county, including all municipalities.

Library Existing Level of Service

The existing level of service for libraries can be determined on the basis of square feet of library facilities per population in the service area. The existing level of service for library facilities is shown below. Because the service area is countywide, the level of service is also determined on the basis of the countywide population.

**EXISTING LIBRARY FACILITY LEVEL OF SERVICE**

<b>Level of Service</b>	<b>Square Feet</b>	<b>2005 Population</b>	<b>2005 Existing Level of Service, Library Facilities</b>
Countywide	10,000	24,473	0.392 sq. ft. per capita

Setting the desired level of service (i.e., the “level of service standard”) depends on a number of factors. In addition, in setting the desired level of service, local governments must consider the “price tag” associated with such policy decision. Frequently, local governments set a level of service standard for a given facility based on the existing level of service, so as not to create any such deficiencies that they are then obligated under legal principles to correct.

**Projection of Needs for Library Space**

The following two tables projects library space needs based on two possible levels of service standards: (1) the existing level of service of 0.392 square feet per capita; and, (2) a higher level of service of 0.6 square feet per capita, which is recommended as a standard by the American Library Association.

**PROJECTION OF LIBRARY FACILITY NEEDS, 2005-2025  
AT EXISTING LEVEL OF SERVICE  
(0.392 SQUARE FEET PER CAPITA)**

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Total County Population	25,570	31,865	40,670	51,910	64,014
Square Feet Needed (@ 0.392 per capita)	10,000	12,491	15,943	20,349	25,093
Square Feet To Add To 2005 Building Stock	--	2,491	5,943	10,349	15,093

**PROJECTION OF LIBRARY FACILITY NEEDS, 2005-2025  
AT EXISTING LEVEL OF SERVICE  
(0.6 SQUARE FEET PER CAPITA)**

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Total County Population	25,570	31,865	40,670	51,910	64,014
Square Feet Needed (@ 0.6 square feet per capita)	15,342	19,119	24,402	31,146	38,409
Square Feet To Add To 2005 Building Stock	5,342	9,119	14,402	21,146	28,409

The Library Director recommends a level of service standard for libraries of 0.6 square feet per capita (countywide population).

**Library Improvement Options in Relation to 2010, 2015, and 2025 Needs**

At the recommended level of service standard of 0.6 square feet per capita (countywide population) for library facility space, there is an immediate deficiency of 5,342 square feet. By 2010, at the recommended level of service (0.6 square feet per capita), the county will need to add 9,119 square feet of library space. By 2015, at the recommended level of service (0.6 square feet per capita), the county will need to add 14,402 square feet of library space. If the county were to add library space only to meets its 2010 needs, it would be faced with the need to add more library space during the 2010-2015 period. Since library construction is a major undertaking, it is recommended construction of a facility that will meet projected needs through 2015. This would leave a need to construct a smaller, additional facility between 2015 and 2025 to meet the twenty-year (2025) demands.

The time frame for meeting future facilities needs is flexible. The county can address needs on a five-year, ten-year, fifteen-year, or twenty-year horizon. It appears to make the most sense to build based on “economies of scale.” That is, a facility project might make good economic sense only if it reaches a certain threshold. For instance, it might not be economically feasible to build a small library, because then the county would have to build another small one or add on to a facility within the next five years.

## OTHER CULTURAL FACILITIES

The White County Historic Society operates a museum of local history inside the old historic courthouse and host monthly meetings and programs. The society is serviced mostly by volunteers.

The Sautee-Nacoochee Center is host to the Sautee-Nacoochee Community Association (SNCA). The association is a non-profit community organization “dedicated to nurturing creativity and protecting the natural and historic resources in the Sautee and Nacoochee Valleys and surrounding areas. The association maintains the center, which is a restored rural school house and gym listed on the National Register of Historic Places. Both of these facilities are in need of improvements, particularly the gym. Fund raising activities are underway to fund the maintenance and improvements to these facilities.

The association and facility hosts a community theater, local history museum, folk pottery museum, art studio, gallery, environmental studies room, and conference facilities. The outdoor grounds at the center host a community playground, walking trail, athletic fields and an outdoor performing arts venue. SNCA and the center are recognized as one of “the Best 100 Small Arts Towns in America.”

In addition to the center, SNCA is developing and managing the Bean Creek Heritage Site. The site will commemorate the African-Americans who labored as slaves in the Sautee and Nacoochee Valleys. Many descendants of these slaves still reside in the Bean Creek Community and in Cleveland. The Heritage Site project will host one of the most important historic structures in White County, a slave cabin constructed in about 1850. Restoration efforts on the cabin is currently taking place. The center is seeking both public and private funds to restore the cabin, establish a museum and exhibits for educational tours, as well as developing a nature preserve.

## **EDUCATIONAL FACILITIES AND SERVICES**

The White County Public School System currently operates 6 public schools from Pre-K to high school. The staffing and enrollment figures as of May 31, 2005 were:

<b>SCHOOL</b>	<b>GRADES</b>	<b>ENROLLMENT</b>	<b>CERTIFIED STAFF</b>	<b>SUPPORT STAFF</b>
Jack P. Nix Primary	PK – 2	627	43	47
White County Intermediate School	3 – 5	651	42	27
Mount Yonah Elementary School	K-5	511	39	35
White County Middle School	6-8	887	60	29
Ninth Grade Academy	9	291	18	12
White County High School	10 - 12	775	50	20

In the 2005-2006 school year, PK-12 ending enrollment was 3,742. In the previous year, the system graduated 239 students. This represents a high school completion rate of 79.9%. The per-Full Time Equivalent (FTE) student expenditure for 2004-2005 was \$7,525 and the pupil/teacher ratio was 16:1.

### **Personnel**

The total system employment is just over 400. This total represented 204 certified teachers, 64 support staff and administrators. Average years of teaching experience was 14.05. About 70% of the certified staff members hold advanced degrees. Approximately 27% have Master's Degrees, 41% have Education Specialist Degrees, and 2% have Doctorate Degrees. All certified staff receive a local salary supplement and participate regularly in professional development activities. Average PK-12 teacher annual salary was \$43,728.

### **Accreditation**

All White County schools are accredited by the Southern Association of Colleges and Schools (SACS) and by the Georgia Accrediting Commission (GAC). SACS describes accreditation as a desirable overall level of education provided to students by capable administrators and qualified teachers who are adequately supported by a community concerned about the future of their children.



## Facilities

Within the last five years, an elementary school (2004) and a intermediate school (2001) have been built. The old elementary school has been completely renovated to open the Ninth Grade Academy in 2004. Finally, in 2005 a new wing was constructed for the middle school.

In order to relieve overcrowding, White County voters approved by a 1% local sales tax increase for the construction of a new elementary school to be located on Westmoreland Road just off of U.S. 129 south. An agricultural facility for the high school is also under construction. Other future facility needs should include a new middle school and a new administrative facility to house the Board of Education staff.

Custodial and maintenance services are considered outstanding. School facilities are made available to community organizations by arrangement with the Principal.

All schools have an internal computer network (LAN) that connects classrooms with the central school office and with other schools. Teachers have internet and e-mail service in the classrooms.

## School Food and Nutrition Program

The School Food and Nutrition Program is directed by a Registered Dietitian who has a Specialist Degree in Education. At the school level, each cafeteria has a highly skilled staff and a certified manager. Each school offers both a breakfast and lunch program that provides students and school employees with delicious and nutritious meals. In 2000-2001, the Nutrition Program served more than 550,000 meals. As an indication of the quality of the program, the student participation (grades K-12) was about 86%.

## Transportation

The system utilizes modern buses to transport students. County school buses travel more than 1,000 miles each day transporting students to and from school. Transportation is available to all students living more than one and one-half miles from their assigned school. Specially equipped buses are provided for the handicapped. School bus drivers are required to have annual physical examinations, participate in bus driver training and annual safety up-dates, and must hold a special Commercial Driver's License. All buses must pass rigorous annual safety inspections and random quarterly safety inspections.

## Financial Information

The 2004 school operating budget was over \$29-million. Approximately 40% of these funds are generated locally. The White County 2005 school tax millage rate is 40% of \$13.21 per \$1,000 of assessed property value. Offering a quality education at the lowest possible tax rate is a high priority for the White County Board of Education.

## Curriculum and Instruction

The curriculum for White County Schools is based on the Georgia Quality Core Curriculum, which defines instructional objectives for the subject areas of fine arts, foreign languages, health, language arts, mathematics, physical education, science, and social studies. In the elementary grades the emphasis is on basic skills acquisition for each child. In the middle school, those basic skills are expanded and emphasis is placed upon the transition from childhood to adolescence. In the upper grades refinement of skills and subject matter are emphasized. The high school offers a college preparatory and a vocational diploma based upon the course of study that the students and their parents choose.

### Elementary Grades

In addition to regular classroom teachers, students in grades kindergarten through three are served by the Special Instructional Assistance Program. Teachers in this program provide activity-based instructional units that require the use of hands-on, manipulative materials for students. This program also requires that teachers work closely with parents to ensure student success. The Federally funded Title 1 Program and remedial education services are also provided in elementary grades.

### Middle Grades

Interdisciplinary teams of middle grades teachers are responsible for teaching the academic areas of language arts, mathematics, science, and social studies. Exploratory courses allow students an opportunity to study foreign language, sample high school vocational courses, and develop fine arts. The middle grades are designed to allow students a smooth transition from the self-contained classroom of the elementary school to a departmentalized high school.

### High School Grades

At the high school level, White County Schools provide high quality instruction that allows students to pursue either a college preparatory or technical school preparatory program. White County Schools have a close working relationship with local colleges and industry. Qualified students may take college courses that meet both college and high school graduation requirements.

Teachers at White County High School have been working with North Georgia Technical College to develop the widely-acclaimed Tech-Prep Program. This program provides a seamless curriculum transition from high school to technical school in several areas of technical education. A related program, designed to assist in the transition from school to work, is the Youth Apprenticeship Program.

## Interactive Distance Learning Laboratory

White County High School has an interactive distance learning laboratory. This includes state-of-the-art interactive audio-video transmitting and receiving equipment. It allows our students to connect interactively to a worldwide distance learning network. Students can take college or high school courses using this innovative technology. Also several courses and seminars are offered to the community throughout the year.

## Exceptional Student Education

The special education program provides the following services through the regular school program (main streaming) and/or through special education classes: gifted, speech and language, learning disabled, behavioral disorders, health impaired, mildly mentally handicapped, moderately mentally handicapped, severely mentally handicapped, related vocational instruction and hospital-homebound. The program has the services of a psychologist, paraprofessionals, a secretary, and a director.

## Student Support Services

Each school in White County has the services of at least one counselor. The middle and high school have two counselors. Student support services are also provided by a social worker as well as with the Family Connections Program. Nurses are at all schools County Elementary, Middle, and High Schools and a School Psychologist works within the system.

## Testing Information

Student academic achievement is the major goal of the White County School System. Historically, students have performed well above average on tests developed specifically for students in Georgia. Our students compare favorably on nationally formed tests.

The results shown below are national percentile scores for the norm-referenced testing administered during the 2000-2001 school year. Also, the results for the Scholastic Assessment Test and the Georgia High School Graduation Test are provided along with the results of the newly-implemented Georgia Criterion-Referenced Competency Test (CRCT).

Percentage of Students Meeting and Exceeding Standard	Title I	Non-Title I
Criterion Referenced Competency Test (CRCT)		
Mathematics	89.3%	74.0%
Reading	89.7%	86.9%
English Language Arts	87.5%	81.1%
Science	93.0%	87.4%
Social Studies	92.4%	85.7%
Georgia High School Graduation Test (GHSGT)		
Mathematics	0.0%	90.0%
English/Language Arts	0.0%	96.1%
Science	0.0%	67.5%
Social Studies	0.0%	86.9%

## Post-Secondary Data

Graduates Entering Georgia Public Colleges			Graduates Entering Georgia Public Colleges and Requiring Learning Support (LS)		
		Number	Percent Of Graduating Class	Number Requiring LS	Percent of Those Attending Georgia Public Colleges
2003 Graduates Entering in 2003-2004	System	61	30.5%	13	21.3%
	State	29,512	40.0%	5,327	18.1%
2002 Graduates Entering in 2002-2003	System	54	32.0%	11	20.4%
	State	27,333	38.7%	5,119	18.7%

Graduates Entering Georgia Public Technical and Adult Schools					
		Entering 2004-2005		Entering 2003-2004	
		Number	Percent	Number	Percent
2003 Graduates	System	19	9.5%	--	--
	State	5,618	7.7%	--	--
2002 Graduates	System	--	--	26	15.4%
	State	--	--	5,875	8.3%

## HOPE Scholarship Eligibility

Number of 2005 Graduates	180
Number Eligible	106
Percent Eligible	58.9%

For more information on White County Schools: [www.white.k12.ga.us/](http://www.white.k12.ga.us/)

### Area Technical College

North Georgia Technical College has two campuses in close proximity to White County. The main campus is located in Clarkesville. In 1943, the State Board of Education realized the need for adequate trade training and vocational opportunities and approved a plan for a system of state trade schools. The North Georgia Trade and Vocational School at Clarkesville was the first school officially established under this plan. The Habersham County Board of Education deeded some 300 acres of land on the site of the old Ninth District A & M School to the state to establish the school at Clarkesville.

Blairsville in 1998 celebrated the opening of the Blairsville Campus of North Georgia Technical College, located on GA 515. This is a state-of-the-art \$5.5-million facility with 48,000 square feet of classrooms, labs and administrative space. The latest technology is found in every program.

Associate Degree Programs include:

- Applied Business Technology
- Computer Information Systems
- Professional Chef

Diploma Programs offered at the North Georgia Tech include:

Accounting	Applied Business Technology
Applied Manufacturing Technology	Business and Office Technology
Computer Information Systems	Hotel/Restaurant/Travel Management
Industrial Maintenance Technology	Medical Assisting
Practical Nursing	Professional Chef

Technical Certificates of Credit are offered for:

Air Conditioning Technician's Assistant	Basic Cooking Skills	Basic Data Entry	Basic Kitchen Skills
Catering Management	Certified Customer Service Specialist	Certified Manufacturing Specialist	CISCO Specialist
CNC Set Up and Programming	Emergency Medical Technology	Gas Metal Arc Welding	Health Care Technician
Leadership Development	Medical Receptionist	Microcomputer Applications	Office Accounting Assistant
Restaurant and Dining Room Services	Restaurant Baking		

Services offered are: Financial aid, HOPE Scholarships, Career planning, Job Placement, Internet-based instruction, Video-Conferencing, Satellite-based instruction.

North Georgia Technical College maintains a close relationship with the business and industrial community to keep in step with the latest operating equipment and the skills needed to meet the requirements of each industry. Almost 100% of the students qualify for Georgia's HOPE Scholarships. The diploma program is divided into three areas: business, technical and health.

North Georgia Technical College also operates a White County Learning Center located on Georgia 115 East.

<http://www.northgatech.edu>

### Area Senior Colleges

#### North Georgia College and State University

Located 20 miles west of Cleveland in Dahlonega, Georgia, North Georgia College and State University is a Senior and Master's unit of the University System of Georgia. The total enrollment in 2005 was 4,555 students. [www.ngc.peachnet.edu](http://www.ngc.peachnet.edu)

#### Truett McConnell College

Truett-McConnell College stands on more than 200 acres of prime mountain land one mile east of the town square in Cleveland, Georgia. After more than half a century as a two-year college, in December 2002 the institution was approved by its accrediting agency to offer four-year degrees. The first two bachelor's degree programs were initiated in the fall of 2003: a Bachelor of Arts in Music and a Bachelor of Arts in Music with a concentration in church music. Enrollment in the two degree programs far exceeded expectations. In December 2005, the college was approved to begin two additional bachelor's degree programs: a Bachelor of Arts in Christian Studies and a Bachelor of Science in Education with a concentration in early childhood education.

#### Gainesville College

Located 35 miles south in Oakwood, Georgia, Gainesville College was recently elevated from a two-year unit of the University System of Georgia to a four year college. The school has a 2004 total enrollment of 5,000. <http://www.gc.peachnet.edu>

#### Brenau University

Located 35 miles south in Gainesville, Georgia, Brenau University is a Senior and Master's+ private independent non-profit college. Total enrollment in 2005 was 1,600. Brenau College operates a satellite school in Blue Ridge, Georgia. [www.brenau.edu](http://www.brenau.edu)

#### Piedmont College

Located 15 miles east in Demorest, Georgia, Piedmont College is a Senior and Masters private independent non-profit college. Total 2005 enrollment was 2,000. [www.piedmont.edu](http://www.piedmont.edu)

## Georgia State University

Located 74 miles south of White County in Atlanta, Georgia State is a Senior and Doctorate unit of the University system of Georgia. Enrollment in 2005 was 26,000. Doctorate degrees are awarded at this University. [www.gsu.edu](http://www.gsu.edu)

## Georgia Institute of Technology

Georgia Tech, located in Atlanta 70 miles south of Cleveland, is a residential and coeducational Senior and Doctorate unit of the University system of Georgia. It is a nationally-ranked engineering school and research institute. Enrollment totaled 15,575 in 2004. The average freshman SAT score at Georgia Tech is approximately 1,300 - the highest of any public university in the country. [www.gatech.edu](http://www.gatech.edu)

## University of Georgia

Georgia's largest university is located 55 miles south of White County in Athens. The University of Georgia is a Senior and Doctorate unit of the University System of Georgia. U.G.A. offered business and liberal arts degrees to a 2004 enrollment of 34,000 and has a full-time faculty of 2,000. [www.uga.edu](http://www.uga.edu)

## Toccoa Falls College

An independent non-profit private Senior college located 35 miles east at Toccoa Falls, Georgia. Total enrollment was 1,000 in 2004. [www.toccoafalls.edu/](http://www.toccoafalls.edu/)

## Junior Colleges - Two-Year

### Young Harris College

Located 25 miles north of Cleveland in Young Harris, Georgia, Young Harris College is a two-year, coed, residential, liberal arts college affiliated with the United Methodist Church. Total enrollment in 2003 was 622. This figure includes 510 students living in residence halls and 112 local commuting students.

Young Harris College provides 39 areas of study, which lead to an Associate of Arts, Associate of Fine Arts, or an Associate of Science degree. The student/faculty ratio is 17/1 with 30 full-time and 4 part-time faculty members. In 2001, 75% of the students received financial aid. Ninety-two percent of entering Georgia freshmen were HOPE scholars. Young Harris College will cover 100% of a student's demonstrated financial need if the financial aid application is received by May 1. There are 24 students enrolled as Post Secondary Option students. These are local high school students who take college level classes under a State grant.

The Institute for Continuing Learning (ICL) at Young Harris College offers adult education classes to the public with no age limit. Classes range from Aerobics, Antiques, Computers, Genealogy, Investing, Music, Spanish, Writing, and more. ICL Enrollment has grown to over 500. [www.yhc.edu](http://www.yhc.edu)

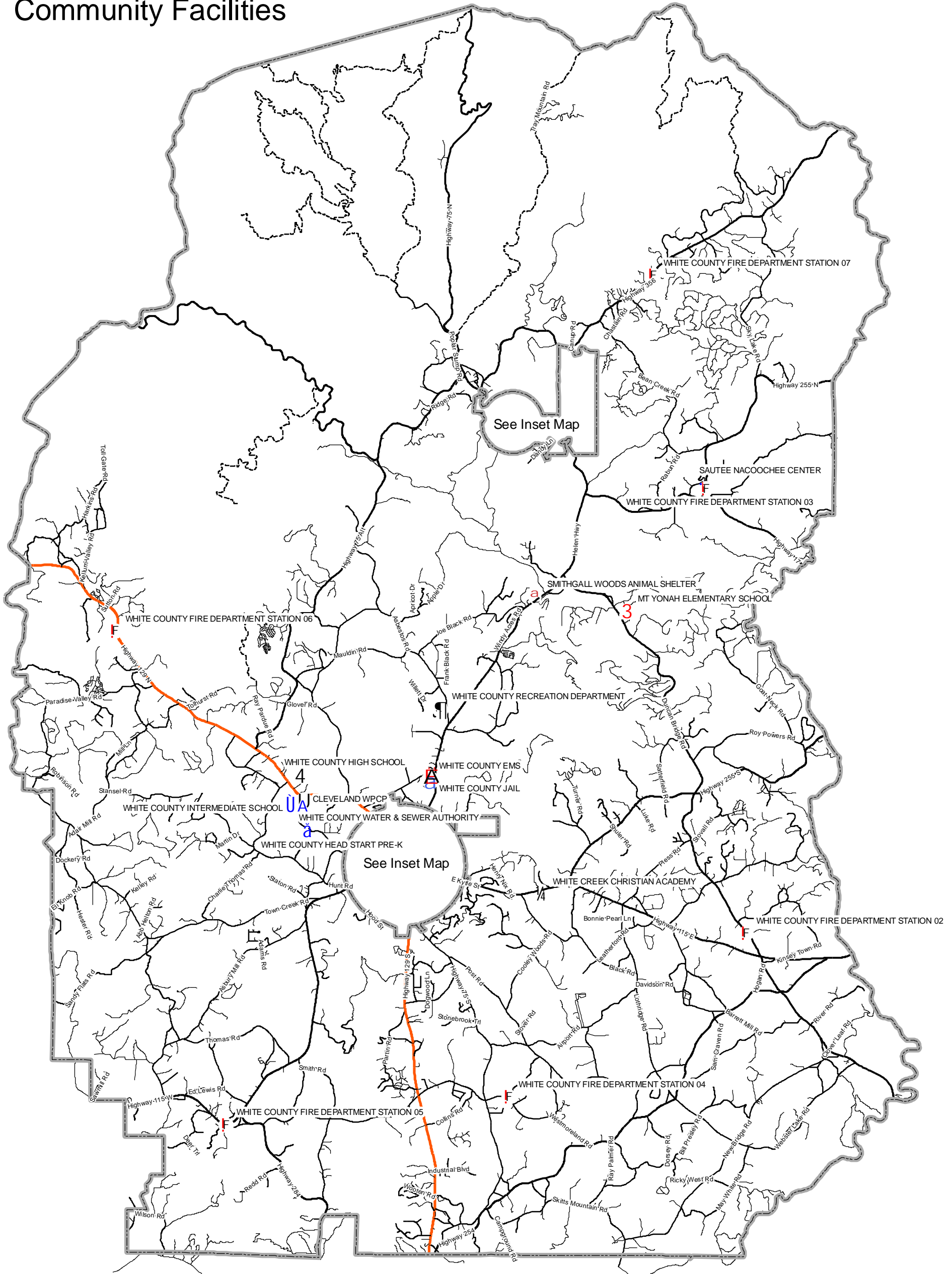
## **ASSESSMENT**

- There is an ample water supply for approximately the next five years, increased permit withdrawals and treatment capacity will be needed beyond. There is also a need for increased raw water storage and treated storage for all three local governments in White County.
- There is very little sewer capacity available for growth. Capacity is severely limited due to an antiquated treatment facility and an aging collection system.
- The cumulative placement and use of septic systems in higher density areas in the county may cause long-term water quality problems, especially in areas where extremely steep slopes exist.
- There is an immediate need for space in the Sheriff's Department. By the year 2020 the department will need an additional space of over 22,000 square feet for offices and detention.
- Based on projected population for Cleveland, to maintain the same level of service the city will need to employ and additional five officers (total 16 officers) at the year 2010 and 23 total officers by the year 2020. This does not include any clerical positions that may be needed for administrative purposes. The Police Department will need to increase their space need to 2,200 square feet by 2010 and to 3,100 square feet by 2020.
- Fire station # 1 in Cleveland should be replaced/relocated immediately. An eighth fire station should be located somewhere in the south part of the county along U.S. 129. Based on projected growth the county will need three additional stations by the year 2020. Additional full-time personnel are needed as well.
- The county health department severely limited due to extremely limited space in their current facility. A new health department facility is needed to accommodate the current population as well as the anticipated population growth. Such a facility should also include enough space to adequately house mental health services as well.
- With the anticipated increase in the elderly population in White County and its cities over the next twenty years, the need for facilities for assisted living and nursing homes will increase.
- White County has an extremely low crime rate, which makes it an attractive place to live and visit. Anticipated Federal and State Homeland Security initiatives more than likely will have an impact on Public Safety personnel, facilities and equipment.



- As the mean age of the population increases, so does the number of requests for emergency response.
- The County Courthouse is at capacity for courts and administrative space and requires either expanded or new facilities. The county should address the needs as they are presented to the Board of Commissioners.
- The City of Cleveland is in need of administrative space to adequately house City Hall.
- By 2025, the county will need to add 118.1 developed acres of parks and recreation land to its inventory. Some of this need can be offset by the presence of state and federal lands for recreational purposes. Passive recreation is excellent for citizens and visitors due to the abundance of the mountains and streams in the state and federal lands in White County.
- The student population growth will be accommodated per the White County Board of Education Five-Year Facility Plan as required by the State Board of Education.
- Opportunities for higher education, bachelor degrees, now exist in White County with the expansion of the curriculum at Truett-McConnell College.
- There is an immediate need for an additional 5,000 square feet for library space in White County. Growth projections show that space needs for the library will increase by more than 20,000 square feet of additional space by the year 2020.
- Civic or community meeting space is extremely limited in the county. Beside the facility at Unicoi State Park, there is not a facility available that could host a large convention, concert, meeting, etc.

# White County Community Facilities



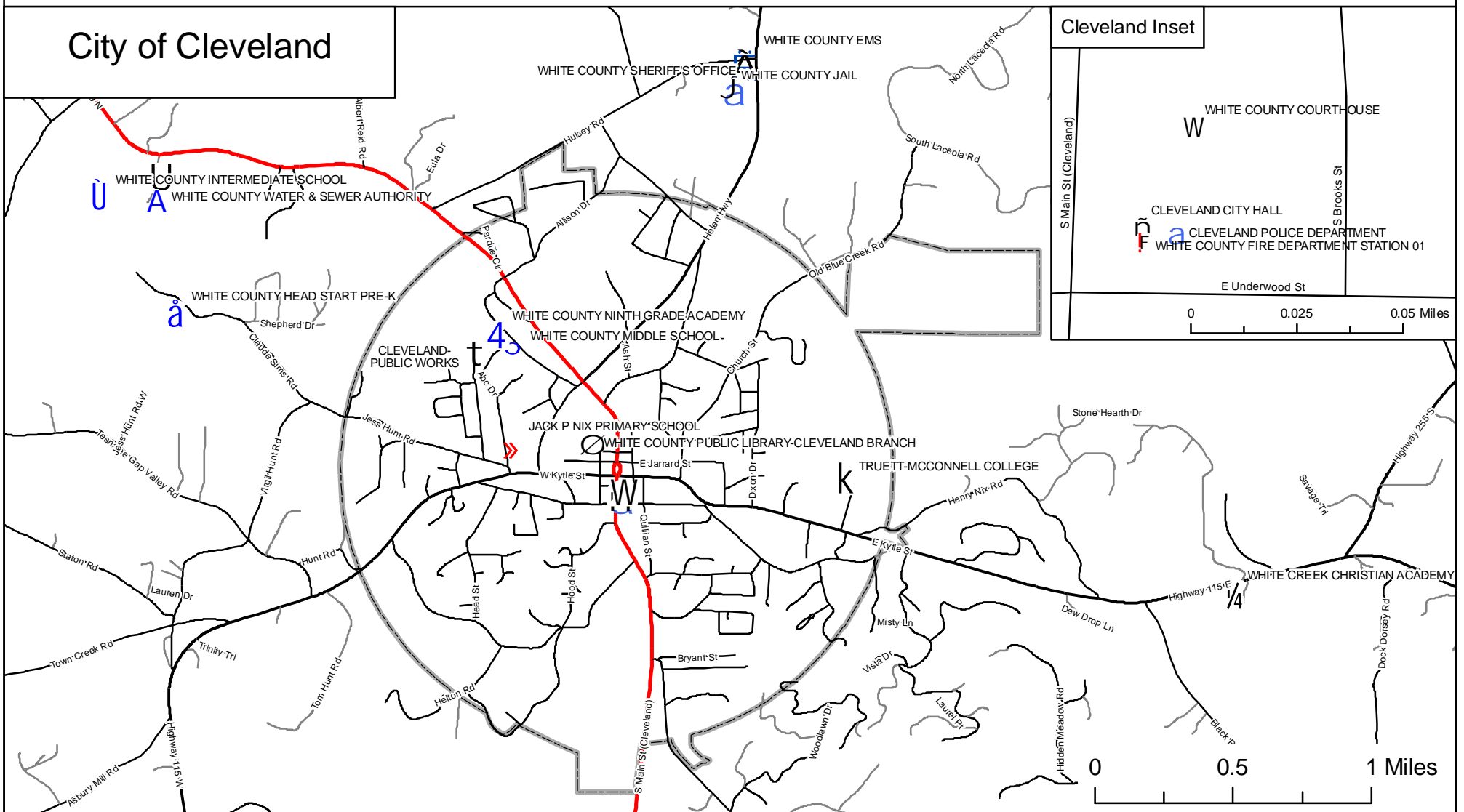
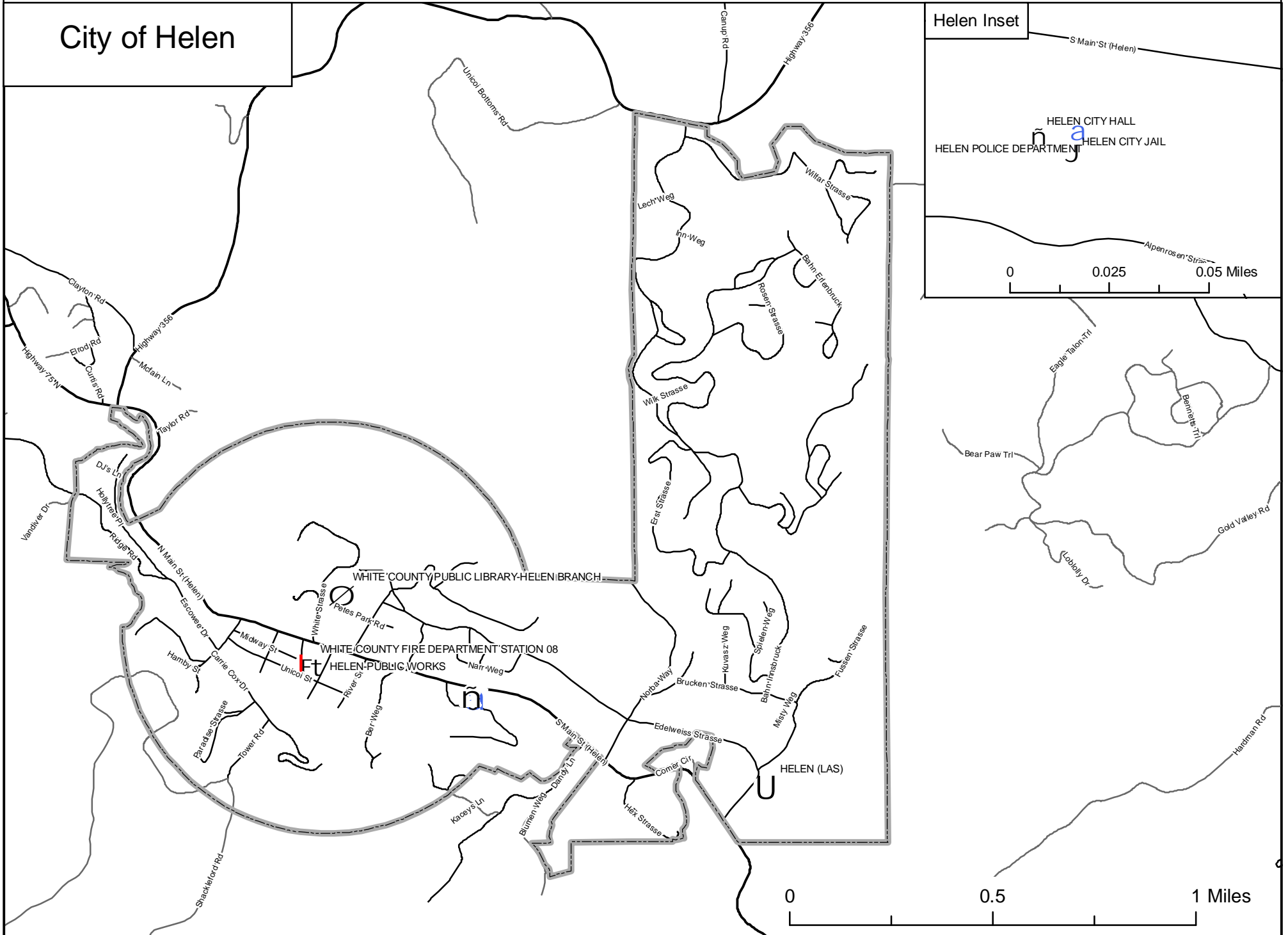
## Legend

Community Facilities	EMS Station	Recreation Center	Ninth Grade Academy	Pre-K
Courthouse	Fire Station	Water Authority	Intermediate School	Private School
City Hall	Animal Shelter	Water Treatment Plant	Middle School	City Limits
Law Enforcement	Library	College	Elementary School	County Boundaries
Jail	Community Center	High School	Primary School	Roads

Map Produced By:  
White County Mapping  
March 29, 2007

Disclaimer:  
Information depicted herein is for reference purposes only  
and is compiled from best available sources. White County  
makes no warranty concerning its accuracy and completeness.

# White County: Community Facilities Inset Maps



Legend						
Community Facilities		EMS Station		Community Center		High School
		Public Works		Recreation Center		Ninth Grade Academy
		Fire Station		Water Authority		Intermediate School
		Animal Shelter		Water Treatment Plant		Middle School
		Library		College		Elementary School
						Primary School
						Pre-K
						Private School
						City Limits
						County Boundaries

Map Produced By:  
White County Mapping  
March 29, 2007

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## CHAPTER NINE

### TRANSPORTATION ELEMENT

#### Transportation Overview

According to the U.S. Census Bureau's 2000 Census Data, White County has an estimated population of 19,944 and is comprised of some 242 square miles. The density per square mile for this area is approximately 82.6 persons and 42.2 housing units. The City of Cleveland, likewise, has a total population of 1,907 persons with a total square mileage of approximately 3.1 miles. The density per square mile for Cleveland is 623.9 persons and 260.7 housing units. The City of Helen has a total population of 430 persons with a total square mileage of approximately 2.1 miles. The density per square mile for Helen is 221 persons and 153.3 housing units. The estimated work-eligible population (16 years and over) for White County is 15,824 persons; of those individuals 9,954 persons are in the labor force.

In evaluating the transportation network of a community it is important to evaluate certain economic and social patterns that impact such infrastructure. For this reason, a list of relevant employment and commuting census data is listed in the tables below. These tables provide the reader with an understanding about the uses of White County's transportation network and the factors, which impact this network.

*Table 9.1* provides a comparison between White County and statewide statistics for place of work for workers. It is important to recognize that the majority of White County's work population (52%) remained inside the county while 47% worked outside the county. Finally, one percent (1%) of the total eligible workers traveled outside of the state for work. By knowing where people are working transportation planners are able to better understand traffic patterns.

**Table 9.1**

**P26. PLACE OF WORK FOR WORKERS 16 YEARS AND OVER--STATE AND COUNTY LEVEL [5]**  
**- Universe: Workers 16 years and over**

	<b>Georgia</b>	<b>White County</b>	<b>Cleveland</b>	<b>Helen</b>
Total:	3,832,803	9,463	884	209
Worked in state of residence:	3,737,030	9,356	884	207
Worked in county of residence	2,240,758	4,951	637	152
Worked outside county of residence	1,496,272	4,405	247	55
Worked outside state of residence	95,773	107	0	2

U.S. Census Bureau  
Census 2000

Furthermore, *Table 9.2* helps to define how people chose to travel to work. This table reflects the commute travel modes for White County. Not surprisingly, 93.3% of all working residents traveled to work by vehicle in 2000. Of those traveling to work by vehicle, 85.5 % chose to drive alone while 14.5% chose to carpool, 2 % chose to walk or ride a bike to work, 0.69% chose other means, and 3.7% worked from home. Public transportation consisted of only 0.19% of the traveling population. Of these individuals, 39.9% chose to ride the bus and 61.1% chose to use a taxicab.

**Table 9.2**  
**P30. MEANS OF TRANSPORTATION TO WORK FOR WORKERS 16 YEARS AND OVER [16] -**  
**Universe: Workers 16 years and over**

	<b>Georgia</b>	<b>White County</b>	<b>Cleveland</b>	<b>Helen</b>
Total:	3,832,803	9,463	884	209
Car, truck, or van:	3,525,972	8,827	737	209
Drove alone	2,968,910	7,550	644	177
Carpooled	557,062	1,277	93	152
Public transportation:	90,030	18	0	25
Bus or trolley bus	59,355	7	0	0
Streetcar or trolley car (publico in Puerto Rico)	843	0	0	0
Subway or elevated	20,116	0	0	0
Railroad	1,762	0	0	0
Ferryboat	382	0	0	0
Taxicab	7,572	11	0	0
Motorcycle	3,055	13	0	0
Bicycle	5,588	0	0	0
Walked	65,776	191	74	22
Other means	33,396	65	23	0
Worked at home	108,986	349	50	10

U.S. Census Bureau  
Census 2000

*Table 9.3* further defines the vehicle occupancy types for workers who chose to carpool. The average carpool for White County was 2-persons per vehicle. The data reveals that 82.1% were 2 person carpools, 13.6% were 3 person carpools, 1.4% were 4 person carpools, 2.0% were 5 to 6 person carpools, and 0.86% were 7 or more person carpools.

**Table 9.3**  
**P35. PRIVATE VEHICLE OCCUPANCY FOR WORKERS 16 YEARS AND OVER**  
**[10] - Universe: Workers 16 years and over**

	<b>Georgia</b>	<b>White County</b>	<b>Cleveland</b>	<b>Helen</b>
Total:	3,832,803	9,463	884	209
Car, truck, or van:	3,525,972	8,827	737	177
Drove alone	2,968,910	7,550	644	152
Carpooled:	557,062	1,277	93	25
In 2-person carpool	406,954	1,049	87	25
In 3-person carpool	87,725	174	6	0
In 4-person carpool	34,505	18	0	0
In 5- or 6-person carpool	18,718	25	0	0
In 7-or-more-person carpool	9,160	11	0	0
Other means (including those who worked at home)	306,831	636	147	32

U.S. Census Bureau  
Census 2000

Tables 9.4 and 9.5 provide a better understanding about the average trip length (time) for workers in White County. Table 9.4 reveals that the average travel time for workers was somewhere between 10-20 minutes in length for those who didn't work at home. The maximum travel time was 90 minutes or more, which comprised only 4.5% of the working population.

**Table 9.4**  
**P31. TRAVEL TIME TO WORK FOR WORKERS 16 YEARS AND OVER [15] -**  
**Universe: Workers 16 years and over**

	<b>Georgia</b>	<b>White County</b>	<b>Cleveland</b>	<b>Helen</b>
Total:	3,832,803	9,463	884	209
Did not work at home:	3,723,817	9,114	834	199
Less than 5 minutes	93,446	405	86	15
5 to 9 minutes	334,403	990	219	57
10 to 14 minutes	511,628	1,325	187	49
15 to 19 minutes	583,820	1,029	61	9
20 to 24 minutes	519,875	829	49	11
25 to 29 minutes	209,374	397	25	3
30 to 34 minutes	535,531	1,355	74	12
35 to 39 minutes	108,867	308	31	6
40 to 44 minutes	132,121	382	22	0
45 to 59 minutes	347,610	1,006	37	26
60 to 89 minutes	234,588	682	22	4
90 or more minutes	112,554	406	21	7
Worked at home	108,986	349	50	10

U.S. Census Bureau  
 Census 2000

Table 9.5 breaks the travel time down further by observing the types of transportation utilized along with travel lengths. Some 54.6% of workers traveling by non-public transportation means, and spent less than 30 minutes traveling to work. Additionally, 24.4% traveled 30-44 minutes, with the remaining 22.9% of the population traveling 45 or more minutes.

**Table 9.5**

**P32. TRAVEL TIME TO WORK BY MEANS OF TRANSPORTATION TO WORK FOR WORKERS 16 YEARS AND OVER WHO DID NOT WORK AT HOME [13] - Universe: Workers 16 years and over who did not work at home**

	<b>Georgia</b>	<b>White County</b>	<b>Cleveland</b>	<b>Helen</b>
Total:	3,723,817	9,114	834	199
Less than 30 minutes:	2,252,546	4,975	627	144
Public transportation	25,868	7	0	0
Other means	2,226,678	4,968	627	144
30 to 44 minutes:	776,519	2,045	127	18
Public transportation	20,442	0	0	0
Other means	756,077	2,045	127	18
45 to 59 minutes:	347,610	1,006	37	26
Public transportation	13,742	0	0	0
Other means	333,868	1,006	37	26
60 or more minutes:	347,142	1,088	43	11
Public transportation	29,978	11	0	0
Other means	317,164	1,077	43	11

U.S. Census Bureau  
Census 2000

*Table 9.6* shows the various times workers leave their homes to travel to work. According to the data, the majority of workers left home between 6:30 and 8:30 A.M. in order to reach work on time. Therefore, the average weekday peak hours of travel would be between 6-9 o'clock in the morning.



**Table 9.6**  
**P34. TIME LEAVING HOME TO GO TO WORK FOR WORKERS 16 YEARS AND OVER [17] - Universe: Workers 16 years and over**

	<b>Georgia</b>	<b>White County</b>	<b>Cleveland</b>	<b>Helen</b>
Total:	3,832,803	9,463	884	209
Did not work at home:	3,723,817	9,114	834	19
12:00 a.m. to 4:59 a.m.	108,019	355	34	7
5:00 a.m. to 5:29 a.m.	102,302	289	16	2
5:30 a.m. to 5:59 a.m.	156,682	401	11	5
6:00 a.m. to 6:29 a.m.	343,349	769	37	9
6:30 a.m. to 6:59 a.m.	422,728	955	33	8
7:00 a.m. to 7:29 a.m.	608,777	1,519	148	40
7:30 a.m. to 7:59 a.m.	610,869	1,703	186	20
8:00 a.m. to 8:29 a.m.	391,849	873	99	5
8:30 a.m. to 8:59 a.m.	187,692	316	21	7
9:00 a.m. to 9:59 a.m.	204,205	436	40	32
10:00 a.m. to 10:59 a.m.	79,927	144	10	22
11:00 a.m. to 11:59 a.m.	34,761	115	23	0
12:00 p.m. to 3:59 p.m.	219,434	672	91	30
4:00 p.m. to 11:59 p.m.	253,223	567	85	12
Worked at home	108,986	349	50	10

U.S. Census Bureau  
 Census 2000

### **Land Use and Transportation**

The high reliance on vehicle use for mobility is to a large extent the result of the separation of land uses. Single-family subdivisions are located in the county in areas distant from employment and activity centers, leading to a greater reliance on vehicles and an increase in vehicle miles traveled, as has been noted in the previous section. Likewise, current housing opportunities within White County are not often located within a convenient walking distance to employment/activity centers, thus requiring vehicle use when public transit is not readily available. Working at home (i.e., home occupations) helps to reduce vehicle travel. Offering opportunities to walk to destinations also reduces vehicle dependency. The density and patterns of land usage has a major bearing on the modes and distances of travel.

White County recognizes the intrinsic relationship between Land use patterns/densities and travel patterns/behaviors. As a result, the county's comprehensive plan supports mixed uses in the downtown central business district, and the mixing of office and commercial uses so that daily lunchtime trips are shortened, reduced, or completely eliminated.

## **A. Inventory & Needs Assessments**

According to the University of Georgia's annual publication of *The Georgia County Guide 2002, 21<sup>st</sup> Edition*, White County has approximately 414.14 miles of roadway. There is 107.83 miles of state route, 282.08 miles of county roads, and 19.37 miles of city streets that comprises White County's roadway network. The report indicates that these numbers represent a 2.8% increase since 1993. Of the total road mileage, 269.67 miles or 65.1% is paved and 144.47 miles or 34.9% is unpaved. This is an increase of 9.5 % in the amount of paved mileage for the county since 1993. The GCG data further reveals that there are 27,488 registered vehicles and 17,425 licensed drivers in White County. These local drivers, along with the countless visitors and tourists who come to White County, traveled some 621,492 daily vehicle miles.

The Georgia Department of Transportation's annual 400-Series Reports for 2002, indicates that the City of Cleveland has approximately 24.65 miles of roadway. There is 5.05 miles of state route, 5.22 miles of county roads, and 14.38 miles of city streets that comprises Cleveland's roadway network. The report indicates that these numbers represent a 14.4% increase since 1992. Of the total road mileage, 23.5 miles or 95.3% is paved and 1.15 miles or 4.7% is unpaved. This is an increase of 16.9% in the amount of paved mileage for the city since 1992. The total daily vehicle miles traveled for 2003 was 75,416.3 miles. This represents a 60.5% increase from 1992.

These same reports indicate that the City of Helen has approximately 7.47 miles of roadway. There is 2.13 miles of state route, 0.35 miles of county roads, and 4.99 miles of city streets that comprises Helen's roadway network. The report indicates that these numbers represent a 14.1% increase since 1992. Of the total road mileage, 7.47 miles or 100% is paved. In 1992, Helen also maintained a 100% paved road status for the community. Therefore there was no increase in the amount of paved roads since 1992 for the City of Helen. The total daily vehicle miles traveled for 2002 was 16,683.6 miles. This represents a 32.8% increase from 1992.

Currently, there are no publicly owned airport facilities within the county, however there is one private airport. There is not a rail system that provides passenger or freight services within the county. Finally, there are no navigable waterway systems or rural transit programs for White County. Sidewalks are only available within the Cities of Cleveland and Helen.

### **Roadways**

In order to determine the adequacy of a roadway system, it is necessary to inventory all road facilities according to how they fulfill two purposes: (1) movement of traffic, and (2) access to property. By evaluating the degree to which a particular roadway serves each of the two basic functions, a functional classification can be determined.

### **Functional Classification**

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a

logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a roadway network. Functional classification is routinely used for planning roadway system development, determining the jurisdictional responsibility for particular systems, and fiscal planning. Therefore, understanding the function of a road is critical to the transportation planning process. The parameters established by a road systems function will greatly impact the need for future improvements to the system.

The U.S. Department of Transportation (USDOT) and the Federal Highway Administration (FHWA) have identified 11 different types of Functional Classifications in the United States. Each individual State’s designated Transportation Agency is responsible for the classification of all roads in the public road system. In Georgia, this responsibility belongs to the Department of Transportation (GDOT). *Table 9.7*, shown below, identifies the different types of classifications used for roadways in Georgia.

**Table 9.7**  
**Types of Functional Classifications**

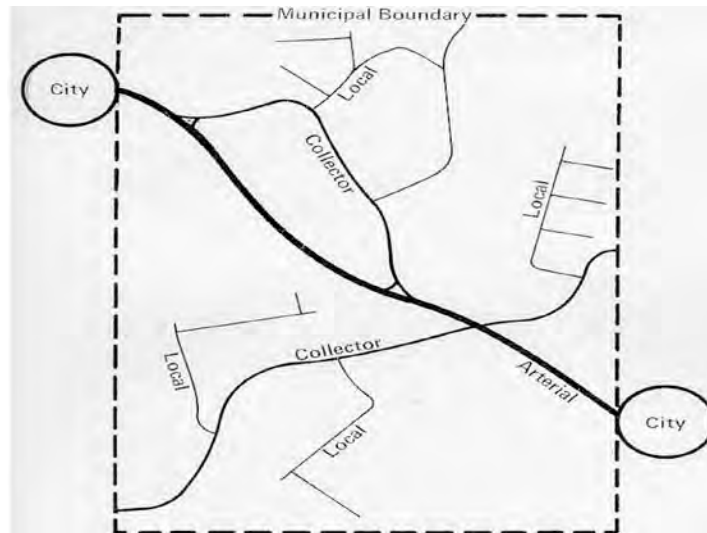
<b>Key For Functional Classification</b>	<b>Stands For</b>
IPA	Interstate Principal Arterial
PAR	Principal Arterial- Rural
MAR	Minor Arterial- Rural
MCR	Major Collector- Rural
NMC	Minor Collector- Rural
LOC	Local- Rural
UFY	Freeway- Urban
UPA	Principal Arterial- Urban
MAS	Minor Arterial- Urban
CST	Collector Street- Urban
LOU	Local- Urban

*Source: GDOT, Office of Transportation Data*

***(Note: For the purpose of this document, only rural classifications are relevant to White County.)***

Generally, most roadways fall into one of four broader categories-- *principal arterial, minor arterials, collector roads, and local roads*. **Arterials** provide longer through travel between major trip generators (larger cities, recreational areas, etc.); and **collector** roads collect traffic from the local roads and also connect smaller cities and towns with each other and to the arterials; finally, **local** roads provide access to private property or low volume public facilities. *Figure 9.1* below, shows a diagram map of these four categories.

**Figure 9.1:** Illustrates Functional Classification Categories



## Arterial Roadways

Generally, the primary function of an arterial roadway is to move traffic thru a defined region or corridor. The most common rural arterial systems are Interstate facilities. These roadways typically provide limited access to the facility and carry large volumes of traffic at higher speeds. Within municipal boundaries and in some rural non-municipal areas, these systems may provide limited access to cross streets and driveways to private property. There are two different types of arterial roadways: principal (major) arterials and minor arterials.

Principal (major) arterials serve major activity centers and major corridors within a community or defined area and typically have the highest traffic volumes. These roadways carry a large proportion of trips with origins and destinations within the surrounding region. They also serve to move thru-traffic into and out of the region or area by connecting them to other communities. These roadways may provide access to private property or be a controlled access facility. Typically, these facilities have 100 to 200 feet right-of-way, four or more lanes, and may be divided by a median or some type of barrier. Speeds are generally high- ranging from 45 mph to 70 mph. Interstates and freeways are the best example of such road systems.

Minor arterials are often classified as streets and highways (non-interstate or freeways) that interconnect with and compliment the principal (major) arterials. These roadways serve trips of moderate length and emphasize more land access than major arterial roads. Minor arterials usually have 80 to 120 feet of right-of-way and have wide intersections with turn lanes. These roadways may have up to five lanes of traffic. However, most facilities in rural areas are

two lanes. Speed limits are moderately high- ranging between 45-65 mph. Most State Routes typically fall into this category. The rural minor arterial road system should, in conjunction with the principal arterial system, form a rural network having the following characteristics:

- Link cities and towns (and other traffic generators, such as major resort areas, that are capable of attracting travel over similarly long distances) and form an integrated network providing interstate and inter-county service.
- Be spaced at such intervals, consistent with population density, so that all developed areas of the State are within a reasonable distance of an arterial highway.
- Provide (because of the two characteristics defined immediately above) service to corridors with trip lengths and travel density greater than those predominantly served by rural collector or local systems. Minor arterials therefore constitute routes whose design should be expected to provide for relatively high overall travel speeds, with minimum interference to thru movement.

**Figure 9.2:**  
*Illustrates  
Arterial Road  
Characteristics*

***Characteristics of Arterial Highways Summary***

- 1. Long Distance**
- 2. Higher Speeds**
- 3. Higher Volumes of traffic – Multilane Facilities**
- 4. Interstate Travel - Interstate System**
- 5. Links Major Cities**
- 6. Statewide and Inter-county Travel**
- 7. Area Service Coverage**

According to the most recent data available for White County, there are five roadways that classify as arterial roads. One is classified as Rural Principal Arterial (PARs) roadways: SR11/US 129. The remaining four are classified as minor arterials. They are *SR 17*, *SR 75*, *SR 115*, and *SR 254*.

**Collector Roadways**

The primary purpose of a collector road is to collect traffic from other roadways in commercial and residential areas and then distribute that traffic onto arterial road systems. Some collector roads serve thru-traffic as well as local traffic, which accesses nearby destinations. Essentially, collectors are designed to provide a greater balance between mobility and land access within residential, commercial, and industrial areas. The makeup of a collector facility is largely dependent upon the density, size, and type of abutting developments. Additionally, due to the emphasis on balancing between mobility and access, a collector facility is better designed to accommodate bicycle and pedestrian activity while still serving the needs of the motoring public.

Collectors typically have 60-100 feet right-of-ways and two to four travel lanes. Collectors intersect with cross-streets and driveways more frequently than arterial systems. Speeds and traffic volumes along these roadways are moderate. Posted speed limits are generally between 30-55 mph.

There are two types of Collectors: major collectors and minor collectors- although there are only slight differences between the two.

Major Collector routes should: (1) Provide service to any county seat not on an arterial route, to larger towns not directly served by the higher systems, and to other traffic generators of equivalent intra-county importance, such as consolidated schools, shipping points, county parks, important mining and agricultural areas, etc.; (2) link these places with nearby larger towns or cities, or with routes of higher classification; and (3) serve the more important intra-county travel corridors. There are ten Rural Major Collector Roads (MCRs) in White County: *SR 75 Alternate, SR 255, SR 284, SR 384, SR 356, SR 384, CR 68, CR 147, CR 200 (portion), and CR 251.*

Minor Collector routes should: (1) Be spaced at intervals, consistent with population density, to collect traffic from local roads and bring all developed areas within a reasonable distance of a collector road; (2) Provide service to the remaining smaller communities; and (3) Link the locally important traffic generators.

There are ten Minor Collector Roads (NMCs) in White County: *CR 10, CR 88, CR 103, CR 115, CR 118, CR 127, CR 145, CR 200 (portion), CR 204 and CR 205.*

**Figure 9.3:**  
*Illustrates  
Collector Road  
Characteristics*

### **Characteristics of Collector Highways Summary**

- 1. Shorter Trips**
- 2. Moderate Speeds**
- 3. Lower Volumes of Traffic - Two Lane Facilities**
- 4. Intra-county Travel**
- 5. Serves:**
  - a. County Seats**
  - b. Larger Towns not on Higher System**
  - c. Consolidated Schools**
  - d. Shipping Points**
  - e. Larger Manufacturing Areas**

## Local Roadways

Local roadways, because of their design features, are influenced less by traffic volumes and are tailored to provide more local access and community livability. Mobility on local facilities is typically incidental and involves relatively short trips at lower speeds to and from collector facilities. They are designed for neighborhood environments. This "neighborhood" nature requires travel speeds to be generally lower than collectors and arterials. Posted speed limits on local city streets generally range between 15 and 35 mph, depending on available right-of-way and the adjacent land uses. Local county roads are generally posted between 30-55 mph. Traffic volumes on local streets are generally less than 5,000 vehicles per day, and often vary depending on available right-of-way and the adjacent land uses.

Pedestrian and bicycle safety and aesthetics are generally high priorities on local road systems in and around residential and commercial areas. Wider travel lanes and broader turning radii, to accommodate larger vehicle sizes, are major considerations on local streets in industrial/commercial areas.

The rural local road system should have the following characteristics: (1) Serve primarily to provide access to adjacent land; and (2) provide service to travel over relatively short distances as compared to collectors or other higher systems. Local roads will, of course, constitute the rural mileage not classified as part of the principal arterial, minor arterial, or collector systems.

**Figure 9.3:**  
*Illustrates  
Local Road  
Characteristics*

### **Characteristics of Local Road Summary**

- 1. Adjacent Land is Primary Function**
- 2. Shortest distances**
- 3. Low Speeds**
- 4. Low Volumes**
- 5. Roads not Falling in Higher Systems**

## Road System Inventory

The majority of all roadways in White County are functionally classified as rural local roads. White County's remaining roadways are classified respectively as follows: major collectors- rural; minor collectors- rural; and principal arterials- rural. These roadway classifications can be further analyzed using the Georgia Department of Transportation's 400-Series Reports. *Table 9.8* provides a more detailed breakdown of the various functional classes for White County roadways by mileage, route type, and road system.

**Table 9.8**  
**Mileage By Route Type and Road System**  
**White County**  
**12/31/2002**

<i>Type Road System</i>	STATE ROUTE		COUNTY ROAD		CITY STREET		TOTALS	
	<i>Mileage</i>	<i>VMT</i>	<i>Mileage</i>	<i>VMT</i>	<i>Mileage</i>	<i>VMT</i>	<i>Mileage</i>	<i>VMT</i>
RURAL PRINCIPAL ARTERIAL	14.97	123917.99	0.00	0.00	0.00	0.00	14.97	123917.99
RURAL MINOR ARTERIAL	46.42	243768.00	0.00	0.00	0.00	0.00	46.42	243768.00
RURAL MAJOR COLLECTOR	46.44	85888.00	12.01	17308.00	0.00	0.00	58.45	103196.00
RURAL MINOR COLLECTOR	0.00	0.00	25.32	44460.00	0.00	0.00	25.32	44460.00
RURAL LOCAL	0.00	0.00	244.75	92084.60	19.37	14065.00	264.12	106149.60
RURAL TOTAL	107.83	453574.00	282.08	153852.60	19.37	14065.00	409.28	621491.60
TOTALS	107.83	453574.00	282.08	153852.60	19.37	14065.00	409.28	621491.60

Source: GDOT 400 Series Reports # 445.

Furthermore, *Table 9.9* indicates the major road inventory for White County with corresponding classifications, number of lanes, and agency jurisdiction/responsibility.



**Table 9.9**  
**White County Major Road Inventory By Functional Classification,**  
**Number of Lanes, and Jurisdiction-**

<b>Road Number</b>	<b>Name of Roadway</b>	<b>Descriptions (From/To)</b>	<b>Functional Classification</b>	<b>Number of Lanes</b>	<b>Jurisdiction</b>
SR 11/ US 129	Andrew Jackson Hwy	Union Co line to Hall Co line	PAR	2	State
SR 17	None	Habersham Co line to SR 75	MAR	2	State
SR 75	Tom Bell Hwy/Richard Russell Scenic Hwy	Towns Co line to SR 11/US 129	MAR	2	State
SR 75 Alternate	Richard Russell Scenic Hwy	SR 75/17 (Helen) to SR 11/US 129	MCR	2	State
SR 115	Cleveland Hwy/Dahlonega Hwy	Habersham Co line to Lumpkin Co line	MAR	2	State
SR 254	None	SR 115 to Hall Co line	MAR	2	State
SR 255	None	Habersham Co line to SR 115	MCR	2	State
SR 284	Shoal Creek Church Rd	SR 115 to Hall Co line	MCR	2	State
SR 348	Richard Russell Scenic Hwy	Union Co line to SR 75 Alt	MCR	2	State
SR 356	None	Habersham Co line to SR 75/17	MCR	2	State
SR 384	Duncan Bridge Rd	SR 75 to Habersham Co line	MCR	2	State
CR 10	Skitt Mtn Road	SR 254 to Hall Co line	NMC	2	Local
CR 68	Hulsey Road	SR 75 to SR 75 Alt	MCR	2	Local
CR 88	Abestos Road	SR 75 to SR 75 Alt	NMC	2	Local
CR 103	Sky Lake Road	SR 356 to SR 255	NMC	2	Local
CR 115	Sims Road	SR 11/US 129 to SR 115	NMC	2	Local
CR 118	Hunt Road	Sins Rd to Tesnatee Gap Valley Road	NMC	2	Local
CR 127	Adair Mill Road	SR 11/US 129 to Town Creek R	NMC	2	Local
CR 145	Town Creek Road	Lumpkin Co line to CR 200 (Town Cr Ch Rd)	NMC	2	Local
CR 147	Sandy Flats Road	CR 200 (Town Creek Rd) to Lumpkin Co line	MCR	2	Local

CR 200	Town Creek Rd/Town Creek Church Rd	SR 115 to Lumpkin Co line	MCR/NMC	2	Local
CR 204	Westmoreland Road	SR 284 to SR 254	NMC	2	Local
CR 205	Ray Palmer Rd	SR 254 to Skitt Mtn Rd	NMC	2	Local
CR 251	Old SR 75 S.	SR 11/US 129 to SR 254	MCR	2	Local

Source: Compiled by Georgia Mountains RDC based on data from GDOT, 2003.

## Traffic Counts

Table 9.10 provides the most current traffic counts available for White County. Annual Average Daily Traffic (AADT) is the total volume on a roadway segment for one year divided by the number of days in the year. All traffic count data is provide by the Georgia Department of Transportation and generated using data elements contained in the MTPT evaluation conducted during this study. For further details refer to *Appendix A*.

**Table 9.10**  
**2002 Traffic Counts**  
**Major Roads in White County**

Road Number	Name of Roadway	F.C.	Highest AADT
SR 11 / US 129	Andrew Jackson Hwy	PAR	20,770
SR 17	None	MAR	9,770
SR 75	Tom Bell Hwy/ Richard Russell Scenic Hwy	MAR	11,660
SR 75 Alternate	Richard Russell Scenic Hwy	MCR	1,699
SR 115	Cleveland Hwy/ Dahlonega Hwy	MAR	11,800
SR 254	None	MAR	2,200
SR 255	None	MCR	2,750
SR 284	Shoal Creek Church Road	MCR	1,040
SR 348	Richard Russell Scenic Hwy	MCR	486
SR 356	None	MCR	1,971
SR 384	Duncan Bridge Road	MCR	6,200

CR 10	Skitt Mountain Road	NMC	1870*
CR 68	Hulsey Road	MCR	1870
CR 88	Asbestos Road	NMC	1,870*
CR 103	Sky Lake Road	NMC	1,870*
CR 115	Sims Road	NMC	1,870*
CR 118	Hunt Road	NMC	1,870*
CR 127	Adair Mill Road	NMC	1,870*
CR 145	Town Creek Road	NMC	1,870*
CR 147	Sandy Flats Road	MCR	201
CR 200	Town Creek Rd/ Town Creek Ch. Rd	MCR/ NMC	2,330
CR 204	Westmoreland Road	NMC	1,855
CR 205	Ray Palmer Road	NMC	1870*
CR 251	Old SR 75 S.	MCR	2,930

Source: Compiled by Georgia Mountains RDC based on Data from GDOT and MTPT Software.

When comparing AADT data it must be understood that traffic counts vary considerably from day to day, season to season, and year to year. Certain environmental factors and social patterns such as days of the week, different seasons of the year, weather, special events, and other anomalies can all have an impact on the raw data that is collected and the averages, which result for them. For the reason, FHWA and GDOT have established control factors, which help to account for and “factor-out” these anomalies. Thus, GDOT is able to reduce the probability of generating faulty data.

## Levels of Service

The Florida Department of Transportation’s Quality/Level of Service Handbook, 2002 Edition best defines Level of Service (LOS) as “a quantitative stratification of the quality of service” for a segment of or an entire roadway. Quality of Service (QOS), likewise, is defined as “a traveler-based perception of how well a transportation service or facility operates.” In more simple terms, Level of Service (LOS) is a measurement of how well a roadway segment or intersection operates. There are six levels involved in such evaluations. These quantitative stratifications are represented as alphabet characters and range from A (best) to F (worst), and each letter represents a capacity of service based upon established characteristics and average

travel speeds (ATS). Florida’s Q/LOS Handbook’s Rural Undeveloped and Rural Developed characteristics best describe the typical roadways in White County. Thus, these were applied during the evaluation process for the purpose of this document. *Table 9.10*, provides a listing of the LOS thresholds, which were used for the evaluation of services. The more uniform, 2000 Highway Capacity Manual (HCM 2000) characteristics are more applicable to Urbanized area and do not take into account the rural factors which impact White County, and thus were not utilized for this analysis.

**Table 9.11  
Rural Levels of Service (LOS) Thresholds**

<i>LOS</i>	<i>2-lane Hwy (ru) v/c</i>	<i>2-lane Hwy (rd) % FFS</i>	<i>Multilane Hwy (ru) v/c</i>	<i>Multilane Hwy (rd) v/c</i>	<i>Arterials ATS</i>	<i>Intersections/ Non-State Signalized Control Delay</i>
<i>A</i>	$\leq 0.34$	$\leq 0.34$	$\leq 0.34$	$\leq 0.34$	$> 42 \text{ mph}$	$\leq 5 \text{ sec}$
<i>B</i>	$< 0.34$	$< 0.34$	$< 0.34$	$< 0.34$	$> 34 \text{ mph}$	$\leq 10 \text{ sec}$
<i>C</i>	$< 0.34$	$< 0.34$	$< 0.34$	$< 0.34$	$> 27 \text{ mph}$	$\leq 20 \text{ sec}$
<i>D</i>	$< 0.34$	$< 0.34$	$< 0.34$	$< 0.34$	$> 21 \text{ mph}$	$\leq 30 \text{ sec}$
<i>E</i>	$< 0.34$	$< 0.34$	$< 0.34$	$< 0.34$	$> 16 \text{ mph}$	$\leq 40 \text{ sec}$
<i>F</i>	$\leq 0.34$	$\leq 0.34$	$\leq 0.34$	$\leq 0.34$	$\leq 16 \text{ mph}$	$> 40 \text{ sec}$

Source: Florida Department of Transportation’s 2002 Quality/Level of Service Handbook

v/c = Demand Capacity Ratio      % FFS = Percent Free Flow Speed  
 ATS = Average Travel Speed      ru = rural undeveloped      rd = rural developed

White County desires to maintain an overall level of service (LOS) of “D” or better for all major roadways within the system, with an optimal LOS of “C” or better. An analysis of the network reveals that most roadways exceed this standard, however, there are a few that fall below the desired LOS. *Table 9.12*, below, provides an overview of the LOS Analysis and recommendations for action for the major roadways inventoried under this plan. For a detailed analysis for these facilities, as well as for all local roadways evaluated for White County, please refer to *Appendix A*.

**Table 9.12  
Lowest Levels of Service and Required Actions  
for Major Roads in White County**

<b>Road Number</b>	<b>Road Name</b>	<b>F.C.</b>	<b>Current LOS</b>	<b>10 Yr LOS</b>	<b>20 Yr LOS</b>	<b>Action Required</b>
SR 11 / US 129	Andrew Jackson Hwy	PAR	C,D,F	E,~	~	N,M
SR 17	None	MAR	C,D,E,F	E,~	~	N,M
SR 75	Tom Bell Hwy/ Richard Russell Scenic Hwy	MAR	F	~	~	N
SR 75 Alternate	Richard Russell Scenic Hwy	MCR	A,B	B,C	D,E	L
SR 115	Cleveland Hwy/ Dahlonega Hwy	MAR	E,F	~	~	N
SR 254	None	MAR	B,C	C,D	E,~	M,L
SR 255	None	MCR	B,C,D	B,C, D,~	D,E,~	N,M,L
SR 284	Shoal Creek Church Road	MCR	A	A	C	X
SR 348	Richard Russell Scenic Hwy	MCR	A	A	A,B	X
SR 356	None	MCR	A,B,C	A,C,D	B,E,~	X,M,L
SR 384	Duncan Bridge Road	MCR	C,E	D,~	~	N,M
CR 10	Skitt Mtn Road	NMC	A,B	A,B	A,D	X,L
CR 68	Hulsey Road	MCR	B	B,C	D	L
CR 88	Asbestos Road	NMC	B,C	C	E	L
CR 103	Sky Lake Road	NMC	B	C	E	L
CR 115	Sims Road	NMC/LOC	A,B	A,B,C	A,D,E	X,L
CR 118	Hunt Road	NMC	B	C	E	L
CR 127	Adair Mill Road	NMC	B	B,C	D,E	L
CR 145	Town Creek Road	NMC	B	C	E	L
CR 147	Sandy Flats Road	MCR	A	A	A	X
CR 200	Town Creek Rd/ Town Cr. Ch. Rd	MCR/NMC	B,C	D,C	E,~	M,L
CR 204	Westmoreland Road	NMC	A,B	B,C	C,D,E	X,L
CR 205	Ray Palmer Road	NMC	B	B	D	L
CR 251	Old SR 75 S.	MCR	A,B,C	B,C,D	D,~	M,L

*Source: Compiled by Georgia Mountains RDC based on data from GDOT, 2003.*

*Action Key: X= No Action; I= Immediate Action; N= Near Term; M= Medium Term; and L= Long Term*

## System Deficiencies

As discussed in the previous Levels of Service section, a number of roadways were identified as exceeding the thresholds for LOS. There are numerous road segments that are currently failing or will be failing in the very near future (LOS “E”, “F”, or “~”). Most of these roadways exist within or near the Cities of Cleveland and Helen and are primarily State Route systems. Additionally, there are several road segments that on the borderline of the thresholds or will be breaching the thresholds over the period covered under this document. The majority of these roadways are a part of the local system (either county roads or city streets). For further details please refer to Current, 10-year, and 20-year Level of Service maps.

*Note:* In addition to this document, the reader should consult GDOT’s Multi-modal Transportation Study Final Report conducted for Habersham, Rabun, White, and White Counties prepared by the Day-Wilburn Associates, Inc. in July 2003.

## Roadway Improvements

As previous mentioned under *Table 9.12*, the system analysis for White County evaluated the road network for needed improvements and identified several roadways, which required either minor or major improvements. These recommended improvements were listed as being needed immediately or in the near, medium, or long term range in order to meet the established Level of Service goals for the county. Minor improvements are defined as facility improvements such as road widening of the average lane width up to 12-feet and shoulder widths up to 6 feet. Major improvements are defined as facility improvements with additions of: (1) a passing lane for two-lane facilities; and/or (2) one or more additional lane(s) in each direction (total of two more lanes) if a multilane or freeway facility.

Both major and minor improvements were identified as being needed for the following roadways:

- |                |          |
|----------------|----------|
| ✓ SR 11/US 129 | ✓ CR 103 |
| ✓ SR 17        | ✓ CR 115 |
| ✓ SR 75        | ✓ CR 118 |
| ✓ SR 75 ALT    | ✓ CR 127 |
| ✓ SR 115       | ✓ CR 145 |
| ✓ SR 254       | ✓ CR 200 |
| ✓ SR 255       | ✓ CR 204 |
| ✓ SR 356       | ✓ CR 205 |
| ✓ SR 384       | ✓ CR 251 |
| ✓ CR 10        |          |
| ✓ CR 68        |          |
| ✓ CR 88        |          |

For a complete list of recommendations and associated costs please refer to *Appendix A* of this document.

## **Bridges and Major Culverts**

GDOT maintains a management system on every bridge and major culvert in the state. These Inventory Data Listings include the following relevant information:

- Location
- Sufficiency rating
- Facility carried
- Features intersected
- Year constructed
- Year reconstructed (if applicable)
- Date of last inspection
- Design load
- Structure and foundation type
- Appurtenances information
- Work programming data
- Hydraulic data
- Number of lanes
- Length, width and clearance
- Posting data

The structures are graded by a sufficiency rating, which is used to determine scheduling for rehabilitation or reconstruction of the facility. With adequate maintenance, any structure with a rating above 75 should still be in acceptable condition 20 years from its rating date. Those structures with a rating between 65 and 75 are more marginal, and those with a sufficiency rating below 65 are likely to require major rehabilitation or reconstruction within the next 20 years.

White County currently has seventy-two (72) locally owned structures that meet the state qualification to be classified as bridge/culvert structures. It must be noted that more bridge/culvert structures exist throughout White County. There are numerous privately owned structures and other structures that may be considered bridges/culverts. However, these structures do not meet the established criteria to be classified under the state law of what is considered to be a “bridge structure,” therefore they are excluded from consideration. Additionally, there are several bridges that are owned and maintained exclusively by the state. These structures are also being excluded from consideration in this document. All routine inspections are conducted on a two-year schedule and performed by certified bridge inspectors of the Georgia Department of Transportation. White County receives a report from GDOT at the end of each cycle, which details the status of each structure. White County and GDOT work cooperatively to ensure that necessary bridge repairs are conducted. These work projects are scheduled into the Georgia Statewide Transportation Improvement Program. This program establishes funds to cover the expenses for federal aid and state aid projects. The table below summarizes the total number of bridges with a sufficiency rating below the recommended 65 under the most recent Bridge Report conducted for White County. Appendix B provides the detailed report.

**Table 9.13**  
**Bridge and Major Culvert Locations**  
**with Sufficiency Ratings below 65**

<b>Roadway Type Carried by Structure</b>			
<b>State Route</b>	<b>County Road</b>	<b>City Street</b>	<b>Total</b>
4	8	0	12

*Source: Georgia Department of Transportation  
White County Bridge Report, 2002*

Currently, there are no officially designated evacuation routes for White County. White County has, however, identified *SR 11/US 129*, *SR 17*, *SR 75*, *SR 115* and *SR 384* as potential or likely evacuation routes in the event of some catastrophic event. Therefore only bridges located along these routes would be considered under this document. At this time all of these bridges appear to be in sufficient condition to serve the evacuation needs of the community.

**Signal Warrants and Traffic Control**

Currently, there are three (3) traffic signals located within the planning area. The majority of these signals are located within or near the city limits of Cleveland. One (1) exists within the city and two (2) are located in the county. There are no locally owned facilities at this time. All traffic signals are located at intersections with state routes and therefore are owned and maintained by the Georgia Department of Transportation. Traffic controls are generally required to conform to the standards and guidelines established under the Manual of Uniform Traffic Control Devices for Streets and Highways. Any future additions in traffic signals, which may become necessary during the planning horizon (determined by a signal warrant), will most likely occur at intersections of state routes and local roads, thereby becoming GDOT’s responsibility.

**Roadway Signage**

All road signs are erected in accordance with the Georgia Manual on Uniform Traffic Control Devices for Streets and Highways. Requirements for signage depend on whether they are erected on conventional roads, expressways, or freeways. The Georgia Department of Transportation is responsible for signage in the rights-of-ways of all state routes. The location and composition of White County’s and the ’s signage meet applicable specifications.

**Public Transit**

Currently, White County does not operate a 5311-Rural Public Transit Service Program, nor are such programs planned at this time. There are no other services available through the local governments, nor is it anticipated that services will be established during the planning period covered under this document.



## **Airports and Air Transportation**

Neither White County, nor any of its municipalities operate an airport facility. All air transportation services are obtained through the use of surrounding facilities in other counties. For example, Lee Gilmer Airport in Gainesville, Habersham County Airport in Cornelia, Blairsville Airport in Blairsville, and Lumpkin County-Wimpy Airport in Dahlonega, Georgia. It is not anticipated that White County will establish such facilities during the planning period covered under this document.

## **Pedestrian Pathways: Sidewalks and Recreational Trails**

Currently, the only public owned and maintained sidewalks, which exist in White County, are located primarily within the Cities of Cleveland and Helen. Both Cleveland and Helen have an extensive network of sidewalks that provides pedestrians access throughout the downtown area and into its outlying neighborhoods. Sidewalks typically exist along both side of the roadway within the city limits. Cleveland and Helen, both maintain an ongoing program to replace and/or repair deteriorating sidewalks and construct new sidewalks whenever possible.

Other sidewalks may exist within White County and its municipalities, however, they are privately owned and maintained, and therefore, they are outside the scope of this documents evaluation.

## **Pedestrian Facility Recommendations**

Whether performing improvements to existing sidewalks or designing new pedestrian facilities, efforts should be made to create a pleasant and safe walking experience for all users. The following recommendations are made to help in achieving this goal.

### **Existing Sidewalks**

Sidewalks throughout the planning area should be in compliance with the Americans with Disabilities Act (ADA). Adequate curb cuts and railings (if necessary) should be installed. Repairs to cracked and deteriorating concrete should be made on a regular basis. Children and older adults are often the largest users of sidewalks. This group of pedestrians may have mobility issues that would be made more difficult by uneven pavement. For safety, sidewalks should be in good condition.

In making repairs to existing sidewalks, care should be taken if historic paving materials are present. Many of the communities within the Georgia Mountains region have sidewalks built with hexagonal pavers. These pavers may be a character-defining element of a historic district and should be carefully repaired and preserved in place. Historic commercial buildings often have small ceramic tiles at the recessed entrances of stores that abut the sidewalk. When repairing or replacing sidewalks, these historic tile entrances should not be disturbed.

When existing sidewalks are in need of major repair or where a road project requires sidewalk reconstruction, every attempt should be made to improve sidewalks with a planting strip between the road and sidewalk. Planting strips that separate pedestrians from vehicular

traffic are widely accepted as a way of helping pedestrians feel safer and more comfortable. The design of planting strips depends largely on the volume and speeds of traffic and whether or not on-street parking exists. GDOT has several recommendations for planting strip designs and should be consulted when the time comes to make improvements to sidewalks.

### New Sidewalks

Building new sidewalks is the second, but equally important, priority for pedestrian facility enhancements. When making recommendations for new sidewalks, first priority is to link existing sidewalk sections with new sidewalks. This creates a continuous sidewalk path and reduces the need for pedestrians to cross the street or walk on roadways. In general, this is necessary in city centers where sidewalks may have been built in stages or as part of the construction of a building site.

New sidewalks should extend existing sidewalks to local schools, parks, recreation centers, institutions, and commercial activity nodes. GDOT recommends that, whenever possible, sidewalks should be located on both sides of the street. Where sidewalks have not previously existed, constructing sidewalks on one side of the street is acceptable for the short-term. As with improvements to existing sidewalks, new sidewalks should be ADA accessible and have a planting strip.

It is recommended that subdivision regulations for sidewalks meet the same standards as city and county sidewalks to include planting strips and ADA compatibility. In addition, subdivision sidewalks should link to public sidewalks to provide a continuous path.

When building new sidewalks in listed or eligible historic districts, a preservation professional should be consulted to identify significant landscape elements that should not be altered. New sidewalks are compatible with historic districts when done sensitively. Planners may want to recommend incorporating appropriate historic paving materials into the design of a new sidewalk.

Pedestrian amenities such as street furniture and lighting improve the quality of the pedestrian experience. Street furniture includes benches, trash receptacles, bike racks and newspaper boxes. The installation of these items should be carefully planned to allow for the uninterrupted flow of traffic. Too much street furniture creates clutter and maintenance issues that can be a nuisance for the pedestrian. It is recommended that street furniture be clustered in areas that receive at least a moderate amount of foot traffic and out of the path of pedestrians. National standards have been established for the minimum space requirements for street furnishings. These standards should be consulted when planning new streetscapes. GDOT can also assist local governments in this regard.

Proper lighting for pedestrians is an important safety consideration. Most urban areas have adequate lighting in place. For pedestrian purposes it is recommended that lighting fixtures be shorter than typical street lighting. Generally, lighting fixtures for pedestrians should not exceed 15-feet. Care should also be taken to choose lighting fixture styles that are appropriate to the character of the neighborhood. Overly stylistic lights would not typically be appropriate for historic rural communities such as White County and the Cities of Cleveland and Helen. Simple contemporary fixtures are often more compatible. Lighting fixtures should be directed toward the

sidewalk area and not upward. Light that is pointed at the sky creates a glow that can hamper the vision of pedestrians and cyclists. In addition, it becomes necessary to add more lighting, which raises the cost. It is recommended that light fixtures be positioned for maximum effectiveness, thereby increasing the quality of the pedestrian experience and decreasing the cost to the community and the negative impacts of environmental or light pollution.

## **Other Alternate Mode Recommendations**

Some types of facilities, such as multi-use trails and scenic highways, encourage use by more than one mode of travel. Because multi-modal use creates the need for some additional considerations, some further recommendations are mentioned below.

### **Multi-use Trails and Paths**

Multi-use trails are off-road paved (either pervious or impervious) trails that are shared by pedestrians and cyclists and used for other activities such as horseback riding. These trails are usually considered to be recreational, but people also use short segments for daily activities when they are located near commercial activity centers. GDOT recommends that multi-use shared paths be 10-feet in width, at a minimum. However, a 12-foot or more width offers greater comfort for users. These trails are popular with both locals and tourists. As an example, the Silver Comet Trail in Georgia currently has 38 miles of shared trails with plans for a total of 51 miles. Eventually the trail will connect with the Chief Ladiga Trail in Alabama to cover 101 miles from Atlanta to Anniston, Alabama.

The proposed multi-use path and trail system for the Helen and Sautee-Nacoochee area is proposed in the Georgia Mountains Regional Bicycle and Pedestrian Plan. Proposed improvements in this plan are recommended project that are to be incorporated in the State's Transportation Improvement Plan. The proposed project for this areas includes linking a number of state and local tourism facilities with alternative modes of transportation. Many of the facilities are important local and state historic resources.

## **Bicycle Travel**

Bicycle users have various levels of expertise, which makes different types of facilities more desirable. Cyclists are typically separated into three groups: Type A, Type B and Type C. These types are described in the AASHTO Guide for the Development of Bicycle Facilities as follows:

- Type A Cyclists: Advanced or experienced riders who generally use their bicycles as they would a motor vehicle.
- Type B Cyclists: Basic or less confident adult riders who may also be using their bicycles for transportation purposes, e.g. to get to the store or visit friends, but prefer to avoid roads with fast or busy motor vehicle traffic unless there is ample roadway width to allow easy overtaking by the faster traveling motor vehicle.
- Type C Cyclists: Children, riding on their own or with parents, who may not travel as fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreation facilities.

Cyclists desire safe routes to go to work and school, complete errands, and ride for health and recreational reasons. Cyclists are also discouraged from riding on sidewalks, which can create safety hazards for pedestrians. In order to provide safe and attractive routes for cyclists, bike routes should be recommended for local designation. There are several acceptable ways to delineate a bikeway. These different types depend greatly on the volume and speed of traffic and are typically chosen during the design phase of the bikeway project.

For the purposes of future guidance for appropriate bikeway selection, the types of bikeways will be discussed. Bicycle facilities have four basic types (three on-road facilities and one off-road facility) that are described in more detail below. In addition, recommendations from a study for the Pedestrian and Bicycle Information Center completed in August 2002 titled “Bicycle Facility Selection: A Comparison of Approaches” will be summarized. For further information on bicycle facilities, the following sources can be consulted:

- Georgia Bicycle and Pedestrian Plan, Georgia Department of Transportation;
- Pedestrian and Bicycle Information Center;
- Federal Highway Administration (FHWA), and
- American Association of State Highway and Transportation Officials (AASHTO).

The simplest type of bikeway is a paved shoulder. Especially in rural areas, AASHTO suggests that paved shoulders of a four-foot width minimum can act as a bicycle facility. GDOT has guidelines available for signing a bike route. It is recommended that all routes, whether they are a paved shoulder or striped bike lane, be signed. Type A cyclists are typically comfortable with this type of bikeway, but Type B and Type C cyclists may not prefer it.

The next level of bikeway is a wide outside lane or shared lane. As the name suggests, bicyclists share the outside lane of traffic with motorists. Generally the minimum width of an outside lane must be 14-feet and should not include the gutter pan. It is acceptable to reduce the width of an interior lane of traffic in order to provide for a wider outside lane according to AASHTO. This allows for safer bicycle travel without widening the roadway.

The final on-road bikeway is the bike lane. A bike lane is a striped separate lane designated solely for bicycles. A minimum four-foot wide lane is acceptable for lanes with no curb, gutter or parking. A minimum of five-feet is necessary for lanes that are adjacent to parking. In some situations where bicyclists must share the lane with parallel parking areas, a minimum of 11-feet is necessary for lanes with no curb and 12-feet for lanes with a curb face. Bike lanes require a solid white line stripe to separate it from vehicular traffic.

An additional off-road bikeway is a separated lane. This lane is located adjacent to a road and may have a planting strip or cement wall between the lane and road. The less-experienced Type B and Type C cyclists favor the security of this type of bikeway. These are used most often for recreational use in Georgia and none are recommended in this plan.

For cyclists to be able to use their bikes for daily activities, it is necessary to provide bike racks in public areas such as schools, government buildings, parks, and commercial activity centers. Bike racks should support a bicycle in two places and prevent the wheel from tipping. All racks should be anchored so that they cannot be stolen. Racks should be located near the entrances of buildings and under cover, if possible.

White County does not have any locally designated bike routes, however it does have a good network bike facilities that are designated as part of the State Bike System. State Bike Route 90/Mountain Crossing and State Bike Route 55/Appalachian Gateway are currently the only officially designated routes for bike riders in White County. SBR 90/Mountain Crossing is an extended east/west route that stretches 210.3 miles from the Whitfield County, Georgia to Rabun County, Georgia. The White County portion of the route covers portions of SR 75 and SR 356 from the Towns County line in the north to the Habersham County line in the east. SBR 55/Appalachian Gateway, likewise, is an extended north/south route that stretches 62.8 miles from northern Gwinnett County to northern White County where it intersects with SBR 90/Mountain Crossing. There are no other facilities that exist in the county except the multi-use facilities located with the city and county parks.

Although, there are currently no other solid plans to develop future bike facilities or create new “designated” bike routes, it is the goal of the community to expand existing facilities and develop new facilities where physically and financially possible.

### **9.3 Community Goals and Strategies**

The Comprehensive Plan’s Transportation Element for White County and its municipalities represent an effort to define a set of transportation programs and projects that address existing and future transportation needs within the county. The plan’s recommendations will guide future transportation investments and provide mobility solutions to accommodate population and employment growth in this area.

Thoughtful goals and effective performance measures ensure a long-range, needs-based perspective that assists in effectively identifying and implementing appropriate transportation initiatives for White County and its municipalities. The goals and performance measures must be compatible in order to develop a transportation network that also addresses regional needs.

Performance measures are necessary tools in needs-based plan development because they can track performance over time and assist in identifying improvements. They provide accountability and link strategic planning to resource allocation. By defining specific performance measures, White County will be able to measure the effectiveness of selected projects and programs in meeting goals. Performance measures as a package indicate the extent to which the current and recommended programs help achieve established goals.

The federal Transportation Equity Act for the 21st Century (TEA-21) emphasizes that transportation infrastructure investment should be driven by the need for improvement. The goals and performance measures established for White County and its municipalities were designed to meet the area’s specific transportation needs, while simultaneously incorporating sensitivity to the transportation efforts of the region’s multiple planning partners. The goals and performance measures for the area, provided in *Table 9.16* consider the objectives outlined in the GMRDC’s Regional Comprehensive Plan.

## Goals and Performance Measures

Four Transportation planning goals have been established for White County. The first goal is to improve accessibility and mobility of people and goods. The accomplishment of this goal will be measured by establishing a threshold for 2025 roadway LOS C or better and monitoring performance roadway levels of congestion. The number of alternative roadway connections with capacity for high volume flows will also serve as a measure of transportation access and mobility.

**Table 9.16**  
**Goals and Performance Measures**

<b>Goals</b>	<b>Performance Measures</b>
<ul style="list-style-type: none"> <li>• Improve accessibility and mobility of people and goods.</li> </ul>	<ul style="list-style-type: none"> <li>• MTPT 2025 roadway LOS C or better.</li> <li>• Provides alternative roadway connections with capacity for high volume flows.</li> </ul>
<ul style="list-style-type: none"> <li>• Enhance Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Will reduce accident occurrences.</li> <li>• Locations with significant numbers of correctable vehicle crashes.</li> <li>• Provides additional improvements to pedestrian facilities for activity centers.</li> <li>• Provides additional bike lanes or separated bike paths along corridors with high vehicle/bike friction.</li> </ul>
<ul style="list-style-type: none"> <li>• Preserve and improve the existing system, environment, and quality of life.</li> </ul>	<ul style="list-style-type: none"> <li>• Present serviceability ratings (PSR) of 3.0 or above.</li> <li>• Bridge sufficiency ratings above 75.</li> <li>• Number of actively protected wetlands and historic areas protected from encroachment from transportation projects.</li> <li>• Burdens or benefits to environmental justice communities.</li> <li>• Number of pedestrian facilities for activity centers.</li> <li>• Connectivity of bike facilities to regional network.</li> <li>• Percent of area served by transit.</li> <li>• Number of design features that encourage transit patronage.</li> </ul>
<ul style="list-style-type: none"> <li>• Ensure multi-jurisdictional coordination to facilitate interregional connectivity and foster regional economic development.</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing communication between regional jurisdictions.</li> <li>• Number of alternative roadway connections between jurisdictions with capacity for high volume flows.</li> </ul>

The second goal is to enhance safety. The achievement of this goal will be measured by: (1) monitoring and reducing accident rates, and (2) monitoring and reducing the number of locations with correctable vehicle crashes. Other performance measures for this goal include increasing the number of pedestrian facilities for activity centers, and the number of miles of bike lanes, or separated bike paths along corridors with high vehicle/bike friction.

Thirdly, White County and its municipalities will preserve and improve the existing system, environment and quality of life by monitoring performance measures such as present serviceability ratings for pavement, bridge sufficiency ratings, the number of wetlands and historic areas protected from encroachment from transportation projects, and burdens on and benefits to environmental justice communities. This goal will also be measured by the number of pedestrian facilities for activity centers, connectivity of bike facilities to the regional network, the percent of area served by transit, and the number of design features that encourage transit patronage.

Finally, the fourth goal is to ensure multi-jurisdictional coordination to facilitate interregional connectivity and foster regional economic development. Achievement of this goal will be measured by the level of ongoing communication between regional jurisdictions and the number of alternative roadway connections with capacity for high volume flows.

Ensuring that the goals for White County and its municipalities are achieved requires an accurate inventory of the existing transportation infrastructure and a detailed analysis of the operating conditions and services for inventoried facilities. Both of these were conducted early in the planning process and are outlined in previous sections.

Future growth forecasts are essential for developing long-range transportation plans to determine overall needs and the level of transportation strategies required to meet those needs. Transportation planning is an ongoing process where planning factors, such as growth and the assessment of needs, are periodically monitored and reevaluated. The rapid growth in this area requires an effective monitoring and update function of the planning process. Planning assumptions and transportation strategies must be evaluated periodically, as needed.

## **Decision Context**

As the planning process entered the project development phase, a “decision context” within which strategies would be recommended was developed. To ensure that the overall goals for White County are achieved, recommended programs and projects should work to achieve established goals. Whether or not the goals are successfully achieved is assessed objectively by comparing existing and future conditions, using the defined set of performance measures and thresholds.

Four primary “decision context” questions were used to examine potential projects before developing the preferred program of projects:

***1. Do the strategies meet the plan’s goals and objectives?***

The recommended program should demonstrate, through specific performance measures, that the plan’s goals and objectives have been met.

***2. Are the strategies appropriate and proportional to needs?***

Specific performance measures are useful tools for evaluating plans, but may not tell the whole story. Strategies must not only be effective, but also appropriate and proportional to needs.

***3. Are strategies cost-effective?***

Federal law requires transportation plans to be fiscally constrained. Nevertheless, detailed scrutiny is required to ensure the best possible use of financial resources.

***4. Are other options viable?***

All viable options must be considered. Population and employment densities determine cost-effectiveness. System optimization improvements, such as improving intersection Geometrics and signal timing are low-cost options to alleviate localized congestion.

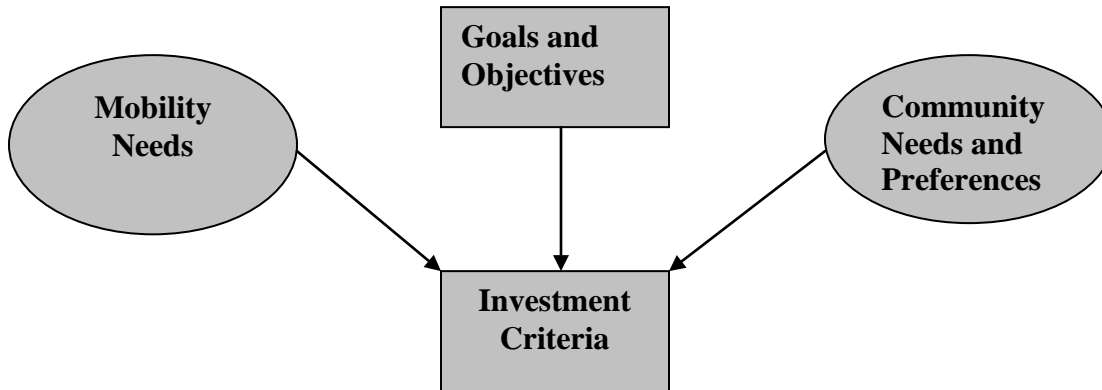
**Investment Criteria**

Investment criteria guide the transportation planning process and provide a framework for the development of programs and projects. Within the decision context, financial effectiveness analysis is conducted based on identified established investment criteria. Investment criteria ensure that the counties gain the most cost-effective improvements when developing a program of projects.

Community needs and preferences were defined through a series of discussions with community stakeholders and other public involvement efforts. Mobility needs were identified through technical analysis.



**Figure 39**  
**Development of Investment Criteria**



Goals and objectives, mobility needs, and community preferences combine to define a series of six primary investment criteria:

**Investment Criteria:**

- *Efficiency improvements*
- *Mobility options*
- *Congestion relief*
- *Accessibility to interstates and major highways*
- *East-west connectivity*
- *North-south connectivity*

Using previously described investment criteria; potential improvement strategies were initially identified and applied to the transportation system. Lower-cost improvements addressing system efficiency or travel demand were considered prior to more costly strategies. Where less expensive measures do not provide adequate improvement, increased system capacity solutions were considered. Finally, the package of improvements in each program category (such as roadway, transit, and bicycle/pedestrian) is evaluated to ensure that transportation improvements work together to define a fully integrated multi-modal transportation system.

### **Coordination with Regional Planning**

The Georgia Planning Act was adopted by the General Assembly in 1989 as a means to encourage better management of growth in the booming areas of the state, while encouraging the less prosperous parts to avail themselves of opportunities for growth. The Planning Act established a coordinated planning program for the State of Georgia, which provides local governments with opportunities to plan for their future and to improve communication with their neighboring governments. The Act established a "bottom-up," comprehensive planning approach initially to be conducted at the local government level, and then at the regional and state levels. The Planning Act also assigns local governments certain minimum responsibilities

to maintain "Qualified Local Government" (QLG) status, and thus, be eligible to receive certain state funding.

The cornerstone of the coordinated planning program is the preparation of a long-range comprehensive plan by each local government in the state. This plan is intended to highlight community goals and objectives as well as determine how the government proposes to achieve those goals and objectives. Municipal and county plans are then used as the basis for a regional development plan.

Regional Development Centers (RDC) are charged with the responsibility of promoting the establishment, implementation, and performance of coordinated and comprehensive planning by municipal and county governments. The RDC is expected to plan for conformity with minimum standards and procedures established by the Planning Act. As the designated RDC for the Georgia Mountains area, the Georgia Mountains Regional Development Center addresses regional issues and mobility needs through planning efforts that culminate in the development of the Regional Comprehensive Plan. White County and its municipalities should continue to work closely with each other, the RDC, and other municipalities and local governments in surrounding counties to ensure regional coordination in the development of these plans.

To address regional transportation planning impacts, White County and its municipal governments must work closely with the GDOT Office of Planning and the GDOT District One Office in Gainesville, Georgia. GDOT's Office of Planning assigns specific planning resources to ensure a regional and statewide perspective in planning for White County. The GDOT District One Office also offers personnel and other resources to bring regional and local perspective to the transportation planning process. Transportation solutions are identified for White County and other counties through the development of improvement projects included in the six-year GDOT Construction Work Program (CWP) and the three-year Statewide Transportation Improvement Program (STIP).

### **Transportation Investment Strategies**

An inventory of potential strategies was evaluated for the purpose of developing this document. These strategies have the potential to reduce congestion, increase capacity, and improve the quality of life for White County in the future. Programs and projects to address identified needs in White County were drawn from the three classifications presented below:

- Growth Management
- Safety and Operations
  - Traffic System Operations Optimization
  - Intersections and Interchanges
- Infrastructure Enhancements
  - Roadway Projects
  - Pedestrian and Bicycle Improvements

## ***Growth Management***

Despite the population growth projected for White County over the next 30 years, reduced traffic congestion and improved quality of life can be achieved by managing the type and location of growth. Planning the location of community activities and services closer to neighborhoods and one another could substantially reduce vehicle trips. Mixed land use planning on a regional, community, and activity center level will improve accessibility to major destinations. By clustering or mixing uses in a small area, community residents have access to most of their daily needs within a short multi-purpose drive, bicycle ride, or walk from home. Schools, shopping centers, and places of employment are popular destinations and should be developed in locations providing maximum accessibility by the residents of the community or region.

An essential tool in controlling transportation demand, land use regulations such as zoning or subdivision development codes can enable growth, while reducing traffic congestion throughout White County. Traffic congestion will decrease as vehicle trips shorten and transit, bicycling and walking become viable travel options as strong growth management efforts are pursued.

## ***Safety and Operations***

Non-capacity adding projects, such as safety and operational projects, can address specific location or community needs. These improvements address the need to maximize the efficiency and safety of the existing roadway network as a foundation for providing an overall transportation system that meets future demands. Safety and operational projects normally address issues such as sight distance limitations, sharp turning radii, intersection angles, and signage placement. The projects are essential to meeting the transportation needs of the community without adding roadway capacity. The safety and operations category is a key element of the recommended program of projects.

## ***Traffic System Operations Optimization***

Small-scale improvements can be incorporated into the existing roadway network to improve the flow of traffic, and they usually have a relatively short completion schedule and lower cost than roadway widening or new construction. Whenever possible, traffic operation improvements should be considered before determining the need for a widening or new construction project. Traffic operations can be optimized in many ways, including providing inter-parcel access, adding medians, closing curb cuts (driveways), adding turn, acceleration or deceleration lanes, or installing or upgrading traffic signals. Coordinated signal timing plans link together the operations of a series of traffic signals located close enough together to impact traffic conditions along an entire corridor. Developed to vary by time of day and day of week, coordinated signal timing plans improve the efficiency of signal operations along congested corridors, increasing the corridor's effective capacity by ten to fifteen percent.

## ***Intersections and Interchanges***

Another transportation improvement strategy that addresses safe and efficient travel on the roadway network is the improvement of intersections and interchanges. Many transportation

conflicts resulting in congestion and safety issues are found at intersections and interchanges. Their improvement is vital to the safety and efficiency of the transportation network and builds a foundation for a network that meets future demands.

Intersection improvements can correct roadway deficiencies, increase safety, and result in increased capacity without the need to widen or make additional improvements to the roadway. Intersections with high crash rates or severe congestion should be considered for improvements. In addition to intersection improvements, the conversion of critical intersections on high volume roads into interchanges provides effective capacity increases along corridors.

### ***Infrastructure Enhancements***

The need to maximize the effectiveness of existing roadway infrastructure is critical in maintaining an efficient transportation network. Potential infrastructure improvements include transit systems, roadway projects, bike and pedestrian facilities, and other strategies requiring capital investment.

### ***Roadway Projects***

Roadway improvements identified through the roadway analysis and public involvement process are the central feature of the long-term planning effort. Additional roadway projects that increase levels of service, reduce congestion, and improve safety become the foundation for meeting transportation needs over the planning period, but may be subjected to air quality emissions testing conducted region-wide.

White County and its municipalities are actively pursuing the development and maintenance of a road network that accommodates continuing growth. A list of current and future projects was discussed in earlier sections and in the sections: Improvement Projects and Potential Funding Sources listed below. You may also refer to Appendix A for further details.

### ***Pedestrian and Bicycle Improvements***

Used for recreation as well as transportation, pedestrian and bicycle facilities serve as an integral element of a multi-modal transportation network. Pedestrian and bicycle facilities are vital for providing links to transit, accommodating short trips between neighborhoods and community facilities, and providing circulation between land uses in denser activity centers. The connection of neighborhoods to activity centers, such as employment centers, community facilities, and retail opportunities, by way of pedestrian and bicycle facilities, will improve resident accessibility to these locations. Demand for bicycle and pedestrian facilities have grown substantially since the inception of ISTEA and TEA-21, which have provided more funding for these modes.

Georgia's Statewide Bicycle Plan, created by GDOT, proposes a statewide network of 14 named and numbered routes totaling 2,943 miles that are or will be particularly well-suited for bicycle use. As previously stated, there are only two State Bike Route located within the planning area: SBR 55 and SBR 90. There are currently no plans to establish new bike routes, however, discussion have occurred during this planning effort which indicates a desire to explore further biking opportunities within White County.

Recently, Georgia DOT contracted to prepare the Regional Bicycle and Pedestrian Plan, prepared by Georgia Mountains Regional Development Center, which has designated a number of pedestrian bicycle routes and projects as well as multi-use path projects that should be incorporated into local and state transportation planning projects. The proposed project for White County includes the use of multi-use/bicycle and pedestrian paths to link a number of tourism and historic venues in the Helen and Sautee-Nacoochee area.

## **Road Improvement Projects**

All transportation improvement projects within White County are funded through the Georgia Department of Transportation. All projects for the county and city are planned and programmed as part of the Statewide Transportation Improvement Program (STIP). This document details the projects identified by the state through the planning process and are prioritized according to their importance and the availability of funds thru the Congressional balancing process. The STIP includes Highway, Bridge, Bicycle, Pedestrian, Transportation Enhancement activities, and Public Transportation (transit) projects. Projects in the STIP emphasize the maintenance, safety, and improvement of existing transportation facilities and public transportation systems. Project related costs, such as Preliminary Engineering (PE), Right of Way (ROW), and Construction are identified for highways, and Capital and Operating costs for public transit projects. The STIP must fiscally balanced, and include only those projects with funding available or that have a reasonable expectation of obtaining funds. The STIP covers projects to be developed over a three-year period and is updated on an annual basis. There are 3 major funding categories for Road Improvement projects under the STIP:

- Federal Aid
- State Funds
- Local Funds

The Georgia Department of Transportation has identified two projects under the current STIP for FY 2004. They include the following projects:

- ❖ Project # 122130- Road widening for SR 75 from SR 75 Alt to Cr 88/Asbestos Road.
- ❖ Project # 162390- New road construction for Cleveland Bypass from SR 11/US 129 to Hulsey Road to SR 75.

GDOT has also begun work for the newest STIP (draft) update, which includes projects for FY 2005, 2006, and 2007. This draft includes projects, which are a continuation of Project numbers: 122130 and 162390. This document identifies two additional projects for White County:

- ❖ Project # 0001934- Installation of Traffic Signal at SR 11/US 129 and West Moreland Road.
- ❖ Project # 122240- Road widening on SR11/US 129 from SR 284/Clermont to Cleveland Bypass/White County.

The next STIP update is not planned until FY 2005. Furthermore, GDOT's 6-year Construction Work Program (CWP) identifies following long-range projects, which have a completion date beyond FY 2006:

- Project No. 122130 – SR 75 from SR 75 Alt to CR 88/Abestos Road – Road widening (CWP/STIP) from 2 to 3 lanes.
- Project No. 132560 – SR 115 @ Chattahoochee River- Bridge Replacement.
- Project No. 141830 – SR 384/Duncan Bridge Road from west of SR 115 to SR 75- Construct passing lanes/reconstruction/rehabilitation at eight locations.
- Project No. 162390 – Cleveland West Bypass from SR 11/US 129 north of new location/Hulsey Road to SR 75– New Construction 4 lanes (CWP/STIP).
- Project No. 122240 – SR 11/US 129 from SR 284 (Clermont) to Cleveland Bypass (White County)- Road Widening.
- Project No. 0004330 – 371 wetland mitigation credits for Project No. 132560 (CWP/STIP).
- Project No. 0004303 – East-West Highway/SR 560 from SR 11/US 129 to SR 384 - New Road Construction.
- Project 0004302 – East-West Highway/SR 560 from SR 115/SR 284 along West Moreland to SR 11/US 129- New Road Construction.
- Project No. M002275- Resurfacing of SR 11/US 129 from just south of SR 115 to Lumpkin County line (Under Construction)

For a complete list of details regarding these projects for White County, please refer to GDOT's Statewide Transportation Improvement Program and Construction Work Program documents.

#### *Potential Funding Sources*

The most likely funding sources are identified for each project, based largely on the location of the project and responsible agencies. In some situations, it may be possible for the county or local agencies to accelerate the process of upgrading facilities by increasing local funding participation. The most likely funding sources for White County are listed as follows:

- General Funds
- Special Purpose Local Options Sales Tax (SPLOST)
- Local Options Sales Tax (LOST)
- FHWA, Transportation Enhancement Activities funds
- FTA, Rural Public Transportation funds
- State Aid, County / City contracts
- Federal Lands Program, Scenic Byways

Other options, considered less likely for White County specifically, include:

- Appalachian Regional Commission program grants
- Transit fare-box revenues
- Public/private partnerships, such as Community Improvement Districts (CIDs)
- Development impact fees

White County will continue to seek out other funding opportunities where available and will pursue all efforts to reasonably secure federal, state, and local funds, in an effort to maintain and improve the transportation network for the its citizens. However, it must be mentioned that White County's ability to obtain such funding hinges on favorable economic conditions and the highly competitive nature of the demands on transportation funding for such projects within the Congressional District, which serves the area and surrounding communities.

### *Project Phasing*

Although a large number of transportation projects have been recommended, it is not practical or feasible to implement all improvements simultaneously. A phasing plan was therefore developed to provide a starting point to use in prioritizing the recommended projects for further evaluation, funding, and implementation. The prioritization was based on the level of deficiency to be mitigated or eliminated by the project, the estimated cost and the difficulty of implementation from a planning or design perspective. The three time periods used were as follows:

- Short-range period: 2004 through 2007
- Medium-range period: 2008 through 2014
- Long-range period: 2015 through 2025

The specific phase recommended for each improvement was previously outlined in earlier discussions under Table 9.12. Also see Appendix A.

### *Project Implementation*

In order to enhance the potential of success for this proposed plan, the following implementation guidelines are offered:

- ❖ Continue public outreach efforts for project-specific details as part of studying the project feasibility.
- ❖ Secure funding for each short-range project.
- ❖ Identify ways to utilize resources to accelerate the planning, design and construction process for the recommended projects.
- ❖ Undertake study to determine more detailed cost and design elements for the recommended projects.

### **Conclusions**

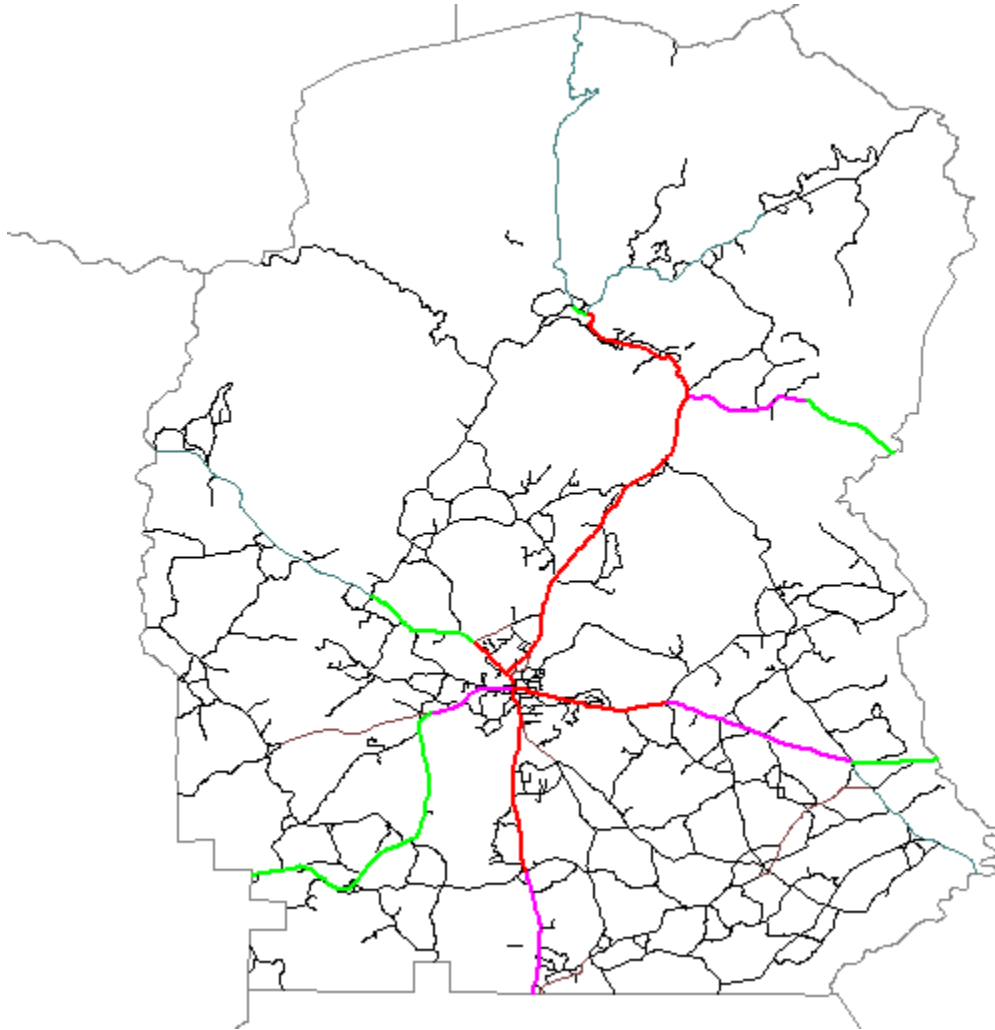
White County has had a steady growth in its population and it has seen an increase in tourist activity due to a multitude of scenic attractions in the county and surrounding communities in the region. The associated traffic generates difficult transportation planning challenges for the area. Improvements were selected that can be implemented without changing the fundamental character of the study area. The purpose of this element was to provide information and transportation recommendations for White County in order to address their transportation needs. It is highly recommended that White County and its municipalities jointly invest in the long-range transportation planning process as established by the Multi-modal Transportation Study completed by Day-Wilburn and Associates in July 2003. It is very





important that the community complete the recommendations as outlined in that document and where possible expanded upon its efforts by engaging the following practices:

- ✓ Complete a Corridor Transportation Management Study for SR 11/US 129, SR 75 and SR 75 ALT, SR 115 & SR 384.
- ✓ Complete a Corridor Transportation Management Study for downtown Cleveland and Helen.
- ✓ Engage in Pedestrian and/or Bike Planning for Cleveland, Helen, and White County. Complete a comprehensive pedestrian and/or bike community plan, if possible.
- ✓ Implement the recommended project for White County in the Regional Bicycle and Pedestrian Plan. Seek the assistance of Transportation Enhancement funding to help implement the proposed project.
- ✓ Develop and consider new or additional routes for movement of traffic within and through White County.
- ✓ Develop an effective implementation strategy for needed road projects.

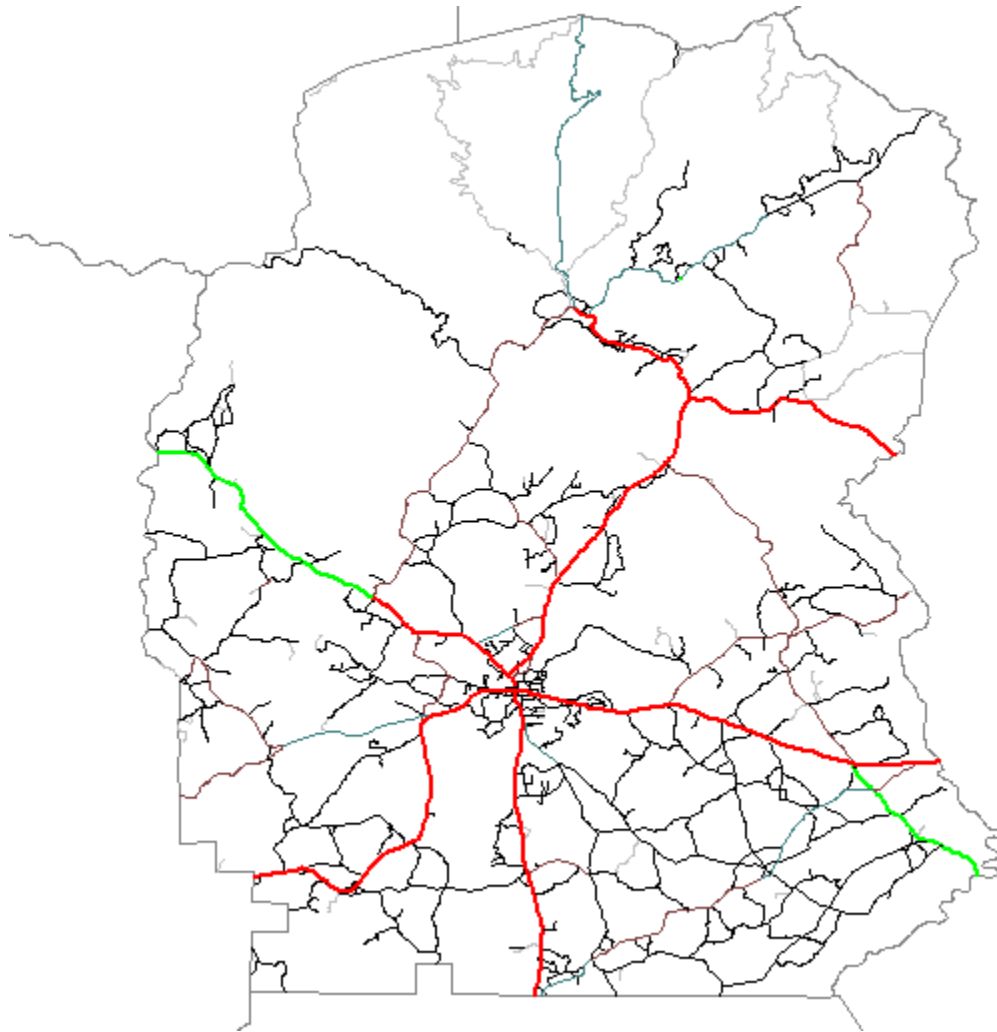






**CURRENT LEVELS OF SERVICE**



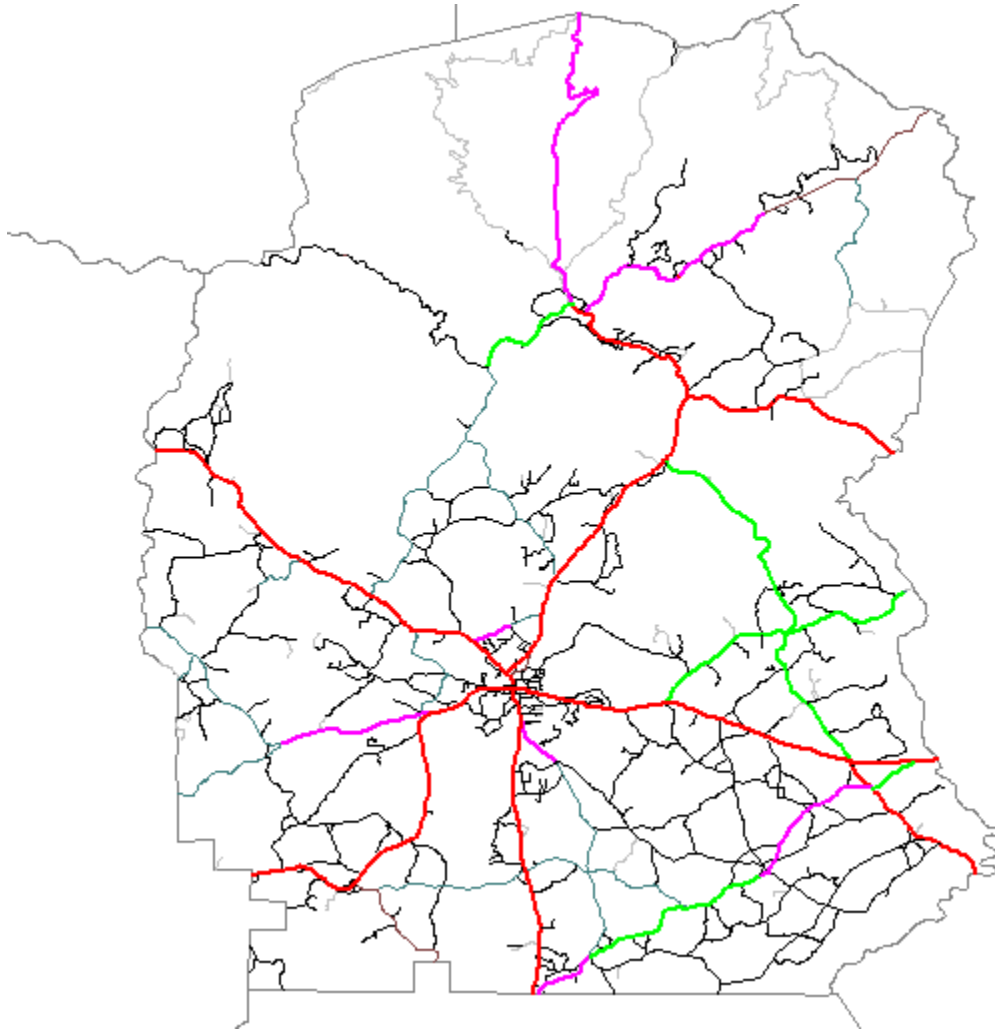
<b><u>Road</u></b>	<b><u>LOS (Grade)</u></b>
	F
	E
	D
	NA





## 10-YEAR LEVELS OF SERVICE



<u>Road</u>	<u>LOS (Grade)</u>
	F
	E
	D
	NA

**20-YEAR LEVELS OF SERVICE**



<b><u>Road</u></b>	<b><u>LOS (Grade)</u></b>
	F
	E
	D
	NA

## CHAPTER TEN

### INTERGOVERNMENTAL COORDINATION ELEMENT

The Intergovernmental Coordination Element provides local governments an opportunity to inventory existing intergovernmental coordination mechanisms and processes with other local governments and governmental entities that can have profound impacts on the success of implementing the local government's comprehensive plan. The purpose of this element is to assess the adequacy and suitability of existing coordination mechanisms to serve the current and future needs of the community and articulate goals and formulate a strategy for effective implementation of community policies and objectives that, in many cases, involve multiple governmental entities.

#### INVENTORY OF EXISTING ACTIVITIES, PROGRAMS AND CONDITIONS

##### LOCAL GOVERNMENT ENTITIES, BOARDS, AUTHORITIES AND PROGRAMS

**White County** operates a commission/manager form of government. The County government has a Board of Commissioners that are made up of a commission chairman and two other elected commissioners who serve four-year terms. The Board of Commissioners are responsible for hiring a county manager that provides general day-to-day management operations of the county government. The Board of Commissioners set and approve the budget for all departments and elected officials. The Board of Commissioners sets the millage rate each year, which provides funds for the operation of the county departments.

The **City of Cleveland** is governed by a mayor and four member city council that are elected city wide. All city council members serve on a part-time basis. Currently the mayor supervises the city clerk and all city departments.

The **City of Helen** is governed by a mayor and four member city council that are elected city wide. All city council members serve on a part-time basis. The City employs a city manager that supervises all city departments and daily function within the city.

The **White County Board of Education** serves the residents of Cleveland, Helen and White County. The school system currently operates seven public schools and is the fiscal agent for the White County Head Start Program and the Pre-Kindergarten Program. The school system coordinates with White County Government in the use of its facilities for recreation and other public use and for other programs.

The **White County Development Authority**, created as a local Development Authority in accordance with Georgia state law, works to attract new industry and expand existing industry in the county. Its five members meet quarterly, or in called meetings as necessary, to report on projects, plan strategy, consider inducement resolutions for new industries, and to acquire and develop industrial buildings, industrial sites and industrial parks.

**The White County Water Authority** provides water services within its respective service areas as agreed upon in the White County Service Delivery Strategy.

**The City of Cleveland** and the **City of Helen** provides water services to their respective water service area in White County as agreed upon in the White County Service Delivery Strategy.

The **White County Historic Society** provides historic preservation and museum services within White County and the City of Cleveland. The County provides a building to house the society's office and museum and provide insurance coverage (the old courthouse). The City funds a position through hotel/motel tax collections and pays for the societies utilities.

The **White County Chamber of Commerce** operates the Welcome Center and is active in tourism and economic development in White County. Volunteers and paid staff of three, including an Executive Director, assist new business, serve existing businesses, as well as the mountain tourists and other visitors to the community. The Chamber has about 600 members and is governed by a volunteer President and a Board of Directors representing businesses in the community.

The **City of Helen Convention and Visitors Bureau (CVB)** provides tourism and convention services within the City of Helen, including marketing and coordination of group tours and activities. The CVB also operates a full service visitor center and administers several tourist related events throughout the year.

The **Cleveland Better Hometown** program is a non-profit organization created to promote and improve the downtown area of Cleveland. The program encourages rehabilitation of historic structures and economic development in the downtown area. The organization is funded by the City of Cleveland, White County and through donations.

Adjacent local governments include **Hall County** to the south, **Towns County and Union County** to the north, **Habersham County** to the east and **Lumpkin County** to the west.

Coordination with these local governments is essential to the planning, development and service delivery process. White County is a member of the **Georgia Mountains Regional Development Center (GMRDC)**, which coordinates local and regional planning and development activities for all of the above counties. The RDC coordinates the review process for all developments that are at such a large scale they may have impacts beyond their jurisdictional boundaries (regional in nature) and may cause inter-jurisdictional conflicts. This review, titled **Development of Regional Impact (DRI) review** notifies all surrounding local governments and potential impacted agencies of the proposed development and allows them an opportunity to review the project (development) and provide comments about its potential impact on them. The RDC will then provide to the submitting local government comments and recommendation on the proposed project prior to the local government making a decision allowing the project to proceed or be denied.

## **OTHER UNITS OF LOCAL GOVERNMENT**

The **White County Sheriff Department** is responsible for the police protection, service and safety of White County citizens. The department operates a patrol, investigations, jail and public and school education division as well as participating in a drug task force. The sheriff department may assist the County in the enforcement of its local regulations. The department patrols county buildings and facilities and serves criminal and civil papers for the Magistrate Court.

The **Clerk of Courts** is responsible for all the civil and criminal filings made in the **White County Superior Court**. It also serves as the official recorder of real estate documents for the County maintaining records of deeds, plats, etc. The Clerk also provides the jury pool for Grand Jury and civil and criminal trials.

The **Magistrate Judge** is an elected official in White County. The **Magistrate Court** office process various criminal and civil matters and small claims up to \$15,000. The criminal section issues warrants, hold bonds, committal, dispossessory and first appearance hearings for certain offenses. The civil section issues notices of foreclosure, garnishments and Fi-FA's. The Magistrate Judge also performs marriages.

The **Judge of the Probate Court** is an elected official. The office is the custodian of vital records that allows the issuance of certified copies of birth and death certificates. The office maintains marriage records and copies of the legal organ. **The Probate Court** is responsible for the probate and administration of estates along with guardianships of minors and incapacitated adults. The court also handles misdemeanor traffic violations for the county. The Probate Judge also performs marriages.

The **Juvenile Court** handles all cases involving delinquent, unruly, and deprived children, as well as cases involving custody, child abuse, abortion notification, and termination of parental rights, and provides probation supervision of children on probation. Juvenile court also handles all traffic cases involving children under the age of 17, regardless of the jurisdiction of the incident.

The **City of Cleveland** and **City of Helen** both provide police protection inside their respective city limits. Response times within the City are as low as one to two minutes, as the department has a service area of approximately one mile to two miles.

Both **Cleveland** and **Helen** provide municipal court services that processes violation of city codes within their jurisdictions.

## **MULTI-JURISDICTIONAL AND REGIONAL ENTITIES AND PROGRAMS**

The **Enotah Judicial Circuit Court** serves four counties that include Lumpkin, Towns, Union and White. There is a joint agreement among the counties to fund the court services along with state funding. It is determined that the service is meeting current needs and is adequate to serve the county over the planning horizon.

The **Smithgall Woods Animal Shelter**, is an independent animal shelter that contracts with White County to provide care for abandoned and problem animals. Animal control is provided by the White County Sheriff's Office.

The **Appalachian Drug Task Force**, a joint law enforcement effort by Lumpkin, Towns, Union and White Counties, provides the resources necessary to facilitate the investigation, arrest, prosecution and conviction of drug and violent offenders who illicit activity impacts within the collective jurisdiction.

The **Georgia Mountains Regional Development Center** provides land planning, transportation planning, historic preservation planning, water resource and water quality planning, economic development assistance, and grant assistance to the county and city. GMRDC has a regional plan and coordinates the review of local plans and developments of regional impact. The **Georgia Mountains Regional Economic Development Corporation** provides economic development and loan assistance to the city and county.

Electric power is distributed in White County by the **Habersham Electric Membership Corporation**, with headquarters in Clarkesville, and by **Georgia Power** headquartered in Atlanta.

## **STATE AGENCIES, PROGRAMS AND ACTIVITIES**

The **Georgia Department of Community Affairs** provides a great deal of assistance to the county and city through its numerous programs. These programs include assistance in the areas of planning, housing, quality growth, downtown development and community development. White County is also a member of the Region 2 Regional Advisory Council.

The **Georgia Department of Transportation** operates a maintenance and engineering post for localized road maintenance and improvements. The department also does the local transportation planning for White County out of the District 1 Office located in Gainesville, Georgia. Georgia DOT also has as local maintenance operations office located within White County.

The **Georgia Department of Labor** maintains a State Employment Security Office at the Gainesville Career Center in Hall County for use of citizens from White County.

The **Georgia Forestry Commission** operates a forestry county unit office in White County. The office provides a county ranger who provides leadership, service and education in protection, management, and wise use of local forest resources.

The **Georgia Department of Natural Resources** owns several recreation and historic facilities within White County, including Unicoi State Park, Smithgall Woods, Buck Shoals, Hardman Farm and other important historic and archeological resources. These facilities total about 9,500 acres of land in White County. The Environmental Protection Division of DNR regulates permits for drinking water, waste water, stormwater management.

Agricultural extension services are provided county-wide by the **University of Georgia Cooperative Extension Service**. This program is funded jointly by White County and the State of Georgia.

The **Georgia Department of Human Resources** provides health services and mental health services through the White County Health Department and the White County Department of Mental Health. These two departments are funded by local, state and federal funds and grants.

The **Georgia Department of Family and Children Services** provides social and protective service assistance to needy families and children within the County. These services are funded by county, state and federal funds and grants.

### **FEDERAL AGENCIES AND PROGRAMS**

The **United States Forest Service** manages nearly 42,000 acres of land in White County. Occasionally the Forest Service will conduct land swaps on an as need basis with local governments and private individuals to consolidate their property and management of the forest. Because of all the Forest Service land located in White County, the federal government provides a token reimbursement to the county for the loss taxable lands.

The **Appalachian Regional Commission** is a federal-state partnership that works with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life. The ARC program is administered at the state level by the Georgia Department of Community Affairs (DCA). Each year ARC provides funding for several hundred projects throughout the 13 Appalachian states in support of economic and human development. These efforts seek to augment ARC's highway development program and bring more of Appalachia's people into America's economic mainstream. The projects directly address ARC's five goal areas: education and workforce training, physical infrastructure, civic capacity and leadership, business development, and health care. In helping Appalachian states meet community needs in these five goal areas, ARC has supported a variety of innovative projects and initiatives. Each year throughout the Region ARC programs create thousands of new jobs, increase school readiness, improve local water and sewer systems, expand access to health care, assist local communities with strategic planning, and provide technical, managerial, and marketing assistance to emerging new businesses.

White County is one of 35 counties in North Georgia eligible for assistance and programs activities from ARC. It is imperative that goals, policies and objectives at the local level be consistent and applicable to the mission goals of the ARC. The goals, policies and objectives found in each element of this plan are all relevant to ARC policies.

The **U.S.D.A Natural Resource and Conservation Service** provides technical assistance on natural resources issues and assist individuals, groups, and communities within the county to implement soil and water conservation practices to protect the privately owned land in Cleveland, Helen and White County. This program is jointly funded by county and federal funds.



## **SERVICE DELIVERY STRATEGY**

In accordance with the Service Delivery Act (HB 489), the White County, City of Cleveland and City of Helen Service Delivery Strategy (SDS) was developed, submitted and approved in 1999. This state law requires that local governments and related entities cooperate with the delivery of community services. The SDS identifies local community services, assigns service areas and responsibilities (including funding), and provides a methodology for the delivery of community services that include a variety of implementation tools such as ordinances and contracts.

In accordance with the SDS law, a local government's existing Strategy must be updated concurrent with the local government's comprehensive plan. To ensure consistency between the comprehensive plan and SDS the services to be provided by the local governments, as identified in the comprehensive plan cannot exceed those identified in the SDS. And, there must be consistency between the comprehensive plan and the SDS.

The current SDS includes the following services:

- Animal Control
- Appalachian Drug Task Force
- Ambulance Service
- Building Inspections
- Clerk of Court
- Code Enforcement
- Cooperative Extension Service
- Coroner
- District Attorney
- Economic Development
- Election Services
- E-911
- Emergency Management Agency
- Erosion and Sedimentation Control
- Family and Children's Services
- Fire Protection
- General Administration and Finance
- Health Services
- Humane Society
- Indigent Defense
- Jail Services
- Library Services
- Magistrate Court
- Mapping
- Municipal Services
- Occupation Tax (Business License)
- Park and Recreation Services
- Planning

- Probate Court
- Public Works
- Senior Citizen Services
- Social Services
- Soil Conservation Service
- Solid Waste Collection
- Solid Waste Disposal
- Superior and Juvenile Courts/Court Records
- Tax Appraisal/Assessment
- Tax Collection
- Voter Registration
- Water/Sewer Services
- Water Service.

All of these services are presented and discussed in other elements (Community Facilities and Services, Natural Resources, Historic and Cultural Resources, Transportation) within the comprehensive plan.

The SDA also includes an agreement between White County and the Cities of Cleveland and Helen to implement a process for resolving land use disputes over annexations. Under the agreement between the Cities and the County prior notification of annexation activities will be given to the County by the City providing full information on the proposed land use or zoning classification and area to be annexed. The county will respond to the City within 15 working days of its agreement or objection to the proposal. In the event of disagreement between the City and County, the dispute will go through the agreed upon mediation process.

To ensure compatible and non-conflicting land use White County, Cleveland and Helen provide land and water planning through ordinances for the following: Subdivision Regulations, Mountain Protection, Water Supply Watershed Protection, River Corridor Protection, Soil Erosion and Sedimentation Control Wetlands Protection, Floodplain Regulation, and through a resolution approving and adopting a comprehensive plan. Both the cities have zoning ordinances in place to assist in the management of growth. Expansion of water and sewer services and land use modifications must comply with these resolutions, ordinances, and the comprehensive plan.

There are additional departments or services identified in the SDS not addressed in this element, but are departments or units of local government, and are solely funded out of the county or city budget, are addressed and assessed in the community facilities element of this plan.

No immediate changes are required in the White County SDS. However, this does not prevent that due to future recommendations in the comprehensive plan as it is updated and from changes brought about by growth, the SDS could and should be revisited and updated.

## **OTHER ACTIVITIES**

A Source Water Assessment and Protection Plan (SWAP) was conducted by Georgia DNR, EPD for the White County Water Authority drinking water intake on Turner Creek. This assessment surveys land uses found within the watershed and rates each use on their potential threat to the intake based on use and location within the watershed. The plan will help White County to better understand land use activities within the watershed and help them develop policies and measures to protect the drinking water source. It is important to note that about 40% of the land in this watershed is either owned by the U.S. Forest Service or the State of Georgia, and not managed by White County.

## **ASSESSMENT OF CURRENT AND FUTURE NEEDS**







- The current methodology for resolving land disputes within the county and for coordinating planning activities, via regional hearings for local planning and communication large scale developments, DRI reviews, works well for White County, Cleveland and Helen.
- The White County level of need with the Appalachian Regional Commission is skewed by the higher income retirement population that is locating to the area. This is a population that does not work and does not contribute directly into the community. Looking below the surface there are several low and moderate income individual and families who are in need of training and jobs.
- A better methodology needs to be developed that will help the federal government understand the enormous loss in tax base in White County and increase their annual reimbursement to a fair value.
- Neither the City of Cleveland or the City of Helen have a history of an aggressive policy of annexation. As required by the minimum planning standards for this plan, the future land use map for both cities presents land use designations on property that could potentially be annexed into their jurisdiction. This does not mean that the cities will undertake annexation of those lands. These uses are in all likelihood consistent with future land uses identified by White County.
- Forecasted population and areas of future development for the Cities and County to determined future levels of service should be coordinated with the water authorities or utilities for permitting purposes and fire protection purposes, and with the White County Board of Education in their Five –Year Facilities Planning as required by the State BOE.
- Currently, the White County Service Delivery Strategy for coordinating local government services and related program is functioning adequately. As the cities and county move forward with land development regulations or new/expanded services and programs, the strategy may need to be amended.

<b>ELEMENT</b>	<b>TYPE OF STATEMENT PRIORITY</b>	<b>DESCRIPTION</b>	<b>WHITE COUNTY</b>	<b>CLEVELAND</b>	<b>HELEN</b>
Intergovt. Coordination	Goal	Resolve all land and services conflicts as prescribed in the Service Delivery Strategy.	X	X	X
Intergovt. Coordination	Goal/Policy	Study and encourage improvements in federal government policy for local government reimbursement for loss of local property tax base.	X		
Intergovt. Coordination	Policy	Encourage all planning, development and growth within the county to be coordinated, and opportunity for county departments and agencies to be afforded comments and input on growth should occur.	X	X	X
Intergovt. Coordination	Goal	Update the Service Delivery Strategy as needed and as growth occurs. Ensure that the SDA is consistent with the Comprehensive Plan.	X	X	X
Intergovt. Coordination	Goal	Revise and update existing programs and ordinances that will further enhance and protect the public water supply and expand public sewer capacity.	X	X	X

**COMPREHENSIVE LISTING OF GOALS  
POLICIES AND OBJECTIVES**

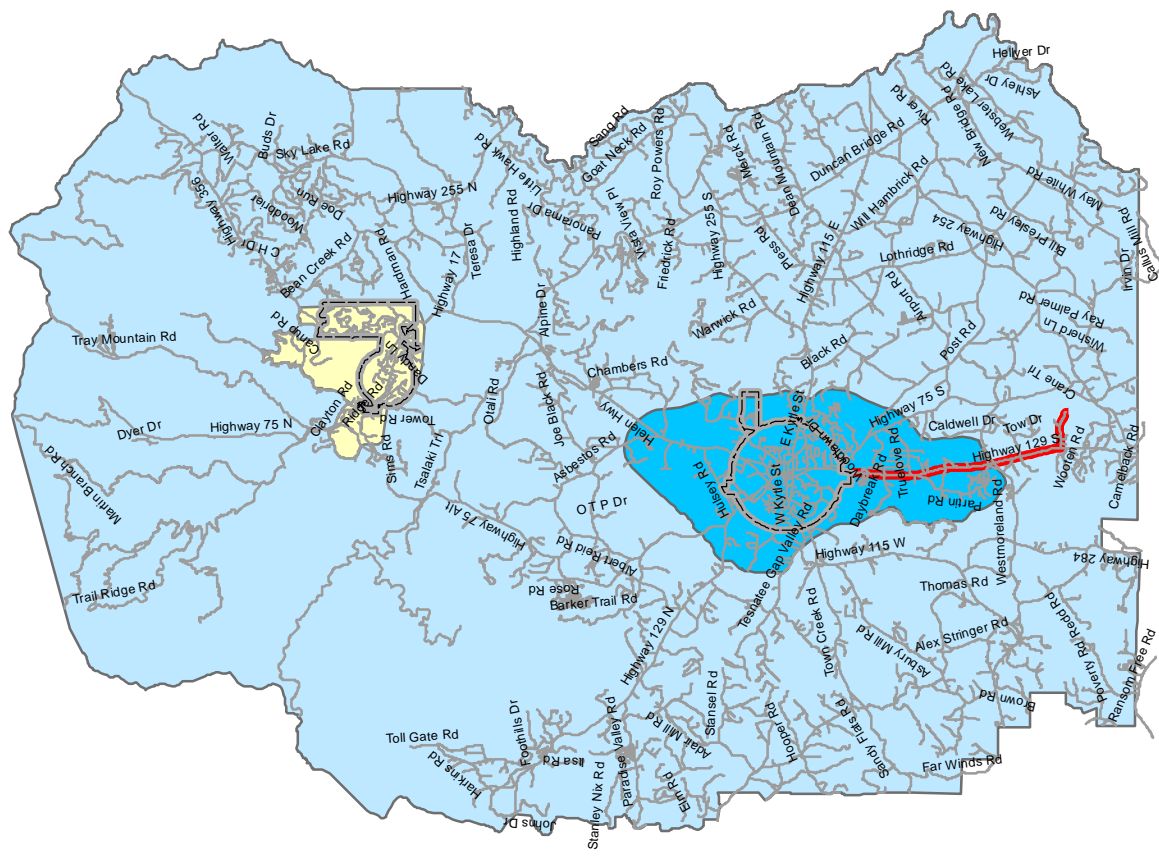
# White County Service Delivery Areas

## Legend

-  City of Helen - City Limits
-  City of Cleveland - City Limits
-  Cleveland Water Service Area
-  Helen Water Service Area
-  White County Water Authority Service Area
-  Cleveland Industrial Park Sewer Service Line



Map Prepared By:  
Georgia Mountains Regional  
Development Center  
FDJ, September, 2006



## CHAPTER 11

### IMPLEMENTATION

The purpose of this chapter is to establish a strategy for the implementation of the various goals, objectives, strategies and policies established in the Comprehensive Plan. An implementation strategy is necessary to ensure that the Comprehensive Plan is used by community leaders as a guide to make decisions affecting the community's future. Furthermore, it is the intent of the Georgia Planning Act that plans can be implemented and used in the regional and state, as well as local, planning processes.

Minimum planning standards for local plans require the development of a Short Term Work Program, which consists of community programs and projects needed to meet the goals and objectives, public facilities necessary to meet the standard of living desired by the community for existing residents and the projected population into the future, and a general description of any land development regulations expected to be adopted or amended to help achieve the goals and objectives of the Comprehensive Plan in the next five years. The local planning standards also require that the Short Term Work program be revised every five years.

Prior to the discussion of the major programs, facilities and regulations necessary to implement the plan, however, it is desirable to describe various functions of the plan in the implementation process.

#### Legal Status of Comprehensive Plan

Adoption of the Comprehensive Plan carries with it no weight of law, and the Board of Commissioners of White County and the City Councils in Cleveland and Helen are under no legal obligation to implement the Comprehensive Plan. However, adoption of the plan demonstrates a consensus of intent among County Commissioners to implement the plan and the various methods needed for implementation.

#### Use of Plan in Development Decisions

Upon adoption, the Comprehensive Plan, including the various policy statements and the Future Land Use Map should be consulted when considering a development proposal. The cities should make use of the plan in zoning decisions. However, the County Commission is under no obligation to adhere strictly to the Future Land Use Map. The plan should also be used by the Planning Commissions in each jurisdiction in its review of subdivision plat applications and by the White County Chamber of Commerce, Water and Sewerage Authority or Departments, and Development Authority in advising prospective developers and in their own decisions.

#### Use of Plan in Public Facility and Program Decisions

The White County Board of Commissioners should utilize the Comprehensive Plan **as a** guide in making decisions about future operating and capital expenditures. Every major decision involving use of public lands and additional public facilities should be referred to the Planning Commission to enable study of such proposal's consistency with planning policies. The Comprehensive Plan should be used as a reference and justification for developing grant

application and new county programs they may require state and/or federal assistance and with public/private partnerships.

### Conflict Between Policies and Maps

In the event that one or more goals, objectives, strategies, and/or policies, or any portion of the text, conflict with the Future Land Use Map or any other maps, the provisions of the text shall prevail. This is the case because the Future Land Use Map, while substantially detailed, is not intended to dictate the exact use of each parcel in White County, the City of Cleveland or the City of Helen. Rigid application of this map is not expected because it is intended to be applied generally, and because there will undoubtedly be justifiable departures from the design of the plan map. Implementation of the overall general policies is what is most important. However, substantial and/or successive departures from the plan map should result in an amendment to the plan text and map.

### Conflict Between Policy Statements

It is anticipated that instances will arise where certain goals and policies will conflict with other policy statements. For instance, the economic development strategy of promoting suitable job opportunities may conflict with the goal of preserving the rural and scenic character of White County. The goals, objectives, strategies and policies are all considered to be of equal value on their face. That is, such policy statements are not ranked by order of importance in the plan. In cases of conflicts, the County Board of Commissioners and each City Council must decide, as individual instances arise, which of the conflicting policies will prevail.

### Community Vision

White County and its cities will continue to provide a quality community for its citizens, visitors, business and industry. The strong sense of community, family, heritage and entrepreneurship, coupled with the respect for the unique natural resources and inspirational amenities makes White County simply “the natural choice” to live and work in the present day and in the future.

### Future Land Use Development Maps

The future land use development maps for White County, Cleveland and Helen are an illustration of future character areas desired by the community as expressed through the public participation process. Character areas are descriptions and narrative explaining what type of development should occur in the specified areas to create an overall vision of the type of future development that will be pursued. Delineation of these areas are more free form and allow for the assessment of the overall compatibility among uses throughout the entire county. For character areas identified on the maps, guidelines explaining types, forms, and patterns of development are specified. Also identified are some specific types of land uses, quality community objectives and implementation measures. Many of the future character areas were initially developed from the White County Resource Team Report. These characteristics were further defined into the future land use maps for the cities and the county.

## Defining Narrative and Characteristics for Land Use

**Second Home Residential** – These are areas where the majority of second home development has taken place throughout the county. These areas include larger lots because they are associated with mountain and hillside protection. They usually have views and the lots with steeper slopes and with more sensitive soils. The mountain protection standard protects the environment and particularly the viewshed, which is important to the local community and the tourism based economy in White County and both cities. Some future residential development should occur in conservation subdivisions, where the carrying capacity of the land will allow such developments.

**Single Family Residential** – These are areas in the county and in each city where local residents live full time. Many of these areas were second home developments in the past and have either converted or will be converting to full time residences. These areas should allow moderate densities due to the fact that they are located along corridors where there is supporting infrastructure and road network. Many future developments in these areas should encourage traditional neighborhood style subdivisions and master planned communities. Both cities have the ability to encourage this type of development through the update of their zoning and subdivision codes and their wastewater infrastructure.

**Single Family Low Density** – These are areas in the county that are very low density. These areas will continue to have large amounts of open space and green belts in their viewshed. This area should truly focus on the use of conservation subdivisions. The slopes and soils are such that they can support the clustering of lots and other mixed uses while preserving the best locations for viewshed green space and common areas.

**Agricultural and Low Density** – Agriculture will continue to thrive in significant portions of White County. The promotion of the county's agricultural program and its products is an important way to keep the agricultural value in these areas and prevent them from converting to other types of land uses. Traditional row crops, livestock, poultry and development of new agricultural and horticultural produce, such as grape and nursery plants, add value to the profession of the land and to the local economy. Land conservation easements should be encouraged in these areas in order to help the farmer keep their costs (and taxes) at a minimum. If necessary a farmland protection program could be developed to look for additional ways to preserve and enhance agricultural uses in the community. Residential land uses in these areas should mostly be related to farm management uses and intra-family land transfers to keep families together. The agricultural areas in the county are some of the most historical as well. It is important to recognize these lands and corridors and provide protections and incentives in order to preserve these historic areas.

**Agriculture/Forestry** – These are areas in the county that are gateways into the mountains and historic communities. It is important that these be maintained as much as possible because they are part of what draws millions of visitors to the area. Development should be kept at a minimum and if it takes place should appear in a manner that does not compromise the gateway viewshed and minimizes the impact on the existing uses.



**Community Commercial** – These are mainly where crossroads exist and nodes of mixed activity are most likely to develop. Uses should be kept to moderate densities with of mix of smaller retail businesses and services that are of a convenience nature to the local areas. Architecture, site design and signage should blend with the unique nature of each community node. This can be accomplished through the plan review process for all commercial sites in White County.

**Tourism Commercial** – White County and its cities play hosts to millions of visitors each year. It is anticipated this the tourism industry in the area will more than double the current number of visitors over the next ten years. These particular areas are mainly focused within the City of Helen and in the northern parts of the county (Robertstown, Sautee-Nacoochee, Chimney Mountain. They include corridors such S.R. 17 east from Helen to the county line, S.R. 255 from Sautee Junction into Habersham County, S.R. 75 north from Helen to Unicoi Gap, and S.R. 356 from Robertstown and Unicoi State Park north to the county line. These corridors include exquisite views and historic areas. Signage and site setbacks and buffer are most important and should be emphasized in the site location and design of future tourism venues and related facilities. As these corridors and centers develop, they should take place with pedestrian and alternative transportation modes in mind. Many of these alternative modes are identified in the Regional Bicycle and Pedestrian Plan and will be programmed in the State Department of Transportation Improvement Plan as state transportation facilities are improved.

**Commercial Corridor** – The City of Cleveland is the economic and social center of White County. It is projected that this will continue over the time frame of this plan. The four highway corridors leading into the city from unincorporated White County are projected to be commercial corridors, with U.S 129 being the primary commercial corridor. It is important that future development stay within these corridors and highway nodes. New development will set back appropriately through local and state requirements which may include buffers, access roads, interparcel connecting roads, shared driveways, all reducing curbs and maintaining safe traffic flow on the state facilities. The gentrification of abandoned or older dilapidated commercial centers should be encouraged rather than new on spring up. The city will focus uses through their zoning and provision of community services. Signage should be appropriately modest, low and minimally lighted, and properly set back.

**Industrial** – These uses will be kept to the Telford Hulsey Industrial Park and to those areas zoned in the City of Cleveland for industrial use. These areas are where the existing infrastructure is available. It is doubtful and undesirable that such infrastructure would be extended to any other location in the county. The future focus of industrial development in White County is to encourage small light industries that need anywhere from 1,000 to 5,000 square feet of space and employ 3 to 20 employees. The idea behind this concept is to allow small business entrepreneurs to develop and grow in the county and become not just an industry, but part of the community.

**Historic Downtown District** – This is more than just a business district, but an area that will promote community activity. The City of Cleveland and the Cleveland Better Home Town Program focuses on the management of downtown. Revitalization activities, community promotions and events, and maintaining the historic character and sense of place are being emphasized in downtown Cleveland. In addition to the Better Home Town Program, the city is developing historic design guidelines for downtown structures and businesses and is seeking a

pedestrian oriented streetscape plan from the Georgia Department of Transportation.

**Scenic Heritage Corridors** – These areas include S.R. 17, S.S. 254, S.R. 255, S.R. 356, and S.R. 384 from its intersection of S.R. 255 to S.R. 75. These areas either include extremely beautiful viewsheds or very important historic community, often both. Each corridor have their defining features and development should be modified to be appropriate to their context and maintain their character. Not only is this important for community appearance and vitality, but also for traffic flow and appropriate land uses.

**Helen/Chattahoochee Riverfront** – This area/corridor would begin in the Chattahoochee River in Robertstowns, traverse through the City of Helen and end below Nacoochee Village at the Hardman Farm. Part of this concept is proposed in the White County Resource Team Report as well as in the Regional Bicycle and Pedestrian Plan. However, a local and visitor pedestrian amenities plan should be developed to provide guidance and oversight in order to the community to capitalize on the river as a quality of life amenity. The plan should include appropriate bicycle and pedestrian facilities that parallel the river and flow around existing structures and properties. There should be linkages to the riverfront from community facilities and visitor venues. The plan should include buffers that are required for environmental protection.

For location of such character areas and land uses please see that attached future land use maps for White County, the City of Cleveland and City of Helen. In addition, these character areas are also reference in the attached illustrations from the White County Resource Team Report.

### Community Issue and Opportunities

#### **Population**

- The county population is expected to more than from 2000 to 2015. Both cities will experience higher growth rates than the county over the same time frame.
- The majority of the population growth is expected to occur in age groups 55+ as the baby boom generation retires.
- There is a direct correlation between the increasing age of the population and the number of calls for emergency response.
- Cleveland will continue to serve at the social and economic center in the county, therefore focusing its services on the functional population. In peak tourist season, the county, including the City of Helen may have as many as 70,000 visitors a day undertaking a variety of activities at various locations.
- Income levels in the City of Cleveland are significantly lower than the rest of the county. One fourth of the children under age 18 in Cleveland live below the poverty level.

- Education levels have dramatically increased. They are expected to continue to rise as additional higher education opportunities come forward through Truett-McConnell becoming a four year institution and North Georgia Technical College having two campuses adjacent to White County and a satellite location in the county.

## **Housing**

- Single family housing is the dominant use in the county with very little multi-family housing. Most multi-family housing opportunities are found in Cleveland and Helen where the appropriate infrastructure is available providing necessary support.
- A very high percentage of the housing units in the county are for seasonal or second home purposes creating lower than normal housing occupancy rates or high vacancy rates. Many of the housing units are projected to become primary residences over the next twenty years, thus contributing to high population growth.
- The value and cost of housing has risen dramatically over the past ten years and is expected to continue.
- Land values continue to double about every four years, escalating to the point where it could contribute to housing affordability issues.
- Adjustments need to be made to local development regulations that will provide more housing options and innovations, which could include creation affordable housing opportunities.
- More multi-family housing opportunities need to be made available in appropriate areas.

## **Economic Development**

- Agriculture and tourism are the two largest contributors to the local economy. Helen is the tourism center for all of North Georgia.
- Additional tourism opportunities are emerging through heritage tourism venues and agricultural related tourism venues. The county and cities should develop programs to enhance these venues and promote them.
- Economic promotion and enhancement should always include agricultural production. Poultry, livestock, and row crops continue to be a strong contributor to the local economy. Promotion would help keep these farms active, valuable and contributing to the local economy and not developed for residences.

- The county should pursue new agricultural and horticultural opportunities such as the development of vineyards, corn mazes and nurseries for ornamental plants. These types of operations can double as agri-tourism operations.
- The county and cities should continue to focus its commercial and industrial recruitment and growth on small business entrepreneurs who need smaller spaces and want their industries to be a part of the community.
- The county should obtain designations such as Entrepreneur Friendly and Community Work Ready in order to provide assistance in the development of business and industry.
- The City of Cleveland should finalize and officially obtain the Better Home Town designation to assist in the revitalization and promotion of downtown activities.
- The City of Helen was hit by a tornado in 2005, but continues to rebound well in its rebuilding efforts of tourism facilities, its wastewater spray fields and restoration of the river.
- A coordinated effort and plan should be developed to create a community and visitor pedestrian corridor from Robertstown to the Hardman Farm, with future linkage to the Sautee Junction area.
- Both cities should continue to plan and update their infrastructure to serve and concentrate commercial development in the appropriately designated areas.
- Opportunities should be sought to high-speed information and communications throughout the county, particularly wireless communication applications.
- Encourage the development of a medium to large size conference facility.

### Natural Resources

- The county has adopted all of the Part V criteria for environmental protection. Neither the City of Cleveland or Helen has adopted any of the criteria.
- Water supply sources for the both the county and cities are sufficient for the next five to seven years. However, with the projected rate of growth and the length of time it take to develop water resources all three local governments should be planning the development of additional water resources.
- The majority of White County is covered with moderate to steep slopes, therefore placing severe limitations, challenges and costs on development opportunities.
- Associated with steep slopes are shallow and sensitive soils placing additional limitations on development opportunities.

- The local climate, slopes and clay soils in White County are ideal for growing grapes and the development of vineyards.
- Soils in bottom lands should continue to serve as floodplain and for agriculture. Development within the flood plain should be discouraged.
- Though mountain and hillside protection measures are place, the viewsheds in the county continue to be a resource that should be closely monitored.
- The preservation of cool water habitat for trout should be addressed in local regulations beside the Erosion and Sedimentation Control law.
- Stormwater management measures are needed to address future commercial development and residential areas with moderate to high densities.
- Prime agricultural areas in the county are threatened by the pressure of future residential development. A program and measures may be needed to preserve farmland and maintain farm operations.
- Both the City of Helen and the City of Cleveland should become Tree Cities.

#### Historic and Cultural Resources

- The City of Cleveland should obtain the Better Home Town Designation.
- The City of Cleveland needs to develop and adopt measure to protect and enhance its historic building on the downtown square and areas adjacent to the square.
- An update historic resources survey is needed.
- There are no protection or preservation measures for the Sautee and Nacoochee Valleys, which are National Register districts. There are also historic five church camps in White County that also do not have any protection or preservation measure either.
- Historic and cultural resources are an important part of the community and are ideal as local heritage tourism sites. They should be enhance and promoted as such.

#### Community Facilities

- There is an ample water supply for approximately the next five years, increased permit withdrawals and treatment capacity will be needed beyond. There is also a need for increased raw water storage and treated storage for all three local governments in White County.

- There is very little sewer capacity available for growth. Capacity is severely limited due to an antiquated treatment facility and an aging collection system.
- The cumulative placement and use of septic systems in higher density areas in the county may cause long-term water quality problems, especially in areas where extremely steep slopes exist.
- There is an immediate need for space in the Sheriff's Department. By the year 2020 the department will need an additional space of over 22,000 square feet for offices and detention.
- Based on projected population for Cleveland, to maintain the same level of service the city will need to employ and additional five officers (total 16 officers) at the year 2010 and 23 total officers by the year 2020. This does not include any clerical positions that may be needed for administrative purposes. The Police Department will need to increase their space need to 2,200 square feet by 2010 and to 3,100 square feet by 2020.
- Fire station # 1 in Cleveland should be replaced/relocated immediately. An eighth fire station should be located somewhere in the south part of the county along U.S. 129. Based on projected growth the county will need three additional stations by the year 2020. Additional full-time personnel are needed as well.
- The county health department severely limited due to extremely limited space in their current facility. A new health department facility is needed to accommodate the current population as well as the anticipated population growth. Such a facility should also include enough space to adequately house mental health services as well.
- With the anticipated increase in the elderly population in White County and its cities over the next twenty years, the need for facilities for assisted living and nursing homes will increase.
- White County has an extremely low crime rate, which makes it an attractive place to live and visit. Anticipated Federal and State Homeland Security initiatives more than likely will have an impact on Public Safety personnel, facilities and equipment.
- As the mean age of the population increases, so does the number of requests for emergency response.
- The County Courthouse is at capacity for courts and administrative space and requires either expanded or new facilities. The county should address the needs as they are presented to the Board of Commissioners.
- The City of Cleveland is in need of administrative space to adequately house City Hall.
- By 2025, the county will need to add 118.1 developed acres of parks and recreation land to its inventory. Some of this need can be offset by the presence of state and federal lands for recreational purposes. Passive recreation is excellent for citizens and visitors

due to the abundance of the mountains and streams in the state and federal lands in White County.

- The student population growth will be accommodated per the White County Board of Education Five-Year Facility Plan as required by the State Board of Education.
- Opportunities for higher education, bachelor degrees, now exist in White County with the expansion of the curriculum at Truett-McConnell College.
- There is an immediate need for an additional 5,000 square feet for library space in White County. Growth projections show that space needs for the library will increase by more than 20,000 square feet of additional space by the year 2020.
- Civic or community meeting space is extremely limited in the county. Beside the facility at Unicoi State Park, there is not a facility available that could host a large convention, concert, meeting, etc.

### Transportation

- Complete a Corridor Transportation Management Study for SR 11/US 129, SR 75 and SR 75 ALT, SR 115 & SR 384.
- Complete a Corridor Transportation Management Study for downtown Cleveland and Helen.
- Engage in Pedestrian and/or Bike Planning for Cleveland, Helen, and White County. Complete a comprehensive pedestrian and/or bike community plan, if possible.
- Implement the recommended project for White County in the Regional Bicycle and Pedestrian Plan. Seek the assistance of Transportation Enhancement funding to help implement the proposed project.
- Develop and consider new or additional routes for movement of traffic within and through White County.
- Develop an effective implementation strategy for needed road projects.

### Land Use

- Vast amounts of White County are undeveloped, forested lands under the management of the United States Forest Service.
- The county consists of scattered rural residential and agricultural land uses.

The largest concentrations of residential and other development occur in and surrounding the Cities of Cleveland and Helen, and also along the corridors of 129 and 75.

- Topography and steep slopes are major factors in the placement of developments throughout the County. In the northern half of White County especially, topography forces all land uses to co-exist in narrow mountain valleys.
- Careful planning of mountains, valleys and corridors for a variety and mixture of land uses is the most significant challenge. Current updates of local regulations meet many of these challenges, however, additional requirements are most likely needed to address other concerns.
- "Second" homes are expected to continue developing around streams, lakes, and ridgetops with scenic views. The City of Helen continues to draw second home development as well.

#### Intergovernmental Coordination

- The current methodology for resolving land disputes within the county and for coordinating planning activities, via regional hearings for local planning and communication large scale developments, DRI reviews, works well for White County, Cleveland and Helen.
- The White County level of need with the Appalachian Regional Commission is skewed by the higher income retirement population that is locating to the area. This is a population that does not work and does not contribute directly into the community. Looking below the surface there are several low and moderate income individual and families who are in need of training and jobs.
- A better methodology needs to be developed that will help the federal government understand the enormous loss in tax base in White County and increase their annual reimbursement to a fair value.
- Neither the City of Cleveland or the City of Helen have a history of an aggressive policy of annexation. As required by the minimum planning standards for this plan, the future land use map for both cities presents land use designations on property that could potentially be annexed into their jurisdiction. This does not mean that the cities will undertake annexation of those lands. These uses are in all likelihood consistent with future land uses identified by White County.
- Forecasted population and areas of future development for the Cities and County to determined future levels of service should be coordinated with the water authorities or utilities for permitting purposes and fire protection purposes, and with the White County Board of Education in their Five –Year Facilities Planning as required by the State BOE.
- Currently the White County Service Delivery Strategy for coordinating local government services and related program is functioning adequately. As the cities and county move forward with land development regulations or new/expanded services and programs, the strategy may need to be amended.



## **SHORT TERM WORK PROGRAMS FOR WHITE COUNTY, THE CITY OF CLEVELAND AND THE CITY OF HELEN**

The Short Term Work Program (STWP) is the implementation part of the Comprehensive Plan that list specific actions and objectives to be undertaken annually by each local government over the next five years. Each item in the STWP refers to issues in the plan and addresses concerns and opportunities referenced in the plan. Each items includes a description , costs (if any), department responsibility and types of possible technical assistance that may be available.

A STWP has been developed separately for each local government. Each local government is responsible for implementing its own STWP. Some items may require coordination between local governments or local governments and other partners such as state agencies as well as public private partnerships. At the end of five years each local government is require to prepare a report of accomplishments reporting on the STWP (status of all items). Each local government then must prepare a new STWP for the next five years and continue implementing the Comprehensive Plan and its goals and policies.

The STWP for each local government are attached in a folder at the end of this chapter.

MULTIMODAL TRANSPORTATION PLANNING TOOL

System Level Analysis

Results of analysis of WHITE County conducted on November 12, 2005  
(Based on the GDOT Road Characteristic file dated 2002)

\*\*\* Warning about Interpretation of these Results \*\*\*

All, or a portion, of the county/counties you selected for analysis may be classified as a U.S. Census-designated "Urbanized Area", in which regular and ongoing transportation planning activities occur through the Urbanized Area's Metropolitan Planning Organization. [Urbanized Areas are typically those having a contiguous urbanized population above 49,999.] Please be aware that the MTPT's highway analysis module is neither intended nor appropriate for use in an Urbanized Area; instead, the user is advised to contact the appropriate MPO for highway analysis information resulting from their travel demand model.

HIGHWAY ANALYSIS KEY

Key for Route type

Key	Stands for
STR	State route
CYR	County road
CST	City street
CRD	COL road
URD	Unofficial road
RMP	Ramp
PRD	Private road
PUR	Public road
CDR	Collector-Distributor

Key for Functional Class

Key	Stands for
IPA	Interstate Principal Arterial
PAR	Principal Arterial -- Rural
MAR	Minor Arterial -- Rural
MCR	Major Collector -- Rural
NMC	NFA Minor Collector -- Rural
LOC	Local -- Rural
UFY	Freeway -- Urban
UPA	Principal Arterial -- Urban
MAS	Minor Arterial Street -- Urban
CST	Collector Street -- Urban
LOU	Local -- Urban

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 Key for priority  
 -----

Key        Stands for

  X    No action required  
 I    Immediate action  
 N    Near term  
 M    Medium term  
 L    Long term

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 Legend for Highway Analysis Output Results  
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Key                Stands for

RTE#            Route Number  
 BMP            Beginning Milepoint  
 EMP            Ending Milepoint  
 RTE            Route Type  
 FC            Functional Class  
 AADT           Average Annual Daily Traffic / Road Inventory Year  
 TRL            Number of Travel Lanes  
 SPD            Speed Limit  
 LOS(3)        Level of Service for Current, 10 year, & 20 year  
 ACT            Recommended Action Priority as described above

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 HIGHWAY ANALYSIS -- TWO-LANE

Input for two-lane highways  
 Terrain : LOOKUP  
 Lowest acceptable LOS : C  
 K : 12%  
 D : 60%

Results of two-lane highway analysis

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 001100 | 0000 | 0264 | 1   | PAR | 009900 | 02  | 55  | F,~,~  | N   |
| 001100 | 0264 | 0551 | 1   | PAR | 011600 | 02  | 55  | F,~,~  | N   |
| 001100 | 0551 | 0574 | 1   | PAR | 011600 | 02  | 50  | F,~,~  | N   |
| 001100 | 0574 | 0578 | 1   | PAR | 011600 | 02  | 45  | F,~,~  | N   |
| 001100 | 0578 | 0602 | 1   | PAR | 019800 | 02  | 45  | F,~,~  | N   |
| 001100 | 0602 | 0634 | 1   | PAR | 019800 | 02  | 35  | F,~,~  | N   |
| 001100 | 0634 | 0647 | 1   | PAR | 019800 | 02  | 25  | F,~,~  | N   |
| 001100 | 0654 | 0667 | 1   | PAR | 020400 | 02  | 25  | F,~,~  | N   |
| 001100 | 0667 | 0687 | 1   | PAR | 020400 | 02  | 35  | F,~,~  | N   |
| 001100 | 0687 | 0698 | 1   | PAR | 008900 | 02  | 35  | F,~,~  | N   |
| 001100 | 0698 | 0719 | 1   | PAR | 008900 | 02  | 45  | F,~,~  | N   |
| 001100 | 0719 | 0770 | 1   | PAR | 008900 | 02  | 55  | F,~,~  | N   |
| 001100 | 0770 | 0986 | 1   | PAR | 007900 | 02  | 55  | F,~,~  | N   |
| 001100 | 0986 | 1156 | 1   | PAR | 003100 | 02  | 55  | D,~,~  | N   |
| 001100 | 1156 | 1159 | 1   | PAR | 003100 | 02  | 55  | C,E,~  | M   |
| 001100 | 1159 | 1494 | 1   | PAR | 003100 | 02  | 55  | D,~,~  | N   |
| 001100 | 1494 | 1497 | 1   | PAR | 003100 | 02  | 55  | C,E,~  | M   |
| 001700 | 0000 | 0133 | 1   | MAR | 003300 | 02  | 55  | E,~,~  | N   |
| 001700 | 0133 | 0151 | 1   | MAR | 003300 | 02  | 55  | D,~,~  | N   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 001700 | 0151 | 0153 | 1   | MAR | 003300 | 02  | 55  | E,~,~  | N   |
| 001700 | 0153 | 0177 | 1   | MAR | 003300 | 02  | 45  | E,~,~  | N   |
| 001700 | 0177 | 0180 | 1   | MAR | 003300 | 02  | 45  | D,~,~  | N   |
| 001700 | 0180 | 0191 | 1   | MAR | 003300 | 02  | 45  | E,~,~  | N   |
| 001700 | 0191 | 0303 | 1   | MAR | 004600 | 02  | 45  | E,~,~  | N   |
| 001700 | 0303 | 0421 | 1   | MAR | 004600 | 02  | 55  | E,~,~  | N   |
| 001700 | 0421 | 0425 | 1   | MAR | 008800 | 02  | 55  | F,~,~  | N   |
| 001700 | 0425 | 0449 | 1   | MAR | 008800 | 02  | 45  | F,~,~  | N   |
| 001700 | 0449 | 0544 | 1   | MAR | 008800 | 02  | 35  | F,~,~  | N   |
| 001700 | 0544 | 0555 | 1   | MAR | 005200 | 02  | 35  | E,~,~  | N   |
| 001700 | 0555 | 0620 | 1   | MAR | 005200 | 02  | 30  | E,~,~  | N   |
| 001700 | 0620 | 0710 | 1   | MAR | 005200 | 02  | 35  | E,~,~  | N   |
| 001700 | 0710 | 0745 | 1   | MAR | 004400 | 02  | 35  | E,~,~  | N   |
| 001700 | 0745 | 0768 | 1   | MAR | 002700 | 02  | 35  | C,E,~  | M   |
| 001700 | 0768 | 1208 | 1   | MAR | 002700 | 02  | 45  | C,E,~  | M   |
| 001700 | 1208 | 1528 | 1   | MAR | 002700 | 02  | 35  | C,E,~  | M   |
| 007500 | 0000 | 0024 | 1   | MAR | 010000 | 02  | 35  | F,~,~  | N   |
| 007500 | 0024 | 0065 | 1   | MAR | 010000 | 02  | 45  | F,~,~  | N   |
| 007500 | 0065 | 0138 | 1   | MAR | 010100 | 02  | 45  | F,~,~  | N   |
| 007500 | 0138 | 0221 | 1   | MAR | 007800 | 02  | 45  | F,~,~  | N   |
| 007500 | 0221 | 0538 | 1   | MAR | 007800 | 02  | 55  | F,~,~  | N   |
| 007500 | 0538 | 0654 | 1   | MAR | 008600 | 02  | 55  | F,~,~  | N   |
| 007500 | 0654 | 0676 | 1   | MAR | 008600 | 02  | 45  | F,~,~  | N   |
| 011500 | 0000 | 0208 | 1   | MAR | 005800 | 02  | 55  | E,~,~  | N   |
| 011500 | 0208 | 0626 | 1   | MAR | 005600 | 02  | 55  | E,~,~  | N   |
| 011500 | 0626 | 0676 | 1   | MAR | 008300 | 02  | 55  | F,~,~  | N   |
| 011500 | 0676 | 0677 | 1   | MAR | 008300 | 02  | 50  | F,~,~  | N   |
| 011500 | 0677 | 0682 | 1   | MAR | 009600 | 02  | 50  | F,~,~  | N   |
| 011500 | 0682 | 0730 | 1   | MAR | 009600 | 02  | 45  | F,~,~  | N   |
| 011500 | 0730 | 0733 | 1   | MAR | 009600 | 02  | 35  | F,~,~  | N   |
| 011500 | 0733 | 0762 | 1   | MAR | 009600 | 02  | 25  | F,~,~  | N   |
| 011500 | 0762 | 0768 | 1   | MAR | 009600 | 02  | 35  | F,~,~  | N   |
| 011500 | 0768 | 0782 | 1   | MAR | 009600 | 02  | 25  | F,~,~  | N   |
| 011500 | 0782 | 0793 | 1   | MAR | 011300 | 02  | 25  | F,~,~  | N   |
| 011500 | 0793 | 0834 | 1   | MAR | 011300 | 02  | 35  | F,~,~  | N   |
| 011500 | 0834 | 0892 | 1   | MAR | 011300 | 02  | 45  | F,~,~  | N   |
| 011500 | 0892 | 1055 | 1   | MAR | 011300 | 02  | 55  | F,~,~  | N   |
| 011500 | 1055 | 1249 | 1   | MAR | 008400 | 02  | 55  | F,~,~  | N   |
| 011500 | 1249 | 1400 | 1   | MAR | 006800 | 02  | 55  | F,~,~  | N   |
| 011500 | 1400 | 1550 | 1   | MAR | 004800 | 02  | 55  | E,~,~  | N   |
| 025400 | 0000 | 0121 | 1   | MAR | 002000 | 02  | 55  | C,D,~  | M   |
| 025400 | 0121 | 0493 | 1   | MAR | 001300 | 02  | 55  | B,C,E  | L   |
| 025400 | 0493 | 0766 | 1   | MAR | 001400 | 02  | 55  | B,C,E  | L   |
| 025400 | 0766 | 0784 | 1   | MAR | 001400 | 02  | 45  | B,C,E  | L   |
| 025400 | 0784 | 0806 | 1   | MAR | 001600 | 02  | 45  | B,C,E  | L   |
| 025400 | 0806 | 0883 | 1   | MAR | 001600 | 02  | 55  | B,C,E  | L   |
| 025500 | 0000 | 0278 | 1   | MCR | 001700 | 02  | 55  | C,C,E  | L   |
| 025500 | 0278 | 0540 | 1   | MCR | 001300 | 02  | 55  | B,C,E  | L   |
| 025500 | 0540 | 0549 | 1   | MCR | 001300 | 02  | 55  | B,C,D  | L   |
| 025500 | 0549 | 0550 | 1   | MCR | 001300 | 02  | 55  | B,B,D  | L   |
| 025500 | 1190 | 1193 | 1   | MCR | 002500 | 02  | 45  | D,~,~  | N   |
| 025500 | 1193 | 1268 | 1   | MCR | 002500 | 02  | 45  | C,D,~  | M   |
| 025500 | 1268 | 1569 | 1   | MCR | 001900 | 02  | 45  | B,C,E  | L   |
| 028400 | 0000 | 0252 | 1   | MCR | 000900 | 02  | 55  | A,A,C  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 034800 | 0000 | 0005 | 1   | MCR | 000500 | 02  | 35  | A,A,A  | X   |
| 034800 | 0005 | 0400 | 1   | MCR | 000500 | 02  | 35  | A,A,B  | X   |
| 034800 | 0400 | 0664 | 1   | MCR | 000500 | 02  | 45  | A,A,B  | X   |
| 034800 | 0664 | 0702 | 1   | MCR | 000500 | 02  | 35  | A,A,B  | X   |
| 035600 | 0000 | 0105 | 1   | MCR | 002000 | 02  | 45  | C,D,~  | M   |
| 035600 | 0105 | 0144 | 1   | MCR | 002000 | 02  | 35  | C,D,~  | M   |
| 035600 | 0144 | 0150 | 1   | MCR | 002000 | 02  | 40  | C,D,~  | M   |
| 035600 | 0150 | 0151 | 1   | MCR | 002000 | 02  | 35  | C,D,~  | M   |
| 035600 | 0151 | 0153 | 1   | MCR | 002000 | 02  | 40  | B,C,E  | L   |
| 035600 | 0153 | 0155 | 1   | MCR | 002000 | 02  | 40  | C,C,E  | L   |
| 035600 | 0155 | 0201 | 1   | MCR | 002000 | 02  | 40  | C,D,~  | M   |
| 035600 | 0201 | 0204 | 1   | MCR | 002000 | 02  | 40  | C,C,E  | L   |
| 035600 | 0204 | 0227 | 1   | MCR | 002000 | 02  | 40  | C,D,~  | M   |
| 035600 | 0227 | 0450 | 1   | MCR | 002000 | 02  | 45  | C,D,~  | M   |
| 035600 | 0450 | 0814 | 1   | MCR | 000600 | 02  | 45  | A,A,B  | X   |
| 038400 | 0000 | 0269 | 1   | MCR | 005500 | 02  | 55  | E,~,~  | N   |
| 038400 | 0269 | 0335 | 1   | MCR | 005200 | 02  | 45  | E,~,~  | N   |
| 038400 | 0335 | 0650 | 1   | MCR | 003000 | 02  | 55  | C,D,~  | M   |
| 038400 | 0650 | 1135 | 1   | MCR | 002600 | 02  | 55  | C,D,~  | M   |
| 000100 | 0000 | 0202 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 000200 | 0000 | 0046 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 000300 | 0000 | 0096 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 000400 | 0000 | 0724 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 000500 | 0000 | 0076 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 000700 | 0000 | 0055 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 000800 | 0000 | 0014 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 000900 | 0000 | 0493 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 001000 | 0000 | 0192 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 001000 | 0192 | 0310 | 2   | NMC | 001870 | 02  | 55  | B,B,D  | L   |
| 001100 | 0000 | 0057 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 001200 | 0000 | 0045 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 001300 | 0000 | 0035 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 001400 | 0000 | 0031 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 001500 | 0000 | 0018 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 001600 | 0000 | 0251 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 001700 | 0000 | 0037 | 2   | LOC | 000740 | 02  | 40  | A,A,A  | X   |
| 001900 | 0000 | 0038 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002000 | 0000 | 0096 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002100 | 0000 | 0151 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 002200 | 0000 | 0030 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002300 | 0000 | 0184 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002400 | 0000 | 0143 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002500 | 0000 | 0081 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002600 | 0000 | 0032 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 002700 | 0000 | 0077 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002800 | 0000 | 0060 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 002900 | 0000 | 0088 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 003000 | 0000 | 0062 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 003000 | 0062 | 0285 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003100 | 0000 | 0085 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003200 | 0000 | 0076 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003200 | 0076 | 0088 | 2   | LOC | 000100 | 02  | 10  | A,A,A  | X   |
| 003200 | 0088 | 0143 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003300 | 0000 | 0091 | 2   | LOC | 000740 | 02  | 40  | A,A,A  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 003400 | 0000 | 0129 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003500 | 0000 | 0198 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003600 | 0000 | 0339 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 003600 | 0339 | 0341 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 003900 | 0000 | 0071 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 004000 | 0000 | 0103 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 004100 | 0000 | 0087 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 004200 | 0000 | 0084 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 004300 | 0000 | 0035 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 004300 | 0035 | 0036 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 004400 | 0000 | 0001 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 004400 | 0001 | 0041 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 004500 | 0000 | 0024 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 004600 | 0000 | 0030 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 004700 | 0000 | 0135 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 004800 | 0000 | 0107 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 004900 | 0000 | 0133 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 005000 | 0000 | 0041 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 005000 | 0041 | 0042 | 2   | LOC | 000100 | 02  | 30  | A,A,A  | X   |
| 005000 | 0042 | 0070 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 005100 | 0000 | 0028 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 005200 | 0063 | 0088 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 005400 | 0000 | 0081 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 005600 | 0000 | 0108 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 005600 | 0108 | 0114 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 005600 | 0114 | 0119 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 005700 | 0000 | 0002 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 005700 | 0002 | 0004 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 005700 | 0004 | 0098 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 005700 | 0098 | 0127 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 005700 | 0127 | 0333 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 005700 | 0333 | 0407 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 005800 | 0000 | 0227 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 005900 | 0000 | 0001 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 005900 | 0050 | 0104 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 006000 | 0000 | 0161 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 006000 | 0161 | 0183 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 006100 | 0000 | 0121 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 006100 | 0121 | 0124 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 006100 | 0124 | 0149 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 006200 | 0000 | 0259 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 006300 | 0000 | 0023 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 006500 | 0000 | 0017 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 006500 | 0017 | 0061 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 006600 | 0000 | 0027 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 006600 | 0027 | 0057 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 006800 | 0000 | 0062 | 2   | MCR | 001500 | 02  | 55  | B,C,D  | L   |
| 006800 | 0062 | 0130 | 2   | MCR | 001300 | 02  | 55  | B,B,D  | L   |
| 007000 | 0000 | 0027 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 007100 | 0000 | 0214 | 2   | LOC | 000740 | 02  | 40  | A,A,A  | X   |
| 007300 | 0000 | 0072 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 007400 | 0000 | 0146 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 007400 | 0146 | 0184 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 007600 | 0000 | 0046 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 007800 | 0000 | 0199 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 007900 | 0000 | 0139 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 008200 | 0000 | 0020 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 008200 | 0020 | 0032 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 008200 | 0035 | 0047 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 008200 | 0051 | 0053 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 008400 | 0000 | 0394 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 008500 | 0000 | 0053 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 008700 | 0000 | 0057 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 008800 | 0000 | 0188 | 2   | NMC | 001870 | 02  | 55  | C,C,E  | L   |
| 008800 | 0188 | 0191 | 2   | NMC | 001870 | 02  | 45  | B,C,E  | L   |
| 008800 | 0191 | 0362 | 2   | NMC | 001870 | 02  | 55  | B,C,E  | L   |
| 008900 | 0000 | 0093 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 009100 | 0000 | 0217 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 009300 | 0000 | 0013 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 009300 | 0013 | 0030 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 009300 | 0030 | 0150 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 009400 | 0000 | 0122 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 009500 | 0172 | 0227 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 009700 | 0000 | 0102 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 009700 | 0102 | 0103 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 009800 | 0000 | 0028 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 009900 | 0000 | 0041 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 010000 | 0000 | 0050 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 010300 | 0000 | 0308 | 2   | NMC | 001870 | 02  | 55  | B,C,E  | L   |
| 010400 | 0000 | 0334 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 010500 | 0000 | 0121 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 010500 | 0121 | 0126 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 010500 | 0126 | 0168 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 010600 | 0000 | 0150 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 010600 | 0150 | 0348 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 011000 | 0000 | 0025 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 011100 | 0000 | 0019 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 011200 | 0000 | 0049 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 011500 | 0000 | 0130 | 2   | NMC | 001870 | 02  | 30  | B,C,E  | L   |
| 011500 | 0130 | 0144 | 2   | NMC | 001870 | 02  | 30  | B,B,D  | L   |
| 011500 | 0144 | 0209 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 011700 | 0000 | 0424 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 011800 | 0000 | 0101 | 2   | NMC | 001870 | 02  | 35  | B,C,E  | L   |
| 011800 | 0101 | 0105 | 2   | NMC | 001870 | 02  | 35  | B,B,D  | L   |
| 011800 | 0105 | 0122 | 2   | NMC | 001870 | 02  | 55  | B,C,E  | L   |
| 011900 | 0000 | 0052 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 012000 | 0000 | 0018 | 2   | LOC | 000740 | 02  | 50  | A,A,A  | X   |
| 012100 | 0000 | 0036 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 012200 | 0000 | 0422 | 2   | LOC | 000740 | 02  | 50  | A,A,A  | X   |
| 012300 | 0000 | 0001 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 012300 | 0035 | 0162 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 012400 | 0000 | 0140 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 012500 | 0000 | 0052 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 012600 | 0000 | 0042 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 012700 | 0000 | 0110 | 2   | NMC | 001870 | 02  | 35  | B,C,E  | L   |
| 012700 | 0110 | 0316 | 2   | NMC | 001870 | 02  | 35  | B,B,D  | L   |
| 012800 | 0000 | 0113 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 013000 | 0000 | 0145 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 013100 | 0000 | 0357 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 013300 | 0000 | 0113 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 013300 | 0115 | 0200 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 013400 | 0000 | 0034 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 013600 | 0000 | 0100 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 013700 | 0000 | 0022 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 013800 | 0000 | 0013 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 013900 | 0000 | 0172 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 013900 | 0172 | 0173 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 013900 | 0173 | 0189 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 014300 | 0000 | 0075 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 014400 | 0000 | 0094 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 014500 | 0000 | 0093 | 2   | NMC | 001870 | 02  | 55  | B,C,E  | L   |
| 014500 | 0093 | 0106 | 2   | NMC | 001870 | 02  | 50  | B,C,E  | L   |
| 014600 | 0000 | 0063 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 014700 | 0000 | 0245 | 2   | MCR | 000200 | 02  | 35  | A,A,A  | X   |
| 014800 | 0000 | 0026 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 014800 | 0026 | 0088 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 014800 | 0088 | 0160 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 014800 | 0160 | 0208 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 014900 | 0000 | 0035 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 015100 | 0000 | 0067 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 015300 | 0000 | 0042 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 015300 | 0042 | 0098 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 015300 | 0098 | 0147 | 2   | LOC | 000740 | 02  | 35  | A,A,A  | X   |
| 015400 | 0000 | 0043 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 015500 | 0000 | 0053 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 015600 | 0000 | 0016 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 015700 | 0000 | 0123 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 015900 | 0000 | 0036 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 016000 | 0000 | 0186 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 016000 | 0186 | 0263 | 2   | LOC | 000740 | 02  | 40  | A,A,A  | X   |
| 016100 | 0000 | 0101 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 016200 | 0000 | 0236 | 2   | LOC | 000740 | 02  | 45  | A,A,A  | X   |
| 016300 | 0000 | 0053 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 016400 | 0000 | 0086 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 016500 | 0000 | 0020 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 017100 | 0000 | 0038 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 017200 | 0000 | 0070 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 017300 | 0000 | 0033 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 017800 | 0000 | 0062 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 018100 | 0000 | 0009 | 2   | LOC | 000100 | 02  | 30  | A,A,A  | X   |
| 018100 | 0009 | 0028 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 018200 | 0000 | 0027 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 018200 | 0027 | 0032 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 018300 | 0000 | 0021 | 2   | LOC | 000740 | 02  | 40  | A,A,A  | X   |
| 018400 | 0000 | 0061 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 018400 | 0061 | 0124 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 018800 | 0000 | 0055 | 2   | LOC | 000100 | 02  | 10  | A,A,A  | X   |
| 018900 | 0000 | 0040 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 019100 | 0000 | 0003 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 019100 | 0003 | 0011 | 2   | LOC | 000740 | 02  | 40  | A,A,A  | X   |
| 019100 | 0011 | 0012 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 019100 | 0012 | 0101 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |



| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 019300 | 0000 | 0033 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 019400 | 0000 | 0003 | 2   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 019400 | 0003 | 0069 | 2   | LOC | 000100 | 02  | 20  | A,A,A  | X   |
| 019500 | 0000 | 0020 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 019600 | 0000 | 0001 | 2   | LOC | 000740 | 02  | 35  | A,A,A  | X   |
| 019600 | 0001 | 0002 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 019600 | 0002 | 0012 | 2   | LOC | 000100 | 02  | 55  | A,A,A  | X   |
| 019600 | 0012 | 0050 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 019700 | 0000 | 0053 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 019800 | 0000 | 0126 | 2   | LOC | 000740 | 02  | 35  | A,A,A  | X   |
| 019800 | 0126 | 0127 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 020000 | 0000 | 0328 | 2   | NMC | 001870 | 02  | 50  | B,C,E  | L   |
| 020000 | 0328 | 0600 | 2   | MCR | 002200 | 02  | 50  | C,D,~  | M   |
| 020100 | 0000 | 0485 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 020400 | 0000 | 0281 | 2   | NMC | 001100 | 02  | 55  | A,B,C  | X   |
| 020400 | 0281 | 0406 | 2   | NMC | 001900 | 02  | 55  | B,C,E  | L   |
| 020400 | 0406 | 0612 | 2   | NMC | 001500 | 02  | 55  | B,B,D  | L   |
| 020500 | 0000 | 0116 | 2   | NMC | 001870 | 02  | 55  | B,B,D  | L   |
| 020900 | 0000 | 0053 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021000 | 0000 | 0059 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021100 | 0000 | 0055 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021100 | 0055 | 0067 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 021300 | 0000 | 0018 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021500 | 0000 | 0002 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 021500 | 0002 | 0093 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021600 | 0000 | 0023 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021700 | 0000 | 0028 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 021700 | 0028 | 0046 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 021900 | 0000 | 0031 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 022000 | 0000 | 0033 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022100 | 0000 | 0045 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022300 | 0000 | 0050 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022400 | 0000 | 0070 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022500 | 0000 | 0054 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 022600 | 0000 | 0055 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022700 | 0000 | 0026 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022800 | 0000 | 0018 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 022900 | 0000 | 0034 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023000 | 0000 | 0129 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023000 | 0129 | 0130 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 023100 | 0000 | 0033 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 023200 | 0000 | 0048 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023400 | 0000 | 0036 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023500 | 0000 | 0035 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023500 | 0035 | 0037 | 2   | LOC | 000100 | 02  | 55  | A,A,A  | X   |
| 023500 | 0037 | 0070 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023600 | 0000 | 0036 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023800 | 0000 | 0028 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 023900 | 0000 | 0024 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 024000 | 0000 | 0111 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 024100 | 0000 | 0013 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 024200 | 0000 | 0012 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 024300 | 0000 | 0009 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 024500 | 0000 | 0002 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 024900 | 0000 | 0052 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 025000 | 0000 | 0032 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 025100 | 0000 | 0190 | 2   | MCR | 001300 | 02  | 55  | A,B,D  | L   |
| 025100 | 0190 | 0445 | 2   | MCR | 001500 | 02  | 55  | B,C,D  | L   |
| 025100 | 0445 | 0497 | 2   | MCR | 002500 | 02  | 55  | C,D,~  | M   |
| 025100 | 0497 | 0508 | 2   | MCR | 002500 | 02  | 45  | C,D,~  | M   |
| 025100 | 0508 | 0554 | 2   | MCR | 002500 | 02  | 25  | C,D,~  | M   |
| 025200 | 0000 | 0015 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 025300 | 0000 | 0039 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 025400 | 0000 | 0004 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 025400 | 0004 | 0035 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 025500 | 0000 | 0064 | 2   | LOC | 000740 | 02  | 35  | A,A,A  | X   |
| 025500 | 0064 | 0094 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 025600 | 0000 | 0007 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 025700 | 0000 | 0056 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 025700 | 0056 | 0058 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 025700 | 0058 | 0066 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 025800 | 0000 | 0009 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 025900 | 0000 | 0017 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 026000 | 0000 | 0007 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 026100 | 0000 | 0010 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 026200 | 0000 | 0058 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 026300 | 0000 | 0014 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 026500 | 0000 | 0002 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 026500 | 0002 | 0012 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 026600 | 0000 | 0017 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 026700 | 0000 | 0015 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 026800 | 0000 | 0006 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 026900 | 0000 | 0036 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 027000 | 0000 | 0093 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027100 | 0000 | 0009 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027200 | 0000 | 0023 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027300 | 0000 | 0013 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027500 | 0000 | 0031 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027600 | 0000 | 0034 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027700 | 0000 | 0036 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 027800 | 0000 | 0052 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 027900 | 0000 | 0007 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 027900 | 0007 | 0060 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 028000 | 0000 | 0058 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 028100 | 0000 | 0051 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 028200 | 0000 | 0055 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 028300 | 0000 | 0016 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 028400 | 0000 | 0102 | 2   | LOC | 000100 | 02  | 30  | A,A,A  | X   |
| 028600 | 0000 | 0014 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 028700 | 0000 | 0014 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 028800 | 0000 | 0049 | 2   | LOC | 000740 | 02  | 50  | A,A,A  | X   |
| 029500 | 0000 | 0009 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 030400 | 0000 | 0036 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 031000 | 0000 | 0069 | 2   | LOC | 000740 | 02  | 35  | A,A,A  | X   |
| 031100 | 0000 | 0019 | 2   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 031200 | 0000 | 0025 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 031300 | 0000 | 0027 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 031600 | 0000 | 0026 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 032500 | 0000 | 0023 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 032600 | 0000 | 0019 | 2   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 032600 | 0019 | 0033 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 032600 | 0033 | 0055 | 2   | LOC | 000100 | 02  | 30  | A,A,A  | X   |
| 032700 | 0000 | 0013 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 032800 | 0000 | 0023 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 032900 | 0000 | 0050 | 2   | LOC | 000740 | 02  | 35  | A,A,A  | X   |
| 033000 | 0000 | 0066 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 033100 | 0000 | 0044 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 033200 | 0000 | 0012 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 033300 | 0000 | 0037 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 033600 | 0000 | 0039 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 033700 | 0000 | 0057 | 2   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 033800 | 0000 | 0018 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 033900 | 0000 | 0030 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034000 | 0000 | 0025 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034200 | 0000 | 0037 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034300 | 0000 | 0033 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034400 | 0000 | 0038 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034500 | 0000 | 0012 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034700 | 0000 | 0031 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034800 | 0000 | 0015 | 2   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 034900 | 0000 | 0009 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 035000 | 0000 | 0009 | 2   | LOC | 000100 | 02  | 25  | A,A,A  | X   |
| 050001 | 0000 | 0031 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 050101 | 0000 | 0019 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 050201 | 0000 | 0072 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 050401 | 0000 | 0011 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 050501 | 0000 | 0037 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 050601 | 0000 | 0025 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 050701 | 0000 | 0083 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 050801 | 0000 | 0012 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 050901 | 0006 | 0016 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051001 | 0000 | 0006 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051101 | 0000 | 0030 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051301 | 0000 | 0016 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051401 | 0000 | 0014 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051501 | 0000 | 0032 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051801 | 0000 | 0043 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 051901 | 0000 | 0049 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052001 | 0000 | 0052 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052301 | 0000 | 0084 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 052401 | 0000 | 0061 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052501 | 0000 | 0012 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052601 | 0000 | 0012 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052701 | 0000 | 0021 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052801 | 0000 | 0044 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 052901 | 0000 | 0018 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053001 | 0000 | 0027 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053001 | 0027 | 0029 | 3   | LOC | 000100 | 02  | 30  | A,A,A  | X   |
| 053101 | 0000 | 0029 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053201 | 0000 | 0008 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053301 | 0000 | 0060 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053401 | 0000 | 0015 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 053501 | 0000 | 0014 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053601 | 0000 | 0006 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053701 | 0000 | 0005 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 053801 | 0000 | 0027 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 053901 | 0000 | 0014 | 3   | LOC | 000740 | 02  | 15  | A,A,A  | X   |
| 054001 | 0000 | 0021 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054101 | 0000 | 0017 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054201 | 0000 | 0072 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 054401 | 0000 | 0028 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054501 | 0000 | 0004 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054601 | 0000 | 0030 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054701 | 0000 | 0007 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054801 | 0000 | 0028 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 054901 | 0000 | 0048 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055001 | 0000 | 0007 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055101 | 0000 | 0007 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055201 | 0000 | 0018 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055301 | 0000 | 0032 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055401 | 0000 | 0005 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055501 | 0000 | 0008 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055601 | 0000 | 0004 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055701 | 0000 | 0026 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055801 | 0000 | 0032 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 055801 | 0032 | 0036 | 3   | LOC | 000740 | 03  | 30  | A,A,A  | X   |
| 060003 | 0000 | 0048 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 060103 | 0000 | 0015 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 060203 | 0000 | 0032 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 060303 | 0000 | 0007 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 060403 | 0000 | 0017 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 060503 | 0000 | 0014 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 060603 | 0000 | 0050 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 060803 | 0008 | 0012 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 060903 | 0000 | 0001 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 061003 | 0000 | 0008 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 061203 | 0000 | 0009 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 061203 | 0009 | 0012 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 061303 | 0000 | 0041 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 061403 | 0000 | 0120 | 3   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 061503 | 0000 | 0026 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 061603 | 0000 | 0031 | 3   | LOC | 000740 | 02  | 30  | A,A,A  | X   |
| 010800 | 0000 | 0071 | 7   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 010900 | 0000 | 0020 | 7   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 010900 | 0020 | 0022 | 7   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 010900 | 0022 | 0135 | 7   | LOC | 000740 | 02  | 20  | A,A,A  | X   |
| 010800 | 0000 | 0026 | 8   | LOC | 000740 | 02  | 15  | A,A,A  | X   |
| 010900 | 0000 | 0128 | 8   | LOC | 000740 | 02  | 15  | A,A,A  | X   |
| 020800 | 0000 | 0215 | 8   | LOC | 000740 | 02  | 15  | A,A,A  | X   |
| 020800 | 0215 | 0332 | 8   | LOC | 000740 | 02  | 25  | A,A,A  | X   |
| 033400 | 0000 | 0011 | 8   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 033400 | 0011 | 0012 | 8   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 033500 | 0000 | 0002 | 8   | LOC | 000740 | 02  | 55  | A,A,A  | X   |
| 033500 | 0002 | 0005 | 8   | LOC | 000100 | 02  | 35  | A,A,A  | X   |
| 0075AL | 0299 | 0449 | 1   | MCR | 001700 | 02  | 45  | B,C,E  | L   |
| 0075AL | 0449 | 0451 | 1   | MCR | 001700 | 02  | 45  | B,C,D  | L   |

| RTE#   | BMP  | EMP  | RTE | FC  | AADT   | TRL | SPD | LOS(3) | ACT |
|--------|------|------|-----|-----|--------|-----|-----|--------|-----|
| 0075AL | 0451 | 0723 | 1   | MCR | 001700 | 02  | 45  | B,C,E  | L   |
| 0075AL | 0723 | 0759 | 1   | MCR | 001300 | 02  | 45  | A,B,D  | L   |
| 0075AL | 0759 | 0883 | 1   | MCR | 001300 | 02  | 35  | A,B,D  | L   |
| 0075AL | 0883 | 1106 | 1   | MCR | 001500 | 02  | 35  | B,C,D  | L   |
| 0075AL | 1106 | 1110 | 1   | MCR | 001500 | 02  | 35  | B,C,E  | L   |

Error Records for Highway Analysis

Two-lane Road Segments Unavailable for analysis in White County

| RTE#   | BMP  | EMP  | RTE | FC  |
|--------|------|------|-----|-----|
| 007500 | 0676 | 1783 | STR | MAR |
| 025500 | 0550 | 0997 | STR | MCR |
| 025500 | 0997 | 1190 | STR | MAR |
| 0075AL | 0000 | 0299 | STR | PAR |