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***NOTE: Funding assistance was provided by a grant from the Unrestricted Fund at the Polk County Community Foundation.***



## POLK COUNTY VISION PLAN SECTION I PREFACE

### SECTION I. PREFACE

#### A. PLAN PURPOSE

While the preparation of a comprehensive plan is encouraged by North Carolina legislation, there are broader and more important reasons to engage in the planning process. Local government plans and planning affect people's lives. Basically, planning begins with understanding Polk County and its people, and caring for both. Tough choices must be made about the natural, manmade, and financial resources in the county. The county's budget should be compared to the plan to ensure that public money will be spent in accordance with the county's goals and objectives.

The planning process also serves to educate ourselves about Polk County citizens, about our attitudes towards others, and our willingness to share a sense of belonging to Polk County. Planning should be promoted as a means of community decision-making through public participation. But planning also may involve conflict and friction because it may divide people into opposing groups. Some conflict in the planning process is good. It stimulates thinking and reminds us of the need to understand and tolerate, and even support, the opinions of others.

Polk County has undertaken the preparation of this comprehensive plan with the understanding that the plan should be:

- Comprehensive in setting goals and objectives for all aspects of the county.
- Part of a continuous planning process that is timely and responsive to the needs/desires of the county.
- The legal basis for land use regulations and a guide for county budgeting.

In summary, this process will provide a workable, creative, and dynamic plan to guide future long-term growth and development throughout the next twenty (20) years. It provides a foundation for Polk County's ongoing planning program and serves as the county's primary policy guide for short- and long-range planning, zoning, and land use related decision-making within the county.

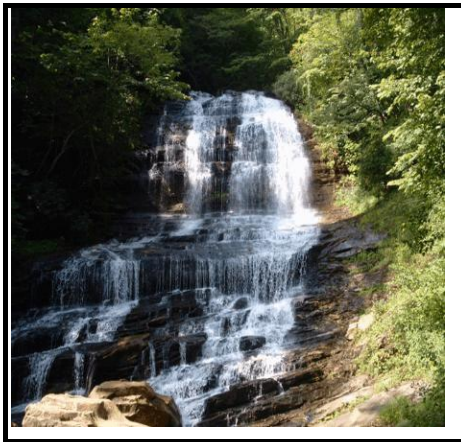
#### B. THE PLANNING PROCESS

The adoption of this plan by Polk County is not the end but rather the beginning of an ongoing process. This process includes five (5) essential steps:

1. **Basic Goals.** Polk County must consider basic goals including: Do we want to grow? Do we want to be a center for high-tech industry? What balance do we want between growth and preservation of the natural environment?
2. **Study and Analysis.** Polk County must study land use, population trends, the economic base of the county, and physiographic features.
3. **Plan or Policy Preparation.** The comprehensive plan must provide a basic statement of how the county will develop, in what direction, and at what pace.
4. **Implementation and Effectuation.** To implement the plan, the county must use such tools as land use regulations, capital improvements programs, and general guidelines for private development and public investment.
5. **Monitoring and Feedback.** The county must continuously evaluate how well the plan's policies are being carried out, whether the goals are realistic, and whether new, unanticipated conditions have occurred. Feedback may become the basis for redesign of this plan.



## POLK COUNTY VISION PLAN SECTION II INTRODUCTION





## POLK COUNTY VISION PLAN SECTION II INTRODUCTION

### SECTION II. INTRODUCTION

#### A. DEVELOPMENT OF THE COMPREHENSIVE PLAN

The development of this plan was initiated in 2007 by the Polk County Visioning Committee, appointed by the Polk County Board of Commissioners and comprised of twenty-two (22) persons. The members included representatives of the County and the three municipal governments, the Planning Department, Economic Development Commission, St. Luke's Hospital, Polk County Schools, Emergency Services, Parks and Recreation, Social Services, the Chamber of Commerce, and representatives of each township.

The Visioning Committee was tasked with developing a vision for the future of Polk County and to recommend priorities for future planning. The committee supervised the distribution of surveys to 12,100 households in Polk County. A total of 2,553 surveys were returned, for a response rate of 21%. The survey results were compiled in January, 2008. Copies of the complete survey results are available on the Polk County website, [www.polknc.org](http://www.polknc.org), and/or from the Polk County Planning Department.

Based on the sentiments expressed by the public survey, citizen comments, and Committee members, the following vision statement was developed:

#### Vision for Polk County

Polk County's rural atmosphere and serene natural beauty will be vigorously protected. Visionary and pragmatic county and municipal governments will work together in a cooperative manner as they continue to enhance the quality of life for all Polk County citizens.

The Committee's prioritized list of recommendations as detailed below supports the achievement of the people's vision:

- Future Growth/Development. In a collaborative effort with municipalities,

create as soon as possible a professionally designed Comprehensive Land Use Plan. This plan will achieve the vision that citizens want for the community. It will more effectively guide future development, quality of life standards and delivery of services countywide. Such a plan should also include the mechanisms to insure future compliance.

- Environment. Develop and aggressively enforce appropriate regulations to preserve/enhance the beauty and quality of our natural resources, including slope and ridgetop protection as well as forest preservation. Activities should include effective waste management programs that encourage greater participation in recycling efforts.
- Farmland Preservation. Maintain the rural character and beauty of Polk County by aggressively creating and supporting programs to protect/preserve farms and open areas, along with forest preservation.
- Housing. Include within the Comprehensive Land Use Plan for the county a means to reconcile the contradiction between support of affordable housing and opposition to multi-family units and mobile homes.
- Water. Develop an effective system to insure adequate safe water for the future needs of the community, and create contingency plans to better cope with water emergencies. This requires an ongoing program to aggressively monitor quantity and quality of both ground and surface water in the county.
- Health Care. Monitor closely and provide the necessary leadership and focus to improve availability as well as quality of health care services to all citizens of Polk County.
- Education. Support public education effectively to maintain high achievement standards in academic and performance excellence with minimum dropouts.
- Public Safety. Insure that law enforcement, fire service, and emergency medical (ambulance)



**POLK COUNTY VISION PLAN  
SECTION II INTRODUCTION**

services are properly equipped, trained, and staffed to maintain the high standards necessary to provide good security to the public, continually seeking both effective and efficient coordinated efforts among the various agencies throughout the county.

- Economic Development. Enhance efforts to achieve the county’s economic goals and to provide strong leadership dedicated to improving the economic vitality of the county.
- Government Services. Insure that county staff members maintain high-quality standards of public competence with enhanced recruiting and in-service training programs designed to permit the government to adequately meet the public’s needs. Work should continue to improve cooperative relationships among all levels of government – federal, state, county, and municipal.

The survey results and the Committee’s recommendations provide the foundation for the preparation of this plan.

Continuing into 2008-09, Polk County undertook the actual preparation of this Comprehensive Land Use and Development Plan. To aid in the development of the plan and to further its goal to optimize citizen participation, the Polk County Board of Commissioners appointed a Comprehensive Plan Advisory Committee composed of the members listed below. This ad hoc committee was instrumental in overseeing the development of the plan and supervised presentation of the draft plan to the Planning Board and to the Board of Commissioners.

The preparation of this plan was funded by Polk County General Fund Revenues and with grant assistance from the Unrestricted Fund at the Polk County Community Foundation.

Jurisdiction	Primary	Alternate
Columbus Township	Evangelena Barber	Dave Herbert
Cooper Gap Township	Roger Odel	Bob Strickland
Green Creek Township	Doug Harmon	A.Y. Brown
Saluda Township	Jim Carson ( <i>Chairman</i> )	Susan Welsh
Tryon Township	Emily Clark ( <i>Vice-Chairman</i> )	Mark Byington
White Oak Township	Ernest Giannini	Christel Walter
Town of Columbus	Maryneal Jones	Kathleen Kent
City of Saluda	Hal Green	Henry Bright
Town of Tryon	John Walters	Katharine Smith

**B. REGIONAL LOCATION**

Polk County, North Carolina is located in the foothills of the Blue Ridge Mountains of western North Carolina. It is positioned in the transitional area between the Piedmont and the mountains. Polk County is bordered to the south-southeast by Spartanburg County, South Carolina; north and east by Rutherford County, North Carolina; south-southwest by Greenville County, South Carolina, and to the west, Henderson County, North Carolina. The county is approximately 25 minutes north of Spartanburg, 45 minutes south of Asheville, 90 minutes west of Charlotte, and 3 hours north of the Atlanta metropolitan area. See Map 1 for regional location of the County and its municipalities.

Polk County is situated in the thermal belt, a region that experiences a climate phenomenon in which temperature inversions occur. The mountain slopes of the region experience a relatively high temperature with limited freezing while autumn. Botanically, the area is rich in native flora, and the thermal belt allows growing seasons conducive to apples, grapes, and other fruits.

Polk County has a total area of 239 square miles, of which 238 square miles is land and one (1) square mile is water. The county’s largest body of water is Lake Adger, located about 5 miles north of Columbus. The county is divided into six townships: Columbus, Cooper Gap, Green Creek, Saluda, Tryon, and White Oak (see Map 2). There are three municipalities

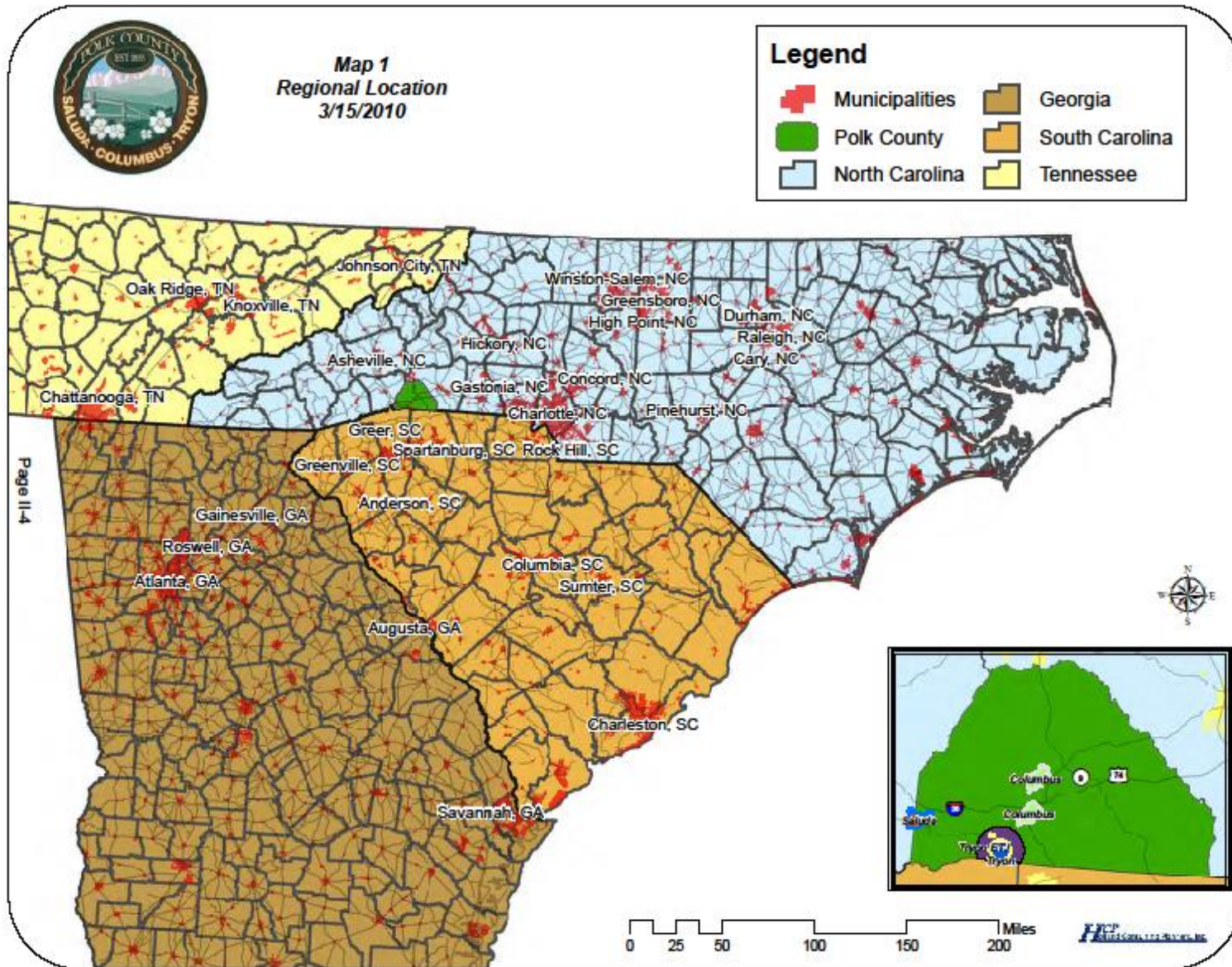


## **POLK COUNTY VISION PLAN SECTION II INTRODUCTION**

in the county: Columbus (county seat), Saluda,  
and Try



# POLK COUNTY VISION PLAN SECTION II INTRODUCTION

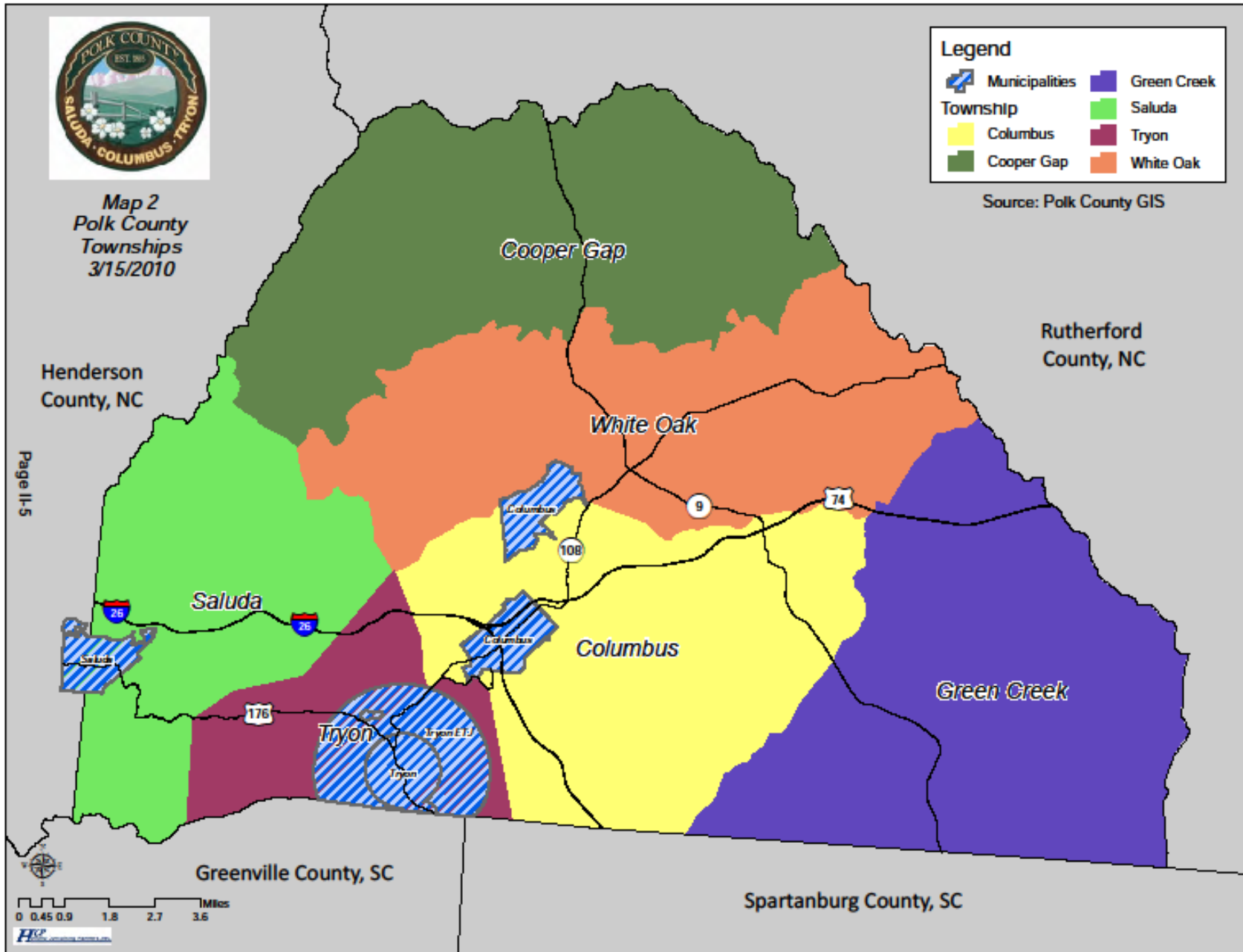




## **POLK COUNTY VISION PLAN SECTION II INTRODUCTION**



# POLK COUNTY VISION PLAN SECTION II INTRODUCTION





## POLK COUNTY VISION PLAN SECTION II INTRODUCTION

### C. HISTORY

Polk County has an abundant history which has laid the foundation for a diverse and culturally rich county. The following county history is an excerpt from the Polk County website, [www.polkcounty.org](http://www.polkcounty.org):

"By 1540, some 47 years after Columbus discovered the New World, Hernando DeSoto had arrived in the mountain country, probably here in Polk County, where he found the Cherokee Tribe already in an advanced state of civilization.

The Indians lived in substantially-built log houses. Though accomplished hunters, they subsisted chiefly by their knowledge of agriculture. They raised corn, pumpkins, and beans.

The area was a fine place in which to live, as the first white settlers quickly learned. Several decades before the Revolution a sprinkling of families had set down their roots in the mountain coves in the midst of the Cherokee hunting lands. By 1768 traders were already traveling up the old Blackstock Road from Charleston to bargain for furs and hides.

The proximity of the two civilizations resulted in many clashes and much bloodshed. The conflicts became so numerous that the Royal Governor, William Tryon, himself journeyed west from the colonial capital to parley with the Cherokees and negotiate a boundary line.

The new line agreed upon extended from a point near Greenville in South Carolina to the highest peak on White Oak Mountain. When the treaty had been signed, Governor Tryon was flattered to learn that the settlers had named this the highest place on White Oak – Tryon Peak.

Determination of the boundary, however, failed to insure safety for the pioneers to the east or for Indians to the west. Many vicious raids continued despite the establishment of forts. One of the heroes of the time was the Indian, Skyuka.

As its population slowly increased, the area became a favorite stopping place for drovers transporting livestock from Kentucky and

Tennessee to seaboard harbors. With political independence, towns gradually emerged.

Polk, named to honor the Revolutionary War hero, Colonel William Polk, did not achieve county status until 1855. Columbus, the county seat, was named for Dr. Columbus Mills of Mill Spring. One of his ancestors, Colonel Ambrose Mills, was a Loyalist who was hanged by Patriots after his capture at the Battle of Kings Mountain. The Town of Columbus is distinguished by an imposing courthouse, built of handmade brick in 1855. The ancient slave block still remains on the court house lawn.

Polk County had just begun to function in the family of North Carolina counties when the Civil War intervened. In the ensuing four years of conflict (1861-1865), her economy, as in other counties in the state, was severely taxed.

At the end of the war, her people were in dire straits. Polk County did not recover from paralyzing lethargy following the Civil War until about 1900.

The Town of Saluda was incorporated by the General Assembly of 1881. In 1885, the General Assembly incorporated Tryon.

During the administration of Governor Charles Brantley Aycock, 1901-1905, there was an awakening along educational lines. One of Polk County's first major schools, still used today, was the Stearns School in Columbus, made possible by Mr. Frank Stearns who settled in Columbus from Cleveland, Ohio. Mr. Stearns gave land and funds to help build the school which had a major influence on education in the area. Hundreds of children from the mountains went to Stearns School in the days when there was dearth of school facilities.

Descendants of many of the original families helping to establish and settle Polk County still live here. The names of Gibbs, Laughter, Pace, Arledge, Lankford, Newman, Wilkins, Green, Williams, Fagan, Durham, Bradley, Fisher, Jackson, Nodine, Mills represent the fourth generation of Polk County Pioneers and there are probably many more. Few centurion counties anywhere, of small population, can count today so high a percentage of descendants from its first settler families."



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

### SECTION III. COMMUNITY PROFILE

#### A. INTRODUCTION

This section provides a summary of selected demographic, housing, and economic data. Information is not consistently provided by year for all datasets. For example, travel time to work information is available for only 1990 and 2000. Other data may be available for all years – 1980, 1990, 2000, estimated for 2008, and forecast for 2013. Applied Geographic Solutions 2008 PCensus data has been utilized as the database. This database and its capabilities are described in Appendix 1.

The primary new data sources utilized in this update include the 2010 U.S. Census and the American Community Survey (ACS) 2014. The ACS is a product of the U.S. Census Bureau, which utilizes statistical sampling to estimate demographic data between each decennial Census. The data is based on rolling, multi-year averages determined by the population of the geographic area studied. For Polk County, the ASC incorporates a five-year average, so that the 2014 estimates are based on data from 2009 through 2014.

The selected data has been provided for the following areas: Polk County (total area and unincorporated area), the City of Saluda, the Town of Tryon, the Town of Columbus, the Polk Economic Impact Area, North Carolina, South Carolina, and the United States. The data which is forecast to 2013 is provided to reflect changes anticipated to occur during the preparation of this plan. The significant data is summarized in the text of this plan. Detailed PCensus demographic, housing, and economic data is provided in the Polk County Comprehensive Plan Data Manual. This detailed data allows the reader to make individual analyses/comparisons of datasets.

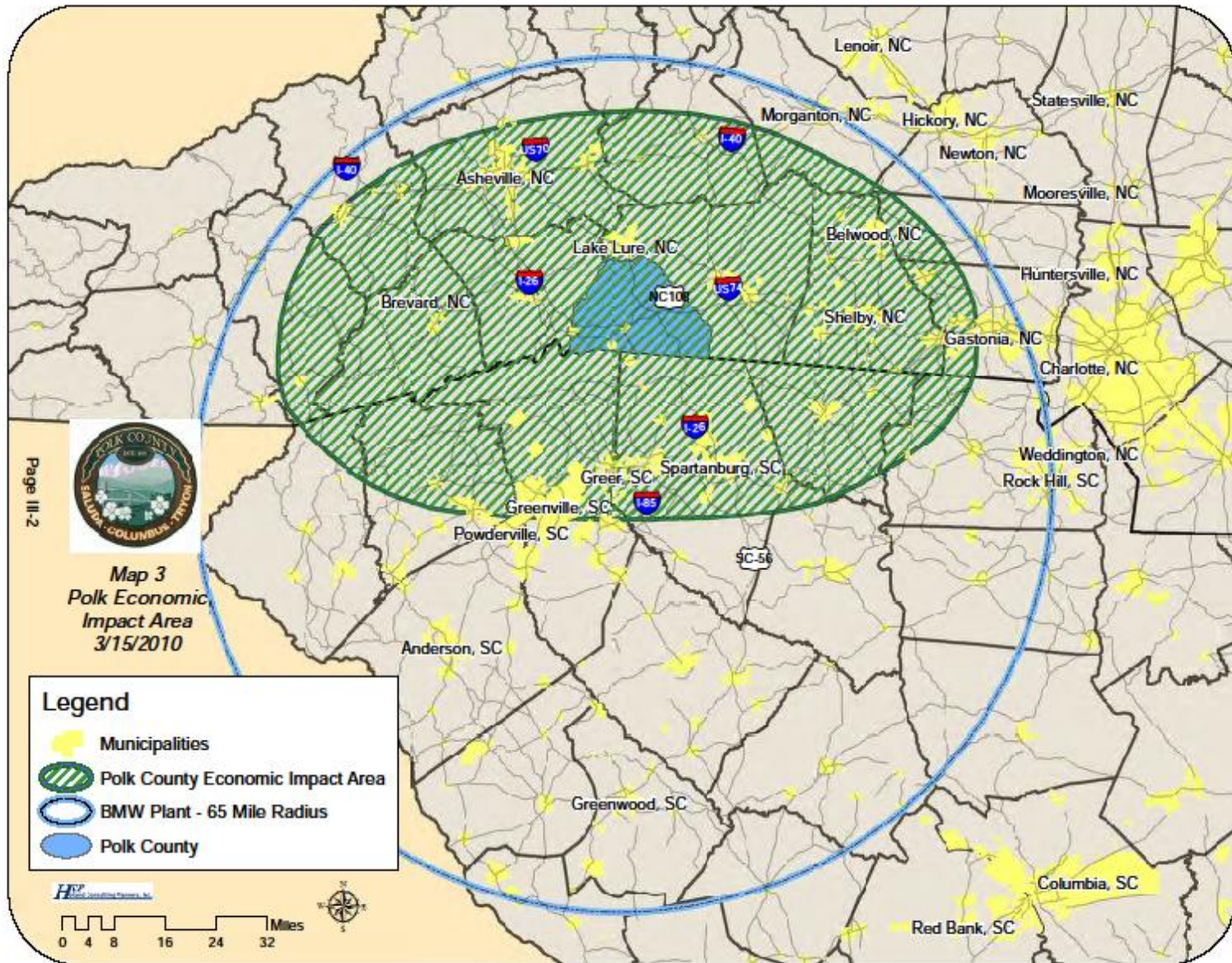
The Polk Economic Impact Area refers to a demographic/economic area which has been defined in concert with the Polk County Economic Development Office. This area, which includes 5,526 square miles, is delineated on Map 3. Polk County is situated in the center of this vibrant economic region.

The factors that were considered in delineating the Polk Economic Impact Area include:

- Areas within one hour or less drive time to central Polk County.
- Most of the Isothermal Council of Governments area.
- The I-26 Asheville to Spartanburg corridor.
- A significant portion of the western North Carolina I-40 corridor.
- The NC 25 corridor which connects Greenville to Hendersonville via Flat Rock.
- An area of rapidly increasing international attention.
- 40% of the Greenville, SC, BMW plant 65-mile radius local purchasing area.
- The “center” of the Asheville, Spartanburg-Greenville, Shelby-Gastonia urban areas.
- Asheville is considered the “capital” of western North Carolina.
- The Brevard and Lake Lure areas, significant draws for tourism, including eco-tourism and second home developments. Brevard has a long, well-established cultural connection with Tryon.
- Over 50% of the Advantage West economic development area.
- The I-85 corridor through Greenville and Spartanburg Counties.
- Ninety-one (91) municipalities.



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE





## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

In addition to these factors, the following provides further support for the delineation of the Polk Economic Impact Area.

- The Brevard Music Center, Flat Rock Playhouse, Tryon Fine Arts Center, and large civic auditoriums in Spartanburg, Greenville, and Asheville form a cultural corridor following the route of the old railroad connecting Asheville and Spartanburg.
- King's Mountain is the terminus of the Overmountain Victory National Historic Trail which travels through Polk County.
- Area colleges and universities including AB Technical College, Blue Ridge Community College, Brevard College, Cleveland Community College, Converse College, Fruitland Bible Institute, Furman University, Gardner-Webb University, Isothermal Community College, Mars Hill College, McDowell Community College, Montreat College, North Greenville University, Spartanburg Methodist College, Spartanburg Community College, Spartanburg Technical College, University of North Carolina at Asheville, University of South Carolina Upstate, Warren Wilson College, and Wofford College are all located within a 1.5 hour drive of Polk County.
- Major medical facilities are located in Greenville, Spartanburg, Hendersonville, Fletcher, Brevard, and Asheville.
- Asheville, NC is considered the capital of western North Carolina and is the central asset in regional marketing for both tourism and company recruiting primarily because of the Biltmore Estate and the bohemian lifestyle of the city.
- The Polk Economic Impact Area encompasses extensive active and passive outdoor recreation/activity areas, including hiking trails, whitewater rafting and kayaking, equestrian activities, and extensive natural/conservation areas.

In general, the Polk Economic Impact Area is at the center of the developing south-eastern United States megaregion. Megaregions are extended networks of metropolitan centers and

the surrounding areas. They often cross county and state lines and are linked by transportation and communication networks. A large area of the southeastern United States (Raleigh/Cary/Durham to Atlanta/Birmingham) has been identified as a megaregion where important social, economic, and environmental links are developing. The increasing urbanized density is indicated by the urban areas delineated on Map 1, pg. II-4. Polk County is a valuable natural asset located in the middle of the south's most rapidly developing urban area.

In 2000, the Polk Economic Impact Area had an approximate population of 1,199,600 people. By comparison, the Charlotte-Gastonia-Concord Standard Metropolitan Statistical Area (SMSA) had an approximate 2000 population of 1,330,450, while the Raleigh-Cary SMSA had an approximate 2000 population of 797,000.

### **B. POPULATION**

#### **1. Population Growth**

From 1980 to 2008, Polk County's population increased from 12,946 to approximately 19,507, a 51% increase. By comparison, the population increase for the Polk Economic Impact Area was 35%. During the same period, North Carolina and the United States increased 57% and 36%, respectively. Map 4 provides a general delineation of the 2005 population distribution within the County.

Polk County is the exception for a North Carolina rural area. It has closely mirrored the growth rate for the state and exceeded those of the Polk Economic Impact Area and the United States. Most rural areas have lagged behind both the state and the country in population growth. Based on PCensus data, the county's population is forecast to increase by 3.5% to 20,189 in 2013. The Polk Economic Impact Area population is expected to increase from 1,280,878 in 2008 to 1,332,901 in 2013, a 4% increase. Both increases are less than those of North Carolina, South Carolina, and the United States which are 7.0%, 5.6%, and 4.8%, respectively. While the growth rate for the Polk Economic Impact Area falls behind the nation and its constituent states, its influence is significant. The area's 2008 population (1,280,878) compares to the Charlotte-



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

Gastonia SMSA population of 1,665,239 and the Raleigh-Cary SMSA population of 1,050,496.

After a decade of rapid population growth in Polk County during the 1990s (27%), growth since 2000 returned to a rate close to that of the 1970s and '80s. The growth rate mirrored national growth, but lagged that of the adjacent counties, North Carolina and South Carolina.

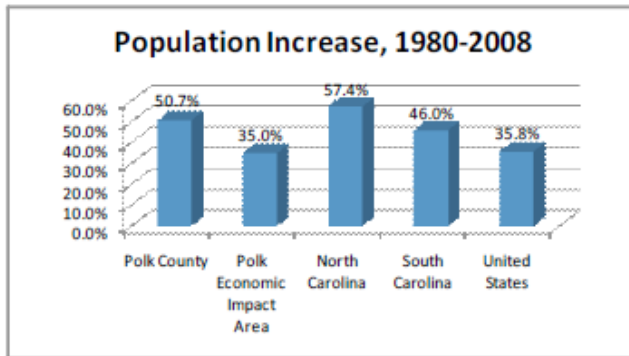


Figure 1. (Source: US Census)

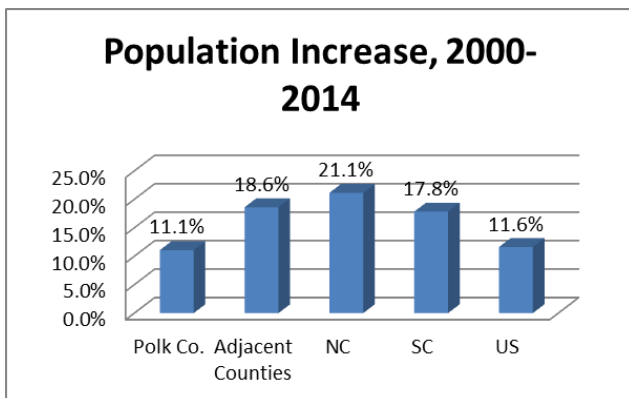


Figure 1-A. (Source: US Census)



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**2. Population Age**

Throughout the 1980 to 2008 period, the Polk County population median age has been consistently higher than those of both North and South Carolina, the United States, and the Polk Economic Impact Area. From 1980 to 2008, the County's median age increased from 39.1 to 45.7. Comparatively, the average median age for the combined North Carolina, South Carolina, and United States populations increased from 29.5 in 1980 to 37.2 in 2008. This clearly reflects the increasing Polk County retirement age population. During the same period, 1980 to 2008, the percentage of Polk County's population in the prime wage earning years of 18 to 54 years remained constant at 44%. The primary wage earning years for North Carolina, South Carolina, and the nation remained constant at approximately 50% to 55%.

The County's median age grew from 44.9 in 2000 to 50.5 in 2014, an increase of 12.5%. By comparison, the State and national median age in 2014 stood at 37.8 and 37.4, respectively. Between 2010 and 2014, the 65 and over population in the County grew by 2%, (4,993 to 5,327) while the under 18 and 18 – 64 age groups each declined by 1% (3,938 to 3,705, and 11,579 to 11,320, respectively).

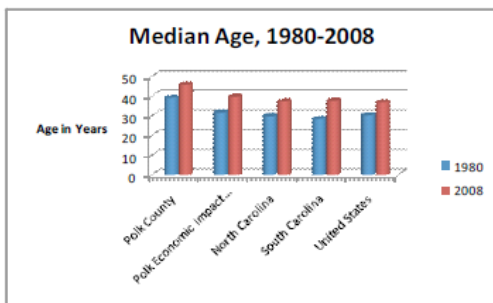


Figure 2. (Source: US Census)

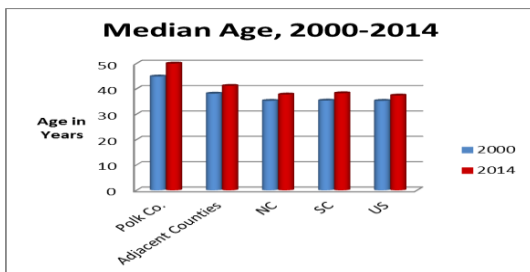


Figure 2A. (Source: US Census)

**3. Gender and Racial Composition**

Polk County's population gender and racial composition has been constant. In 1980, the male/female composition was 6,117/6,829 for a 47%/53% mix. By 2008, the male/female composition was almost constant at 9,272/10,235 for a 48%/52% mix. The mix of the County's population by gender has remained consistent with those for the Polk Economic Impact Area, both North and South Carolina, and the nation.

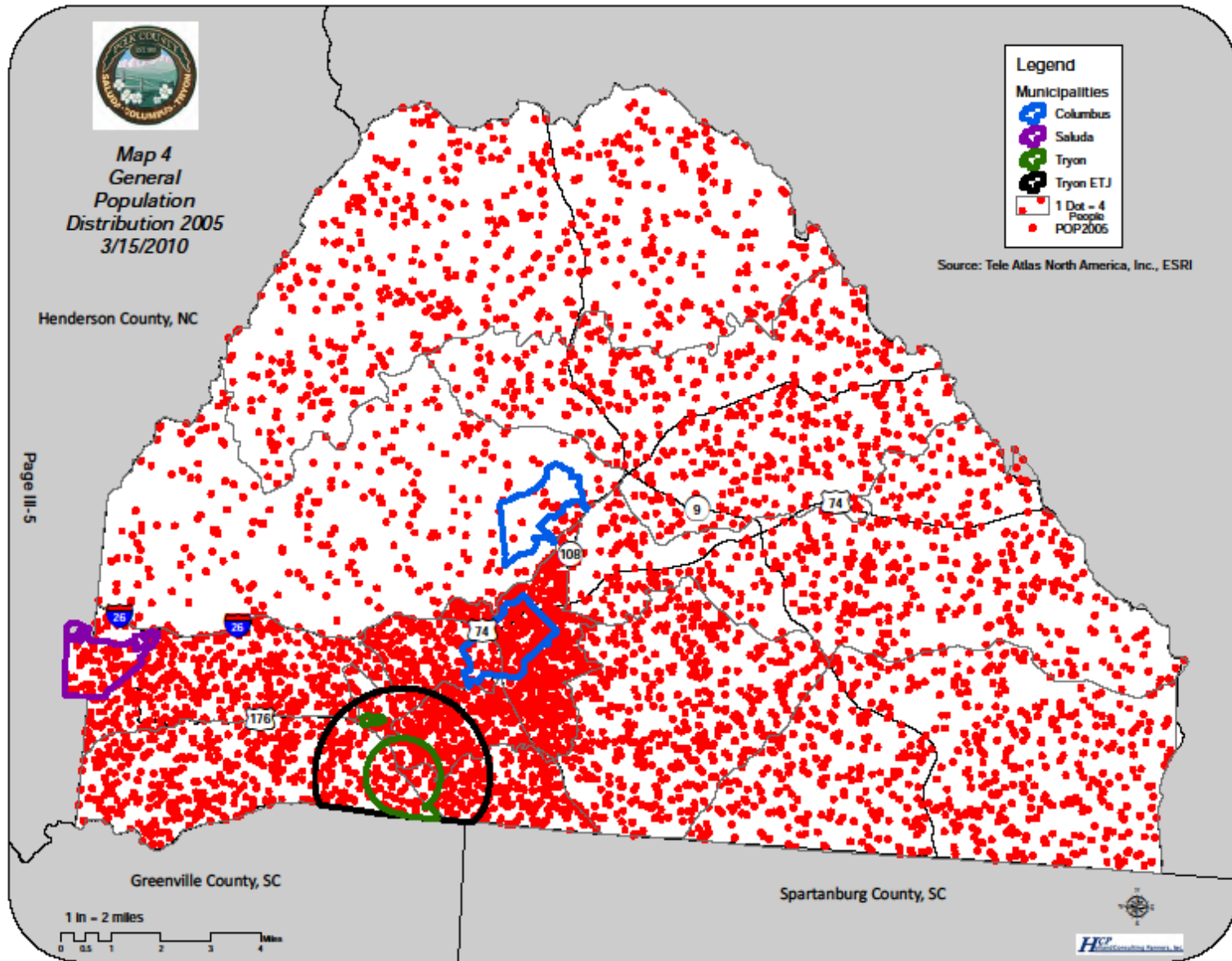
In 2010 the male/female mix was 47.9/52.1. The estimated 2014 proportions were 48.3/51.7.

In 1980, 90% of the County's population was white with 9% black and 1% other. By 2008, the racial mix was 92% white, 6% black, and 2% other. From 1980 to 2008, the percentage of black population for the Polk Economic Impact Area was 14%. By 2008, this percentage had decreased slightly to 13%. The black population for North Carolina, South Carolina, and the nation remained fairly constant from 1980 to 2008 at 22%-21%, 30%-28%, and 11%-12%, respectively.

In 2014, the County's racial composition was essentially unchanged, with the white population at 92.9%, compared to 71.5% in North Carolina. The Hispanic population represented 5.6% of Polk County's residents, while Hispanics composed 9.0% of the State.

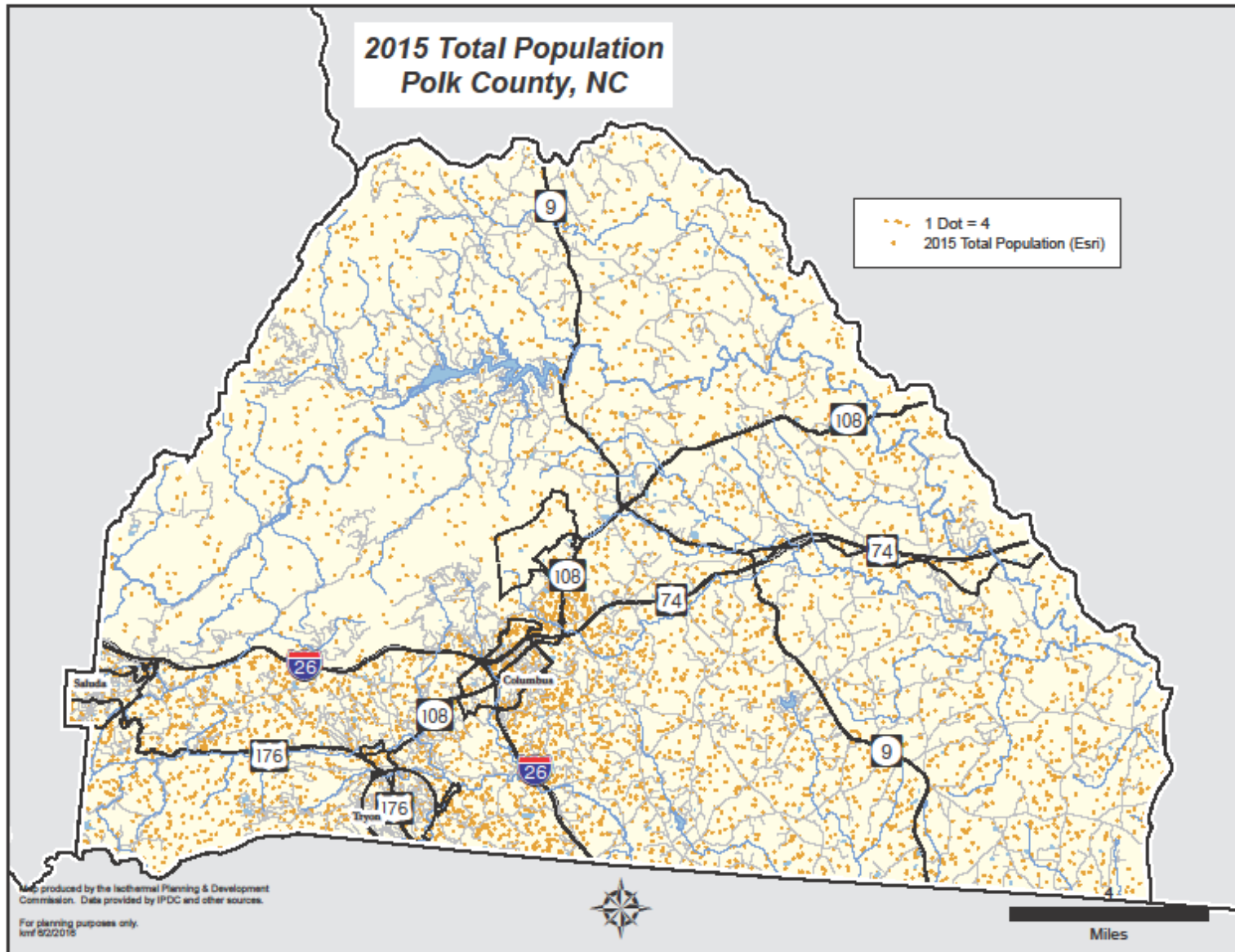


# POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE





# POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE





**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**C. HOUSING**

**1 Dwelling Unit Growth**

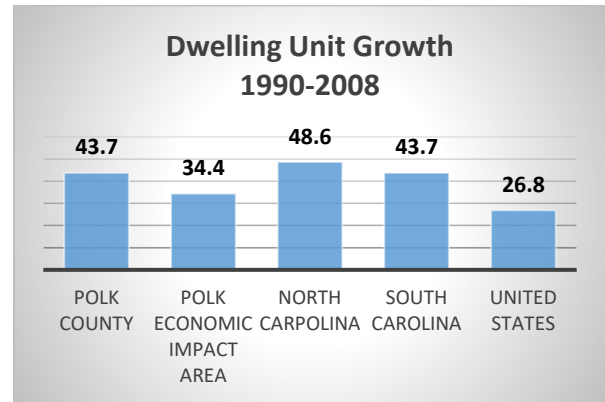
In 1980, there were approximately 3,968 owner-occupied households and 1,042 renter-occupied households for a total of 5,010 households (NOTE: in the 1990 Census, categories were redefined to reflect housing units rather than house-holds). By 1990, the total housing unit count was 7,273 with 4,883 owner-occupied, 1,227 renter-occupied, and 1,163 vacant.

By 2000, the total housing unit inventory had grown to 9,192, a 26% increase from 1990. The 2000 inventory included 6,222 owner-occupied, 1,686 renter-occupied, and 1,284 vacant.

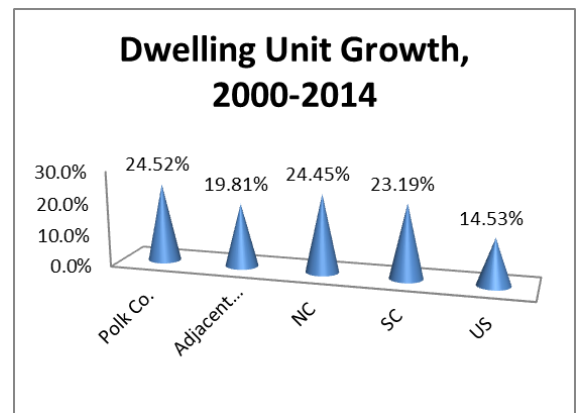
Of the 1,284 vacant units in 2000, 664 or 52% were considered seasonal. The percentage of vacant housing units classified as seasonal, recreational or occasional use in 2000 was notably higher in Polk County and its municipalities than that of the Polk Economic Impact Area, North Carolina, South Carolina, and the United States as indicated by the following summary:

- 52% in Polk County (including municipalities).
- 51% in the unincorporated areas of Polk County.
- 73% in Saluda.
- 47% in Columbus.
- 44% in Tryon.
- 34% in North Carolina.
- 32% in South Carolina.
- 34% in the United States.
- 

The total dwelling unit count had risen to an estimated 10,453 in 2008, a 13.7% increase from 2000 and 43.7% increase from 1990. During the 1990 to 2008 period, the total dwelling unit counts for comparative areas increased as follows: Polk Economic Impact Area 34.4%, North Carolina 48.6%, South Carolina 43.7%, and the United States 26.8%. Thus, Polk County has exceeded both the economic impact region and the nation in the rate of growth of dwelling units. The County's dwelling unit growth rate has been close to those of both North Carolina and South Carolina.



**Figure 3** (Source: US Census)



**Figure 3-A** (Source: US Census)

The County's housing growth remained strong between 2000 and 2010, increasing by 24.4%. However, from 2010 to 2014 growth slowed to only 0.1%, reflecting the lingering impacts of the recession.

In 2010, occupied housing units constituted 78.6 percent of total housing units, with 21.4% vacant. Of the 2,443 vacant units, 1,199 (49.1%) were seasonal units, 13% were vacant rental units, and 11% were for sale.

In the face of some locally significant growth, Polk County remained a predominately rural area in 2000 with 90% of its housing classified as rural. This was well above the state and national percentages of North Carolina (41%), South Carolina (39%), and the United States (22%).



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

### 2. Age of Dwelling Units

The age of dwelling units is available for 1990 and 2000. In 1990, 33% of Polk County's housing inventory was 30 years old or older. By 2000, this had increased slightly to 38% for a total of 3,473 dwelling units. In 2000, approximately 49% of the nation's housing inventory was over 30 years old and approximately 41% of the Polk Economic Impact Area's inventory was over 30 years old. The percentage of dwelling units over 30 years old for North Carolina and South Carolina in 2000 were 36% and 33%, respectively. The county's and states' percentages remain relatively low because of new housing construction.



The 2014 ACS data revealed that the home ownership rate for Polk County was 74.2%, significantly higher than that of the State – 66.4%. The market preference for lower-density, detached housing is still strong, as the County's percentage of total housing units in multi-family structures was 9.3%, slightly over half the State rate of 17.2%.

Occupied housing units built prior to 1980 represented 46.1% of total occupied units in Polk County in 2014. The 2014 ACS estimates indicate that less than one percent (0.9%) of occupied units was built since 2010.

### 3. Building Permit Activity

Table 1, ~~page III-8~~, provides a summary of residential building permit activity for counties within the Polk Economic Impact Area from 2004 to 2008. From 2005 to 2008, the residential building permit activity had not slowed in Polk County as much as it had within the region as a whole. However, in 2008 and 2009, the building permit activity significantly declined with only 91 permits issued in 2008 and 46 permits issued through November of 2009.

Building permit activity and subdivision development provides an enhanced view of housing activity within the County. This information is especially useful in understanding housing activity since 2000.



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**Table 1:** Residential Building Permit Trends, 2004-2008

	TOTALS					PERCENT CHANGE			
	2004	2005	2006	2007	2008	2004-2005	2005-2006	2006-2007	2007- 2008
NC Henderson	945	1,007	1,087	1,215	428	6.6%	7.9%	11.8%	-64.8%
NC McDowell	228	205	220	250	158	-10.1%	7.3%	13.6%	-36.8%
NC Polk	160	161	189	169	91	0.6%	17.4%	-10.6%	-46.2%
NC Rutherford	337	366	433	353	224	8.6%	18.3%	-18.5%	-36.5%
NC Transylvania	230	311	238	236	180	35.2%	-23.5%	-0.8%	-23.7%
SC Greenville	3,362	4,047	4,200	3,420	1,732	20.4%	3.8%	-18.6%	-49.4%
SC Spartanburg	1,937	2,193	2,100	1,810	1,082	13.2%	-4.2%	-13.8%	-40.2%
<b>TOTALS</b>	<b>7,199</b>	<b>8,290</b>	<b>8,467</b>	<b>7,453</b>	<b>3,895</b>	<b>15.2%</b>	<b>2.1%</b>	<b>-12.0%</b>	<b>-47.7%</b>



**POLK COUNTY VISION PLAN  
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**Table 1A: Residential Building Permit Trends, 2009-2015**

State/County	TOTALS							PERCENT CHANGE						
	2009	2010	2011	2012	2013	2014	2015	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
NC Henderson	310	226	205	238	310	344	422	-27.60%	-20.70%	-31.50%	-3.40%	37.30%	5.10%	23.00%
NC McDowell	98	108	97	84	101	103	82	-38%	10.20%	-10.20%	-13.40%	20.20%	2.00%	-20.00%
<b>NC Polk</b>	<b>52</b>	<b>42</b>	<b>40</b>	<b>46</b>	<b>41</b>	<b>50</b>	<b>59</b>	<b>-42.90%</b>	<b>-19.20%</b>	<b>-4.80%</b>	<b>15.00%</b>	<b>-10.90%</b>	<b>22.00%</b>	<b>18.00%</b>
NC Rutherford	111	109	81	102	147	81	106	-50.40%	-1.80%	-25.70%	25.90%	44.10%	-44.90%	31.00%
NC Transylvania	76	89	62	73	59	80	81	-57.80%	17.10%	-30.30%	17.70%	-19.20%	35.60%	1.00%
SC Greenville	1006	1169	1289	1869	2025	2152	2355	-41.90%	16.20%	10.30%	45.00%	8.30%	6.30%	9.00%
SC Spartanburg	596	524	501	680	966	1049	1346	-44.90%	-12.10%	-4.40%	35.70%	42.10%	8.60%	28.00%
<b>TOTALS</b>	<b>2249</b>	<b>2267</b>	<b>2275</b>	<b>3092</b>	<b>3649</b>	<b>3859</b>	<b>4451</b>	<b>-43.36%</b>	<b>-1.47%</b>	<b>-13.80%</b>	<b>17.50%</b>	<b>17.41%</b>	<b>4.96%</b>	<b>12.86%</b>

**Notes:**

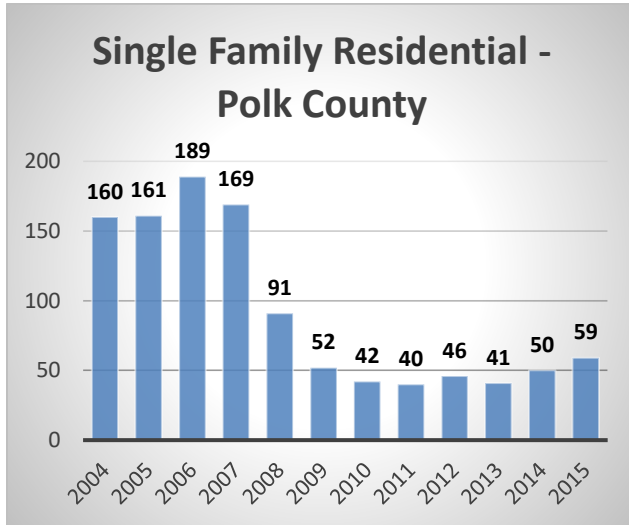
- (1) Data was not available for Cleveland County, NC.**
- (2) Data includes all municipalities located within the counties.**

SOURCE: Residential Building Permit Trend Report, The Market Edge <sup>TM</sup>, [www.themarketedge.com](http://www.themarketedge.com).

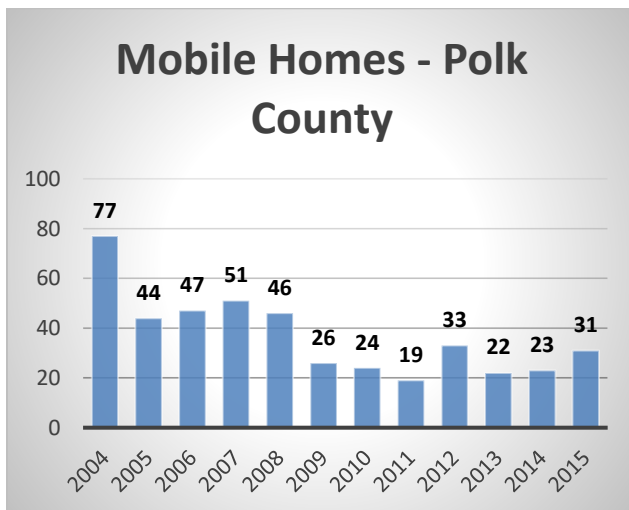


**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**Chart 1A**



SOURCE: Residential Building Permit Trend Report, The Market Edge™, [www.themarketedge.com](http://www.themarketedge.com).



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Source: Building Inspection Department

Table 2, [page III-10](#), provides a more detailed summary of new residential building permits issued in Polk County from 2001 to 2008. A total of 1,336 new residential building permits were issued for site-built/modular homes for an average of over 167 permits per year (NOTE: issuance of a building permit does not mean that a dwelling unit was completed and/or occupied). New home construction dropped dramatically in 2008, a decline of 45% from 2007 (the lowest level in more than ten years). The county averaged only seven (7) new construction residential permits per month in 2008.

Map 5 delineates subdivisions within the county

which include ten (10) or more lots of record. Twenty subdivisions (containing 10 or more parcels each) including a total of 1,221 lots of record have been approved since 2004. However, development slowed dramatically in the county in 2008 with 115 new subdivision lots receiving final plat approval compared to 487 lots approved in 2007. It should be noted that Map 5 delineates some subdivisions which were approved prior to 2004 and some which include fewer than ten parcels.

Currently, there are approximately 5,200 parcels located in Polk County subdivisions. Of these parcels, roughly 3,250, or 62.5%, are considered vacant. Vacant parcels are classified as properties with a building value of less than \$20,000.

Map 6 indicates assessed building values throughout the county.



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

<b>Subdivision Name</b>	<b># of Lots</b>	<b>Average Lot Size</b>
<b>2004</b>		
Panther Creek Farms	15	7.11
*Piney Mtn., Ph IV, Sec II	5	2.02
<b>2005</b>		
Vista at Riverbank	47	1.60
Mountain Park, Ph I	25	1.77
*Mountain Park, Ph IIB	6	6.63
Mountain View	13	1.39
*Brights Creek, Ph I	295	1.00
Ridgeview	20	3.03
<b>2006</b>		
*Contuck Preserve	21	4.72
Whispering Pines	12	2.00
*Highlands at Walnut Crk, Ph 1A	30	.75&2.57
	8	8.75
*Piney Mountain, Ph V	86	0.84
*White Oak, Ph IA	8	2.29
*Brights Creek, Ph IV	6	3.11
*Mountain Park, Ph 3A	44	3.30
Sanctuary at Tryon, Ph I		
<b>2007</b>		
*Piney Mtn, Ph V, Sec II	3	4.51
Ridgeland Preserve	7	1.46
*Brights Creek, Ph IIA	114	1.84
Hillcrest	27	1.46
*Highlands at Walnut Crk, Ph IB	19	1.38
	24	2.33
Sanctuary at Tryon, Ph II&III	10	1.09
Eagles Rest	31	3.93
*Mountain Park, Ph IIIB	11	1.12
Red Tail Run, Ph I	10	1.92
*Jackson Cove West (partial)	52	1.84
*Brights Creek, Ph IIB	14	2.24
Panther Creek	22	1.184
*Brights Creek, Ph IIC	12	8.05
*Hughes Creek Preserve, Ph I	6	1.22
	57	.69&1.45
*Piney Mountain, PH V, Sec III	1	6.00
	9	2.11
*Derbyshire, Ph IA & IB	7	1.31
*Hughes Crk Preserve, Ph V	46	1.47
*Hughes Crk Preserve, Ph II		
*Piney Mountain, Ph V, Sec III		
*Highlands at Walnut Crk, Ph IIB		

<b>Subdivision Name</b>	<b># of Lots</b>	<b>Average Lot Size</b>
<b>2008</b>		
Mountain Laurel Estates	32	2.54
Red Tail Run, Ph II	14	1.21
*Piney Mtn., Ph V, Sec IV	16	1.41
*Derbyshire, Ph 1C	27	0.43
*White Oak, Ph 2A, Sec 1	9	0.79

<b>Subdivision Name</b>	<b># of Lots</b>	<b>Average Lot Size</b>
<b>2009</b>		
Farms at Mill Springs, Ph 3, Sec. 9.53	1	7.00
Farms at Mill Springs, Ph 4	10	12.47
Farms at Mill Springs, Ph 5	8	11.72
<b>2011</b>		
Derbyshire, Ph 1C, Sec. 3	4	0.98
<b>2013</b>		
Mountain at Jackson Cove, Ph 1	4	3.17
<b>2014</b>		
Jackson Cove Farms, Ph 1	2	3.83
Jackson Cove Farms, Ph 2	3	4.83

\* Indicates subdivisions containing 10 or more total parcels, to be completed over multiple years/phases/sections.

Source: Polk County Planning Department.

2016 parcel data from the Polk County Tax Office show a total of 16,721 parcels of land in the County. There are 9,820 improved properties, representing 58.7% of the total. Vacant parcels totaled 6,893, or 41.3% of all parcels.



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**Table 2: Yearly Totals of New Residential Building Permits Issued in Polk County, 2001-2008**

	2001	2002	2003	2004	2005	2006	2007	2008	TOTAL
Single-Family Dwelling (Site Built and Modular)	161	175	218	175	163	191	162	91	1,336
Construction Value in Dollars	20,950,8 29	20,633,7 37	22,289,9 21	20,229,5 45	26,378,5 04	37,801,1 91	34,922,7 93	20,301,1 88	
Mobile Homes	104	87	67	77	44	47	51	46	523
<b>TOTAL</b>	<b>265</b>	<b>262</b>	<b>285</b>	<b>252</b>	<b>207</b>	<b>238</b>	<b>213</b>	<b>134</b>	<b>1,859</b>

SOURCE: Polk County Building Inspector.

**Table 2A: Yearly Totals of New Residential Building Permits Issued in Polk County, 2009-2015**

	2009	2010	2011	2012	2013	2014	2015	TOTAL
Single-Family Dwelling (Site Built and Modular)	51	39	41	43	47	68	61	350
Construction Value in Dollars	11,639,0 79	10,422,2 14	10,319,5 73	10,587,6 44	10,742,5 76	21,079,1 41	18,009,6 73	
Mobile Homes	26	24	19	33	22	23	31	178
<b>TOTAL</b>	<b>77</b>	<b>63</b>	<b>60</b>	<b>76</b>	<b>69</b>	<b>91</b>	<b>92</b>	<b>528</b>

SOURCE: Polk County Building Inspector.



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

Map 5 - Subdivisions

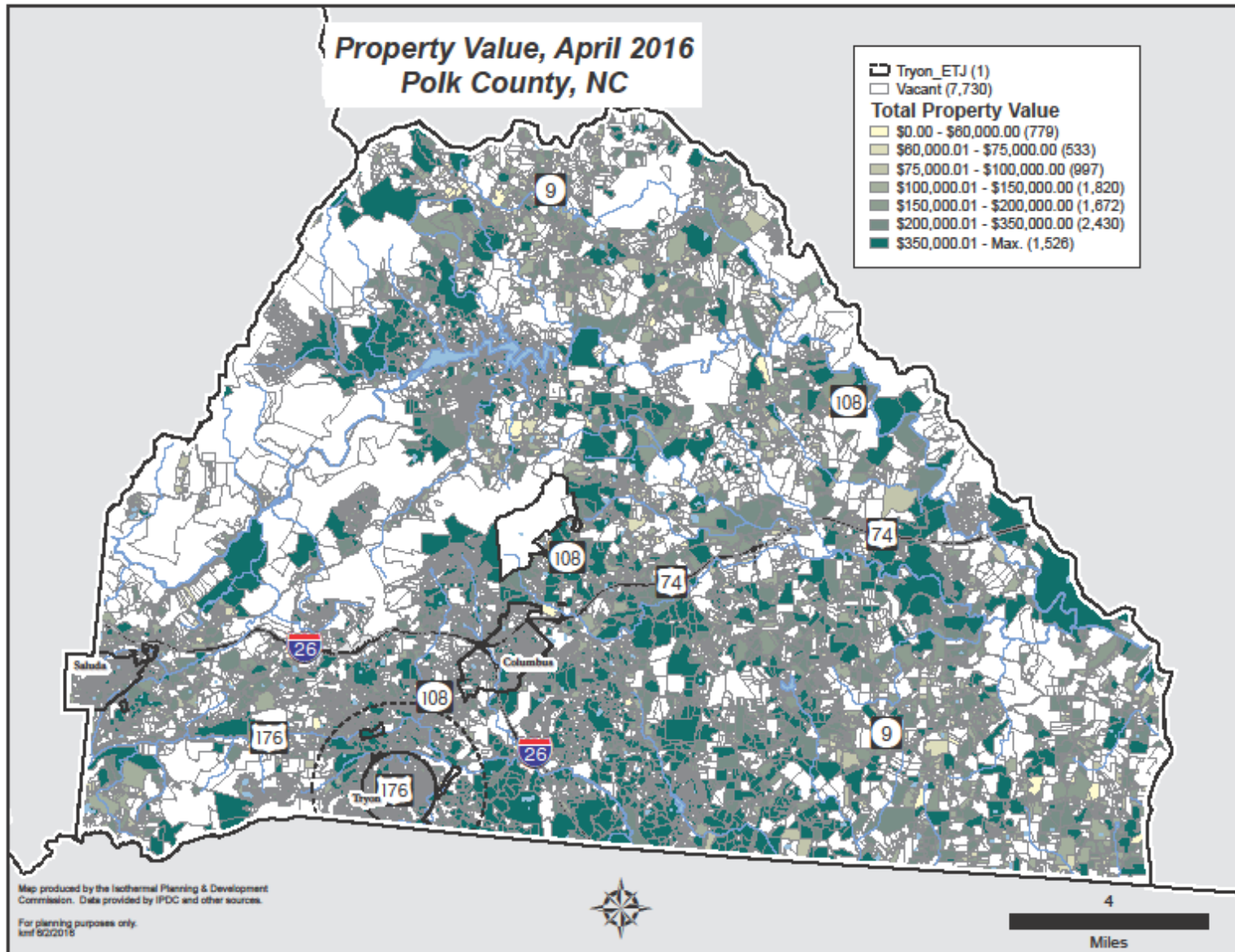


**POLK COUNTY VISION PLAN  
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Map 6 - Assessed Building Value



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE





## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

### 4 Housing Affordability/Condition

Housing conditions and affordability are a significant concern for Polk County. Affordable housing is an issue which should focus on increasing the supply of housing which can be afforded by people/families who work or grew up in Polk County. In 2000, median residential property values in Polk County ranged from \$108,104 in the unincorporated areas to \$129,940 in Tryon. The median residential property values for the Polk Economic Impact Area, North Carolina, and South Carolina were \$97,976, \$108,621, and \$94,940, respectively.

It is difficult to obtain a precise picture of housing affordability in any jurisdiction. Detailed census data, such as property value and family income, is an "estimate" and is almost always obsolete because of its occurrence once every ten years. The issue of affordable housing is further clouded in Polk County because there are few concentrations of low-to-moderate income households or substandard housing in the County's planning jurisdiction. Therefore, the problem is not readily visible. Finally, today's rapidly changing economic picture makes the question of affordability even more challenging to answer. However, it is clear that for some Polk County residents, affordable housing is an increasing problem.

Most measures of housing affordability consider 30% of gross income an allowable/affordable expenditure for housing. For renters, this cost includes rent and utilities. For homeowners, the cost includes mortgage payments, taxes, insurance, and utilities.

Table 3 provides a summary of Polk County housing problems based upon 2000 Census data. The summary has been compiled by the United States Department of Housing and Urban Development through its 2000 Comprehensive Housing Affordability Strategy.

Of Polk County households reporting in 2000, 35.6% of rental households and 20.4% of owner-occupied households had some housing problems. Approximately 30.4% of renters and 18.8% of owners had a cost burden greater than 30% of gross income, and 13.6% of renters and 7.4% of owners had a cost burden greater than 50% of their gross income.

The 2000 Polk County median family income was \$44,175. The moderate, low, and very low income levels are based on 80%, 50%, and 30% of median income, respectively. The 2000 income levels were: Moderate/\$35,340 (80% of median); Low/\$22,088 (50% of median); and Very Low/\$13,253 (30% of median).

The FY2008 Polk County median income, as defined by the NC Division of Community Assistance, had risen to \$53,900, from \$44,175 as reported in the 2000 Census. (Note: The base median assumes a family of four). Table 4 provides a detailed definition of very low ( $\leq 30\%$  of median), low ( $\leq 50\%$  of median), and moderate income ( $\geq 80\%$  of median) income levels adjusted for family size.



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**Table 3: Polk County Housing Summary**

	Renters				Owners				
Income Level	Total Renter Households	% Reporting Housing Problems	% Cost Burden >30%	% Cost Burden >50%	Total Owner Households	% Reporting Housing Problems	% Cost Burden >30%	% Cost Burden >50%	Total All Households
Very Low ≤30% MFI	380	54.5	49.2	31.1	548	60.0	57.5	38.9	928
Low >30% to 50% MFI	219	63.9	63.9	29.2	574	32.2	31.5	11.0	793
Moderate >50% to 80% MFI	337	40.1	27.0	10.1	1,113	31.7	29.1	9.0	1,450
Above LMI >80% MFI	756	16.0	12.7	1.9	3,986	10.1	8.7	2.1	4,742
Total Households	1,692	35.6	30.4	13.6	6,221	20.4	18.8	7.4	7,913

Source: 2000 Comprehensive Housing Affordability Strategy.

**Table 4: Polk County Income Levels**

Polk County, NC	Income Level	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
FY2008 MFI: 53,900	Very Low ≤30% MFI	11,450	13,100	14,700	16,350	17,650	18,950	20,250	21,600
	Low >30% to 50% MFI	19,100	21,800	24,550	27,250	29,450	31,600	33,800	35,950
	Moderate >50% to 80% MFI	30,500	34,900	39,250	43,600	47,100	50,600	54,050	57,550

Source: NC Division of Community Assistance.



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**Table 4 - A** Polk County Income Levels  
FY 2016 MFY: \$55,300

Persons in Household	1	2	3	4	5	6	7	8
EXTRA LOW INCOME	\$11,880	\$16,020	\$20,160	\$24,300	\$28,440	\$32,100	\$34,300	\$36,500
VERY LOW INCOME	\$19,400	\$22,150	\$24,500	\$27,650	\$29,900	\$23,100	\$34,300	\$36,500
LOW-INCOME	\$31,000	\$35,400	\$39,850	\$44,250	\$47,800	\$51,350	\$54,900	\$58,450

**Table 4 - B**

Monthly Housing Costs as a Percentage of Household Income in the Past 12 Months	All households	Owner occupied	Renter occupied
<b>Less than \$20,000</b>	<b>13.60%</b>	<b>11.60%</b>	<b>20.00%</b>
Less than 20 percent	1.60%	1.70%	1.30%
20 to 29 percent	1.50%	1.60%	1.50%
30 percent or more	10.50%	8.40%	17.20%
<b>\$20,000 to \$34,999</b>	<b>18.90%</b>	<b>18.20%</b>	<b>21.00%</b>
Less than 20 percent	7.20%	9.20%	0.90%
20 to 29 percent	5.30%	3.30%	11.70%
30 percent or more	6.40%	5.70%	8.50%
<b>\$35,000 to \$49,999</b>	<b>16.20%</b>	<b>15.90%</b>	<b>17.10%</b>
Less than 20 percent	9.40%	9.60%	8.80%
20 to 29 percent	4.30%	3.80%	6.10%
30 percent or more	2.50%	2.50%	2.30%
<b>\$50,000 to \$74,999</b>	<b>20.00%</b>	<b>21.80%</b>	<b>14.10%</b>
Less than 20 percent	11.30%	12.90%	6.20%
20 to 29 percent	5.50%	5.80%	4.60%
30 percent or more	3.10%	3.10%	3.40%
<b>\$75,000 or more</b>	<b>25.00%</b>	<b>29.80%</b>	<b>10.10%</b>
Less than 20 percent	19.50%	23.50%	7.10%
20 to 29 percent	4.00%	4.90%	1.00%
30 percent or more	1.50%	1.40%	1.90%
<b>Zero or negative income</b>	<b>2.50%</b>	<b>2.70%</b>	<b>1.70%</b>
<b>No cash rent</b>	<b>3.90%</b>	<b>(X)</b>	<b>16.00%</b>

As shown in Table 4-B, housing cost is a greater burden for lower-income households. 10.5% of households with an income of less than \$20,000 spent thirty percent or more of income on housing needs. As household income increases, the percentage of households spending 30% or more of income for housing declines. Only 1.5% of households with incomes above \$70,000 had housing costs in excess of thirty percent of income

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates (Subject to margin of error)



**POLK COUNTY VISION PLAN  
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Based on 2008 PCensus estimates, 4,991 of a total 8,900 households (56%) had an annual gross income of less than \$50,000 (less than the 2008 Polk County median income). To assess home purchasing ability, the following provides examples of the approximate cost of paying a home mortgage and total housing costs for selected home values. The following assumptions were made:

- Assumed Interest Rate - 5.8%
- 30-Year Fixed Rate Mortgage
- 10% Down Payment
- Assessed Value (% of Market Value) - 65%
- Average Property Tax Rate - 0.0074%
- Homeowner's Insurance - \$3.75 per \$1,000
- Utilities - \$225.00/month estimate based on a 2-3 bedroom dwelling

Note: Mortgage payment figures may be subject to additional monthly private mortgage insurance fees in lieu of a 20% down payment.

Price of Home - \$90,000

- Approximate Monthly Payments:
- Principal & Interest - \$475.27
- Taxes - \$36.07
- Homeowner's Insurance - \$28.13
- Utilities - \$225.00
- Total: \$763.47

[Ability-to-pay minimum gross income: \$2,542/mo.; \$30,500/yr.]

Price of Home - \$115,000

- Approximate Monthly Payments:
- Principal & Interest - \$607.29
- Taxes - \$46.10
- Homeowner's Insurance - \$35.94
- Utilities - \$225.00
- Total: \$914.33

[Ability to pay minimum gross income: \$3,042/mo.; \$36,500/yr.]

Price of Home - \$192,500

Approximate Monthly Payments:

- Principal & Interest - \$1,016.55
- Taxes - \$77.16
- Homeowner's Insurance - \$60.16
- Utilities - \$225.00
- Total: \$1,378.87

Ability to pay minimum gross income: \$4,583/mo.; \$55,000/yr.]

Price of Home - \$308,000

- Approximate Monthly Payments:
- Principal & Interest - \$1,626.48
- Taxes - \$123.46
- Homeowner's Insurance - \$96.25
- Utilities - \$225.00
- Total: \$2,071.19

Ability to pay minimum gross income: \$6,917/mo.; \$83,000/yr.]

Price of Home: \$385,000

- Approximate Monthly Payments:
- Principal & Interest - \$2,033.10
- Taxes - \$154.32
- Homeowner's Insurance - \$120.31
- Utilities - \$225.00
- Total: \$2,532.73

Ability to pay minimum gross income: \$8,458/mo.; \$101,500/yr.]

Based on these example payment schedules, 4,991 households (annual gross income of \$50,000 or less) had an affordable housing ceiling of approximately \$192,500 or less. In 2008, in the unincorporated areas of the county, there were approximately 3,200 developed residential parcels with an assumed market value of \$192,500 or less.

For comparison purposes, the following provides estimated salaries for various jobs in the Polk County area and the corresponding housing affordability for each salary:

Job	Base Salary (Annual)	Affordable Home Price
Sheriff	\$89,164	\$308,000
Police Patrol Officer	\$46,698	\$115,000
School Teacher	\$47,253	\$115,000
Registered Nurse	\$58,407	\$192,500
Minimum Wage	\$15,080	Less than \$90,000

Source: <http://www.salary.com>

Limited Section 8 housing is available in Polk County. Section 8 is a federally assisted housing program funded by the US Department of Housing and Urban Development (HUD). The program provides rental assistance for eligible families by contracting with private landlords. To be eligible for admission, an applicant must meet



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

HUD's criteria for eligibility determination as well as additional criteria established by the local administering agency which is the Isothermal Planning and Development Commission.

The allowable income limits are provided in Table 4, [page III-14](#). The majority, 80%, of the county's Section 8 allocation must go to very low income families and individuals. Based on 2008 estimates, there were approximately 1,000 households with an annual gross income of \$15,000 or less. The 4-person household very low income limit was \$16,350. In January 2009, there were only 64 Section 8 housing vouchers in Polk County. The four-county Isothermal Region had 1,331 Section 8 vouchers. Thus, there appears to be a severe deficiency in Section 8 housing assistance. Of the 64 vouchers, 40 were issued to individuals/families residing at Ashley Meadows. The remainder were scattered throughout the county. There was a waiting list of approximately 30 individuals/families. It is suspected that the shortage of Section 8 housing is the result of property being available at affordable rents or property owners declining to participate in the Section 8 housing program.

Source: <http://www.salary.com>

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Meadows. The remainder were scattered throughout the county. There was a waiting list of approximately 30 individuals/families. It is suspected that the shortage of Section 8 housing is the result of property being available at affordable rents or property owners declining to participate in the Section 8 housing program.

Data from the 2010-2014 ACS indicate that an estimated 40.3% of renters in Polk County spent 30% or more of their income on rent—the general indicator that rent is unaffordable—on average from 2010-2014. The estimated rent and utilities for a safe, modest two-bedroom unit at the County's fair market monthly rent was \$728 in 2015. The two-bedroom housing wage in the County was estimated at \$14.00 an hour in 2015. This rate is almost twice the current State minimum wage. This means that if a household member earns the minimum wage, it would take almost two full-time earners (77 hours per week) for that household to afford a modest two bedroom housing unit at fair market rent.

### 5 Elderly Housing

There are multiple housing complexes in Polk County for the elderly. Tryon Estates is a housing complex in Polk County which is specifically intended for the retirement/elderly aged population. This facility houses approximately 460 residents and is normally at a 96% occupancy rate. The facility provides 295 units ranging from independent living to skilled nursing care. The complex has 265 employees. While this facility is a valuable care provider, it does not provide low or very low income elderly care and most of its occupants are not long-term Polk County residents.

Autumn Care of Saluda is a 99-bed skilled nursing facility with 110 employees. The facility's goal is to assist patients to become independent and return home and to make a home for those who remain with them. White Oak Manor is located in Tryon and includes 100 independent living residents, 70 skilled or assisted living residents, and 130 employees. In addition, the Polk County Department of Social Services has identified the following elderly housing facilities:

- LaurelHurst Apartment Homes (private pay)
- LaurelWoods (limited public assistance; DSS monitors)



## **POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE**

- Ridgerest (private pay; DSS monitors)
- Benson Hall at White Oak (private pay)
- Kelly's Care I and II (public assistance and private pay; DSS monitors)

### **D. ECONOMY**

#### **1 Introduction**

Economically in the past decade, Polk County, the surrounding region, and the nation have been undergoing tremendous change. Rising energy costs, a shift toward a global economy, and a changing demographic profile have created unpredictable economic conditions.

Despite Polk County experiencing net job losses in textiles and furniture manufacturing, in 2000, the manufacturing industry in general remained the county's largest employer at 23% of the work force. Since 2000, the textile industry has continued to decline as evidenced by the 2008 closing of Grover Industries. Table 5 provides the county's 2000 labor force by industry data.



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**Table 5:** Labor Force by Industry, Polk County, 2000 Census

Source: PCensus data, Polk County, 2000

Labor Force by Industry	Number Employed	% Base
Agriculture	147	2%
Mining	11	<1%
Construction	806	10%
Manufacturing	1,823	23%
Transportation	236	3%
Information	164	2%
Wholesale trade	152	2%
Retail trade	839	11%
Finance and insurance	265	3%
Real estate & rental/leasing	152	2%
Utilities	78	1%
Professional scientific & technical services	372	5%
Management of companies and enterprises	2	<1%
Administrative and support and waste management services	163	2%
Educational services	549	7%
Health care and social assistance	911	11%
Arts entertainment and recreation	167	2%
Accommodation and food services	452	6%
Other services (except public administration)	383	5%
Public administration	259	3%
<b>TOTAL</b>	<b>7,931</b>	<b>100%</b>

**Table 5-A:** Labor Force by Industry, Polk County, 2014 ACS

Industry	Number Employed	% Base
Agriculture, forestry, fishing and hunting, and mining	102	1.2%
Construction	865	10.5%
Manufacturing	1,179	14.3%
Wholesale trade	132	1.6%
Retail trade	1,108	13.5%
Transportation, Utilities	358	4.4%
Information	63	0.8%
Finance and insurance	367	4.5%
Professional, scientific, and management, and administrative	740	9.0%
Educational services, and health care and social assistance	1,897	23.1%
Arts, entertainment, and recreation, and accommodation and food services	645	7.8%
Other services, except public administration	392	4.8%
Public administration	375	4.6%

Source: American Community Survey, 2010 - 2014



**POLK COUNTY VISION PLAN  
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Retail trade, health care and social assistance, and construction represented the next highest employment sectors for Polk County workers. While the data presented above represents the 7,931 individuals in the labor force, it is important to note that in Polk County, only 53% of civilians were employed, 2% of civilians are unemployed, and 45% of the population in Polk County was not in the labor force. In the Polk Economic Impact Area, North Carolina, South Carolina, and the United States, the civilians employed figure ranges even higher, from 59 - 61%. The relatively high figure for individuals not in the labor force is reflective of the aging population, and number of retired persons moving to the area. The median age has increased for Polk County from 39.1 years in 1980 to 45.7 years in 2008.

The 2000 Census reported only 2% of Polk County's labor force population as being unemployed. However, Polk County's unemployment rate has risen steadily over the past several years, with the latest county unemployment rate figure reported by the NC Employment Security Commission at 8.2% (September 2009). Polk County closely mirrors the national current unemployment rate of 9.8%, and is slightly less than North Carolina's reported rate of 10.8%.

Polk County, along with the state, region, and nation, has suffered the ill effects of the long recession underway during the preparation of this plan. Table 6 indicates the recession's impact on the local job market. From 2000 to 2009, the unemployment rate rose steadily, exceeding 8% in 2009. As a result, from September 2006 to July 2009, the Polk County Department of Social Services food stamps assistance case load increased from 521 to 840, a 61% increase. The economic uncertainties pose many unanswered questions which complicate long-range planning.

**Table 6:** Unemployment Rate, Polk County, 2000-2009

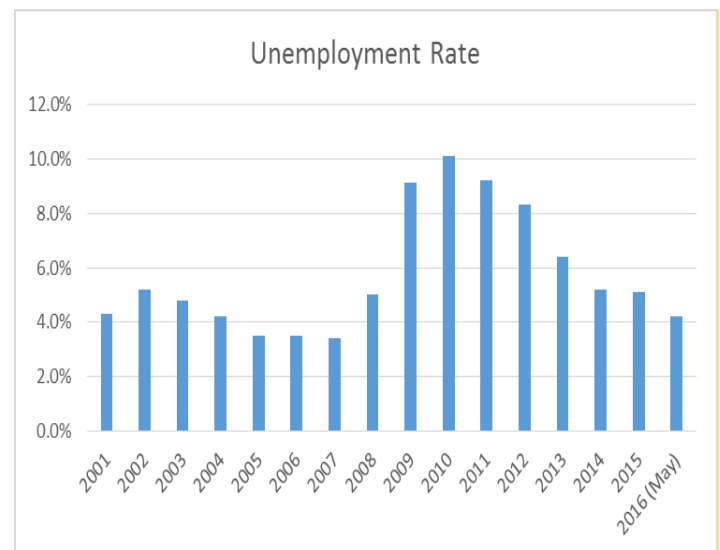
<b>Year</b>	<b>Unemployment Rate</b>
2000	3.6%
2001	4.3%
2002	5.2%
2003	4.8%
2004	4.4%
2005	4.2%
2006	3.5%
2007	3.4%
2008	0.05
2009 (Sept)	0.082

Source: NC Employment Security Commission.

**Table 6-A:** Unemployment Rate, Polk County, 2009-2015

<b>Year</b>	<b>Unemployment Rate</b>
2009	9.1%
2010	10.1%
2011	9.2%
2012	8.3%
2013	6.4%
2014	5.2%
2015	5.1%
2016 (May)	4.2%

Source: U.S. Bureau of Economic Analysis And NC Employment Security Commission





## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

Data from NCWorks Online (NC Department of Commerce) show that there were 434 people looking for work in Polk County - compared to 163 job openings - in December 2015. There were 979 fewer employed people in the County in December 2015 than there were in December 2007 (when the Great Recession began).

It should be noted that in 2008 and 2009, Polk County was designated a Tier 2 county by the NC Department of Commerce. A Tier 1 county is the most economically distressed, while a Tier 3 county is the least stressed economically.

Average household income for Polk County estimated for 2008 is \$52,921. This figure is lower than the Polk Economic Impact Area (\$56,162), and more significantly behind the average household income estimated for North Carolina (\$59,181), South Carolina (\$57,109), and the United States (\$68,953). However, the estimated per capita income for the same year for Polk County was \$24,606, which is higher than the per capita income estimated for the Polk Economic Impact Area (\$23,280), North Carolina (\$23,807), and South Carolina (\$22,613). Polk County's per capita income trails the national per capita income of \$26,464. Polk County's per capita income is significantly affected by its average household size, 2.19, in 2008. This reflects a high percentage of retirement age population and resulting unearned income.

**The 2014 ACS estimated average household income for the County was \$60,197.**

According to the 2000 Census, Polk County had the lowest incidence of poverty in the four-county Isothermal Region. The county's percentage of households below the poverty level was 11.7%, while the state percentage was 12.4%. Of the County's six townships, Cooper Gap township and Green Creek township had the highest incidences of poverty with 18.7% and 16.6% of households below the poverty level, respectively. It is important to note, however, that poverty level has minimal utility in assessing the true economic picture of a region.

**The 2014 ACS estimated that the poverty rate for families was 9.7%, and 13.4% of all people had income below the poverty level. 25.2% of children in the County (875 children) lived in**

**poverty in 2014, compared to 24.1% statewide. An estimated 31.4% of the County's residents were low-income on average from 2010 to 2014, meaning their incomes were less than twice the federal poverty level.**

Educational attainment is normally an indicator of economic conditions. Approximately 29% of Polk County's residents have a high school diploma. This rate parallels North Carolina (30%), South Carolina (33%), and the United States (31%) in similar educational attainment levels estimated for 2008.

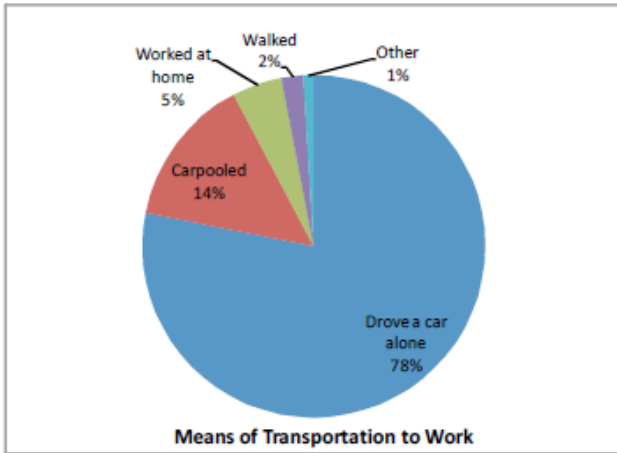
**The graduation rate for Polk County was 89.7% in 2014-2015 compared to the State rate of 85.6%. ACS data show that 30% of adults in the County had a Bachelor's degree or higher compared to 27.8% statewide on average from 2010 to 2014. The data also indicate that 32.9% of women in the County had a Bachelor's degree or higher compared to 26.6% of men during the period from 2010 to 2014. For those with this level of educational attainment, the median earnings for women was \$34,537 compared to \$47,431 for men.**

Teenage pregnancy rates are viewed as an indicator of a community's economic and social challenges. In 2006, the statewide pregnancy rate for teens ages 15 to 19 was 63.1 pregnancies per 1,000 girls. By comparison, Polk County's teen pregnancy rate was 46.7 pregnancies per 1,000 girls. There were only eight (8) North Carolina counties with a lower rate of teenage pregnancies.

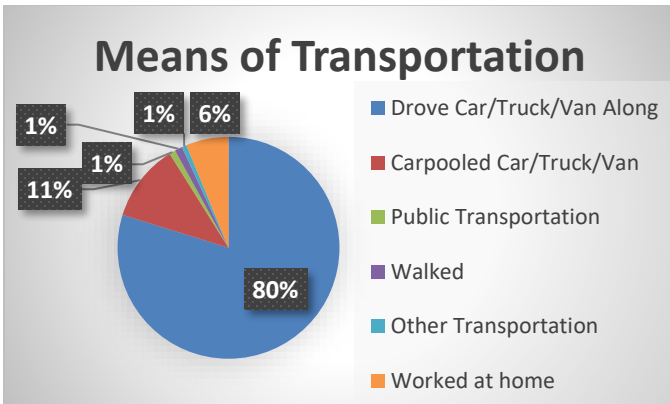
Table 7 provides the most recent travel time to work data. In 2000, over 63% of the work force traveled 30 minutes or less to their place of employment. This figure is comparable to the State overall (69.5%). The County's percentage reflects that many individuals are employed within or near the county and the quality of the regional road system allows easy access to employment within the Polk County Economic Impact Area.



**POLK COUNTY VISION PLAN  
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**Figure 4** (Source: 2000 US Census)



**Figure 4A** (Source: 2010-2014 Census)

**Figure 4-A**

Means of Transportation to Work -- 2014	Percent of Commuters
Drove Car/Truck/Van Alone	79.80%
Carpooled Car/Truck/Van	11.30%
Public Transportation	0.90%
Walked	1.10%
Other Transportation	0.70%
Worked at home	6.20%

Source: US Census - ACS 2010-2014



**POLK COUNTY VISION PLAN  
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**Table 7:** Polk County and North Carolina - Travel Time to Work, 2000 Census

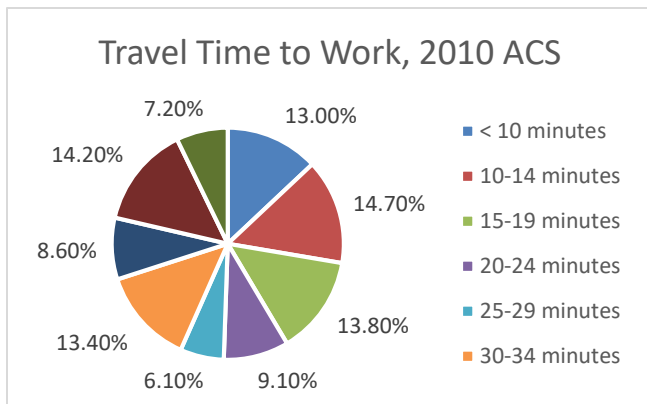
	Polk County		North Carolina	
	Total	% of Total	Total	% of Total
Less than 30 minutes	4,691	63.3%	2,597,461	69.5%
30 to 44 minutes	1,561	21.1%	689,187	18.5%
45 to 59 minutes	626	8.4%	233,614	6.3%
60 or more minutes	532	7.2%	214,560	5.7%
<b>Total</b>	<b>7,410</b>	<b>100.0%</b>	<b>3,734,822</b>	<b>100.0%</b>

Source: 2000 US Census Bureau.

**Table 7-A:** Polk County - Travel Time to Work, 2010 ACS

Means of Transportation to Work -- 2014	Percent of Commuters
Drove Car/Truck/Van Alone	79.80%
Carpooled Car/Truck/Van	11.30%
Public Transportation	0.90%
Walked	1.10%
Other Transportation	0.70%
Worked at home	6.20%

Source: US Census - ACS 2010-2014



Source: US Census-ACS 2010-2014



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

### 2. Local/Regional Economic Factors

While the economic data compiled from past censuses help describe the current situation, it does not accurately present the true state of Polk County's economy. Local economic considerations which demand more detailed attention include the equine industry, viticulture, agriculture, proprietorships/ entrepreneurship, tourism, and the decline of the textile manufacturing industry. Changes in these economic sectors are expected to impact Polk County's future economy.

### 3. Equine Industry

The equine or animal husbandry sector is a major factor in the Polk County economy. It is unique to the region and provides a competitive advantage. Polk County is attractive equine country because its soils provide good riding conditions. The dense wooded areas, attractive landscape, extensive agricultural areas, and natural fauna (including a prolific fox population), and temperate climate all support a flourishing equine community which is conducive to year-round riding. "Tryon Horse Country" is recognized nationally as well as internationally.



In 1996, the North Carolina Department of Agriculture and Consumer Services conducted a survey of the state's equine industry. The four counties of the Isothermal Region possessed a total of 6,100 horses with a combined value of over \$24 million. Although for a substantial number of horses, the average value (\$3,986 per horse) fell slightly below the state average of \$4,038. When these numbers are disaggregated, Polk County proves exceptional. The county's 1,500 horses were valued at over \$11 million, for an average value of \$7,339 per horse. That average trails only Robeson and Cabarrus Counties.

Nationally, there are 9.2 million horses in the United States, and approximately 4.6 million Americans are involved as owners, service providers, employees, and volunteers. The result is a direct equine industry annual impact of \$39 billion. Equine enterprises are agri-based/land based. Businesses such as breeding, training, lessons, sales, and acreage for hay and grain all require open land and smart land management. The equine industry encourages cluster economies – small entrepreneurial businesses that revolve around the larger industry. Polk County and the immediate area have approximately 187 small businesses that are dependent upon the horses of the area. Examples of the businesses include: truck and trailer sales, real estate sales, barn builders, pasture management, feed and equipment sales, training and instruction, farm and equine insurance, veterinary care, commercial equine hauling, massage and chiropractic, boot repair, farrier, fencing, equine dentistry, camps, equine editorial services, course design, accommodations, and equine retirement facilities.

Polk County's show venues, along with private events such as clinics and hunter paces bring competitors to the area every weekend of the year. Shows provide a source of tourism that is not seasonal, and is continuing to grow. Every horse entering a show brings with it an estimated 2.5 people, who in turn, generate restaurant and lodging receipts, fuel consumption, and miscellaneous expenditures such as tack, equipment, feed, bedding, etc. The county's show venues include the Foothills Equestrian Nature Center (FENCE), a 300-stall regional facility, and Harmon Field, a 200-stall local facility which was significantly improved in 2008. In addition, a new 500-stall facility, Green Creek Equestrian Park by Tryon Riding and Hunt Club, is planned for 2010.

As an example of the direct economic impacts of show venues, the FENCE facility reports 28 show weekends per year (average of 2 days for 56 show days per year). The direct dollar impact for the FENCE facility is \$7,980,000 with a \$31,920,000 projected economic impact on the area as a whole. The new TR&H International Equestrian Park is projected to produce 40 show days per year, with a direct facility dollar impact of \$9.5 million, and a significant area-wide indirect impact of \$38 million.



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

Tryon Equine Hospital, formerly Bonnie Brae Equine Hospital, has a national reputation, and brings horses and their owners to Polk County for specialized care from five surrounding states on a consistent basis. Again, while sick horses are hospitalized in the county, owners are using the local accommodations and restaurants.

The county's trail systems (FETA, CETA, North Paolet, and other private systems such as Golden Hills and Fairview Farms) provide approximately 200 miles of trails and are nationally recognized. Polk County offers a unique package in that most other horse communities do not provide both equestrian competition venues and a trail system.

In summary, the local equine industry believes that its direct economic impact on the county is \$15 million, with a total indirect impact of \$45 million. Generally, the following benefits of the equine industry accrue to the county:

- Equine industry related jobs are being created;
- Equestrian events generate approximately 300,000 visitors to the county annually;
- Farmland and open space preservation is supported;
- A larger tax base from sales and property taxes is supported.

The local equine industry has not been spared from the effects of the current recession. The Tryon Daily Bulletin reported in April 2009, that several area horse shows were experiencing significant declines in entries.

The North Carolina Rural Economic Development Center recently released their 2009 North Carolina Equine Industry Study which indicates that Polk County leads all 100 counties in the state for the number of horses per capita. The study shows 3,850 equines (horses, ponies, mules, donkeys, and burros) in Polk County, or about one equine for every five people. That compares to a statewide average of about one equine for every 30 people, based on 2008 population estimates. The study also notes that North Carolina lags behind other states in supporting the equine industry. To grow equine-related business opportunities in North Carolina, the state makes eight specific recommendations:

- Create an Equine Industry Commission.

- Conduct a feasibility and site selection study for a mega horse park.
- Invest in existing facilities.
- Consider the reinstatement of pari-mutuel wagering.
- Allocate more funding for equine health research.
- Bolster marketing efforts.
- Preserve land and open space.
- Revise tax laws and regulations to ensure that horse farms may be taxed as agricultural property.

In 2016, Western Carolina University released a *Summary of a Preliminary Economic Impact Study of Visitors at Tryon International Equestrian Center*, Mill Spring, North Carolina 2015. The Study described the new Tryon International Equestrian Center as follows "TIEC opened in June, 2014 to provide a resort and world class equestrian center with facilities for equestrian sports, activities, and events such as competitions and championships, including fox hunting, show jumping, dressage, steeplechase, and more. The area has historically hosted shows dating back to the 1930s, and served as the home for the 1956 Olympic show jumping team. Tryon International Equestrian Center also serves as an event center for family friendly entertainment. TIEC is ideally located in a year-round temperate climate, and is within one hour of Charlotte, NC, Greenville-Spartanburg, SC, and Asheville, NC. Tryon International Equestrian Center currently provides equestrian activities and resort facilities including 10 riding arenas, 1,200 horse stalls, and a covered riding facility. To complete the experience, the resort includes a fitness center, multiple restaurants, shopping opportunities, and overnight accommodations including vacation rentals, cabin rentals, and an RV park. Tryon International Equestrian Center plans to expand to ultimately include a resort hotel, condominiums, retail space, a sports complex, a sporting clay course, and an 18-hole Arnold Palmer designed golf course. Its initial mission is to provide sanctioned horse shows and equestrian amenities, and in February of 2016 announced they will be hosting the 2016 annual United States Pony Club Championships East."

The Study of visitors to the Equestrian Center was conducted in 2015. The preliminary findings indicate that the Center already had an economic



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

impact of over \$9.2 million, and created in excess of 115 local jobs. Additional facilities have opened in Rutherford County, and the expected impacts of the Equestrian Center will be regional in scope.

The Equestrian Center represents the largest recent capital investment in Polk County, and has been its largest job creator since the start of construction.

TIEC is located at the intersection of US Hwy 74 and Pea Ridge Road. The County and the property developer have entered into a development agreement.

#### 4. Viticulture/Enology

Viticulture, grape growing, and enology, wine production, are rapidly becoming a significant factor in both the North Carolina and Polk County economies. Based upon the report, Discover North Carolina Wines: A Wine Tourism Visitor Profile Study, the following summarizes the state of North Carolina's wine industry for 2008:

"Today, NC is home to a growing wine tourism industry with some 350 vineyards and 63 wineries in 31 counties. In the eastern part of the state, the muscadine grape, which include scuppernongs (native to the region) are cultivated, while bunch grapes like chardonnay and cabernet sauvignon are grown in several areas in western North Carolina. Since 2000, the number of NC wineries in the state has tripled and grape acreage has more than doubled to 1,300 acres enabling the state to become the 10th largest producer of grapes and wine in the U.S. and the western part of the state now boasts the first federally recognized American Viticulture Area (AVA) in North Carolina."

Currently, there are two areas in North Carolina which are recognized as AVAs: Swain Creek and the Yadkin Valley. Efforts are underway to have Polk County designated as an AVA by the federal government.

Further studies by the North Carolina State Department of Commerce's Tourism Division and the North Carolina Wine and Grape Council indicate that the wine and grape industry accounts for \$813 million of the state's economy.

Statewide, the industry hosted more than 800,000 visitors in 2005, provided 5,700 full-time jobs, and paid \$158 million to rural areas which need new economic development. In 2005, North Carolina ranked 10th of all states in grape production.

Polk County is a significant player in the state's viticulture/enology industry. Based upon discussions with representatives of the local industry, in 2008, there were approximately 145 acres of county land in production, with 18 individual vineyards. Approximately 700 additional acres are held by vineyard owners. These vineyards are primarily located on family farms.

Within the county, the prime elevation for vineyards is 700 to 1200 feet above sea level. This area normally lies between higher elevation freezes and lower elevation frosts. Polk County's landscape and temperate climate make it a highly desirable location for viticulture.

Currently most of Polk County's grape production goes to the Biltmore Estates Winery, which is the world's most visited winery. There are three wineries located in Polk County: Rockhouse, Green Creek, and Overmountain Vineyards. In order to expand wine production, the area(s) committed to vineyards must increase. It requires approximately three (3) acres minimum to economically sustain a vineyard. In terms of volume, each acre may yield approximately three tons of grapes. Expansion of the grape volume is critical. In order for a wine to be labeled a North Carolina wine, at least 80% of the grape content must be from grapes harvested in North Carolina.

According to data from the North Carolina Department of Agriculture, and a recent study by The University of North Carolina at Greensboro, North Carolina has 400 vineyards and nearly 150 wineries. This represents a five-fold increase in the last decade. North Carolina is the 10<sup>th</sup> largest grape producer in the US, the 9<sup>th</sup> largest wine producing state and the world leader in muscadine production. This industry accounts for 1.26 million visitors with an impact of over \$1.28 billion annually. In addition, the industry employees over 7,600 people in the state.

According the County Cooperative Extension



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

Service website, Polk County currently has 11 commercial vineyards, primarily in Green Creek Township. There are five active wineries open to the public -- Parker-Binns, Russian Chapel Hill, Overmountain, Mountain Brook, and Green Creek.

Viticulture/enology is a critical part of Polk County's agri-tourism business. In order for visitors to remain in the county for a day-long wine-related trip/activity, three active wineries are required. The further development of local vineyards is critical to support operation of the county's wineries.



### 5. Agriculture

The North Carolina Department of Agriculture and Consumer Services (NCDA&CS) reports 309 farms in Polk County for 2007, with an average farm size of 68 acres. The only crop produced in Polk County which was reported by NCDA&CS was hay (a 2008 yield of 1.45 tons/acre from 4,300 harvested acres). Other grain crops, cotton, peanuts, sweet potatoes, and tobacco are also grown in Polk County, but data is unpublished by NCDA&CS if the harvested acres are fewer than 50 acres of tobacco, 200 acres of peanuts, or 500 acres of other crops. Note that grape harvests for wine production are not considered in the Census of Agriculture statistics.

The 2012 Census of Agriculture showed that the number of farms had declined slightly to 290, but the average farm size increased to 83 acres. Farms constituted approximately 16% of the County's land area, compared to 27% for North Carolina. Hay was the largest crop, with 1.85 tons produced on approximately 5,600 acres. There were 3,200 head of cattle and 1,200 laying hens in the county. (Other livestock data are unpublished due to the smaller quantities produced.) In 2012, gross income from farm-related sources in the County was \$1,239,000, and the average per farm was \$14,574, higher than the State average of \$12,934. In 2014, cash

receipts for crops and livestock were \$11,029,145, which moved the County's ranking in the state up one position to 91<sup>st</sup>.

Regarding livestock farming, the NCDA&CS reported Polk County as having 2,000 head of cattle and 900 beef cows in 2008. Similarly, with crop data reported, other livestock such as chickens, hogs and pigs, milk cows, and turkeys, are present in Polk County, but their numbers are below what is published (fewer than 1,000 hogs or 500 cattle, 500 beef or milk cows, 500,000 broilers or turkeys, or 100,000 other chickens). Cash receipts for crops, livestock, dairy, and poultry, and government payments generated \$7,518,380 in Polk County for 2008, ranking in the bottom tenth (#92) for North Carolina counties.

While farm-related employment constitutes only 3.4% of the total employment in Polk County, a number of high value-added agriculture-related opportunities exist in the area, including selling locally grown produce to restaurants and chefs in neighboring metropolitan areas, and tapping into the agri-tourism business niche through the strengthening viticulture enterprise. In 2009, Polk County was provided a \$10,000 grant from the Southern Region Sustainable Agriculture Research and Education (SSARE) Program. The grant was intended to assist the county's agricultural economic development department to partner local farmers with local restaurants.

The following table provides a summary of the 2005 estimated farm income for Polk County. The income attributed to horses, mules, and ponies (\$2,399,750), while not included in the total of farm income and government payments, represents 28.8% of the total farm income and government payments (\$8,338,797). The volume of income derived from horses, mules, and ponies supports the discussion of the economic significance of Polk County's equine industry. In addition, the income derived from hay and other crops (\$549,000) is directly linked to the equine industry. Fruits and vegetables were the largest income producer yielding \$3,528,547 in income, 42.3% of the total farm income and government payments. This segment of the agricultural economy supports tourism (apples/grapes), regional food service, and agri-tourism.



**POLK COUNTY VISION PLAN  
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**Table 8:** Estimated Income from Sale of Farm Products & Government Payments. Polk County, 2005

<b><u>Commodity</u></b>	<b><u>2005</u></b>
Tobacco-Burley	* \$0
Corn	\$0
Soybeans	\$22,725
Other Grains	\$31,150
Potatoes	* \$0
Fruits & Vegetables	\$3,528,547
Greenhouse & Nursery	* \$0
Hay & Other Crops	\$549,000
Farm Forestry	#\$2,967,082
 Total Crop Income	 \$7,098,504

<b><u>Commodity</u></b>	<b><u>2005</u></b>
Hogs	\$0
Cattle	\$633,925
Milk	\$481,600
Other Livestock & LS/Products	\$14,620
Total Livestock & LS/Prod Income	\$1,130,145
 Total Farm Income	 \$8,228,649
 Government Payments	 \$110,148
 Total Farm Income & Gov Payments	 \$8,338,797
 Non-Farm Forestry	 @ \$0
 Horses, Ponies, Mules	 \$2,399,750

\*Counties may not add to totals to avoid individual disclosures.  
 #Farm forestry - because of disclosure agreements, farm forestry land in 2005 now includes all forest land in a county except for publicly owned land (local, state, federal).  
 @Non-farm forestry - includes public lands only (local, state, federal).  
 Source: *NC Cooperative Extension Service.*

**In 2007, Polk County enacted the Farmland Preservation Ordinance, creating a formal**

farmland preservation program. As of April, 2016 a total of 7,682 acres were enrolled in the program. 167 farm properties are participating. The Farmland Preservation Plan was created in 2007.

In 2009, the Board of County Commissioners created an Agricultural Economic Developer position. The objectives of this new department are:  
 Maintain and enhance Farmland Preservation (VAD and EVAD) in Polk County.  
 Provide networking opportunities and mentorship to new and existing farmers.  
 Assist in scaling up agricultural businesses through training and grant funding.  
 Create market opportunities for Polk County's agricultural products.  
 Encourage value-added enterprises. Identify trends and provide support services.  
 Help Polk County farmers transition farm land to the next generation of farmers.

The Mill Spring Agricultural Center was developed in the former Mill Spring School. In addition to three active farmer's markets, the County now has an independent locally-sourced farm store and a certified commercial kitchen to support value-added agricultural production. A number of new local produce retailers have emerged. The County is building a strong local food movement.

A new non-profit organization, Growing Rural Opportunities, Inc., has been formed to develop and support farm training programs in concert with Isothermal Community College, the Cooperative Extension Service and others. ([www.growrural.org](http://www.growrural.org)) Another initiative, Grow Food Where People Live, began in 2015 at two locations, and grew to four sites in its second year. Participating sites demonstrate the use of edible landscapes, community gardens and individual garden spaces.

**6. Proprietorships and Entrepreneurship**

As stated in An Update of the Isothermal Planning Region's Comprehensive Economic Development Strategy (July, 2008), development of the region's entrepreneurial community is vital to the region's economic vitality and stability. It is estimated that between 1996 and 2006, the Isothermal Region added approximately 7,369 new proprietorships. It is estimated that in Polk



## POLK COUNTY VISION PLAN SECTION III COMMUNITY PROFILE

County, many of the proprietorships were linked to the equine community, viticulture, agriculture, and tourism. In fact, it is estimated that approximately 150 small businesses in the Polk County area are dependent upon the equine industry and related agriculture. In 2006, proprietors accounted for 21.3% of the Isothermal Region's percent of total employment as compared to the state's average of 18.8%. Much of the growth in proprietorships may be linked to the county's and Isothermal Region's decline in manufacturing employment. Figure 5 provides an overview of the Isothermal Region's growth in proprietorships.

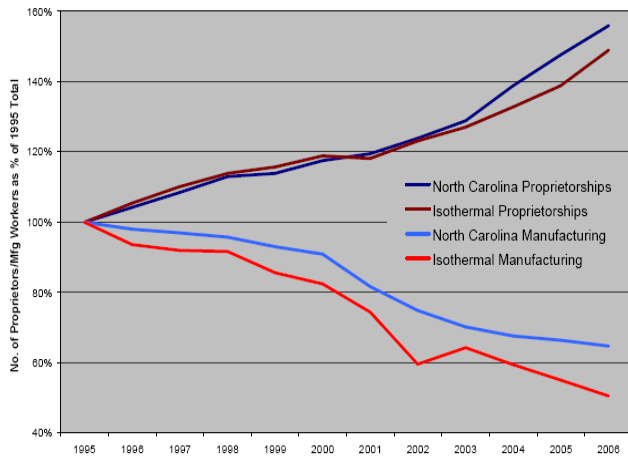


Figure 5. (Source: An Update to the Isothermal Planning Region's Comprehensive Economic Development Strategy, July, 2008)

The Environmental Systems Research Institute reported that for 2008, Polk County's 173 local retail businesses serving food and drink had total retail sales of \$90.6 million. This figure translates to an average sales amount of \$523,632 per business – an impressive amount for small businesses. This information provides further evidence that the equine-related businesses are strong contributors to the local economy.

### 7. Tourism

Tourism is one of North Carolina's largest industries. According to North Carolina Department of Commerce statistics, domestic tourism in Polk County generated an economic impact of \$19.6 million in 2007. In Polk County, tourism is based on multiple attractions including: outdoor recreation, natural assets, viticulture/enology, and the equine industry. This figure represents a 9.6% increase from the 2006 tourism revenue figure of \$17.88 million. Comparatively, North Carolina as a whole experienced a 7.2% increase from 2006 to 2007, for a total of \$16.5 billion spent across the state in tourism dollars. The overall increase in tourism revenue from 2000 to 2008 is 39.04%.

For 2007, more than 170 jobs in Polk County were directly attributable to travel and tourism, generating a payroll of \$2.96 million. Although Polk County ranked 81st of North Carolina's 100 counties in travel impact, state and local tax revenues from travel to Polk County in 2007 amounted to \$2.14 million, which represents \$112.42 in tax savings to each county resident.

When labor force data for tourism-related jobs industries such as retail trade, arts/entertainment/recreation, and accommodations/food services are added together, tourism represents the second largest employer for Polk County behind manufacturing.

The Table below provides the most current economic impacts of tourism in the County. Using the Travel Economic Impact Model (TEIM) methodology, the Research Department of the U.S. Travel Association prepares annual direct visitor spending estimates for all 100 North Carolina counties, as well as county level employment, payroll and tax revenues as a result of direct visitor spending. Total estimated tourism expenditures grew from \$20.26 million in 2010 to \$23.93 million in 2014, an increase of 18%. However, the annual rate of growth slowed significantly after 2011, reflecting the lingering effects of the Great Recession. The impact of the Tryon International Equestrian Center is not yet reflected in the data.



**POLK COUNTY VISION PLAN  
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**Table 9** Tourism Impacts in Polk County

Year	Expenditures \$(millions)	Change from previous	Payroll \$(millions)	Employment (thousands)	State Tax Receipts \$(millions)	Local Tax Receipts \$(millions)	Tax Savings Per Resident
2014	\$23.93	2.70%	\$3.37	0.18	\$1.21	\$1.34	\$122.71
2013	\$23.30	2.99%	\$3.24	0.18	\$1.19	\$1.28	\$119.66
2012	\$22.63	4.04%	\$3.13	0.17	\$1.15	\$1.24	\$117.95
2011	\$21.75	7.35%	\$3.01	0.17	\$1.13	\$1.22	\$116.02
2010	\$20.26	6.51%	\$2.91	0.17	\$1.13	\$1.21	\$113.66

Source: NC Department of Commerce, <https://partners.visitnc.com/economic-impact-studies>

expected to decrease with the greatest declines in fabric mills, and textile and fabric finishing mills. However, there appears to be potential for employment in the auto-related industry centered along I-85 between Gaffney and Anderson, SC.



Rockhouse Vineyards (HCP, Inc.)



Milliken (HCP, Inc.)

**8. Decline in the Textile Manufacturing Industry**

Polk County has suffered from the off-shoring of textile operations. In 2008, Polk County’s remaining five textile companies employed approximately 242 persons. The companies included: Carolina Yarn Processors, Pure Country, Woodland Mills, Milliken, and Quality Textile. Indicative of the decline is the 2008 closure of the Grover Industries in Lynn, a yarn dye facility. The loss of manufacturing jobs may continue to be a problem. The following table summarizes the projected net new manufacturing jobs in the Isothermal Region for 2008-2013.

Regionally, manufacturing jobs are



**POLK COUNTY VISION PLAN  
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**Table 10** Projected Net New Manufacturing Jobs in the Isothermal Region, 2008-2013

Manufacturing Industry	Employed 2008	Employed 2013	Emp. Change 2008-2013	Average Earnings
Pharmaceutical and medicine mfg.	2,391	2,825	434	\$81,055
Fabric mills	1,474	1,056	-418	\$40,955
Other fabricated metal product mfg.	1,209	1,214	5	\$46,978
Textile & fabric finishing mills	1,179	858	-321	\$40,343
Household & institutional furniture mfg.	883	799	-84	\$30,111
Motor vehicle parts mfg.	865	836	-29	\$62,239
Plastics product mfg.	822	858	36	\$39,419
Textile furnishings mills	756	852	96	\$30,857
Glass & glass product mfg.	577	406	-171	\$84,527
Electrical equipment mfg.	570	641	71	\$54,300
<b>Total</b>	<b>10,726</b>	<b>10,345</b>	<b>-381</b>	

SOURCE: An Update to the Isothermal Planning Region’s Comprehensive Economic Development Strategy.

**9. Economic Development**

Polk County economic development efforts are supported by the Polk County Economic Development Office and the Polk County Chamber of Commerce. In addition, in 2008, the North Carolina town of Tryon and the South Carolina town of Landrum joined their two Chambers to become the Chamber Serving the Carolina Foothills. This merger reflects the unique cross-border cooperation across state line that is a reflection of two vibrant economies acting as one. The official recognition of the two communities as one now provides leadership in developing business and economic opportunities that

enhances the quality of life of the entire southern foothills region of the Blue Ridge Mountains along I-26 connecting Asheville and Spartanburg.

In July 2014, Polk County was designated as part of Foreign Trade Zone (FTZ) #57 Service Area. As part of what is known as an “Alternative Site Framework” the entire county is available to businesses wishing to participate in the program. And, due to the County’s proximity to South Carolina’s FTZ#21 and the Inland Port in Greer, SC, manufacturers and processors of foreign-produced components can realize significant cost savings.

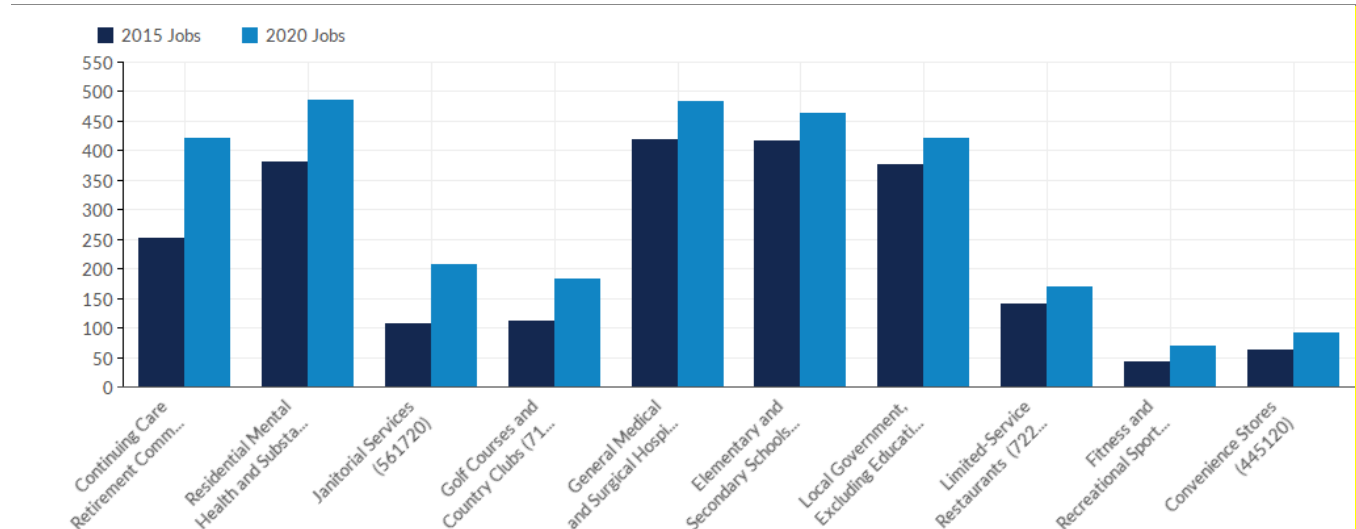


**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

The Polk County Economic Development Policy and Strategic Plan was adopted by the Board of Commissioners in August, 2014. The Plan can be found at <http://www.polkedc.com/img/Economic-Development-Policy-FINALrev0WEB.pdf>

Table 11 projects job growth by industry in the County. The largest number of jobs is estimated in the retirement and health services sectors.

**Table 11 Fastest Growing Industries in Polk County**



<b>Industry</b>	<b>2015 Jobs</b>	<b>2020 Jobs</b>	<b>Change in Jobs (2015- 2020)</b>	<b>% Change</b>	<b>2015 Earnings Per Worker</b>
Continuing Care Retirement Communities	251	422	171	68%	\$29,721
Residential Mental Health and Substance Abuse Facilities	381	486	105	28%	\$47,099
Janitorial Services	107	208	101	94%	\$10,767
Golf Courses and Country Clubs	112	183	71	63%	\$22,595
General Medical and Surgical Hospitals	419	482	63	15%	\$35,965
Elementary and Secondary Schools (Local Government)	417	464	47	11%	\$49,073
Local Government, Excluding Education and Hospitals	376	422	45	12%	\$33,984
Limited-Service Restaurants	139	168	29	21%	\$13,492
Fitness and Recreational Sports Centers	42	70	28	65%	\$10,162



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

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<b>Industry</b>	<b>2015 Jobs</b>	<b>2020 Jobs</b>	<b>Change in Jobs (2015- 2020)</b>	<b>% Change</b>	<b>2015 Earnings Per Worker</b>
Convenience Stores	63	90	27	44%	\$18,687





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Source: EMSI Quarter 1 2016 Data Set – [www.economicmodeling.com](http://www.economicmodeling.com)



**POLK COUNTY VISION PLAN  
SECTION III COMMUNITY PROFILE**

**E. COMMUNITY PROFILE SUMMARY**

	Polk County	Polk Economic Impact Area	North Carolina	South Carolina	United States
 Population	Population grew 6.5% between 2000 & 2008 Population is expected to grow <b>3.5%</b> between 2008 & 2013 2008 median age is <b>45.7</b>	Population grew 6.8% between 2000 & 2008 Population is expected to grow <b>4.1%</b> between 2008 & 2013 2008 median age is <b>39.6</b>	Population grew 13.3% between 2000 & 2008 Population is expected to grow <b>7.1%</b> between 2008 & 2013 2008 median age is <b>37.2</b>	Population grew 10.2% between 2000 & 2008 Population is expected to grow <b>5.6%</b> between 2008 & 2013 2008 median age is <b>37.6</b>	Population grew 8.5% between 2000 & 2008 Population is expected to grow <b>4.8%</b> between 2008 & 2013 2008 median age is <b>36.9</b>
 Household	Number of households increased <b>12.5%</b> between 2000 & 2008 Number of households is expected to increase <b>6.8%</b> between 2008 & 2013	Number of households increased <b>6.8%</b> between 2000 & 2008 Number of households is expected to increase <b>4.1%</b> between 2008 & 2013	Number of households increased <b>13.6%</b> between 2000 & 2008 Number of households is expected to increase <b>7.2%</b> between 2008 & 2013	Number of households increased <b>10.6%</b> between 2000 & 2008 Number of households is expected to increase <b>5.8%</b> between 2008 & 2013	Number of households increased <b>7.7%</b> between 2000 & 2008 Number of households is expected to increase <b>4.4%</b> between 2008 & 2013
 Household Income	Average household income is projected to increase 8.9% between 2008 & 2013 Estimated per capita income is <b>\$24,606</b>	Average household income is projected to increase <b>8.3%</b> between 2008 & 2013 Estimated per capita income is <b>\$23,280</b>	Average household income is projected to increase <b>8.9%</b> between 2008 & 2013 Estimated per capita income is <b>\$23,807</b>	Average household income is projected to increase <b>8.6%</b> between 2008 & 2013 Estimated per capita income is <b>\$22,613</b>	Average household income is projected to increase <b>12.3%</b> between 2008 & 2013 Estimated per capita income is <b>\$26,464</b>
 Educational Attainment	In 2008, <b>9.9%</b> of the population over 25 years of age had earned a Masters, Professional, or Doctorate degree In 2008, <b>16.5%</b> had earned a Bachelor's degree	In 2008, <b>8.3%</b> of the population over 25 years of age had earned a Masters, Professional, or Doctorate degree In 2008, <b>14.6%</b> had earned a Bachelor's degree	In 2008, <b>8.6%</b> of the population over 25 years of age had earned a Masters, Professional, or Doctorate degree In 2008, <b>16.9%</b> had earned a Bachelor's degree	In 2008, <b>8.2%</b> of the population over 25 years of age had earned a Masters, Professional, or Doctorate degree In 2008, <b>15.3%</b> had earned a Bachelor's degree	In 2008, <b>10.2%</b> of the population over 25 years of age had earned a Masters, Professional, or Doctorate degree In 2008, <b>17.6%</b> had earned a Bachelor's degree
	<b>66.3%</b> of the dwelling units were owner-occupied in 2008	<b>59.6%</b> of the dwelling units were owner-occupied in 2008	<b>57.5%</b> of the dwelling units were owner-occupied in 2008	<b>57.8%</b> of the dwelling units were owner-occupied in 2008	<b>59.2%</b> of the dwelling units were owner-occupied in 2008

Source: PCensus.



**POLK COUNTY VISION PLAN**  
**SECTION IV ENVIRONMENT / EXISTING CONDITIONS**

**SECTION IV. ENVIRONMENT/EXISTING CONDITIONS**

**A COMMUNITY FACILITIES/SERVICES**

Community facilities and services are an integral part of how land use is distributed and its density is determined. While community facilities/services may not be the sole or most important determinant, they may function as both a stimulant and deterrent for various categories of land use. This section provides a foundation for the analysis of existing facilities which may affect both near-term and long-term land use decisions. Map 7 provides a delineation of the existing Polk County community facilities.

**1 Transportation**

Interstate 26 (east/west) and US 74 (east/west) are the major highways serving Polk County. These major arteries are supported by NC Routes 9 (north/ south) and 108 (northeast/southwest). I-26 and US 74 are the most significant connectors to the Polk Economic Impact Area and its major metropolitan areas. The I-26 corridor is particularly significant because it connects to I-40 approximately 30 miles north of Polk County. Thus, Polk County has direct access to the entire urban region developing from the North Carolina Piedmont to Atlanta-Birmingham. In addition, I-85 is located approximately 30 miles south.

According to the NC Department of Transportation (NCDOT), there are approximately 738 miles of roads located in Polk County. Map 8 provides 2000 and 2007 annual average daily traffic counts (AADT) for reported locations on federal and state primary roads.

Table 10 provides the 2009-2015 NCDOT Transportation Improvement Program (TIP) transportation improvement projects within Polk County. NOTE: In April 2009, NCDOT was awarded \$10 million in stimulus funds to repave 10 miles of I-26 in Polk County.

Air transportation and access to the national air transportation system is most readily available at the Hendersonville Airport, which is located approximately 10 miles north of Polk County. The Hendersonville Airport is a general aviation facility with a 3,075-foot paved lighted runway. Greenville Downtown Airport located in Greenville, SC, and the GSP International Airport off I-85 between Greenville and Spartanburg, also provide general aviation access.

Air carrier air service is available at both the Asheville Regional Airport north of Polk County and the Greenville-Spartanburg International Airport located to the south.

Polk County and its three municipalities are members of the Isothermal Rural Planning Organization (RPO). The Isothermal RPO is a partnership between the NCDOT and the local governments of McDowell, Polk, and Rutherford Counties. Staffed by the Isothermal Planning and Development Commission, the RPO serves as the transportation planning authority for the region.





**POLK COUNTY VISION PLAN  
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**Table 10 NCDOT TIP Projects, 2009-2015**

<u>Description</u>	<u>Total Proj. Cost (Thou)</u>	<u>Work Type</u>	<u>Schedule (Fiscal Years)</u>
<b>Projects</b>			
SR 1722, SR 1722 (Exit 22) in Henderson County to SR 1142 (Exit 28) in Polk County. Pavement rehabilitation (5.5 miles).	13,700	Construction	Future years
SR 61, Milepost 61 to Milepost 71. Pavement rehabilitation (10 miles).	6,500	Construction	FY2010
SR 74, US 74, NC 108 interchange (Exit 108) revisions and improvements to NC 108.	20,620	Right-of-way Construction	Future years
<b>Projects</b>			
Various, guardrail installation and safety improvements.	1,982	Construction	FY2009
<b>Bridge Projects</b>			
SR 1102, small branch of Pacolet River. Replace bridge number 4.	500	Right-of-way Construction	FY2012FY2013
SR 1102, Pacolet River. Replace bridge number 2.	1,190	Construction	FY2009
SR 1517, Pacolet River. Replace bridge number 19.	989	Under Construction	
SR 1520, Hooper Creek. Replace bridge number 24.	624	Right-of-way Mitigation Construction	FY2009FY2009FY2009
<b>Projects</b>			
Various, ecosystem enhancement program for Division 14 project mitigation.	5,342	In progress	
<b>Projects</b>			
Countywide, add wide paved shoulders on selected sections of designated bike routes.		Scheduled for feasibility study	
<b>Projects</b>			
Various, Blue Ridge National Heritage sites. Interpretive and gateway markers.	469	In progress	
<b>Projects</b>			
SR 176, SR 1831 in Henderson County to the southern intersection of SR 1102 in Polk County. Install shoulder guardrail (7.9 miles).	375	Under construction	
<b>Transportation Projects</b>			
Countywide, provide operating assistance to counties and community transportation systems to meet Work first and employment transportation needs.	14	Operations	FY2009-FY2015
Countywide, provide operating assistance for additional transportation services to the elderly and disabled.	287	Operations	FY2009-FY2015
Countywide, provide maintenance assistance for community transportation systems to serve the rural general public.	217	Operations	FY2009-FY2015



## **POLK COUNTY VISION PLAN**

### **SECTION IV ENVIRONMENT / EXISTING CONDITIONS**

Since the adoption of this Plan, the North Carolina has revised the method of selecting and ranking transportation project for funding across the State. All modes of transportation are assigned quantitative scores and the highest scoring projects are scheduled for funding in coming years and included in the Statewide Transportation Improvement Program (STIP).

The major highway project in Polk County continues to be I-4729, the construction of a new interchange for I-26, US 74 and NC 108. This project is now estimated at approximately \$19 million, and construction is scheduled to begin in 2020. The reconstruction of this interchange, and the completion of the US 74 bypass around Shelby are the primary obstacles to the effort to secure interstate highway designation for US 74 between I-26 in Columbus and I-85 in Kings Mountain.

The current STIP also includes several bridge replacements – SR 1102 (Pearson Falls Rd.) at Fork Creek, SR 1311 (Rock Springs Rd.) at Walnut Creek, SR 1138 (Silver Creek Rd.) at Panther Creek, and SR 1501 (Hunting Country Road) at Wolfe Creek. Prior planning for bicycle and pedestrian needs resulted in the scheduling of new sidewalk construction on Peniel Road from Walker Road to Wheeler Road. New bicycle and pedestrian planning is underway and additional projects will be identified for future funding requests.

The STIP also includes the State’s capital and operating assistance to the County’s public transit program.



**POLK COUNTY VISION PLAN**  
**SECTION IV ENVIRONMENT / EXISTING CONDITIONS**

Map 7 - Community Facilities

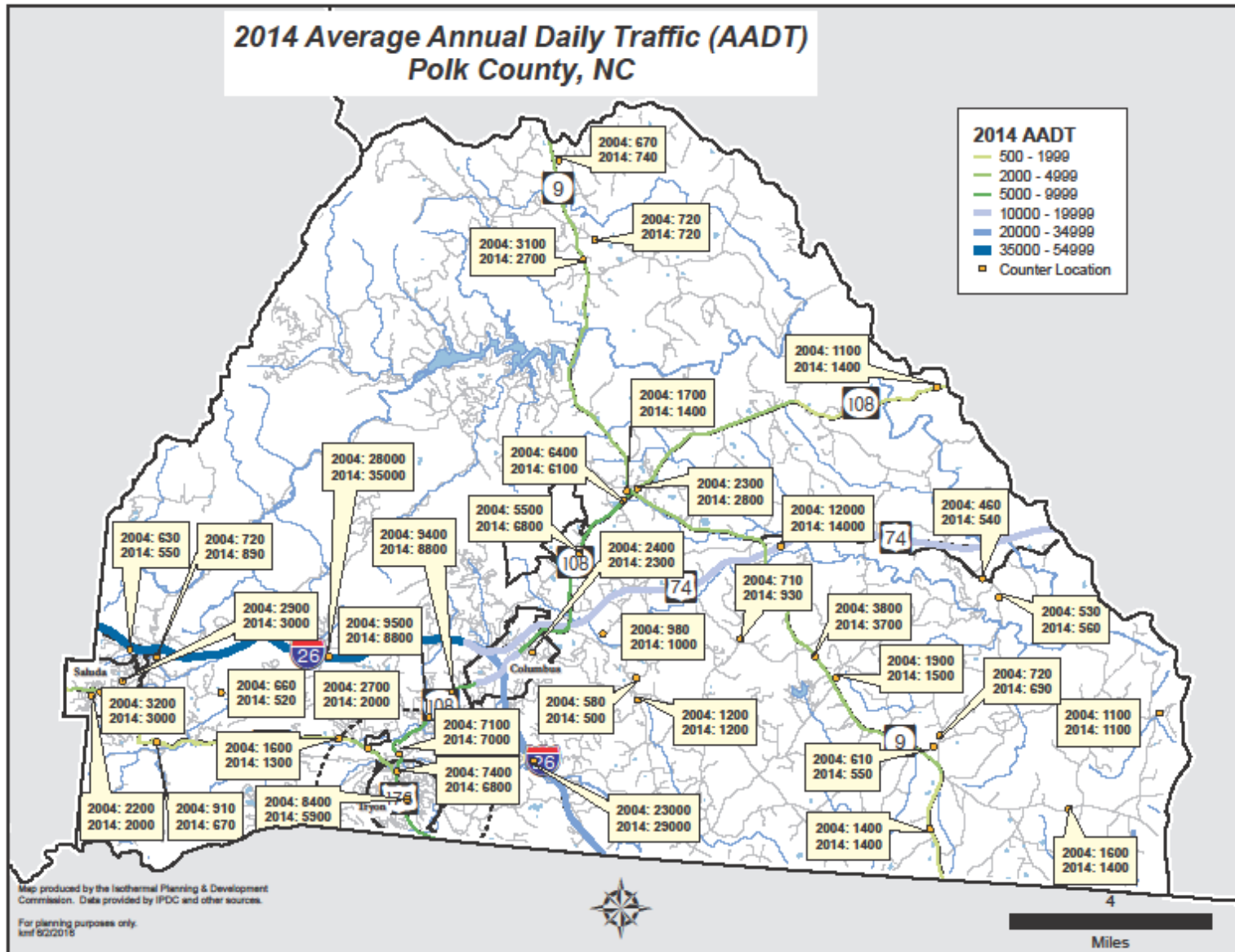


**POLK COUNTY VISION PLAN**  
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Map 8 - AADT



## POLK COUNTY VISION PLAN SECTION IV ENVIRONMENT / EXISTING CONDITIONS





**POLK COUNTY VISION PLAN**  
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The Polk County Transportation Authority (PCTA) provides public transportation to county residents. In 2008, the PCTA operated 12 vehicles (11 peak service) with a total seating capacity of 118. The total annual number of operating days Monday through Friday was 249.

In 2008-2009, Polk County was participating with the Isothermal RPO to develop a coordinated transit plan for Polk and Rutherford Counties. It is intended that the coordinated plan will identify transit needs, priorities, and strategies for inter-county transit services in the region. Table 11 provides a summary of the PCTA historical operating statistics.

**PCTA Mission**

Our mission is to enhance the provision of rural human service and general public transportation in the Polk County Community. We are committed to develop an efficient, safe, reliable and convenient rural public transportation program that the Polk County community can afford with mobility choices and the opportunity to improve their quality of life.

**Table 11: Historical Operating Statistics  
 Polk County Transportation Authority**

	2006	2007	2008	% Change 07-08
Total Service Miles	352,996	372,706	386,082	3.59%
Transit System Service Miles	352,996	372,706	386,082	3.59%
Total Service Hours	16,287	15,628	17,015	8.88%
Total Passenger Trips	44,034	48,857	50,385	3.13%
Total Transit System Trips	44,034	48,857	50,385	3.13%
Total Admin/Oper Revenue	\$478,156	\$516,079	\$571,296	10.70%
Total Contract Revenue	\$246,381	\$258,753	\$275,287	6.39%
Fare Revenue	\$30,597	\$29,008	\$28,967	-0.14%
Total Admin/Oper Adj. Expense	\$521,580	\$521,780	\$618,057	18.45%
Peak Vehicles	10	11	11	

Source: Polk County Transportation Authority.

In June, 2015, a 5-year Community Transportation Service Plan sponsored by the North Carolina Department of Transportation Public Transportation Division was adopted by the Polk County Board of Commissioners. The plan evaluated the current and future mobility needs of residents. Details include the current level of use, demographics of the community, and valuable input from residents, business owners, Human Service and government agencies and other key stakeholders. The Plan also identified under-served transportation dependent segments of the population as well as historical data such as ridership levels and travel patterns into and outside the county. In the plan, recommendations address how to meet the community's transportation needs in the near term, such as vehicle and equipment inventory,

technology, staffing, fare structures, and service enhancements. A copy of the plan may be found on the county's website on the Transportation page.

**SERVICE TYPES**

**Door-to-Door/Demand-Response**

- Available on a reservation basis, runs Monday through Friday, from 5:30 a.m. to 5:30 p.m., excluding county government holidays. Rides may be scheduled the day before by 10 a.m. for in-county trips and 3 business days in advance for out-of-county trips.



**POLK COUNTY VISION PLAN**  
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**Foothills Express/Deviated Fixed Route**

- A fixed route service which began on a trial basis in November, 2015, runs Monday, Wednesday and Friday between Tryon and Mill Spring. On the fixed route, citizens may request deviations up to half mile from the closest bus stop. Passengers call the same day by 12:30 pm for deviations, otherwise, no reservation is needed.

**Human Service Agencies**

- Trips are coordinated with Human Service agencies to assist workers to Polk Vocational Services, trips for Non-Emergency Medicaid appointments, the Senior Centers and other needs of the elderly and disabled.

Refer to the 2015 Polk County Community Transportation Service Plan for a robust collection of data including ridership, fully allocated costs, vehicle usage and more, (sample below).

In 2016, the Board of County Commissioners reorganized County human services agencies, and the PCTA was renamed Polk County Transportation.

Year	Passenger Trips	Vehicle Hours	Vehicle Miles	Operating Expenses	Trips per Vehicle Hour	Trips per Vehicle Mile	Cost per Trip	Cost per Hour	Cost per Mile	Subsidy per Trip
2013	47,916	18,689	371,596	\$587,609	2.6	0.13	\$12.26	\$31.44	\$1.58	\$5.35
2014	40,420	17,884	332,026	\$662,685	2.3	0.12	\$14.10	\$37.05	\$2.00	\$6.84
2015	39,520	19,305	356,307	\$661,365	2.05	0.12	\$16.74	34.26	\$1.86	\$6.46



## POLK COUNTY VISION PLAN

### SECTION IV ENVIRONMENT / EXISTING CONDITIONS

#### 2. Health Care

Polk County is served by local and readily accessible regional health care facilities. St. Luke's Hospital, located in Columbus, is a 75-year old 55-bed hospital accredited by the Joint Commission of Accreditation of HealthCare Organizations (JCAHO). The facility includes a six-bed intensive care unit. St. Luke's is the only hospital in the primary care service area, and offers a wide array of acute health care services and advanced technology. Polk County is fortunate to have local access to emergency, acute, diagnostic, and surgical services including:

- 24-hour, physician staffed Emergency Services.
- Surgical services including general, orthopedic, ophthalmological, dental, urological, gynecologic, GI diagnostics, infusion treatments, anesthesia and post-anesthesia care on both an inpatient and outpatient basis.
- Nursing care including intensive care, medical-surgical and geriatric psychiatric care.
- Imaging services including Magnetic Resonance Imaging (MRI), Computed Tomography, Nuclear Medicine services, general x-ray, ultrasound, digital mammography, bone densitometry, and digital fluoroscopy.
- Regional Hyperbaric and Wound Care Center.
- Ancillary services including Laboratory Services, Pharmacy, Respiratory Care, and Dietary Services.
- Rehabilitation services including physical, occupational, certified hand, speech, and MLD (manual lymph drainage) therapy.
- Community Health Connections for in-home care.
- Physician specialties including general and orthopedic surgery, emergency, ophthalmology, radiology, pathology, internal medicine, family practice, urology, hematology/oncology, pulmonology, gerontology, psychiatry, podiatry, and gynecology.

In 2005, St. Luke's Hospital received federal designation as a Critical Access Hospital (CAH),

a move that ensured a higher Medicare reimbursement for a hospital that serves a high number of Medicare patients. In addition to increased Medicare reimbursement, hospital leadership recognized the need to partner with a larger, more stable healthcare system. The hospital's small size provided little leverage in contract negotiations, so in 2008, St. Luke's joined Carolinas HealthCare System of Charlotte, NC, for management expertise, experience with developing strong community-based clinical services, and participation in revenue and purchasing contracts.



St. Luke's maintains a close affiliation with Spartanburg Regional Medical Center in Spartanburg and Mission-St. Joseph's Health System in Asheville. Both are major tertiary-care centers and are minutes away by ambulance or helicopter. In addition, St. Luke's provides office space and medical support staff on its campus to specialists from surrounding counties so patients can be treated in Columbus. A full description of all of St. Luke's services and a directory of healthcare professionals affiliated with St. Luke's are available on their website at [www.saintlukeshospital.com](http://www.saintlukeshospital.com).

The Hospital has continued to grow and evolve to meet community needs. A helipad and EMS services are located on-site. Additional medical specialties have been added, including hospitalists, audiology, pain management and anesthesiology, cardiology, and outpatient counseling services for adults aged 65 and over. Other services have passed to other area providers, such as in-home care and wound care.



## POLK COUNTY VISION PLAN

### SECTION IV ENVIRONMENT / EXISTING CONDITIONS

The Polk County Health Department, located in Columbus, is part of the Rutherford, Polk, and McDowell Health District. The department provides routine preventive health services, home-health services, environmental services, and vital records. Environmental inspection services include local restaurants, septic tank and well permits, and chemical water sampling.

The District's most recent Community Health Assessment was performed in 2015 using information from the WNC Healthy Impact data set and other local statistics to produce a comprehensive examination of Polk County's health status and offer direction for the planning of disease prevention and health promotion services and activities in the county. The primary health priorities identified in the Assessment were: Tobacco Use, Healthy Eating and Active Living, and Mental Health. The report can be found at <http://rpmhd.org/images/forms/1000/1120/cha/2016/RPM1120.001.2016-P.pdf>

In March, 2009, the Polk County Community Health and Wellness Center, Inc., opened in Columbus. The facility provides walk-in primary care, mental health, substance abuse, recovery support, education/prevention and wellness services to underserved and uninsured residents of Polk County. Polk County provides financial support to the clinic.

The Saluda Medical Center, a private non-profit rural health center and medical facility located a short distance from downtown Saluda, was created over thirty years ago in response to a lack of critical medical resources and physicians in the area. Governed by a local, volunteer Board of Trustees and supported by the NC Office of Rural Health and Community Care, it is the only rural health center in the area that receives state funding for services based upon a sliding fee scale, for which the uninsured can qualify.

Polk County has designated the Polk County Emergency Medical Services (PCEMS) as the system administrator for provision of the EMS system for the county. As a result, PCEMS is the lead agency for the provision of all levels of pre-hospital and patient care and transport within the county. The PCEMS is a county

agency operating under the control of the Polk County Board of Commissioners. The county has five EMS units which include: Green Creek Fire Department (First Responders), Polk County (First Responders), Polk County Rescue Squad, Saluda Volunteer Fire and Rescue, and Sunny View Fire and Rescue.

As an outgrowth of the 2008 Community Health Assessment, the former Polk County Wellness Coalition reorganized as Polk Fit, Fresh and Friendly (PF3). PF3 is a consortium of volunteers dedicated to making a difference in the health and wellness of Polk County. The name reflects the mission of a broad-based group of community leaders, health professionals, and concerned community members working together to plan and implement effective strategies to promote wellness in the community. In 2015, the organization received its 501(c)3 non-profit designation from the IRS (<http://www.polkfitfreshandfriendly.org/>).

211 is a telephone-based information and referral service which is intended to provide a single community source for individual and family services in Polk County. This service was established in 2013 through a partnership of United Way and local and regional organizations. Local agencies and service providers submit information about programs and services in the County so that 211 operators in the Asheville call center can relay needed county-specific information to residents.

### 3 Fire Services

Polk County residents receive fire protection from six fire departments, including Tryon, Columbus, Saluda, Green Creek, Mill Spring, and Sunny View. Each fire department is under contract with the county, the Town of Landrum, and one Henderson County fire department, for automatic mutual aid. Automatic mutual aid sends multiple departments to a fire call.

The Insurance Services Office (ISO) of North Carolina has a grading schedule for rural and municipal fire protection. Individual communities are surveyed every nine to ten years, and the grading process considers the following: water supply 39%, fire department



## POLK COUNTY VISION PLAN

### SECTION IV ENVIRONMENT / EXISTING CONDITIONS

39%, fire communications 9%, and fire safety control 13%. A rating of 1 is the best possible, with the lowest rating of 10 being assigned to areas with essentially no protection. The ratings have a financial impact on property owners because fire insurance premiums depend upon the grade or class assigned by the ISO. The first number (and in some cases, the only number) in the sequence represents the rating if a structure is within 1,000 feet of a fire hydrant. The second number in the sequence represents the rating if a structure is beyond 1,000 feet of a fire hydrant. A 9S sequence is a five-mile rating, which means that the department can carry 1,500 gallons of water on wheels, has 20 personnel, and meets certain minimum equipment requirements. All areas of the county outside of municipal jurisdictions currently have an ISO rating of 9.

As of 2016, several departments have improved their ISO ratings. Columbus is a Class 5 throughout the district. Tryon is now a Class 5 within five miles of the fire department or substation. Between five and six miles remains a Class 9, and over six miles from a station is a Class 10. Green Creek is a Class 6 within five miles of the fire department or substation, and class 9 between five and six miles, and over six miles is a Class 10. All other areas are Class 5 within municipal limits, then a Class 6 outside the city up to five miles, between five and six miles is a Class 9, and over six miles from the fire station is a Class 10.

#### 4 Law Enforcement

Law enforcement is provided to the County by the Polk County Sheriff's Office. The department is located at 40 Ward Street in Columbus. There are 34 fulltime employees and four part-time employees. The department operates six units: Administration, Patrol Division, Civil/Courts/Animal Control, Investigations, Detention Center, and Reserve Deputies. The maximum capacity of the jail is 25 – it does not house any females. The average number of inmates per year is 650. The jail staff is responsible for the safekeeping of inmates who are in custody as pre-trial detainees. The inmates are provided with transportation to and from court proceedings and other matters such as doctors' visits. The jail staff is also responsible for coordinating

individuals assigned to community service, which is typically carried out with duties around the Sheriff's office.

The deputies of the Sheriff's office are responsible for serving outstanding orders for arrest, civil summons, subpoenas, and execution of other civil documents. The Sheriff's office also conducts traffic stops and reports findings in conjunction with the Governor's Highway Safety Program. Certain assigned deputies fill out forms for individuals to obtain concealed handgun permits. One of the biggest functions of the Road Patrol is answering calls for service, such as domestic related calls.

#### 5 Recreation

Polk County maintains a year-round recreation program which is managed by a full-time recreation director and one support staff position. The following section provides a summary of existing county-owned recreational facilities. It also includes Harmon Field (owned by the Town of Tryon) and the Foothills Equestrian Nature Center (FENCE) owned by a non-profit organization. Both facilities have county-wide and regional significance. In addition, as discussed in the economy section, both contribute significant positive economic impact because of the associated equestrian activities.

The majority of the county-owned facilities are active recreation areas with an emphasis on sports fields (baseball, softball, and football). Outside organizations run baseball, football, and softball programs utilizing County facilities. There are no soccer fields in the County recreation system. The County relies on the Harmon Field soccer fields. It should be noted that several of the ballfields listed are minimally developed. While they are included in the inventory, and therefore used in the needs assessment of this report, improvements to these facilities should be made if they are truly considered ball fields.



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The following provides descriptions of the recreation facilities:

**Gibson Park (6.8 acres).** Located in Columbus, this facility provides active recreation for the entire county. The park's primary facility is a 25-meter pool with bathhouse. The bathhouse includes changing areas, restrooms, a small office, and storage. Both the pool and bathhouse are in good repair. In addition to the swimming pool, Gibson Park offers alighted field, which serves as a practice field for the Polk County Youth Association. Playground and picnic tables are provided; the playground is a metal/plastic modular system and is in good repair. Parking at Gibson Park is somewhat limited and access to the playground is difficult.

**Searcy Field (2 acres).** Located on Highway 108, this facility is an open field with backstop currently used for Little League and soccer practice. No infrastructure (parking, restrooms, etc.) has been developed at Searcy Field; therefore, use is very limited.

**Stearns Park (1.5 acres).** Located on Mills Street in downtown Columbus in front of Stearns School. The historic Stearns School building, which now houses the Polk County Schools administrative offices, is surrounded by large grassy field. The grounds are complete with a walking path, a gazebo, numerous large trees, and a playground area.

**Harmon Field (46 acres).** Operated by the Town of Tryon, this park is the only true regional park in the county. Located along the Pacolet River, this park has a variety of recreational offerings, including:

- (3) baseball fields
- (2) soccer fields
- (4) tennis courts
- (1) playground
- (1) community room
- (1) open air gym
- walking trails
- picnic facilities

In addition to the active recreation facilities, Harmon Field offers significant equestrian facilities including stables and an equestrian ring, and is the site of numerous horse shows

and park festivals. In 2009, the Tryon Town Council approved an updated Harmon Field Masterplan which includes more than \$3 million in improvements through fiscal year 2011. The improvements include renovation of the open air gym, resurfacing tennis courts, and a walking trail extension. In addition, in 2008/2009, the equestrian facilities were improved by the Blue Ridge Hunter Jumper Association in concert with the Town of Tryon.



**Polk County Recreation Complex.** This County park is located off Highway 108 in Mill Spring. The park offers three baseball fields, a small playground, two tennis courts, a fishing pond with wooden dock, and a hiking trail.

Foothills Equestrian Nature Center. FENCE is a non-profit organization dedicated to providing education, preservation, and recreation of natural areas and equestrian skills through operation of a facility in the southern part of the county. The FENCE property, which covers 380 acres, provides nature and equestrian trails, open space, natural pond, and equestrian facilities. The facility has regional, and developing national, recreational and economic significance.

**County Schools.** It should be noted that the county's school facilities offer both indoor (gymnasium) and outdoor recreation opportunities. However, joint use between the School Board and the County Recreation Department is limited. Based on this lack of joint use, or long term agreements for joint use, school facilities (with the exception of the Ballfields at Polk Middle School) were not incorporated into this inventory, nor used in establishing current facility supply. Ianthe



## POLK COUNTY VISION PLAN SECTION IV ENVIRONMENT / EXISTING CONDITIONS

spring of 2009, the County agreed to enter into a \$1.7 million financing agreement to purchase and renovate the former Carolina Classical School property (a private school) to serve as the County's new senior center.

**Trails.** There are extensive biking/hiking trails in Polk County which provide recreation access and support ecotourism. Trails in the area which provide easy to moderate activity are summarized as follows:

- Green River Game Land (10,000 acres). 16.25 miles of trails over mostly rugged terrain in relatively undisturbed wilderness.
- Norman Wilder Forest (185 acres). 2-3 miles of trails on the steep slopes of Little Warrior Mountain.
- Foothills Equestrian Nature Center (380 acres). 6 miles of multi-use trails, including a nature pond with boardwalk and a .3-mile paved, wheelchair-accessible trail.



### **Green Creek Equine Park.**

Construction of this new horse park began in 2009. The planned park facilities will include a recreational vehicle park to be used only in connection with the equestrian events at the facility containing 20 to 30 hook-ups, five stables to board 100 horses per stable, one office building to be used at show and race events, ten riding rings consisting of five show rings and five warm-up rings, one steeplechase race track, and various riding trails. The park, located near Tryon, is expected to hold the 66th Block House Steeplechase in 2012.

In 2013, Polk County developed a formal recreation master plan which was adopted by the Board of Commissioners in December of 2013. The Plan can be found at [http://www.polknc.org/docs/Recreation/POLK\\_COUNTY\\_RECREATION\\_PLAN\\_Final.pdf](http://www.polknc.org/docs/Recreation/POLK_COUNTY_RECREATION_PLAN_Final.pdf).

Through a community survey, multiple public meetings, meetings with the Recreation Board, staff and other stakeholders, the planning process sought to express the wishes of the citizens. The Plan provides information on each facility, including site maps. The Plan focuses primarily on actions which can be taken by the County; with the recognition that many organizations throughout the county are key partners in providing recreational opportunities.

Key recommendations of the Plan include:

- Focus most major upgrades/additions to the Polk County Recreation Complex in Mill Spring.
- Tie together Recreation Complex, Agricultural center, Searcy Park and Polk County Middle School
- Maintain/improve other existing facilities (Stearns Gym & Park, Gibson Park, Searcy Field) while keeping an eye towards long-term needs
- Develop joint use agreements through school board
- Develop and enforce contracts with youth sport groups for use of county facilities
- Enhance current marketing
- Facilitate trail development
- Develop current job descriptions for existing and potential staff
- Develop fund raising and volunteer recruitment plan
- Develop alternatives to all plans based on whether or not YMCA comes to county.

Additional recommendations included ongoing monitoring of the needs and preferences of seniors which could be met by the Recreation Department or by other organizations, the encouragement of cooperation by youth sports leagues, and encouragement of participation with key stakeholders such as the Harmon Field Board of Supervisors, Polk Fit, Fresh & Friendly, Paolet Area Conservancy, Saluda Community Land Trust and FENCE.



## POLK COUNTY VISION PLAN SECTION IV ENVIRONMENT / EXISTING CONDITIONS

### 6 Schools

There are currently eight schools in the Polk County School System. In 2016 the number of schools is seven due to the combination of Forbes Pre-School with Tryon Elementary School. Four of the schools have either been opened or expanded since 2003. The school system currently faces some challenges which are spread across the eight campuses. Consideration of capacity in the Polk County Schools should be balanced with the understanding that as state and federal guidelines change, so does capacity. If the state lowers the K-3classroom size from 18 to 15, then the system will need more classrooms regardless of student enrollment increases. These policy changes have major effects and are nearly impossible to plan for or anticipate. Each of the elementary schools has traffic problems due to the location and design of the schools. These problems can be addressed only with capital projects and should be addressed through future planning and funding. Funding for new and improved technology will continue to be a challenge for the Polk County School System. This demand will necessitate almost continual electrical upgrades. The largest issue facing the Polk County Schools is that of public water and sewer. Polk County Schools continue to use a combination of wells, septic systems, and on-site wastewater treatment at Polk Central, Polk County Middle School, and Sunny View School.

Polk County Schools student population has remained fairly steady with a slight decrease over the past six years. Renovations have continued at several campuses, but the only major construction projects completed recently are an addition to the Sunny View library and the renovation of a commercial site adjacent to Polk County High School which now houses Polk County Early College. The completion of county water lines to the eastern side of the county has been a large improvement to Sunny View, Polk Middle, and Polk Central schools, which are no longer well-

dependent. Sewer access is still a problem at all three sites with each possessing their own wastewater treatment. Traffic ingress and egress are still issues with several elementary schools and fixing them will require planning and funding. Aging buildings at all sites demand attention to systems such as HVAC and electrical, and roofing structures will continue to require investment. As State and federal budgets fluctuate, a continued strain on the system is the upkeep of grounds and paving needs. The ever-present need to upgrade technology access and infrastructure presents another continued fiscal challenge to the district.



Table 12 provides a system-wide summary of 2008-2009/2009-2010 school enrollment. Table 12: 2008-2009/2009-2010 Enrollment Polk County School System

Grade	2008-2009 Enrollment	2009-2010 Enrollment
Pre-Kindergarten	127	194
Kindergarten	189	145
First grade	214	191
Second grade	196	196
Third grade	183	174
Fourth grade	183	189
Fifth grade	198	178
Sixth grade	187	187
Seventh grade	184	181
Eighth grade	186	179
Ninth grade	239	223
Tenth grade	193	210
Eleventh grade	180	176
Twelfth grade	158	155

Source: Polk County School System.



**POLK COUNTY VISION PLAN  
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Table 12-A System-wide Summary of Student Population:

<b>Polk County Schools Enrollment</b>			
<b>Grade</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
<b>Pre-Kindergarten</b>	<b>120</b>	<b>120</b>	<b>120</b>
<b>Kindergarten</b>	<b>174</b>	<b>167</b>	<b>148</b>
<b>First Grade</b>	<b>162</b>	<b>185</b>	<b>167</b>
<b>Second Grade</b>	<b>149</b>	<b>152</b>	<b>177</b>
<b>Third Grade</b>	<b>188</b>	<b>157</b>	<b>145</b>
<b>Fourth Grade</b>	<b>159</b>	<b>195</b>	<b>159</b>
<b>Fifth Grade</b>	<b>174</b>	<b>160</b>	<b>190</b>
<b>Sixth Grade</b>	<b>184</b>	<b>167</b>	<b>147</b>
<b>Seventh Grade</b>	<b>163</b>	<b>176</b>	<b>165</b>
<b>Eighth Grade</b>	<b>189</b>	<b>168</b>	<b>179</b>
<b>Ninth Grade</b>	<b>191</b>	<b>192</b>	<b>186</b>
<b>Tenth Grade</b>	<b>184</b>	<b>176</b>	<b>173</b>
<b>Eleventh Grade</b>	<b>171</b>	<b>169</b>	<b>159</b>
<b>Twelfth Grade</b>	<b>151</b>	<b>160</b>	<b>166</b>
<b>Thirteenth Grade</b>	<b>9</b>	<b>5</b>	<b>2</b>
<b>Total Enrollment</b>	<b>2368</b>	<b>2349</b>	<b>2283</b>

The following provides a brief description of each school campus:

**Polk Central School Grades Pre-K through 5 (enrollment – 450) (361).**

Capacity at Polk Central was expanded with the opening of Polk County Middle School in 2005. Renovations of the restrooms, windows, heating system, and lighting were completed in 2007/2008. The combination of these factors puts this school in good condition to accommodate some growth. The biggest remaining issue is that the school does not have the necessary electrical upgrades to handle ever-evolving technology needs in the classrooms. The school also does not have public water or sewer. Growth in housing along the Highway 9 corridor could affect future Polk

Central School enrollment. The school was recently connected to the County water system but still maintains its own sewer treatment facility.

**Saluda School Grades Pre-K through 5 (enrollment – 159) (162).**

Capacity at Saluda School was expanded with the opening of Polk County Middle School in 2005. Renovations of the restrooms, windows, heating system, and lighting have been accomplished. Growth at this school is expected to be minimal. The school will need continued HVAC upgrades in the coming years, a difficult task for the collection of older buildings which constitute the campus.



**Sunny View School Grades Pre-K through 5 (enrollment – 199) (125).**

The Sunny View School currently has three mobile units and the existing space does not include an art room, music room, or space for special services. In the summer of 2009, a new classroom wing opened with eight additional classrooms and restrooms. This should provide the necessary space for this school for the next five years. Growth of housing in the Sunny View area could greatly affect demand for school expansion. The school does not have public water or sewer.

In the summer of 2009, a new classroom wing opened with eight additional classrooms and restrooms. This expansion should provide the necessary space for this school for the next few years. Development in the Sunny View area could greatly affect demand for school expansion, though



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enrollment numbers are holding steady. The school has recently been connected to the County's public water system but still utilizes an on-site sewer treatment system.

### **Tryon Elementary School Grades Pre-K through 5 (enrollment – 482) (422).**

Tryon Elementary is the system's largest elementary school. An eight-room classroom addition and a \$1.8 million Qualified Zone Academy Bonds (QZAB) renovation has added to the school's capacity. This school should have adequate capacity for the foreseeable future. The school will continue to have routine maintenance but is generally in good condition.

### **Forbes Pre-School (enrollment –72).**

The Forbes Pre-School building was given to Polk County Schools by Mrs. Margaret Forbes in 1997. It houses 4 preschool classrooms. The building is generally in good condition.

The Pre-School has been combined with Tryon Elementary School.

### **Polk County Middle School Grades 6 through 8 (enrollment – 557) (498).**

Polk County Middle School was opened in 2005 with approximately 525 students. The opening of this facility did much to relieve overcrowding at Polk Central School, Saluda School, and Tryon Elementary School. The capacity of the school is approximately 650 and the need for additional space is not anticipated based on the system's current K-5 enrollment. Growth in housing along the Highway 9 corridor could affect the middle school's future enrollment. The school does not have public water or sewer.

The school now has public water.

### **Polk County Virtual Early College Grades 9 and 10 (enrollment – 41) (70).**

The school system hopes to continue to add enrollment at this school with an eventual enrollment of 100 students. This will provide some relief at Polk County High School.

Polk County Early College moved into a new site in the fall of 2014 to address needs for increased capacity and technology

infrastructure. The school system continues to add enrollment with an eventual goal of 100 students. This provides some relief at Polk County High School.

### **Polk County High School Grades 9 through 12 (enrollment – 736) (649).**

The capacity of Polk County High School was expanded in 2003 with the addition of a classroom wing and expansion of the cafeteria. In 2008/2009, there was a space shortage at the school. However, enrollment increases at the Virtual Early College should provide some relief at the High School. The school needs a new roof on the entire facility and paving of the parking lots. Some athletic facilities including the tennis courts and soccer facility need upgrades.

Continued population growth will affect Polk County High School's enrollment. In October, 2009, the NC Department of Public Instruction recognized Polk County as one of the top ten school districts in the state for having the highest rates of high school graduation. Polk County High School has enacted numerous measures in order to help meet a wide variety of its students' needs with the intended outcome of ensuring that students with wide ranging interests, learning levels, and backgrounds can earn a high school diploma.

Enrollment increases at the Early College provide some relief at the High School. The school needs continued replacement of room and hallway HVAC units throughout the facility and paving of the parking lots. Earlier population growth has stabilized. Polk County High School is consistently listed in the US News and World Report's "Best High Schools." The school has enacted numerous measures in order to help meet a wide variety of its students' needs with the intended outcome of ensuring that students with wide ranging interests, learning levels, and backgrounds can earn a high school diploma.

In addition to the public school system, there is one private school in Polk County. Tryon Seventh Day Adventist School has 24 students in grades 1 through 8. There are also 319 children in the County who are home schooled.



## POLK COUNTY VISION PLAN SECTION IV ENVIRONMENT / EXISTING CONDITIONS

There are also approximately 300 children in the County who are home schooled.



Higher education opportunities are offered at Isothermal Community College(ICC). The college's two campuses are located at 286 ICC Loop Road in Spindale and 1255 West Mills Street in Columbus. It was founded in 1964 and is under the North Carolina Community College System. ICC offers degrees, diplomas, and certificates in various areas of study including computer engineering technology, manufacturing technology, automotive body repair, business administration, nursing, and cosmetology.

### **7 Libraries**

The main branch of the Polk County Public Library System is a new 18,000-square foot facility located adjacent to the Columbus campus of the Isothermal Community College. This facility holds 43,891 volumes, as well as periodicals, DVDs, audio recordings, and more. The library also oversees many services – including a bookmobile, book clubs, summer reading programs, interlibrary loans, and computers with internet access.

A branch library, created through volunteer efforts, is located in Saluda. This branch holds 14,385 items and offers access to all main branch resources and services.

There are also several private libraries in the area including the Lanier Library, Felburn Foundation Nature Library, and Stony Knoll Community Library.

In 2016, the Polk County Public Library (PCPL) continues to provide services through the Main Library in Columbus and a Branch in Saluda, as well as outreach services. PCPL offers books, movie, music, audiobooks and downloadable eBooks and audiobooks. Both libraries offer computers for public use as well as wireless internet access. The libraries offer regularly scheduled programs for people of all ages including Baby Bookworms, computer classes, Teen Scene, and Summer Reading. Polk County Public Library's per capita rates of checkouts, visitors, program attendance and public computer use are among the highest in the state.

In 2015-2016, Polk County Public Library completed a community-based planning process to develop priorities that will guide library services for the next five years. Guided by a community needs assessment, a team of staff and community members identified how the library services could most effectively serve the county.

In accordance with its long-term plan, Polk County Public Library builds opportunities to:

#### Explore and Know Our Community

- Adults in Polk County will be able to make meaningful connections to resources and services in the community.
- People of all ages will have opportunities to build and strengthen connections with each other in order to foster community engagement.

#### Visit a Comfortable Place

- Library visitors will have access to spaces that support a multitude of uses, from social interaction to sitting quietly and reading.
- Teens in Polk County will have inviting places to gather and interact.

#### Connect with Technology

- Polk County residents will have access to current technology and the support to learn how to use it.



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#### Spark and Satisfy Curiosity

- Residents of Polk County will have resources and activities that encourage exploration of new ideas and personal interests.

#### Create a Bright Future

- School aged children and teens will have resources to support them in becoming engaged, literate community members.
- Young children in Polk County will have the skills and knowledge to prepare them to enter school ready to learn.

### 8 Natural Gas

PSNC Energy, Inc., is the sole supplier of natural gas in the county. The service area includes the towns of Columbus and Tryon and the connecting Highway 108 corridor (see Map 9).

### 9 Electricity

The western and southern part of the county is served by Duke Energy Company. Rutherford Electric Membership Cooperative serves the northern and eastern portions of the county. Broad River Electric Cooperative serves a small area along the South Carolina border in the eastern section of the county.

Northbrook Carolina Hydro, LLC, operates the Turner Shoals hydroelectric generation facility at Lake Adder. Two generators produce approximately 5.5 megawatts of electricity, which is sold to Duke Energy.

### 10 Telecommunications

With the rising importance of telecommunication (voice and data) in almost all aspects of life, the availability of reliable, high-speed communications infrastructure and services has become important to education, government, health care, and commercial and industrial development. The county is served by three telephone providers: AT&T, Saluda Mountain Telephone Company, and Windstream. High-speed internet and DSL services are available in the majority of the county. AT&T serves a small area of the northern section of Polk County with its Lake Lure exchange (Rutherford County), which

includes DSL access. Saluda Mountain Telephone Company (TDS Telecomm) provides DSL service to 76% of Saluda. Windstream provides DSL in the Columbus (99%), Green Creek (95%), and Tryon (91%) exchanges. Some Polk County customers have access to Direcway, Starband, and Charter Communications high-speed internet service. NewEraCom [www.skyrunner.net](http://www.skyrunner.net) provides wireless high-speed internet access in the Tryon Peak area of Polk County.

In 2002, Polk County gained designation as an e-Community by the NC Rural Internet Access Authority. An ecommunity is a group of people that primarily interact via communication media such as newsletters, telephone, email, internet social network service, or instant messages rather than face to face. The county received funding to develop public internet access site at the Green Creek Family Life Center and to improve existing sites at the public libraries in Columbus and Saluda.

e-Polk, Inc., was formed to build, own, and operate the Polk Area Network for Government, Academic, and Enterprise Activities (PANGAEA) fiber optic network for Polk County and the surrounding region. Its goal was also to increase digital literacy, web applications, and public internet access as established by the Rural Internet Access Authority (RIAA) in North Carolina.

e-Polk drew its initial board membership and impetus from Polk County's e-community planning effort, initiated in 2001 by the RIAA, now the e-NC Authority. The planning committee's assessment of Polk County's needs led to a successful proposal and grant award of \$375,000 for the PANGAEA fiber optic network. Soon after, e-Polk was incorporated and a board was elected.

e-Polk was registered as a 501(c)(3) non-profit corporation in North Carolina on January 16, 2003. e-Polk lit its network in July, 2004. Since then, e-Polk has received more than \$2 million in grants and partner funding and has grown the network to 125 miles in two counties.

In May, 2007, e-Polk adopted PANGAEA as the company's official name. PANGAEA's mission is



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to build an open and cost-effective fiber optic network and infrastructure to deliver affordable high speed internet connectivity to enhance economic development, improve the quality of life, and create a broad platform of innovation for rural western North Carolina and upstate South Carolina. This mission will make the Digital Divide better by reducing barriers to entry for internet service providers and other broadband providers – resulting in a proliferation of service providers and business models, lower prices, and spurred economic growth and job creation. More information is provided at [www.pangaea.us](http://www.pangaea.us). The following figure provides the current PANGAEA network as of September 2009.

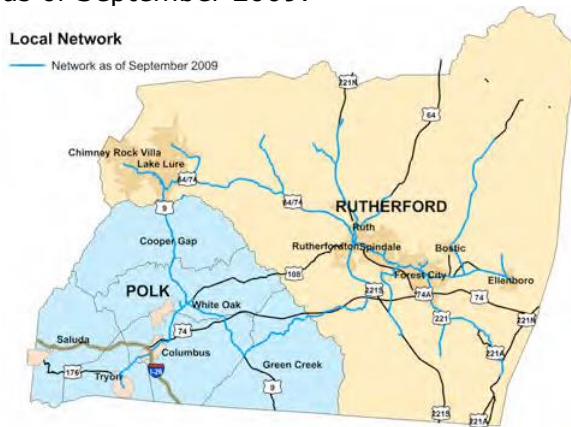


Figure 6. PANGAEA Network, September 2009 (Source: <http://www.pangaea.us>)

By 2016, the PANGAEA middle-mile fiber optic network had grown to 240 miles (see Figure 6A), serving 145 customers at nearly 200 service locations. e-Polk also completed a public Wi-Fi network in the downtown areas of Tryon (including Harmon Field), Saluda, Columbus, Lake Lure, and Chimney Rock Village. PANGAEA is partnering with Facebook to support the Connect Wi-Fi network in Rutherford County’s municipal core. e-Polk continues to work with community partners and private providers in efforts to expand last-mile broadband service in the region.

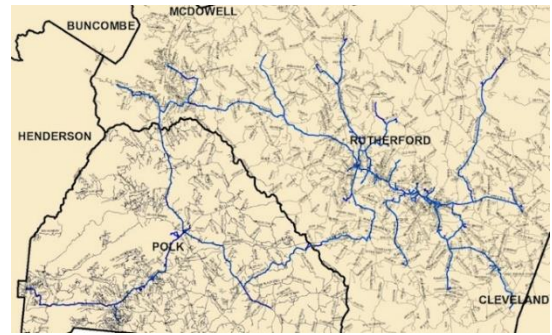


Figure 6A. PANGAEA Network, April, 2016 (Source: <http://www.pangaea.us>)

**11 Broadband**

The importance of county-wide access to affordable high-speed broadband service in Polk County is increasingly recognized. In addition to its benefits to economic development and community well-being, empirical studies are now showing direct benefits to households. A recent report produced by the Appalachian Regional Commission in partnership with the North Carolina Broadband Infrastructure Office noted the following:

- Broadband access affects development: Gaining 4 Mbps of broadband increases household income by \$2,100 per year
- Broadband speed upgrades affect development: Upgrading from 0.5 Mbps to 4 Mbps increases income by around \$322 per month
- Online job searches result in re-employment 25 percent faster than traditional searches
- Broadband is associated with higher employment rates in rural counties.
- Possible reasons for the links found between access to fast broadband networks and economic improvements include:
  - Personal productivity: A faster broadband speed boosts personal productivity, in part by supporting more flexible work arrangements.
  - Income enhancement: A higher speed connection enables more advanced home-based businesses as a replacement, or complement to, an ordinary job.
  - More knowledge: Broadband speed enables people to be more informed, better educated and socially and



## POLK COUNTY VISION PLAN SECTION IV ENVIRONMENT / EXISTING CONDITIONS

culturally enriched – fueling a faster career path.”  
(Broadband Planning Primer and Toolkit – August 2016.  
<https://www.arc.gov/images/program/s/telecom/ARCBroadbandPlanningPrimerToolkit.pdf>)

District. Grover Industries, Inc. / Tryon Plant WWTP is no longer permitted, since manufacturing operations ended in 2011. The Town of Tryon WTP permit is also inactive due to upgrades to the Town’s water treatment facilities.

Continued County support of efforts to expand the availability and affordability can have significant impacts on future community and economic development progress. Overcoming the “digital divide” must remain a high priority.

### 12 Solid Waste

The Solid Waste Department handles waste disposal and recycling for the County. The Landfill/Transfer Station is located on North NC Highway 9 two miles north of Mill Spring. Recyclable products accepted include newspapers, mixed paper, glass, plastic and metal food and beverage packaging. Materials handled at the landfill include stumps, brush, yard waste, metal, appliances, automotive batteries, waste oil, tires, concrete, blocks, brick, asphalt, computers, oil filters, anti-freeze, and wooden pallets.



### 13 Sewer

Outside of the municipal sewer service areas, the majority of sewage treatment is provided by septic tanks. There are seven state-permitted government wastewater treatment plants and six state-permitted on-government wastewater treatment plants. These plants are described in Table 13.

Several permit changes have occurred since this Plan was adopted. The Brow/White Oak Mountain Condos switched to a subsurface treatment system regulated by the local Health



**POLK COUNTY VISION PLAN**  
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**Table 13: State Permitted Wastewater Treatment Plants Polk County**

Owner/Facility Name	Owner Type	Permit Type
Grover Industries, Inc./Tryon Plant WWTP	Non-Government	Industrial process and commercial wastewater discharge
Polk County/Woodland Mills WWTP	Government - County	Discharging 100% domestic, < 1 MGD
Town of Columbus/Columbus WWTP	Government - Municipal	Municipal wastewater discharge, < 1 MGD
Town of Tryon/Tryon WWTP	Government - Municipal	Municipal wastewater discharge, Large
City of Saluda/Saluda WWTP	Government - Municipal	Municipal wastewater discharge, < 1 MGD
Polk County Board of Education/Polk Central School	Government - County	Discharging 100% domestic, < 1 MGD
Town of Tryon/Tryon Middle School	Government - Municipal	Discharging 100% domestic, < 1 MGD
Carolina Yarn Processors, Inc./Carolina Yarn Processors	Non-Government	Industrial process and commercial wastewater discharge
The Brow Association, Inc./White Oak Mountain Condominiums	Non-Government	Discharging 100% domestic, < 1 MGD
Lynnbrook Estates Homeowners Association/Lynnbrook Estates WWTP	Non-Government	Discharging 100% domestic, < 1 MGD
Pavillon International/Britten Creek WWTP	Non-Government	Discharging 100% domestic, < 1 MGD
Town of Tryon/Tryon WTP	Government - Municipal	Water plants and water conditioning discharge
CooperRdIs Inc./CooperRdIs Healing Farm	Non-Government	Discharging 100% domestic, <1 MGD
Heater Utilities, Inc./Bright's Creek Golf Club	Non-Government	Non-discharge system/reuse

Sources: NC Department of Environment and Natural Resources.

**14 Water**

**Typical Water Demand Factors.** In order to better understand the overall water needs of the county, it is necessary to look at the water needs for typical water development types. Although the actual demands vary significantly from the typical demands, the typical values can be used to give a sense of scale to the water requirements. North Carolina regulations require that 400 gallons per day (gpd) be allocated for each individual residence. For schools, 15 gpd must be allocated per each student enrolled. Hospitals are allocated 300 gpd per patient bed. Typical values for large industrial, agricultural and landscape users are not given due to the extreme variance in demand based on factors such as industrial process used, type of crop, and type of landscaping.





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**Existing Drinking Water Infrastructure.**

Water service in Polk County is provided by either small well systems larger public water systems. Each of the small on-site groundwater well systems provide water to a relatively small number of people. These systems range from minimally regulated private water systems serving a single home to larger community systems serving schools, churches, or small clusters of homes. Generally, the more rural areas away from the three municipalities in the county utilize the small groundwater systems. Over 60% of the county’s population currently relies on these small groundwater systems for water service (see potable water summary below).

Polk County and surrounding areas have been experiencing severe to extreme drought conditions for the past two years. The County spent much of 2008 at “exceptional” drought, the highest level. This situation has created many concerns in relation to the current and future water supply for the county. Although specific data is not available, it is known that number of private wells in the county have failed, particularly in the southeastern portion of the county. The question of available ground water and, more importantly, the ability of the groundwater aquifer to recharge, is paramount. As of November 2009, Polk County was no longer in a drought.

**Polk County, NC Potable Water Supply Summary**

	Groundwater						Surface Public		Total Water
	Public		Private		Total Ground		Units	% Total	
	Units	% Total	Units	% Total	Units	% Total			
Population	1,820	10%	11,900	62%	13,720	72%	5,410	28%	19,143
Flow (MGD)	0.34	18%	0.83	45%	1.17	63%	0.69	37%	1.86

Source: 2005 USGS Water Supply Survey.



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**Well Systems.** Well water supply systems are a cost-effective means of providing quality water to remote locations. Generally extending public water mains to these remote areas is not feasible because of the large cost. Also, because of typically low demands and long pipe lengths, the age of the water can become excessive which can lead to water quality issues. Well systems can have issues with supply availability, water quality, and operating expense. Because wells draw water from the underground aquifer, it is difficult to estimate the sustainable yield of wells in a given area without significant and costly hydrogeologic studies. Wells can also be subject to natural water quality issues such as iron and arsenic. In addition, wells may be subject to unnatural events which can contaminate the groundwater quality. Examples of such unnatural contamination include leaking underground storage tanks, toxic disposal sites, and penetration of fertilizers, pesticides and herbicides into the aquifer. The cost to operate, maintain and test small well systems is the responsibility of the system owner. These costs can become an issue if a deep well is required or well-head treatment is required.

**Public Water System.** The public systems serving the county generally serve municipalities and surrounding areas. Public systems are regulated by the state and must meet national drinking water standards. The systems are professionally operated and maintained by certified staff. The four public water systems that serve the county include the Polk County Water System, and the water systems serving the municipalities of Columbus, Tryon, and Saluda. Columbus utilizes groundwater as the sole source for raw water while the other systems rely on surface water sources. Currently only the Columbus and Tryon systems are hydraulically linked, allowing transfer of water from Tryon to Columbus. A projects currently being designed which will hydraulically link all three municipalities.

**Polk County Water System.** The Polk County System maintains three hydraulically separate water systems. The first two systems are small well-fed systems which primarily provide water to the Polk County Middle School and Polk

Central School. The third system consists of a water pipeline located in the southeast portion of the county which is supplied water by the Broad River Water Authority (BRWA), located in Rutherford County. This water main was primarily constructed to transfer water from Thera to the Inman-Campobello Water District (ICWD) in Spartanburg County, South Carolina. See Map 9, Existing Water and Natural Gas Systems. Secondary use of the main is to provide water service to areas of Polk County along the main.

The 20-inch main was put into service in late 2008. Initially, the main will have approximately 62 service connections. In Polk County, the main extends over seven miles northeasterly from the North Carolina-South Carolina border to Rutherford County along West Melvin Hill Road, Chesnee Road, Poor's Ford Road, Meadowbrook Road, and again along Poor's Ford Road. Plans have been completed on a new 12-inch main extending from the existing 20-inch main at the intersection of Chesnee Road and Melvin Hill Road in a northwesterly direction along Chesnee Road, Highway 9, and Sandy Plains Road.

In November, 2009, Polk County acquired Lake Adger, located in the northeastern portion of the county, in order to provide the county with a long term supply of surface water. Lake Adger is fed by the Green River and has a surface area of approximately 420 acres. The lake is between 60 and 80 feet deep. The currently proposed agreement gives Polk County the rights to draw up to 8million gallons of raw water per day from the lake. Although final plans for the construction of a water treatment plant have not been developed, the county has indicated that it plans to construct a water treatment facility to treat the raw water once a sufficient customer base is established. To do this, Lake Adger must be reclassified as a "water source (WS)" surface water. This reclassification will require the involvement of all jurisdictions which are in the upstream watershed of the lake, including Henderson County. The ownership of Lake Adger will greatly enhance Polk County's ability to meet future water demands.



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The Lake Adger watershed within the boundary of Polk County was reclassified to a WS IV in 2014.

The County has continued to expand its water distribution system by extending mains and pressure booster pumps along major routes. All public schools are now served by public water systems. The County system is now connected to the Town of Columbus system at Polk County High School. The County's future plans call for additional lines to create a looped system and to extend service to other areas of the County.

**Town of Columbus.** The Town of Columbus owns and operates the public water supply system which serves the town and surrounding areas. Raw water is supplied to the system from four local groundwater wells. The average yield of these wells is 0.460 million gallons per day (MGD) with a maximum yield of 0.61MGD. The average depth of the wells is 355 feet. Because of the relatively good quality of the groundwater, no significant additional treatment is required. Disinfectant is added to the groundwater in order to eliminate microbial growth within the distribution system. The water is then pumped through the 35 miles of water mains in the distribution system to approximately 886 service connections, serving an estimated 2,040 people. The distribution system also utilizes 0.50 million gallons (MG) of storage to meet peak hourly demands. This system serves 330,000 gallons of water on an average day and serves as much as 460,000 gallons on a peak maximum day. The system does not serve any significant industrial water uses, but does serve Polk County High School. As previously mentioned, the Columbus system is interconnected with the Tryon system. Columbus has the contractual ability to purchase up to 0.50 MGD of water from Tryon through the 12-inch pipeline connecting the two systems. In accordance with the existing agreement, this water will be available until the year 2028.

**Town of Tryon.** The public water supply system which serves the Town of Tryon and surrounding areas is owned and operated by the Town of Tryon. The Tryon system draws raw water primarily from Lake Lanier, which is

located south of town. Lake Lanier is on Vaughn Creek which is a tributary to the North Pacolet River. Tryon is currently developing treatment plant upgrades and a new raw water main to tap raw water sources in the mountainous area to the west of town. The raw surface water is treated at the 2.0MGD Tryon Water Treatment Plant. The plant utilizes a traditional flocculation, sedimentation, and filtration treatment method. From the plant, water flows through the 70 miles of water mains which make up the distribution system. The system includes 1.28 MG of storage to meet peak hour demands at various points in the system. The average daily demand for the system is 682,000 gallons with peak maximum day demand of 919,000 gallons. The system serves this demand through 2,220 service connections to an estimated population of 5,518 people. The Town has two industrial users who make up approximately ten percent of the total water demand.

**City of Saluda.** The City of Saluda owns and operates the public water supply system serving the city and surrounding areas. Hendersonville is located in Henderson County, northwest of Saluda and Polk County. Hendersonville is currently the only source of drinking water for Saluda. When the interconnect between Saluda and Hendersonville was constructed, the water treatment plant, which previously served Saluda, was decommissioned and dismantled. In accordance with the existing agreement, Hendersonville will provide up to 0.197MG of treated water to Saluda through year 2011. Hendersonville is located in the French Broad River basin, while Saluda is located in the Broad River Basin. Because the flow is less than two MGD, a North Carolina Interbasin Transfer Certificate (IBTC) is not required. However, an IBTC is required with the Tennessee Valley Authority (TVA). The water flows through a 12-inch pipeline from the Hendersonville system to the Saluda system. The water is then distributed through the nine miles of water mains in the system to 650 service connections.

The city has a single elevated storage tank, with a volume of 250,000 gallons, which is used to meet peak hour demands. The average daily demand is 87,000 gallons, with a peak



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maximum day demand of 150,000 gallons. The system serves an estimated population of 1,000 people. The system has three institutional users who account for approximately forty percent of the total water demand. There are no industrial water users connected to the city's system. Lake Summit has been cited as a possible raw water source for Saluda. Utilizing Lake Summit would require either construction of a new water treatment facility or construction of a raw water supply line to the existing Hendersonville water treatment facility. No formal actions have been taken to pursue Lake Summit as a water source.

**Future Analysis.** In the complex maze of water and water supply issues, it is extremely important that steps be taken to adequately plan for the future needs of Polk County. The county has begun laying the groundwork that will allow for the development of reliable, sustainable means of providing safe drinking water for its citizens. The following items and issues will be examined further in order to assist the county in meeting this important goal:

- The continued development and expansion of the Polk County Water System.
- The use of Lake Adder as a supply of raw water.
- The development of a water treatment plant.
- The continued monitoring and analysis of the long-term impact of the recent drought and recurrent droughts.
- The continued partnership with neighboring water systems to provide additional sources of water.



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Map 9 Existing Water & Natural Gas Systems



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#### **15 Administration**

Polk County has a five-member Board of Commissioners. The county is located in the 11th US Congressional District and the county seat is the Town of Columbus. There is a full-time County Manager and 26 county departments including: Animal Control, Board of Commissioners, Board of Elections, Building and Fire Inspections, Communications, Cooperative Extension, County Manager, Economic Development, MS and Emergency Services, Finance, Jail, Library, Planning and Zoning, Public Buildings, Recreation, Registrar of Deeds, Sheriff, Social Services, Soil and Water, Solid Waste, Systems Coordinator, Tax Assessor and Collector, The Meeting Place, Transportation, Travel and Tourism, and Veteran's Services. In 2009, there were approximately 159 full-time and 42 part-time employees. Approximately 70% of Polk County's employees lived within the County.

**In May, 2016 the County employed 162 full-time personnel and 87 part-time staff.**

#### **16 Current Plans/Policies/Regulations**

Polk County has a Planning Director and maintains a full-time Planning Department. The county has an active Planning Board and Board of Adjustment which oversee the county's planning/land use management program. The county's land use related regulatory ordinances include: Zoning Ordinance, Subdivision Ordinance, Watershed Ordinance, Flood Damage Prevention Ordinance, Sign Ordinance, Junkyard Ordinance, Mobile Home Ordinance, Mobile Home Park Ordinance, ~~Mountainside and Ridgeline Protection Ordinance (Repealed 1/7/13)~~, Tower Ordinance, and Well Ordinance. All of these ordinances may be viewed on the Planning and Zoning page of the county's website at <http://www.polknc.org>. The Polk County zoning map is included as Map 10. The current Polk County Land Use Plan was adopted in 2004.

### **B. ENVIRONMENTAL FACTORS**

This section addresses environmental conditions which impact land use. Some of these factors are culturally created, such as significant historic sites. These factors may be either a stimulant for or deterrent to the utilization of land, depending upon the proposed land use. However, the

considered environmental factors have been consolidated into a land suitability analysis map which is provided in this section. This map and associated analysis provide a general indication of those areas of the county which may provide limiting conditions for particular land uses, especially intensive land uses.

#### **1 Climate**

Polk County enjoys a relatively moderate climate due to the protection of the mountains. The prevailing wind is from the northwest. Average winter temperature is 44° F., with an average low temperature of 32° F. The average summer temperature is 76° F., with an average high temperature of 87° F.

Average annual precipitation is around 65 inches. However, precipitation amounts vary across the county due to differences in topography and other factors. On average, approximately 34 inches of precipitation (53% of annual amount) falls during April through September, which coincides with the growing season for most local crops. Dry seasons occur with a frequency of about one in five years, in which rainfall during the growing season averages fewer than sixteen inches. Average annual snowfall is about eight inches.



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Map 10 Polk County Zoning



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Table 14 provides a 30-year summary of mean monthly temperature and precipitation data for the county. This information was obtained from weather station #318744 in Tryon, NC.

**Table 14: Weather Summary Normal Monthly Mean Temperature and Precipitation in Polk County**

Month	Temperature	Precipitation
January	41.1° F	
	5.81 in.	
February	44.6° F	
	5.11 in.	
March	52.1° F	6.66
in.		
April	59.7° F	
	4.75 in.	
May	67.3° F	
	5.77 in.	
June	74.0° F	
	5.62 in.	
July	78.0° F	
	5.26 in.	
August	76.6° F	
	6.18 in.	
September	70.7° F	5.56
in.		
October	60.6° F	
	4.95 in.	
November	51.3° F	4.91
in.		
December	43.5° F	4.85
in.		

Source: North Carolina State Climate Office.

**2 Geology**

The extreme western edge of Polk County is located in North Carolina’s Blue Ridge geologic region, while the remainder of the county is located in the Piedmont geologic region.

The Blue Ridge and Piedmont regions are geologically similar, composed of very old metamorphosed (altered/folded/faulted by high heat and pressure) rocks that are hundreds of millions to a couple of billion years old. These rocks “weather” and erode over time resulting in rounded mountains. Many of the rocks weather in place, forming a soft, granular saprolite layer that grades down to a “transition zone” of partially weathered bedrock. Beneath this layer is fresh (competent, unweathered) bedrock. The

saprolite and transition zone together are referred to as regolith, the porous layer that serves as a storage reservoir or “sponge” for groundwater. This “sponge” slowly drains water to streams (why they continue to flow during dry periods) and to fractures in the underlying bedrock. The bedrock fractures are the “pipes” that convey water within the groundwater system.

**3 Topography**

Wildcat Spur, at 3,239 feet above sea level, is the county’s highest elevation and the head of a chain of mountain ridges that run from the northwestern tip of the county south to its southwestern corner at the South Carolina state line. The lowest elevation is approximately 721 feet in the southeastern corner of the county along the Green River.

The county contains three basic landforms. The piedmont and mountain uplands account for about eighty-seven percent of the land area. Slopes vary from gently rolling to steep in the piedmont uplands and moderately to very steep in the mountain uplands. The mountain coves and hill slopes cover approximately 27% of the county at elevations above 1,200 feet. Approximately 6% of the land consists of floodplains and stream terraces, primarily in the southern and eastern portions of the county. Map 11 provides a delineation of elevation distribution in the county.



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Map 11 Elevation



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Slope is an increasing concern in Polk County. Map 12 provides a delineation of the percentage of slope throughout the county. Slope is a major consideration in determining an area's susceptibility to landslides. Based on state analysis of North Carolina landslides, the likelihood of landslides normally begins at 40% of slope and increases rapidly as the percentage of slope increases. However, for construction purposes, 30% slope is ideal for the construction of walk-out basements. The following diagram provides a comparison of slope measurement in percentages and degrees.

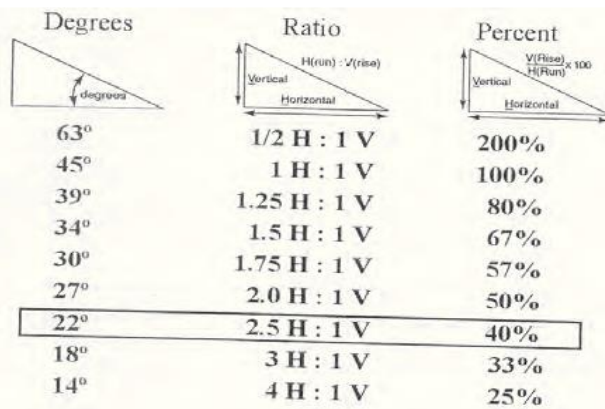


Figure 7. Slope Measurements (Source: Rick Wooten, engineering geologist at the North Carolina Geological Survey)

**4 Water Resources<sup>1</sup>**

Water, both on and beneath the land surface, originates as rainfall. Rain may run off the land surface into streams, infiltrate into the ground recharging the groundwater system, or be lost to respiration. Infiltrating water percolates through the groundwater system and discharges into stream channels. Thus, the sustainability of water is crucial, whether the immediate source of the water is ground or surface water (streams, rivers, or lakes) and whether it is drawn directly by the end user or whether it is drawn and distributed by a public water system, such as a municipality. Land use should be sensitive to the quality, preservation, and replenishment of both surface and groundwater supplies.

**Groundwater**

Based on the 2005 U.S. Geological Survey water use tables, approximately 72% of the county's 2005 population of 19,134 relied on groundwater for its daily water supply. This supply was divided with 11,900 people relying on private wells and 1,820 relying on public wells. Since 1988, there have been 2,400 wells in Polk County recorded in the North Carolina Division of Water Quality database.

Polk County's in-county groundwater supplies have been adequate, though instances of dry wells and springs do occur (typically on hilltops and steep slopes). A "dry well" database does not exist, and, therefore, there is no reliable estimate of the frequency or location of dry wells and springs in the county over time. Some local well drillers suggest that the occurrence of dry wells has not changed significantly over time, while other anecdotal evidence (reports from well owners, for example) suggests that wells with lower yields may be increasing, possibly due to the lingering drought or to the fact that residents are building at higher elevations and on steeper slopes than in the past. The occurrence of dry springs seems to have increased somewhat, which may be expected during drought conditions.

<sup>1</sup> NOTE: The assistance of NCDENR in the preparation of this section is acknowledged and appreciated.  
 Page IV - 84 | March 15, 2010 updated draft to PB 10.13.16



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Map 12 Percentage of Slope



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The following groundwater factors should be considered in Polk County:

- Droughts significantly alter the hydrologic system (including groundwater) in the county.
- Population growth (excess demand) and land use (increased runoff with corresponding reduction in subsurface recharge) also affect the amount of groundwater available on a long-term, sustainable basis.
- If groundwater supplies become depleted (due to drought, excess runoff, or excess demand), springs and wells can become dry, base flow instreams may decrease significantly, and the effects of well interference may become more pronounced.
- The topographic location of county wells can affect their yield.
- Land use significantly affects runoff (and thus the amount of groundwater recharge).
- Contaminated groundwater (natural [radon and uranium] and anthropogenic) occurs beneath a number of areas of the county.

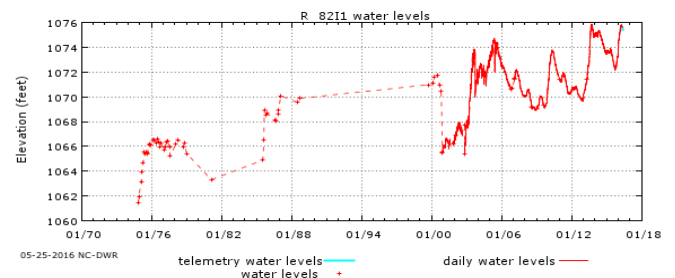
When drilling a bedrock well, the objective is to drill through one or more fractures that are connected to storage in the overlying regolith (see discussion of geology, [page IV-24](#)). Well yield will depend on the number and quality of the regolith-connected fractures that are tapped during drilling. For this reason, it is common for well yields to vary widely in very short distances (even a few feet). Productive fractures are less common at depths greater than -500 to 600 feet due to the nature of fracture formation (as a mountain slowly erodes and sloughs off weight, the newly exposed rock expands and, in the process, forms “exfoliation/sheet” fractures). Fortunately, during dry periods, wells can continue to temporarily supply water from the regolith storage with the expectation that this storage reservoir will be replenished during wet periods. Groundwater storage should not be diminished over the long term.

If a well is pumped dry during dry weather periods, the users are borrowing water from groundwater storage (from the regolith

“sponge”). The well is then drawing water from a finite volume that is limited to the amount stored within the regolith in the surrounding area (typically a radius of between hundreds and one thousand feet or fewer). This process is not sustainable over long periods. If it continues, the groundwater supply is being “mined”.

A sustainable water supply is greatly affected by land use. DENR reported that the relative groundwater recharge rate of an undisturbed forest is 62 times greater than a highly disturbed and compacted lawn. The recharge rate for slightly disturbed woodlands is 22 times greater and former farmland 9.5 times greater than a lawn.

The Division of Water Resources in the NC Department of Environmental Quality operates a single groundwater monitoring well in the county – R8211, located near Columbus. The following charts depict historical water levels in the well.



In the chart, the drought in the early 2000s is clearly visible, as well as other less severe events since that time. However, the broad trend of this well shows an improvement in groundwater quantity in recent years.

### Surface Water

Polk County is located in the Broad River Basin. The basin encompasses 5,419 square miles within North and South Carolina. The North Carolina portion covers 1,513 square miles – nearly 28 percent of the entire watershed. The headwaters and major tributaries in the Broad River basin begin in the Blue Ridge Mountains of western North Carolina. The river continues to flow south-southeast through the foothills and southern piedmont into Cherokee County, South Carolina, where it eventually joins the



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Congaree and Santee Rivers and then the Atlantic Ocean. The basin includes 1,508 miles of freshwater streams. The Broad River Basin includes eight individual watersheds. Map 13 identifies the watershed areas.

Most of the county is located in the Green River Watershed (includes Joe Creek, Bright’s Creek, Walnut Creek, and White Oak Creek) with approximately the southern one-third of the county located in the North Pacolet River Watershed (includes Buck Creek, and Upper, Middle, and Lower North Pacolet River).

The following excerpts from the Broad River Basin Plan, 2008 provide a watershed description and an overview of current water quality for each watershed.

Green River

“The Green River and its tributaries originate in Henderson and Polk Counties and flow into the Broad River near the Polk-Rutherford County line. Tributaries to the Green River include Joe Creek, Bright’s Creek, Hungry River, Britten Creek, Walnut Creek and White Oak Creek. From the headwaters to Rock Creek, the Green River is designated High Quality Waters (HQW). Further downstream, the river has been dammed in two locations to form Lakes Summit and Adder. Both reservoirs are used to produce hydroelectric power; neither is classified as a water supply watershed. The Green River Gameland and the Green River Preserve provide important protected areas to help maintain existing water quality throughout the watershed. Much of the watershed is forested; however, portions are rapidly being developed for second homes and recreational activities.

Of the 268 stream miles in the Green River watershed, 109 miles were monitored by DWQ. Of these waters, 100 percent are rated as supporting for aquatic life. Main stressors in this watershed are habitat degradation and nutrient impacts due to construction activities and storm water runoff.

Biological monitoring was conducted at nine basin-wide sites, two of which were sampled for the first time in 2005. Benthic samples were also collected from three special study sites – Green River headwaters, Joe Creek, and Little

White Oak Creek.

No waters are impaired in the Green River watersheds; however, sedimentation was observed in many of the streams and further investigation is needed to determine the status of the HQW designation of the Green River.

There are six minor NPDES Discharge Permits within the watershed, not including a seventh facility (Six Oaks Complex) which has recently been built. Its first inspection was in February of 2007. Of the six Stormwater Permits, five of the facilities discharge to White Oak Creek and its headwaters.”

**Green River Watershed at a Glance**

COUNTIES

Henderson, Polk

MUNICIPALITIES

Saluda, Columbus

PERMITTED FACILITIES

NPDES WWTP:	6
NPDES Nondischarge:	1
NPDES Stormwater:	6
Animal Operations:	2

MONITORED STREAM MILES (AL)

Total Streams:	109.9 mis.
Total Supporting:	109.9 mis.
Total Impaired:	0 mi.
Total Not Rated:	0 mi.

**North Pacolet River** “The North Pacolet River begins in the far most southeast corner of Henderson County, flows east southeast towards the southernmost portion of Polk County and then into South Carolina where it eventually joins the Pacolet River and the Broad River. The river flows through portions of the Southern Crystalline ridges and mountains and the southern inner and outer piedmont eco-regions. Nearly 80 percent of the land is forested, while the remaining 20 percent is mostly pasture with scattered residential and urban areas. The only urbanized areas are located in the Towns of Saluda, Tryon, and Columbus.

Of the 69 stream miles in the North Pacolet



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River watershed, 18 miles were monitored by DWQ. Of these waters, 100 percent are Supporting for aquatic life. Major stressors in this watershed are habitat degradation and nutrient impacts from storm water runoff and wastewater treatment plants.

Biological monitoring was conducted at three basin-wide sites; one was sampled for the first time in 2005. One additional benthic site was sampled as part of a special study in the North Pacolet River to establish reference conditions.

Overall, water quality in the North Pacolet River watershed has remained unchanged and even improved in some cases. No Impaired water bodies were identified; however, impacts were noted at the fish monitoring site in the North Pacolet River.

There are six minor and two major NPDES discharge permits within this watershed. The Saluda Wastewater Treatment Plant was approved for construction upgrades in 2006. The Tryon Middle School Wastewater Treatment Plant closed in 2005 and was sold to the Town of Tryon. This facility has produced little to no discharge since that time. The Carolina Yarn Processors facility has had no discharge during the last two compliance evaluations. All other facilities were in compliance. There are two storm water permits in this watershed located on the outskirts of the Town of Tryon.”

**North Pacolet River Watershed at a Glance**

COUNTIES

Henderson, Polk

MUNICIPALITIES

Saluda, Tryon, Columbus

PERMITTED FACILITIES

NPDES WWTP:	8
NPDES Nondischarge:	0
NPDES Stormwater:	2
Animal Operations:	0

MONITORED STREAM MILES (AL)

Total Streams:	17.9 mis.
Total Supporting:	17.9 mis.
Total Impaired:	0 mi.
Total Not Rated:	0 mi.

All surface waters in North Carolina are assigned a primary classification by the NC Division of Water Quality (DWQ). All waters must at least meet the standards for Class C (fishable/swimmable) waters. The other primary classifications provide additional levels of protection for primary water contact recreation (Class B) and drinking water (Water Supply Classes I through V). Map13 delineates the Polk County surface water classifications which were applicable in March, 2009. The following describes the water classifications:

**Class B.** Waters protected for all Class C uses in addition to primary recreation. Primary recreational activities include swimming, skin diving, waterskiing, and similar uses involving human body contact with water where such activities take place in an organized manner or on a frequent basis. There are two streams in Polk County classified as Class B: an unnamed tributary at Bethlehem Center Summer Camp, and Skyuka Creek.

**Class C.** Waters protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner. Except for high quality waters (HQW), watershed areas, and the two Class Streams listed above, all surface waters in Polk County are classified C.

**Water Supply II (WS-II).** Waters used as sources of water supply for drinking, culinary, or food processing purposes where a WS-I classification is not feasible. These waters are also protected for Class C uses. WS-II waters are generally in predominantly undeveloped watersheds. All WS-II waters are HQW by supplemental classification. HQ waters are those which are rated excellent based on biological and physical/chemical characteristics.

**Water Supply III (WS-III).** Waters used as sources of water supply for drinking, culinary, or food processing purposes where a more protective WS-I or II classification is not feasible. These waters are also protected for



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Class C uses. WS-III waters are generally in low to moderately developed watersheds.

**Water Supply IV (WS-IV).** Waters used as sources of water supply for drinking, culinary, or food processing purposes where a WS-I, II, or III classification is not feasible. These waters are also protected for Class C uses. WS-IV waters are generally in moderately to highly developed watersheds or Protected Areas.

**Trout Waters (Tr).** This supplemental classification is intended to protect freshwaters which have conditions that shall sustain and allow for trout propagation and survival of stocked trout on a year-round basis. This classification is not the same as the NC Wildlife Resources Commission's Designated Public Mountain Trout Waters designation.

In addition to the DWQ trout water designation, public trout waters managed by the Wildlife Resources Commission are designated as Public Mountain Trout Waters (DPMTW) and are identified by signs posted along the stream banks or lake shore. These waters are located both on and off state game lands. Game land streams and ponds are on state-owned lands, private lands under formal lease by the state, or U.S. Forest Service lands. Trout waters off game lands are primarily on state parks or on privately owned land where public fishing is allowed. While there are seldom any changes in designation of game land waters, the nongame land category is subject to change at the discretion of the individual landowners who may decide to post their land against trespass.

The U. S. Fish and Wildlife Service maintains a National Wetlands Area inventory for wildlife protection. A portion of the county's WS-IV watershed area is included in the national inventory and is designated on Map 13. In March of 2009, Polk County was entering into negotiation with Henderson County for water rights. This process was precipitated by Polk County attempting to have the Lake Adder watershed reclassified in order to use the lake as a future water source. Most of the Lake Adder watershed is located in Henderson County. It was anticipated that the Lake Adder watershed would be a Water Supply III watershed.

The Lake Adder watershed within the boundary of Polk County was reclassified to a WS IV in 2014.

### 5 Flood Hazard Areas

Based on the Flood Insurance Rate Maps (FIRMs) for Polk County, approximately 4.2% of the county is located in a flood hazard area. The county's FIRMs were approved September 3, 2008. The State of North Carolina, as part of the state's flood mapping program, completed updated Flood Insurance Rate Maps for the Broad River Basin. The locations of flood zone areas within the county are delineated on Map 14. All of the county's flood hazard areas fall within an AE zone. Approximately 6,354 acres (4.2%) of the county's total area are located in the AE zone.

Zone AE is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study by detailed methods of analysis. In most instances, Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply. The County requires two (2) feet of freeboard above flood elevation.



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Map 13 Water Resources



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Map 14 Flood Zones



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### 6 Soils

Map 15 provides the general soils map for Polk County. This map shows broad areas that have a distinctive pattern of soils, relief, and drainage. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils and some minor soils or miscellaneous areas. Each map unit is named for the major soils. The components of one map unit can occur in another but in a different pattern.

The general soils map can be used to compare the suitability of large areas of general land uses. Areas of suitable soils can be identified on the map. Likewise, areas where the soils are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field, or for selecting a site for a road, a building, or other structure. The soils in any one map unit differ from place to place in slope, depth, drainage, and other characteristics that affect management.

Table 15 provides a summary of the characteristics of the general soil types.



TABLE 15



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Map 15 Polk County General Soils



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Detailed Polk County soils maps maybe found in the [Polk County 20/20 Vision Plan Data Manual](#) or the [Soil Survey of Polk County, North Carolina, 1998](#).

The preservation of prime farmland is important to Polk County's agricultural interest and the county's economy. Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the nation's short and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U. S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of the nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are factors needed for the soil to economically produce sustained high yields of crops when proper management techniques, including water management and acceptable farming methods, are applied.

Generally, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, favorable temperature and growing season, acceptable levels of acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it is either not frequently flooded during the growing season or is protected from flooding. The slope ranges mainly from 0 to 8 percent. Polk County's prime farmland areas are delineated on Map 16. There are approximately 23,123 acres of prime farmland, 15% of the county. The specific soil types for prime farmland include: Appling sandy loam, Ark aqua loam, Cecil sandy clay loam, Chewacla loam, Dillard sandy loam, Hiwassee clay loam, Masada sandy loam, and Skyuka clay loam.

Wetlands is a generic term for all the different kinds of wet habitats where the land is wet for some period of time each year but not necessarily permanently wet. Many wetlands occur in areas where surface water collects or where underground water discharges to the surface, making the area wet for extended periods of time. The Federal Clean Water Act defines wetlands as "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, prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, bogs, and similar areas."

Wetlands have both upland and aquatic characteristics, and thus they often have richer flora and fauna than other environments. In practice, wetlands are hard to define, precisely because they are transition zones. It is important to recognize that an area does not have to be wet all year long to be considered a wetland – as few as two or three consecutive weeks of wetness a year is all it takes for this determination to be made.

Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands. Activities in waters of the United States that are regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports), and conversion of wetlands to uplands for farming and forestry. The basic premise of the program is that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded.

Hydric soils, as defined by the U.S. Department of Agriculture, are soils that are wet frequently enough to periodically produce anaerobic conditions, thereby influencing the species composition or growth, or both, of plants on those soils. Hydric soils may or may not be subject to 404 wetlands regulations. Map 16 delineates hydric soils in Polk County. There are approximately 12,343 acres of hydric soils in Polk County, 8.1% of the county's total area.



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#### **7 Natural Heritage Areas**

The North Carolina Natural Heritage Program maintains the state's list of significant "Natural Heritage Areas" as required by the Nature Preserves Act (NCGS Chapter 113A-164 of Article 9A). The list is based on the program's inventory of the natural diversity in the state. Natural areas (sites) are evaluated on the basis of the occurrences of rare plant and animal species, rare or high-quality natural communities, and geologic features. The global and statewide rarity of these elements and the quality of their occurrence at a site relative to other occurrences determine a site's significance rating.

The North Carolina Natural Heritage Program identifies 2,344 significant natural heritage areas within North Carolina, of which 31 are located in Polk County. The approximate locations of these sites are provided on Map 17. The sites included on this list are the best-known representatives of the natural diversity of the county and therefore have priority for protection. Inclusion on this list does not mean that public access exists or is appropriate. Permission of the landowner is recommended in all cases. Inclusion on this list does not confer protection to a site, nor does it give regulatory status. The list includes both protected and unprotected areas. This list of sites and their significance ratings are based on the best available information as derived from the Natural Heritage program staff and databases. More information on these natural areas may be obtained from the Natural Heritage Program.

Map 17 also delineates natural heritage element occurrences. These provide the locations of the observation of natural heritage elements which are prerequisite to the designation of an area as a natural heritage area.



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Map 16 Prime Farmland & Hydric Soils



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Map 17 Significant Natural Heritage Areas



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**8 Land Trust/Conservation Properties**

There are 15,904 acres of land in Polk County that are held by land trust or in conservation properties. These properties are delineated on Map 18. The areas are controlled by one of the following management agencies:

<b>Owner/Mgt. Agency</b>	<b>Acres</b>
Saluda Community Land Trust	7.0
Carolina Mountain Land Conservancy	201.3
Upstate Forever	876.5
Pacolet Area Conservancy	3,282.9
Wildlife Resources Commission	11,536.4
<b>Total</b>	<b>15,904.1</b>

The Pacolet Area Conservancy (PAC), based in Tryon, has been in existence for 20 years. PAC has dedicated itself to protecting the land and water which makes up the beauty and health of Polk County and surrounding areas in North Carolina and Upstate South Carolina as a land trust. It has helped protect over 7,000 acres in the immediate area and holds 50 conservation easement agreements. In addition, the PAC owns 24 properties and maintains three hiking trails. In 2008-2009, the PAC was pursuing National Land Trust Alliance Accreditation.

**By 2016, PAC had increased its protected lands to nearly 8,700 acres. Conservation easements now total 64, encompassing 3,639 acres. PAC holds fee simple title to 440.25 acres in 25 properties, and maintains two hiking trails.**

The Saluda Community Land Trust (SCLT), a totally volunteer 501.C3 corporation, was established in 2006 to serve the Saluda community. The SCLT works primarily with landowners to strengthen the community through land use, community greenways, and public land enhancement.

**Upstate Forever is a membership-based nonprofit with three programs: Clean Air and Water, Sustainable Communities, and Land Trust. Upstate Forever primarily serves the ten Upstate counties of South Carolina, but the Land Trust Program has protected significant properties in the North Pacolet River watershed in NC. Upstate Forever is an accredited land trust protecting over 100 properties totaling nearly 20,000 acres.**

**The Trust controls 788.58 acres of protected land in Polk County in 2016.**

**9 Farmland Preservation Areas**

Farmland preservation areas are delineated on Map 18. These lands include either voluntary agricultural districts or enhanced voluntary agricultural districts. The following summarizes the requirements for inclusion in a farm preservation area:

**Voluntary Agricultural Districts (VAD):**

- Farm participating in the farm present use-value taxation program or is otherwise determined by the county to meet all the qualifications of this program.
- Farm managed in accordance with the Soil Conservation Service defined erosion control practices that are addressed to highly erodible land.
- Farm is the subject of a conservation agreement between the county and the owner of such land that prohibits nonfarm use or development of such land for a period of at least 10 years, except for the creation of not more than three lots that meet applicable county zoning and subdivision regulations. By written notice to the county, the landowner may revoke this conservation agreement (if a VAD). Such revocation shall result in the loss of qualifying farm status.
- Other eligibility requirements required by the individual county.

**Enhanced VADs:**

- Includes all terms of a VAD agreement plus:
- Conservation agreement between the county and the landowner prohibits nonfarm use or development of such land for an irrevocable period of 10 years.
- Automatic renewal of conservation agreement for 3 years without written notice to the county revoking the conservation agreement as required by the ordinance.



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Map 18 Preservation/Conservation Areas



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Polk County includes 5,240.22 acres of voluntary agricultural districts and 955.13 acres of enhanced voluntary agricultural districts.

#### 10 Historic Sites

There are 18 sites listed on the National Register of Historic Places. However, only four sites are within the county's jurisdiction (outside of municipal jurisdiction). The following provides listing of the historic sites with those in county jurisdiction indicated with an asterisk (\*):

- Bank of Tryon Building (Tryon) 1/17/2008
- Blackberry Hill (Mills House) (Tryon vicinity) 11/21/1974
- Block House site (Tryon vicinity) 10/15/1970
- The Charlton Leland (Saluda) 4/5/2006
- Church of the Transfiguration (Saluda) 11/26/1982
- Friendly Hills (Tryon vicinity) 6/26/1998
- \* Green River Plantation (Cox Store vicinity) 3/28/1974
- J.G. Hughes House (Columbus) 5/5/1989
- \* John Hiram Johnson House (Saluda vicinity) 2/7/1994
- \* Reverend Joshua D. Jones House (Mill Spring) 9/26/1991
- Mills-Screven Plantation (Tryon vicinity) 2/3/1983
- Mill Farm Inn (Tryon vicinity) 1/22/2009
- Pine Crest Inn (Tryon) 4/15/1982
- Polk County Courthouse (Columbus) 11/8/1974
- \* Railway Clerks' Mountain Home (Saluda vicinity) 7/28/2000
- Ryder Hall (Saluda) 9/15/2005
- Saluda Main Street Historic District (Saluda) 5/29/1996
- Seven Hearths (Tryon vicinity) 3/26/1976

Three of the sites located in the county's jurisdiction are delineated on the Community Facilities Map, page IV-3. The John Hiram Johnson House is not located because of private disclosure.

Additionally, there are approximately twenty prehistoric and historic archeological sites in Polk County.

In addition to the historic sites, in March 2009, the Polk County Historical Association opened a

new museum in Columbus. The museum offers a wide variety of items of interest to Polk County's history.

By 2016, the number of sites had increased to 23:

- Bank of Tryon Building (Tryon) 1/17/2008  
<http://www.hpo.ncdcr.gov/nr/PL0045.pdf>
- Blackberry Hill (Mills House) (Tryon vicinity) 11/21/1974  
<http://www.hpo.ncdcr.gov/nr/PL0001.pdf>
- Block House Site (Tryon vicinity) 10/15/1970  
<http://www.hpo.ncdcr.gov/nr/PL0002.pdf>
- The Charlton Leland (Saluda) 4/5/2006  
<http://www.hpo.ncdcr.gov/nr/PL0042.pdf>
- Church of the Transfiguration (Saluda ) 11/26/1982  
<http://www.hpo.ncdcr.gov/nr/PL0008.pdf>
- --Downtown Tryon Historic District (Tryon ) 12/15/2015  
<http://www.hpo.ncdcr.gov/nr/PL0058.pdf>
- Friendly Hills (Tryon vicinity) 6/26/1998  
<http://www.hpo.ncdcr.gov/nr/PL0035.pdf>
- Green River Plantation (Cox Store vicinity) 3/28/1974  
<http://www.hpo.ncdcr.gov/nr/PL0003.pdf>
- J.G. Hughes House (Columbus ) 5/5/1989  
<http://www.hpo.ncdcr.gov/nr/PL0009.pdf>
- John Hiram Johnson House (Saluda vicinity) 2/7/1994  
<http://www.hpo.ncdcr.gov/nr/PL0011.pdf>
- Reverend Joshua D. Jones House (Mill Spring ) 9/26/1991  
<http://www.hpo.ncdcr.gov/nr/PL0010.pdf>
- --Lynncote (Tryon ) 8/30/2010  
<http://www.hpo.ncdcr.gov/nr/PL0049.pdf>
- Mill Farm Inn (Tryon vicinity) 1/22/2009  
<http://www.hpo.ncdcr.gov/nr/PL0057.pdf>



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- f  
• Mills-Screven Plantation (Tryon vicinity)  
2/3/1983  
<http://www.hpo.ncdcr.gov/nr/PL0007.pdf>
- f  
• Pine Crest Inn (Tryon ) 4/15/1982  
<http://www.hpo.ncdcr.gov/nr/PL0006.pdf>
- f  
• Polk County Courthouse (Columbus )  
11/8/1974  
<http://www.hpo.ncdcr.gov/nr/PL0004.pdf>
- f  
• Railway Clerks' Mountain Home (Saluda  
vicinity) 7/28/2000  
<http://www.hpo.ncdcr.gov/nr/PL0037.pdf>
- f  
• Ryder Hall (Saluda ) 9/15/2005  
<http://www.hpo.ncdcr.gov/nr/PL0043.pdf>
- Saluda Main Street Historic District  
(Saluda) 5/29/1996  
<http://www.hpo.ncdcr.gov/nr/PL0012.pdf>
- Seven Hearths (Tryon vicinity)  
3/26/1976  
<http://www.hpo.ncdcr.gov/nr/PL0005.pdf>
- f  
• --Stone Hedge (Tryon vicinity)  
4/21/2015  
<http://www.hpo.ncdcr.gov/nr/PL0059.pdf>
- f  
• --Sunnydale (Tryon ) 12/7/2011  
<http://www.hpo.ncdcr.gov/nr/PL0148.pdf>
- f  
• --Tryon Country Club (Tryon vicinity)  
2/5/2013  
<http://www.hpo.ncdcr.gov/nr/PL0161.pdf>

■ -- denotes additions since Plan adoption

### 11 Hazard Mitigation

Polk County participated in the creation of the South Mountains Regional Hazard Mitigation Plan, which was completed in January, 2015. The South Mountains Region includes Henderson, Polk, Rutherford, and Transylvania Counties and the municipal governments within the counties. This area is vulnerable to a wide range of natural hazards such as winter storms, thunderstorms, floods, and landslides. It is also vulnerable to human-caused hazards, including hazardous material spills. These hazards threaten the life and safety of residents in the South Mountains Region and have the potential

to damage or destroy both public and private property, disrupt the local economy, and impact the overall quality of life of individuals who live, work, and vacation in the region.

The Plan identified the highest risks for Polk County as:

- Winter Storm and Freeze
- Thunderstorm Wind / High Wind
- Flood
- Hailstorm

The Plan can be found at  
[http://www.polknc.org/docs/planning/FINAL\\_SMTNS\\_Regional\\_HMP\\_02092015.pdf](http://www.polknc.org/docs/planning/FINAL_SMTNS_Regional_HMP_02092015.pdf)

### C LAND SUITABILITY ANALYSIS

This land suitability analysis is a composite summary of the environmental impact factors discussed in the Environmental Factors section.

This Land Suitability Analysis (LSA) is geographic Information Systems (GIS) based tool for evaluating the relative suitability of land for development in Polk County, North Carolina. The result is generalized map, Map 19, which delineates areas of the county that are categorized as having either least, low, moderate, or high suitability for development. The analysis does not provide site-specific results, nor does it make recommendations about how individual landowners may or may not use their land.

Suitability, for the purpose of this analysis, can be primarily defined in terms of physical limitations and/or regulatory restrictions. Physical limitations such as steep slopes or poorly drained soils make the land less suitable for development. Features subject to regulatory restrictions, such as farmland preservation areas, also pose challenges to development.



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Map 19 Land Suitability Analysis – Regulatory, Legal and Environmental Constraints



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The results of the LSA may be used to support planning efforts throughout the unincorporated areas of Polk County. Objectives of the LSA and appropriate uses of the final analysis include the following:

- Identify areas that are more or less suitable for development on a coarse scale;
- Inventory existing spatial information available for Polk County;
- Identify data gaps that may be filled during later planning stages;
- Develop a tool that will assist the county in the implementation of new policies, actions, or regulatory language;
- Provide a base for GIS analysis to be used in other long-range planning projects.
- Limitations of the LSA include the following:
  - The LSA results are not a zoning map, but will be used to support planning processes in Polk County;
  - Results and analyses do not support site-specific planning;
  - The LSA does not make recommendations about how an individual landowner may or may not use their land;
  - The LSA does not result in recommendations about where particular land uses (i.e., commercial vs. residential) should be concentrated;
  - Results do not factor in projected population, carrying capacity, or commercial/housing demand.
  - The LSA map considers regulatory, legal, and environmental constraints to development, which are defined as the following:
    - Regulatory Constraints – Created by a regulatory body to mitigate impact in designated areas. Often, these constraints are temporary and are not legally binding in nature. The following layers are classified as regulatory constraints in the analysis of land more or less suitable for development in Polk County.
      - Farmland Preservation Areas
      - Water Supply III Waters(WS-III)
      - Water Supply IV Waters(WS-IV)
      - Legal Constraints – Any legally binding
    - Environmental Constraints – Any natural or physical resources that limit an area’s potential for development. The two main types of environmental constraints in Polk County arise as a result of (1) the presence of valued natural resources (i.e., high quality waters, public trout waters) that are likely to be adversely affected by development and as such should be preserved or protected where possible; and (2) a hazard issue (i.e., flooding, slope instability). These areas are delineated due to the potential for adverse effects on human life or property. The following layers are classified as environmental constraints in the analysis of land more or less suitable for development in Polk County.
      - Land Trust/Conservation Properties
      - Wildlife Resources Commission Public Game Lands/State-owned Lands
      - Farmland Preservation Areas
      - High Quality Water Management Zones (HQP)
      - Water Supply II waters (WS-II) and DWQ Trout Waters
      - National Wetlands Inventory
      - Significant Natural Heritage Areas
      - Wildlife Resources Commission
      - Public Trout Waters
      - Surface Waters
      - Slope at 30+%
      - Slope at 20.01 - 30%
      - Slope at 10 - 20%
      - Flood Hazard (Zone AE)
      - Prime Farmland Soils
      - Hydric Soils

Suitability areas are ranked in hierarchical order from 1 to 4, with Area 1 (least suitability) posing the greatest constraints to development. The following defines the factors considered in each layer.



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**1 Least Suitability**

Areas of Least Suitable land are more restrictive to development than other land in the county as they are either protected or environmental sensitive areas.

- High Quality Water Management Zones (Hqw) (see Map 13)
- Water Supply II Waters (WS-II) (see Map 13)
- Significant Natural Heritage Areas (see Map 17)
- National Wetlands Inventory (see Map 13)
- Wildlife Resources Commission Public Trout Waters (see Map 13)
- Land Trust/Conservation Properties (see Map 18)
- Surface Waters (see Map 13)
- Slopes at 30+% (see Map 12)

**2 Low Suitability**

Areas of Low Suitability contain development limitations and are more restrictive to development than areas of moderate or high suitability.

- Flood Hazard (Zone AE) (see Map14)
- Prime Farmland Soils (see Map 16)
- Hydric Soils (See Map 16)
- Slope at 20.01 - 30% (see Map 12)
- Water Supply III Waters (WS-III) (see Map 13) Farmland Preservation Areas (see Map 18)

**3 Moderate Suitability**

Areas of Moderate Suitability are more restrictive to development than areas of High Suitability.

- Water Supply IV Waters (WS-IV) (see Map 13)
- Slope at 10 - 20% (see Map 12)

**4 High Suitability**

Areas of High Suitability are not overlapped by any of the three more restrictive land areas.

- Land mass not covered by an existing layer
- Slope less than 10% (see Map 12)
- Land within a half-mile proximity to existing municipal areas
- Public sewer system available (see Map

13)

Table 16 provides a summary of the acreages included in each suitability classification.

**Table 16:** Land Suitability Classification Summary

<b>CLASSIFICATION</b>	<b>ACRES</b>	<b>%</b>
High Suitability	14,087	9.7%
Moderate Suitability	38,612	26.7%
Low Suitability	48,721	33.6%
Least Suitability	43,448	30.0%
<b>Total</b>	<b>144,868</b>	<b>100.0%</b>

Source: Holland Consulting Planners, Inc.

**D EXISTING LAND USE**

Map 20 provides a generalized depiction of existing land use in Polk County as of February, 2009. The majority of the "intensive land use" within the county is concentrated in and around the triangle formed by the municipalities of Columbus, Saluda, and Tryon. This area includes 17,910 acres, or 12.5% of the county. In general, with the exception of the Bright's Creek and Lake Adder areas, most of the more intensive land uses are located in the southern one-third of the county. Conservation lands are concentrated in the western one-third of the county. While agricultural and forestlands are scattered throughout the county, the largest expanses are north of U.S. 74 and east of NC 9. The largest concentrations of potential development are in the following areas:

- Bright's Creek: 768.98 acres
- White Oak Plantation: 687.06 acres
- Lake Adder: 2,650.94 acres
- Derbyshire: 102.42 acres

Table 17 provides a summary of the land use categories in Polk County as a whole and in the Columbus-Saluda-Tryon triangle area. For both the county and the triangle, the categories included in the LSA least suitable category are identified. See Land Suitability Map, Map 19. Within the county as a whole, 23,617 acres, or 33%, of the developed property is located in areas considered as least suitable. See Maps 19 and 20, pages IV-44 and IV-49. Within the triangle area, 3,577 acres, or 36%, of the triangle area's developed land is located in



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areas considered least suitable.

**Table 17: Existing Land Use**

<b>Polk County Total Land Use</b>			<b>Triangle Land Use</b>		
<b>Existing Land Use</b>	<b>Acres</b>	<b>% of Total</b>	<b>Existing Land Use</b>	<b>Acres</b>	<b>% of Total</b>
Commercial	877.97	0.61%	Commercial	29.33	0.16%
Industrial	121.78	0.08%	Industrial	62.54	0.35%
Institutional	917.56	0.64%	Institutional	232.15	1.30%
LDR (10+ Ac.)	39,094.49	27.28%	LDR (10+ Ac.)	4,865.39	27.16%
Residential	15,106.19	10.54%	Residential	3,968.48	22.16%
Utility	8.57	0.01%	Utility	4.37	0.02%
Conservation	15,207.60	10.61%	Conservation	736.77	4.11%
Vacant/Agr./ Forest Land	71,974.54	50.22%	Vacant/Agr./ Forest Land	8,011.66	44.73%
<b>Total County</b>	<b>143,308.70</b>	<b>100.00%</b>	<b>Total Triangle</b>	<b>17,910.69</b>	<b>100.00%</b>

<b>Polk Co. Land Use in Least Suitable Overlay</b>			<b>Triangle Land Use in Least Suitable Overlay</b>		
<b>Existing Land Use</b>	<b>Acres</b>	<b>% of Total</b>	<b>Existing Land Use</b>	<b>Acres</b>	<b>% of Total</b>
Commercial	149.43	0.35%	Commercial	1.78	0.02%
Industrial	1.18	0.00%	Industrial	1.18	0.01%
Institutional	66.75	0.16%	Institutional	7.99	0.10%
LDR (10+ Ac.)	6,285.51	14.86%	LDR (10+ Ac.)	1,803.10	22.20%
Residential	2,103.41	4.97%	Residential	1,064.33	13.10%
Utility	0.60	0.00%	Utility	0.60	0.01%
Conservation	15,010.28	35.48%	Conservation	698.29	8.60%
Vacant/Agr./ Forest Land	18,685.20	44.17%	Vacant/Agr./ Forest Land	4,544.43	55.95%
<b>Total in Least Suitable Overlay</b>	<b>42,302.36</b>	<b>100.00%</b>	<b>Total in Least Suitable Overlay</b>	<b>8,121.70</b>	<b>100.00%</b>

LDR = Low Density Residential. *Note: On LDR property, the majority of each individual parcel's area is undeveloped.*

*Note: The acreage information listed above does not include right-of-ways or incorporated areas.*

Source: Holland Consulting Planners, Inc.



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Map 20 Existing Land Use



## POLK COUNTY VISION PLAN SECTION IV ENVIRONMENT / EXISTING CONDITIONS

### E ENVIRONMENT/EXISTING CONDITIONS SUMMARY

- Polk County has an excellent transportation system which provides easy, fast access to the surrounding regions.
- St. Luke's Hospital provides the foundation for an excellent local healthcare system.
- In addition to its natural outdoor assets, Polk County provides comprehensive recreational facilities.
- The Polk County School System is recognized as a leader in public education, having received state recognition for its high graduation rate.
- Polk County is moving towards a county water system to reduce its dependence on groundwater.
- Polk County has varied topography and a complex ecological system.
- Polk County is known for the high quality of its surface waters.
- There are over 14,700 acres of land trust/conservation properties in Polk County.
- Approximately 64% of Polk County's area has natural limitations for intensive development.
- The majority of the County's "intensive land use" is concentrated in the triangle formed by Columbus, Saluda, and Tryon.



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**SECTION V. POLK PROJECTIONS/FUTURE DEMAND**

Because of the 2009 national and international economic uncertainties, forecasting demographic/economic change and associated service demand is, at best, difficult. The reader should not become too engrossed in the forecast data. The forecasts are a “moving target” which must be carefully and continuously monitored. More importantly, this plan outlines the future path which Polk County will follow. The forecast data provides general parameters within which the county’s path will be charted.

While economic conditions in Polk County and the surrounding region have begun to show improvement in recent years, some uncertainties remain regarding the pace of recovery. Therefore, the forecast caveats above are still appropriate.

**A. POPULATION**

From 2000 to 2008, Polk County’s rate of growth decreased significantly from the rate experienced during the 1990’s. Based upon the North Carolina Office of State Planning data, Polk County’s population increased from 18,324 in 2000 to 19,040 in 2008, an increase of 3.9%. By comparison, during the 1990’s the county’s population increased 27.1%. Table 18 provides a summary of 2000 to 2008 growth rates for selected counties, the Advantage West Region, and North Carolina.

Table 18: 2000-2008 Population Growth Rates, Polk County and Selected Areas

Source: NC Office of State Budget and Management

The growth rates for counties in the Polk County area and rural counties throughout North Carolina have slowed from 2000 to 2008 as compared to the 1990s. This decline is mirrored by the decrease in residential building permits experienced from 2004 to 2008 (see Table 1, pg III-8).

The following summarizes the primary factors believed to be responsible for Polk County’s

Area	% Change 2000-2008
Polk County	3.90%
Rutherford County	-0.12%
Cleveland County	0.73%
McDowell County	4.79%
Henderson County	16.08%
Buncombe County	10.30%
Advantage West Region	6.72%
North Carolina	14.00%

Source: NC Office of State Planning and Holland Consulting Planners, Inc.

**Table 18-A: 2010-2014 Population Growth Rates, Polk County and Selected Areas**

Area	% Change 2010 - 2014
Polk	1.1
Rutherford	-0.3
Cleveland	-0.2
McDowell	0.7
Henderson	3.9
Buncombe	5.4
North Carolina	4.4

growth rate:

- The decline and overall instability of the national and international economy.
- The increasing age of the Polk County population.
- A national population growth rate decrease from 2000 to 2008 (13.2% 1990-2000; 8.9% 2000-2008).
- Continued modest growth in net in-migration.

In the face of these factors which have resulted in a slowing of the county’s growth rate, population increase is still expected. Table 19



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provides NC Office of State Planning population forecasts for Polk County and selected areas through 2030.

The historical and existing demographic data relied upon PCensus demographic data (see Appendix 1). The PCensus data provides population forecasts through 2013 for Polk County, the Polk Economic Impact Area, North Carolina, and South Carolina (see page III-1). The forecast growth rates have been sustained to yield comparative population projections through 2030 (see Table 20). The PCensus forecast yields a more aggressive forecast than the forecast produced by the NC Office of State Planning



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**Table 19:** Population Forecasts, Polk County and Selected Areas

	2000	2010	2015	2020	2030	% Change 2000-10	% Change 2010-15	% Change 2015-20	% Change 2020-30	% Change 2000-30
Polk County	18,324	19,044	19,168	19,293	19,518	3.9%	0.7%	0.7%	1.2%	6.5%
Rutherford County	62,901	64,968	68,615	72,264	78,830	3.3%	5.6%	5.3%	9.1%	25.3%
Cleveland County	96,258	99,717	103,197	105,625	108,300	3.6%	3.5%	2.4%	2.5%	12.5%
McDowell County	42,151	45,717	48,631	51,547	56,792	8.5%	6.4%	6.0%	10.2%	34.7%
Henderson County	89,193	107,383	116,216	125,009	140,271	20.4%	8.2%	7.6%	12.2%	57.3%
Buncombe County	206,310	233,999	248,638	262,367	284,966	13.4%	6.3%	5.5%	8.6%	38.1%
Advantage West Region	999,721	1,095,013	1,154,412	1,211,961	1,311,579	9.5%	5.4%	5.0%	8.2%	31.2%
North Carolina	8,046,813	9,571,403	10,424,250	11,263,964	12,753,597	18.9%	8.9%	8.1%	13.2%	58.5%

Source: NC Office of State Planning and Holland Consulting Planners, Inc.

**Table 19-A: Population Forecasts, Polk County and Selected Areas**

	July 2010	July 2015	July 2020	July 2025	July 2030	July 2035	% Change 2015 - 2020	% Change 2020 - 2025	% Change 2025 - 2030	% Change 2030 - 2035	% Change 2015 - 2035
Polk	20,446	20,848	21,383	21,797	22,049	22,306	2.6%	1.9%	1.2%	1.2%	7.0%
Rutherford	67,769	67,466	67,015	66,789	66,722	66,666	-0.7%	-0.3%	-0.1%	-0.1%	-1.2%
McDowell	45,075	45,380	45,614	45,759	45,850	45,908	0.5%	0.3%	0.2%	0.1%	1.2%
Cleveland	98,041	98,246	99,301	99,850	100,214	100,361	1.1%	0.6%	0.4%	0.1%	2.2%
Henderson	106,911	112,116	117,969	123,396	128,380	133,044	5.2%	4.6%	4.0%	3.6%	18.7%
Buncombe	238,857	254,344	269,682	285,024	300,372	315,714	6.0%	5.7%	5.4%	5.1%	24.1%
NC	9,574,917	10,054,722	10,573,611	11,093,530	11,609,883	12,122,640	5.2%	4.9%	4.7%	4.4%	20.6%

Source: NC Office of State Budget and Management



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**Table 20:** PCensus Population Forecasts, Polk County, Polk Economic Impact Area, North Carolina, and South Carolina

	2000	2008	2010	2015	2020	2030	% Chg. 00-08	% Chg. 08-10	% Chg. 10-15	% Chg. 15-20	% Chg. 20-30	% Chg. 00-30
Polk County	18,324	19,507	19,916	20,781	21,646	23,508	6.5%	2.1%	4.3%	4.2%	8.6%	28.3%
Polk Economic Impact Area	1,199,600	1,280,878	1,301,687	1,357,009	1,412,330	1,532,378	6.8%	1.6%	4.3%	4.1%	8.5%	27.7%
North Carolina	8,046,813	9,120,482	9,380,650	10,159,243	10,937,837	12,753,517	13.3%	2.9%	8.3%	7.7%	16.6%	58.5%
South Carolina	4,012,012	4,422,320	4,521,993	4,717,890	4,949,090	5,407,890	10.2%	2.3%	4.3%	4.9%	9.3%	34.8%

Source: PCensus and Holland Consulting Planners, Inc.



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Through 2008, building permit and utility data support the PCensus estimated forecasts. From 2004 to 2008 (building permit data not available for 2000-2003), a total of 578 new construction residential building permits were issued for an average of 156 dwelling units per year. If the annual average is applied for 2000-2008, a total of 1,248 dwelling units were constructed. Applying a vacancy rate of 40% (the 2000 rate of 26%, inflated 14% to accommodate unsold units and units under construction), 749 dwelling units were occupied. This occupancy yields a total 2000-2008 population increase of 1,647 (assumes an average household size of 2.2). Based on these assumptions, Polk County would have a 2008 population of 19,971 (which exceeds the 2008 PCensus population estimate of 19,507 stated on page III-4) and a 2010 population of 20,383. Thus, both the PCensus and NC State Office of Planning estimates appear conservative when compared to the population estimate based solely on building permits.

**For planning purposes, the average of the NC State Office of Planning and the PCensus projections is utilized and provided in Table 21.**

If all of the 3,250 vacant subdivision parcels cited on page III-9 of this plan were developed/occupied at a 60% occupancy rate and 2.2 average family size, the 2000 population of 18,324 would increase to 22,614 by 2030 (155 more people than the 2030 population forecast shown in Table 19).

The Polk County population forecast growth rate for 2000-2020 is 14.4%. By comparison, the forecast Office of State Planning population increase from 2000 to 2020 for the Advantage West region is 17.0% and for North Carolina is 36.3%.

The current population forecasts from the State show a twenty-year growth rate for Polk County of 7.0%. While this projected growth is greater than that of the other counties in the Isothermal region, it is significantly lower than that of the Asheville metro region and the State as a whole.

The updated growth forecast for the planning period is lower than that originally estimated in the Plan. However, the rate of population growth could be impacted by the development of major projects, such as the Tryon International Equestrian Center.

The age of the county’s population is expected to continue to increase, but at a slower rate than in past years. This will be impacted by in-migration which is expected to continue at an increasing rate. This in-migration may slow the natural increase of the age of Polk County’s population.

Table 21: Polk County Population Projections

2000	2010	2015	2020	2030	% Chg. 2000-10	% Chg. 2010-15	% Chg. 2015-20	% Chg. 2020-30	% Chg. 2000-30
18,324	19,480	19,975	20,470	21,513	6.3%	2.5%	2.5%	5.1%	17.4%

Source: Holland Consulting Planners, Inc.

Map 21 provides a delineation of the anticipated core areas of population growth. These areas are based on:

- Existing/historical development trends;

- Consideration of key transportation corridors/intersections;
- Land suitability analysis.

These areas may attract support services such as retail and office development



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Map 21 - Core Areas of Population Growth



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Within the developing southeastern United States, which extends from Raleigh and Cary, North Carolina, to Birmingham, Alabama (discussed on page III-3), the population is expected to increase 68% from 2000 to 2050. This increase will result in a total population base of 57.2 million. Polk County is virtually in the center of this anticipated southeastern United States population explosion. Sixty percent of this growth is expected to be in non-urban core areas. (Source: Center for Quality Growth and Regional Development, Atlanta, Georgia).

#### B. HOUSING

At an average household size of 2.2 persons, the 2020 forecast population of 20,960 yields a demand for 9,527 dwelling units. In 2008, there were an estimated 9,192 housing units in Polk County. Thus, an additional 335 dwelling units would be required. As stated on page III-9, in 2008, there were approximately 3,250 vacant subdivision parcels in Polk County. These vacant parcels were included on final subdivision plats which had been recorded. In addition, there were 12 proposed developments for which master plans had been approved. These master plans are identified in Table 22 and include 2,355 single-family lots and 350 multi-family/cluster dwelling units for which final approval has not been granted. An additional 293 lots have received preliminary subdivision approval and are identified in Table 23. Both the master plans and preliminary plat approvals are identified on Map 22. Thus, a total of 2,998 lots and cluster/multi-family parcels or units are being considered in Polk County's review and approval process. When added to the approximate 2008 vacant subdivision parcel total of 3,250, a total vacant parcel inventory of 6,248 results. Most of these

parcels will contain dwelling units valued at or above \$192,500 (see page III-15). (NOTE: this vacant parcel inventory does not include parcels located within municipal jurisdictions such as Foster Creek Preserve in Columbus which may include 675 to 700 dwelling units.) Based on the 2004-2008 average annual new construction dwelling unit permit issuance of 156, it would require 40 years to build out all vacant parcels.

The availability of vacant parcels for development in Polk County is not an issue. The apparent concern is the availability of affordable housing for a significant portion of the Polk County population. By 2020, there may be approximately 5,335 households at or below the median income (assumes a continued 56% of total households at or below median income). As stated on page III-15, there were only 3,200 available residential parcels/units which were affordable to households at or below median income.

It is acknowledged that because of Polk County's predominantly rural environment and large size of many parcels, there is an undeterminable number of households achieving affordable standard housing through manufactured homes on leased land or family held land. Even with this acknowledgment, there will continue to be a serious shortage of affordable housing.

Due to the slow growth in new housing starts since the development of the Plan, the housing forecasts remain reasonable for the planning period. The large supply of vacant subdivision lots and larger parcels is still more than adequate to support the expected housing demand.



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Table 22: Polk County Master Plans Approved Through April 2009

Name of Development	Acreage	Average Lot Size	# Lots	Open Space	Township	Lots "Finaled"
White Oak Plantation, Cluster	1,086 acres	.52 acres	539 sf, 304 mf	647 acres	Green Creek	95
Oates Property	344 acres	5.3 acres	65		Cooper Gap	
The Farms at Mill Spring	339 acres	10.9 acres	31		White Oak	
Highlands at Walnut Creek	581.69 acres	1.35 acres	250		Cooper Gap	95
Day Industrial Park	164.58 acres	3.04 acres	54		Columbus	
Carolina Hills at Meadowbrook (Cluster)	512 acres		374	256 acres	Green Creek	5
Ricks Mountain	1275 acres	2.30 acres	319	541.3 acres	Saluda	
Brights Creek	4,666 acres		1370		Cooper Gap	491
Mountain Laurel Estates	78.69 acres	2.54 acres	31	15.56 acres	Cooper Gap	31
Derbyshire, Cluster	274.7 acres	1.16 acres	74 lots, 117 units	89.25 acres	Columbus	46 lots, 38 units
Southside @ Lake Adger	16 acres	1.00 acre	16		White Oak	
Jackson Cove West, Phase 2,3,4	245 acres		62		Cooper Gap	

Source: Polk County Planning Department.

Table 23: Polk County Subdivisions with Preliminary Approval Through April 2009

Name of Development	Acreage	Avg. Lot Size	# Lots	Open Space	Township
Walter Pace Properties	27.9 acres	2.33 acres	12	3.09 acres	Saluda
White Oak Plantation, Phase 2A (Cluster)	42.41 acres	0.95 acres	33	5.39 acres	Green Creek
Jackson Cove West, Phase 2 Preliminary	17.32 acres	1.73 acres	10		Cooper Gap
Carolina Hills at Meadowbrook, Phase 1B, (Cluster)	37.75 acres	1.05 acres	19	18.94 acres	Green Creek
Pine Valley Estates	49.98 acres	2.27 acres	22		Cooper Gap
Bradley Crossing	64.04 acres	.49 acres	64	32 acres	Columbus



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White Oak Plantation, Phase 3 & 4

| 201.53 acres | 1.7 acres | 106 | 36.12 acres | Green Creek

*Source: Polk County Planning Department.*



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Map 22 - Master Plans and Preliminary Plats



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#### C. ECONOMY

Given the uncertainties of the economy, it is impossible to provide meaningful economic forecasts. In general, it is expected that the Polk Economic Impact Area will continue to grow and strengthen as a part of the southeastern United States mega-region. The Polk County economy through 2020 is expected to slowly expand based upon:

- Recruitment of small to medium enterprises (\$2-10 million companies).
- Building a diversified economy utilizing Polk County's cultural, natural, and economic assets.
- Continued development of the county's entrepreneurial/ proprietorship sector.
- Development of a stronger connection between the county's agricultural interests and other sectors of the economy.
- Continued development of the county's equine- and viticulture-based economies.
- Strengthening of the county's eco-tourism.
- Focusing of industrial development in industrial park settings.
- Targeting businesses/industries which are in the growth sectors of health care, education, light industry, and construction.
- Sustainable developments which will serve to preserve Polk County's natural assets.
- Provision of support services for Polk County's growing retirement aged community.

The southeast mega-region is faced with diminishing water resources, degraded environmental conditions, inadequate transportation, impaired air quality, high rural poverty levels, and educational systems which lag behind the nation. Polk County must protect and enhance its resources in order to yield an advantage in the larger southeast mega-region.

Economically the county will face the following challenges:

- Continuing in-migration may lead to higher land values.
- Affordable housing will continue to be a challenge for many Polk County residents, especially the younger segment of the

population.

- There will continue to be an income disparity between new in-migrating residents and many Polk County natives. Many rural households are below median income.
- Demand for higher-wage jobs will be necessary.
- County growth will place greater demands on infrastructure, in particular water system(s), roads, schools, recreational facilities, and services/facilities for the senior population.

#### D. COMMUNITY FACILITIES

Polk County's demand for additional community facilities through 2020 may be expected to focus on general recreation facilities, school system improvements, mental health, emergency management services, social services, transportation improvements, ongoing maintenance of existing facilities, and water system infrastructure. The in-migration of population and its continuing demand for services may be expected to have an influence on the county's future community facility requirements.

##### 1. Administrative and General Service Facilities

Identified general service facilities include the following:

- A new Department of Social Services building, estimated cost \$2 million. **The new DSS building located on Hwy 108 near the Middle School was completed in 2011.**
- A mental health services facility, possibly located in the vicinity of St. Luke's Hospital. It should be noted that Polk County has supported the Polk County Community Health and Wellness Center, Inc., in Columbus. Mental health services are provided at St. Luke's Hospital.
- A new Senior Center, relocated from the Jervey Palmer Building to the Carolina Classical School which has been acquired by the county. A \$450,000 kitchen will be



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added and the Center opened in November, 2009 (the total site includes approximately 27 acres, of which approximately 1/3 is located in a floodplain).

**The Senior Center was moved to the former Carolina Classical School building in 2009.**

- Emergency management services/ facilities will be influenced by the anticipated growth areas indicated on Map 21.

**The Development Agreement between the County and Tryon International Equestrian Center provides a site on Pea Ridge Road for a new Fire/EMS station.**

The county has an inventory of good existing administrative and general service facilities. It will continue to emphasize maintenance and upgrade of its facilities on an annual basis.

**The County has acquired property on Hwy 108 just east of the Columbus town limit for the construction of a law enforcement center. A new courthouse is also planned at this location in the future.**

### 2. School Facilities

It is anticipated that the provision of adequate public water supply and proper sewage treatment will be the largest issue/need facing the Polk County School System. In 2009, the school system relied on a combination of wells, septic systems, and on-site wastewater treatment at the Polk Central, Polk County Middle, and Sunny View Schools. Development of a county water system will be of great importance to the school system (see page V-11).

Policy changes at the state and federal level make it extremely difficult to plan for capacity/demand at each school. For example, the lowering of classroom size by the state would immediately increase the demand for classrooms. Demand must be assessed annually. The following identifies potential growth areas which may impact specific school facilities:

- Growth along the Highway 9 corridor could increase the Polk Central School and Polk County Middle School enrollment.

- Growth in the Sunny View community could increase the Sunny View School enrollment.
- Any county-wide population growth may increase the Polk County High School enrollment.

### 3. Parks and Recreational Facilities

Polk County has a Parks and Recreation Comprehensive Master Plan. The plan was prepared in 1999/2000 and is currently out of date. However, the plan does emphasize the need for "significant" additional park land in the county.

The recreation plan included a summary of county recreational needs based on local standards which were developed in concert with National Recreation and Parks Association and North Carolina Department of Environment and Natural Resources standards. Table 24 provides an updated facility needs summary based on current facilities and population forecasts.

### 4. Transportation System

Transportation and the NCDOT Transportation Improvements Program (TIP) is discussed on page IV-1. Table 10, page IV-2, includes proposed highway improvements and assistance to public transportation needs. The TIP will be updated through the planning period and should be closely coordinated with this plan.



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**Table 24: Polk County Recreation Facility Needs**

Facility	County Standards (1/population)	Existing Facilities <sup>1</sup>	2010 (19,542)	2020 (20,960)
Adult Baseball	1/10,000	0	2	2
Youth Baseball/Girls Softball	1/4,000	7	5	5
Adult Softball	1/5,000	0	5	5
Football	1/10,000	0	2	2
Soccer	1/5,000	0 <sup>2</sup>	4	4
<b>Courts</b>				
Basketball (indoor)	1/5,000	2	4	4
Basketball (outdoor)	1/10,000	0	2	2
Tennis	1/2,000	3	10	10
Volleyball	1/10,000	0	2	2
Shuffleboard	1/10,000	0	2	2
Horseshoe	1/10,000	0	2	2
<b>Outdoor Areas</b>				
Picnic Shelter	1/5,000	0	4	4
Playground	1/5,000	2	4	4
<b>Trails</b>				
Hiking	N/A	0	N/A	N/A
Interpretive	N/A	0	N/A	N/A
Equestrian	N/A	0	N/A	N/A
Camping	N/A	0	N/A	N/A
Archery Area	1/20,000	0	1	1
<b>Specialized</b>				
Community Center	1/20,000	0	1	1
Swimming Pool (indoor)	1/20,000	0	1	1
Swimming Pool (outdoor)	1/20,000	1	1	1
Golf Course	N/A	0	N/A	N/A
<b>Bicycling</b>				
Rural Touring	2 mi/1,000	0	40	40
<b>Canoeing</b>				
Stream Mileage	N/A	0	N/A	N/A
Stream Access	N/A	0	N/A	N/A

<sup>1</sup>Existing facilities include Gibson Park, Searcy Field, Polk Middle School, and Harmon Field.

<sup>2</sup>The only true soccer field in the County is the field at Harmon Field, which is not owned by the County.

Source: Polk County Parks and Recreation Comprehensive Master Plan, with updates by Holland Consulting Planners, Inc.

As noted in Section IV, Polk County developed a formal recreation master plan which was adopted by the Board of Commissioners in December of 2013. With regard to County recreation facilities, the Recreation Plan recommends a focus on the maintenance and upgrading of current facilities. It suggests linking the four parks in the vicinity of Highway 9 and Highway 108 through trails or other innovative connections.



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#### 5. Water System

Future Water System. The future county water system (see Map 23, Future Water System) is designed to serve critical facilities and higher density planned developments within the county which are not currently served by a public water distribution system. It is anticipated that the system will develop slowly. Extending the county's distribution to critical facilities such as schools, fire departments, churches, health care, and commercial facilities will ensure a reliable, high quality water source for these facilities and will eliminate the burden of maintaining individual public community well systems for each of the facilities.

Generally it is not feasible to extend water distribution facilities to low density areas due to economic (insufficient number of users to support cost) and water quality considerations. The future system will also serve public water to the residences along the proposed alignment, discussed below in the phasing section. There are 1,568 total parcels within one thousand feet of the proposed alignment – 967 of those parcels are estimated to be occupied.

The expanded water system also takes into consideration fire protection preparedness, and will provide reliable fire flow to critical facilities as well as to properties along the system with lesser water demand. The Insurance Service Organization (ISO) provides fire protection preparedness ratings for communities, which, in turn, are used to determine insurance rates for communities. The rating, based upon multiple criteria, includes the availability of fire flows to an area. Increasing the availability of fire flows has a positive effect on the ISO rating for an area.

The proposed future system will provide a water infrastructure system that can supply water to planned higher density developments (single-family, commercial and institutional) and serve future county water needs. The proposed system will also supply water to five of the seven identified anticipated core growth areas – the remaining two anticipated core growth areas are located in elevations above 1200 feet. As previously discussed, it is not typically feasible to extend a water distribution system to lower density areas, but it is desirable to extend the

system to high density developments and scattered single-family/commercial areas which are reasonably close to the system. Expansion of the system to higher density development provides a dependable, high quality water supply along with fire flow for these areas. Service to these higher density areas will allow service to scattered lower density areas adjacent to the primary system.

As noted in Section IV, the County has completed several major water line extensions. Future plans anticipate further line extensions to meet demand. The construction of several looping lines would improve water flow and pressures. The addition of elevated water storage would also boost water pressures where needed and provide an emergency supply in the event of a line break.

The proposed system will also serve as secondary supply for the municipal systems within the county through an interconnect with the Columbus water system. A project to construct a new pump station which will allow bi-directional water transfers between Columbus and Tryon is currently underway. Additionally, a project to allow bi-directional water transfers between Tryon and Saluda is also currently underway. Once these two projects are complete, the three municipalities will be capable of transferring water to each other. Once the interconnection is made between the future county water system and the Columbus system, the county water system will be capable of providing water to any of the three municipalities, and conversely, any of the three municipalities will be capable of providing water to the county system. This interconnectivity provides flexibility and an auxiliary supply for all the water systems in the county. These interconnections will also allow water to be provided from multiple sources including ground water from Columbus, surface water from Tryon, surface water from Hendersonville, and surface water from the Broad River Water Authority. A planned future water treatment facility at Lake Adger will provide an additional supply source within Polk County.



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Map 23 - Future Water System



## POLK COUNTY VISION PLAN SECTION V POLK PROJECTIONS / FUTURES DEMAND

The noted interconnections have been constructed. Columbus is connected to the County system at Polk High School. The Saluda – Tryon – Columbus interconnection is complete but not yet fully operational until a design flaw can be corrected.

**Water Supply Sources.** Currently, the existing county water distribution system is supplied from the Broad River Water Authority (BRWA). The current contract with BRWA allocates an average monthly flow of up to 0.50 Million Gallons per Day (MGD), which will increase to 0.60 MGD within the next two years. This initial supply allocation will not be sufficient to supply the future county backbone water system. The BRWA supply will also not be sufficient to meet possible demands from interconnections with the municipal water systems, possible future industrial, commercial or institutional demands, or demands generated as the backbone system is extended to additional critical facilities and higher density developments. In order to meet the future water demands for the county system, additional water supplies must be developed.

The county has water rights to Lake Adger under contract, and has begun preliminary engineering in support of the lengthy permitting process for a new Lake Adger raw water pump station and water treatment plant. The current Preliminary Engineering Report proposes a new raw water pump station, raw water main, and water treatment plant, all with a capacity of 2.0 MGD. The report estimates the cost of these facilities is \$7.8 million. Utilizing Lake Adger as a future water source is beneficial for several reasons. The lake is relatively close to the future water system and the areas served by the system. This significantly reduces the pipeline length and pumping costs to convey water from the source to the service area. The lake also has the advantage of being a storage reservoir for water, which allows for better drought resistance and generally better water quality. The Lake Adger water supply facilities would also have the benefit of being under the direct control of the county. For these reasons, utilizing Lake Adger as a future water supply is a better long term alternative than utilizing imported water sources from other counties or from the municipal systems within their county.

**Phasing of Future Water System.** Phasing for the future water system is presented to give a logical order and extent to each phase for expanding the system. The schedule for implementation of each phase will be dependent upon several factors, including available funding, need to replace existing well systems serving critical facilities, the need for circulation in the existing distribution system to lessen possible water quality issues, and the need for a sufficient number of users to support the cost of the system. At the planning stage it is difficult to estimate actual costs for future infrastructure. Having a sense of scale for the costs is needed in order to make good planning decisions. The estimated costs are included below in the discussion of each phase.

**Phase I.** Phase One of the proposed system includes extending the existing system at the intersection of Highway 9 and Sandy Plains Road and continuing north along Highway 9 to Polk Central Elementary School. This phase will include approximately 4.2 miles of 12-inch water main. The phase would serve the Polk Central Elementary School, the Highway 9/US 74 growth area, and possibly serve the area surrounding the Beulah Church vicinity, and parcels along the alignment. This portion of the system will serve areas with an elevation up to 1,160 feet. The estimated cost for Phase One of the system is \$1.8 million based on general estimating factors.

**Phase II.** Phase Two of the future system extends from the Phase One system at Polk Central Elementary School north along Highway 9 to the Mill Spring Area. From that point the system extends to the southwest along Highway 108 in order to meet the interconnect with the Columbus water system. This phase also includes an additional water main extending northwest along Silver Creek Road to a proposed storage tank. The proposed storage tank will reduce pump-induced fluctuations in pressure. The tank will also provide storage for fire and emergency demands. The phase includes a booster pump station located near the Polk Central Elementary School, which will serve areas with elevations up to 1,208 feet. The service area of 1200 feet of elevation or less is depicted on Map 23, Future Water System. Phase Two



## **POLK COUNTY VISION PLAN**

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includes approximately 6.6 miles of 12-inch water mains and 0.54 miles of 10-inch main. Phase II of the system is estimated to cost \$3.9 million based on general estimating factors.

Phase Two will serve the Polk County Middle School, the Mill Spring Fire Department, the Cooper-Riis Facility, the Tryon/Columbus/Mill Spring Growth Area, Columbus interconnect, and a secondary supply for the Polk County High School. The Phase Two system will also possibly serve the areas surrounding Bethlehem Methodist Church and Stoney Knoll Church, along with residences and businesses along the alignments.

Phase III. Phase Three of the future system extends north along Highway 9 from the Phase Two system at Mill Spring area to the Sunny View Area. Phase Three will serve the Sunny View Elementary School, the Sunny View Fire Department, the Lake Adger Growth Area, and existing commercial development in the Sunny View Area. The phase will also possibly serve the areas in the vicinity of Faith Baptist Church of Polk, and residences along the alignment. Phase Three is adjacent to the proposed site for the Lake Adger water treatment facility.

The phase includes 5.8 miles of 10-inch water main. Phase III of the system is estimated to cost \$2.2 million based on general estimating factors.

Sources of Funding. There are several possible sources for funding of the future water infrastructure. Possible federal programs for funding are the USDA Rural Development Loan Program, the Economic Development Administration, and the Appalachian Regional Commission. Possible state funding sources include the Community Development Block Grant Program, the Clean Water State Revolving Loan Fund and the Rural Economic Development Center. Note: The current economy dictates constantly changing funding options.

Expansion for Further Future Needs. The future system includes several lateral water main extensions to provide water to planned development. These expansions will require the respective phase of the future system to be completed and will be driven by progress on each

planned development. The system will only be extended to developments (residential and non-residential) having densities sufficient to support cost of the system.

As previously discussed, the proposed system will serve as a "backbone" for possible future expansion of the water system. Expansion of the system will occur by providing lateral extensions, generally to the east and the west, from the original alignment. These lateral extensions should, whenever feasible, be looped back to the backbone system. Looping of the system will provide a secondary source of flow, increased capacity, and an increased service area. The looping will also provide circulation for the system, thereby reducing water quality issues. The system will be capable of serving the eastern, non-mountainous portions of the county. Western, mountainous regions of the county can be served from this system through interconnect with the Columbus system and the interconnects between the municipal water systems.

#### **6. Agricultural/Natural Resource Facilities**

In 2009, the Polk County Soil and Water Conservation District received, by donation, the Mill Spring School. The school will be transformed into the Polk County Agriculture Center. The vision for this center will be to enhance community spirit and quality of life by working with farmers, businesses, and individuals, as well as, state and federal agencies to promote the sustainable economic growth and rural character of Polk County through collaborative projects and innovation in fields of agriculture, natural resources, education, tourism, health and wellness, art, and music. The initial phase will establish general operations by repairing, painting, and providing basic maintenance to the facility (while seeking funding). The second phase of renovations will include: updating equipment, remodeling, installing supplemental green power, greenhouses, gardens, elevators, and a banquet hall for conferences and large events. Future projects include: Soil and Water Conservation programs; commercial culinary center; agricultural economic development projects; outdoor education; art studio and gallery; auditorium with seating for 500; and green



## POLK COUNTY VISION PLAN SECTION V POLK PROJECTIONS / FUTURES DEMAND

power projects. The center will support Polk's agricultural economy, as well as arts, tourism, health and wellness education.

- Polk County's population is forecast to increase to 20,960 by 2020, a 14.4% increase from the 2000 population.
- Polk County's population growth rate is decreasing.
- By 2020, there is an anticipated demand for 9,527 dwelling units.
- An inventory of over 6,000 vacant subdivision parcels may exist.
- A shortage of affordable housing may continue to exist
- The development of the County's water system may progress slowly and focus on the provision of water service to the County's critical facilities.

### E. POLK PROJECTIONS/FUTURE DEMAND SUMMARY

#### FUTURE DEMAND SUMMARY

- The acquisition of Lake Adger provides the County with a stable adequate long-range water supply.
- Global and national economic problems will continue to challenge Polk County. However, Polk County's resources and regional advantage should continue to support a generally stable local economy.
- Polk County will continue to provide community facilities to adequately serve the needs of its citizens.

Because of the 2009 national and international economic uncertainties, forecasting demographic/economic change and associated service demand is, at best, difficult. The reader should not become too engrossed in the forecast data. The forecasts are a "moving target" which must be carefully and continuously monitored. More importantly, this plan outlines the future path which Polk County will follow. The forecast data provides general parameters within which the county's path will be charted.

While economic conditions in Polk County and the surrounding region have begun to show improvement in recent years, some uncertainties remain regarding the pace of recovery. Therefore, the forecast caveats above are still appropriate.



## **SECTION VI. FUTURE LAND USE**

This section provides the delineation of future land use for Polk County. Establishing a future land use map is critical toward laying out a preferred pattern of growth for the County. All portions of the County have been classified in one of five primary sectors, based on the development criteria and land use types outlined for each sector. In addition to establishing stated guidelines for development throughout the County, the resulting policies and implementing strategies (Section VII) for future land use will serve as a guide for staff, elected officials, citizens, and developers. The future land use map (Map 24) and supporting policies/implementing strategies should be used on a daily basis to make judgments regarding rezoning activity, infrastructure improvements, and future land use sectors.

In drafting the future land use map, all factors were taken into consideration, including existing uses, density, land suitability, etc., (see Sections IV and V). The Land Suitability Analysis map (Map 19) provides a snapshot of which portions of the county may be more appropriate for intensive development; however; this map alone should not dictate how the various sectors are laid out.

Five independent land use sectors are defined for the future land use map: Conservation, Greenspace, Restricted Growth, Controlled Growth, and Intended Growth. In addition to these five primary sectors, two defined overlay districts – development nodes and special districts are used to define areas of the county that exhibit unique development potential or concerns.

For each future land use sector, a table is provided which outlines preferred development conditions. The following provides an explanation of these factors:

- **Thoroughfare Types:** This factor outlines what type of right-of-way improvements should exist within each defined use sector. Although it is sometimes difficult to avoid road construction through portions of the County where development is not desirable, this guide should assist in the decision process of where these improvements should be directed.
- **Open Space Types:** The open space types listed within the land use sector tables are defined within the current Polk County Subdivision Ordinance. The options relating to open space types are intended to utilize open lands in a manner that is compatible with the surrounding area. For example, it would not be advisable for the county to invest in a playground facility within a portion of the county that is rural in nature, maintains a small population base, and is not readily accessible to citizens and visitors to the County.
- **Average Built Density:** This factor is an estimate of density within each of the five land use sectors. The average density figures outlined are consistent with current zoning and subdivision regulations. These figures are not absolute, and should be viewed as true averages that could result in higher or lower densities within each individual project. In the controlled growth, intended growth, development nodes, and special districts land use sectors, lot sizes less than seven (7) acres may be considered. Densities under each land use sector may be increased through the use of innovative design techniques such as cluster development and/or traditional neighborhood design (TND). See Appendix 2 for definitions.
- **Appropriate Land Use Types:** These land use types generally summarize the predominant development types anticipated throughout the County. The restriction of certain land use types to a given sector has been loosely based upon the current zoning regulations.



## POLK COUNTY VISION PLAN SECTION VI FUTURE LAND USE

Under the development factors for each land use sector there are qualifiers listed (not permitted, permitted, etc.). The following provides a basic explanation of how the qualifiers should be interpreted while working through development of the future land use map:

- Permitted: This use, thoroughfare type, or open space type will be allowed and promoted within the land use sector.
- Not Permitted: This use, thoroughfare type, or open space type will not be recommended for approval in the development review process for this land use sector. If listed as not permitted, certain restrictions may ultimately be addressed through the County's Zoning Ordinance.
- Not Preferred OR Not Preferred/Conditional Use: Not preferred uses, thoroughfare types, or open space types will be discouraged through the development review process for the land use sector. Uses indicated as not preferred/conditional use will require revision of the Polk County Zoning Ordinance to establish conditional uses and to coordinate the zoning districts with the comprehensive plan land use sectors.
- Throughout the land use sector narratives, there are references made to both cluster development and

traditional neighborhood development. Cluster development and the conditions associated with this type of growth are defined within the County's existing subdivision regulations. The following provides a definition of traditional neighborhood development that should be considered while working through the development of the future land use map.

- Traditional Neighborhood Developments (TND) exhibit the following factors:
- The neighborhood has a discernible center. This center is often a square or green, and sometimes a busy or memorable street intersection.
- There is a variety of dwelling types within the neighborhood, e.g., houses, rowhouses, and multi-family, such that younger and older people, singles and families, the poor and the wealthy, may find places to live.
- Most of the dwellings are within a five-minute walk of the center. This distance averages one-quarter of a mile.
- Buildings at the neighborhood center are placed close to the street. This creates a strong sense of place.

This list is not comprehensive, and defines only some the most critical factors that define a true Traditional Neighborhood Development. Many TND's have a mixed-use component incorporated into their design.



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

**A. CONSERVATION SECTOR (C1)**

This land use sector is generally characterized by lands that are not open to development and/or utilized for passive recreation. This sector will involve properties that are within federal- or state-owned property, properties secured through land trusts, or environmentally sensitive areas protected through state and/or federal regulation. Property placed within this sector should be preserved as open space in perpetuity through a defined regulatory or legal mechanism.

These portions of the County represent the ecological backbone of the community, providing critical habitats for wildlife; protection of water quality and protection from flooding and erosion; and providing recreation and greenspace (open lands) for residents and visitors.

The following land uses, natural features, and property types should be considered within the Conservation Sector:

The following land uses, natural features, and property types should be considered within the Conservation Sector:

- Floodways
- Public game lands
- Land trust parcels
- Wetlands
- Managed open lands
- Protected lands



The following summarizes the desired development characteristics within the Conservation Sector:

Thoroughfare Types		Subdivision Type (see Appendix 2)	Average Built Density
Highway	Not Preferred	Minor Subdivision	Not Permitted*
Local Street	Limited	Major Subdivision	Not Permitted*
Public Drive/Path	Permitted	<b>Appropriate Land Use Types</b>	
Private Drive/Path	Permitted	Undisturbed Open Space	Permitted
Pedestrian & Bicycle Trails	Permitted	Conservation Areas	Permitted
Sidewalks	Not Permitted	Parks & Recreation	Not Preferred
<b>Open Space Types (see Appendix 2)</b>		Agricultural/Viticulture	Not Preferred
Playground	Not Permitted	Equestrian Facilities	Not Permitted
Square	Not Permitted	Civic Uses (Government)	Not Permitted
Park (Active Recreation)	Not Permitted	Civic Uses	Not Permitted
Greenway	Permitted	Single-Unit Residential*	Not Permitted
Green	Not Permitted	Multi-Unit Residential	Not Permitted
Greenbelt	Permitted	Commercial/Office	Not Permitted
Agricultural Preserve	Permitted	Retail	Not Permitted
Nature Preserve	Permitted	Mixed Use	Not Permitted
		Industrial	Not Permitted



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

**B. GREENSPACE SECTOR (C2)**

This land use sector includes portions of the County that should be protected or preserved, but are not currently protected through any established regulation or legal mechanism. Although it is recommended that major subdivision and multi-unit be allowed as conditionally permitted uses in the sector, that development should be kept to a minimum and should only be permitted under limited conditions. Property included within the Greenspace Sector should be characterized by one or more of the following:

- Lands immediately adjacent to the conservation sector that should be targeted for protection;
- Lands that are not anticipated to have access to existing or future thoroughfares;
- Lands targeted for future acquisition by the state government, federal government, land trust, or County;
- Environmentally sensitive areas that are removed from county services;
- Moderate to steep slopes;
- Agriculture, in particular portions of prime farmland.

The following land uses, natural features, and property types should be considered within the Greenspace Sector:

- Agricultural operations, including equestrian farms
- Public low density recreational facilities
- Future government civic sites
- Significant natural heritage areas
- Natural preserves
- Very low density single-unit and multi-unit housing (the latter as conditional use)

The following summarizes the desired development characteristics within the Greenspace Sector:



Thoroughfare Types		Subdivision Type (see Appendix 2)	Average Built Density
Highway	Not Preferred	Minor Subdivision	1 dwelling unit/1 to 5 acres
Local Street	Limited	Major Subdivision as Conditional Uses (see Note 1)	1 dwelling unit/3 to 7 acres
Public Drive/Path	Permitted	<b>Appropriate Land Use Types</b>	
Private Drive/Path	Permitted	Undisturbed Open Space	Permitted
Pedestrian & Bicycle Trails	Permitted	Conservation Areas	Permitted
Sidewalks	Not Permitted	Parks & Recreation	Permitted
<b>Open Space Types (see Appendix 2)</b>		Agricultural/Viticulture	Permitted
Playground	Not Permitted	Equestrian Facilities	Permitted
Square	Not Permitted	Civic Uses (Government)	Permitted
Park	Permitted	Civic Uses (Includes places of worship)	Permitted
Greenway	Permitted	Single-Unit Residential	Permitted
Green	Not Permitted	Multi-Unit Residential (see Note 2)	Conditional
Greenbelt	Permitted	Commercial/Office	Not Permitted
Agricultural Preserve	Permitted	Retail	Not Permitted
Nature Preserve	Permitted	Mixed Use	Not Permitted
		Industrial	Not Permitted

**NOTE 1: Subdivision conditional use permits will require groundwater hydrologic study/analysis to aid in determining maximum average built density (including average built density decreases) and floor area ratios for non-residential development; NOTE 2: All will require conditional use permit with maximum four (4) dwelling units/acre and requiring groundwater hydrologic study/analysis to aid in determining maximum density**



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

**C. RESTRICTED GROWTH SECTOR (G1)**

The Restricted Growth Sector is usually rural in nature and consists of open space that is valuable as open space, but like the greenspace sector is neither permanently protected from, nor could be permanently protected from development. New community development for this sector is preferred in the pattern of clustered land development, defined as residential neighborhoods, standing free in the countryside.

Large scale subdivision development within this sector should be clustered, while individual development sites should be held to a minimum of 2 acres. This district will also accommodate larger scale commercial agriculture and equestrian facilities.

The following land uses, natural features, and property types should be considered within the Restricted Growth Sector:

- Equestrian facilities
- Moderate density single unit housing
- Clustered subdivision development
- Civic structures
- Low impact commercial/retail uses

The following summarizes the desired development characteristics within the Restricted Growth Sector:



Thoroughfare Types		Subdivision Type (see Appendix 2)	Average Built Density
Highway	Permitted	Minor Subdivision	1 dwelling unit/1 to 5 acres
Local Street	Permitted	Major Subdivision as Conditional Use (see Note 1)	1 dwelling unit/3 to 7 acres
Public Drive/Path	Permitted	<b>Appropriate Land Use Types</b>	
Private Drive/Path	Permitted	Undisturbed Open Space	Permitted
Pedestrian & Bicycle Trails	Permitted	Conservation Areas	Permitted
Sidewalks	Not Preferred	Parks & Recreation	Permitted
<b>Open Space Types (see Appendix 2)</b>		Agricultural/Viticulture	Permitted
Playground	Permitted	Equestrian Facilities	Permitted
Square	Not Permitted	Civic Uses (Government)	Permitted
Park	Permitted	Civic Uses (Includes places of worship)	Permitted
Greenway	Permitted	Single-Unit Residential	Permitted
Green	Permitted	Multi-Unit Residential (see Note 2)	Conditional
Greenbelt	Permitted	Commercial/Office	Permitted
Agricultural Preserve	Permitted	Retail	Permitted
Nature Preserve	Permitted	Mixed Use	Conditional
		Industrial	Conditional

NOTE 1: Subdivision conditional use permits will require groundwater hydrologic study/analysis to aid in determining maximum average built density (including average built density decreases) and floor area ratios for non-residential development; NOTE 2: All will require conditional use permit with maximum eight (8) dwelling units/acre and requiring groundwater hydrologic study/analysis to aid in determining maximum density



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

**D. CONTROLLED GROWTH SECTOR (G2)**

This sector permits cluster, traditional neighborhood (TND), and traditional subdivision development patterns. Development is permitted at slightly higher densities, and it is preferred that residential developments contain some mix of uses in the form of amenities or neighborhood commercial centers. Non-residential development shall be permitted throughout this sector, and where possible, should blend into adjacent residential communities.

Portions of the county located within the controlled growth sector will generally be located close to thoroughfares and key-crossroad locations. As noted above, this sector is where moderate intensity new development is appropriate, and where a majority of the county's new growth should occur.

- The following land uses, natural features, and property types should be considered within the Controlled Growth Sector:
- Traditional subdivision development
- Innovative TND development
- Neighborhood serving commercial
- Retail facilities
- Civic uses
- Light industrial uses



The following summarizes the desired development characteristics within the Controlled Growth Sector:

Thoroughfare Types		Subdivision Type (see Appendix 2)	Average Built Density
Highway	Permitted	Minor Subdivision	1 dwelling unit/acre
Local Street	Permitted	Major Subdivision (see Note 1)	1 dwelling unit/acre
Public Drive/Path	Permitted	<b>Appropriate Land Use Types</b>	
Private Drive/Path	Permitted	Undisturbed Open Space	Permitted
Pedestrian & Bicycle Trails	Permitted	Conservation Areas	Permitted
Sidewalks	Permitted	Parks & Recreation	Permitted
<b>Open Space Types (see Appendix 2)</b>		Agricultural/Viticulture	Permitted
Playground	Permitted	Equestrian Facilities	Permitted
Square	Permitted	Civic Uses (Government)	Permitted
Park	Permitted	Civic Uses (Includes places of worship)	Permitted
Greenway	Permitted	Single-Unit Residential	Permitted
Green	Permitted	Multi-Unit Residential (see Note 2)	Permitted
Greenbelt	Permitted	Commercial/Office	Permitted
Agricultural Preserve	Permitted	Retail	Permitted
Nature Preserve	Permitted	Mixed Use	Permitted
		Industrial	Conditional

NOTE 1: All subdivisions - One dwelling unit/acre maximum built density. However, major subdivisions will require a conditional use permit with a requirement for hydrologic analysis that could reduce average built density below the one dwelling unit/acre maximum and floor area ratios for non-residential development;

NOTE 2: All will require conditional use permit with maximum twelve (12) dwelling units/acre and requiring groundwater hydrologic study/analysis to aid in determining maximum density.



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

**E. INTENDED GROWTH SECTOR (G3)**

The intended growth land use sector includes portions of the county where current development exists, and/or where development of mixed use centers is desired. This land use sector should accommodate higher densities in an effort to facilitate intensive growth which may not be desired in more rural portions of the County.

Development within this sector should aim to improve upon existing development conditions, and mesh with established building form. Portions of the county within this sector should be walkable, and include a variety of community amenities such as civic space, playgrounds, and commercial uses. This sector should exhibit a range of uses that will serve the daily needs of Polk County residents and visitors.

Land situated within the intended growth sector will generally be located within close proximity to concentrations of existing developed land. It is preferred that property within this sector have access to central water and/or sewer service. If services are not available, and a portion of the county fits within this category, provision of service to an area designated as intended growth sector may be established as a priority within the plan. The following land uses, natural features, and property types should be considered within the Intended Growth sector:

- Neighborhood commercial centers
- Mixed use development
- Single- & multi-unit development
- Large retail facilities
- Office space
- Sidewalks
- Restaurants
- All civic uses



The following summarizes the desired development characteristics within the Intended Growth Sector:

Thoroughfare Types		Subdivision Type (see Appendix 2)	Average Built Density
Highway	Permitted	Minor Subdivision	1 dwelling unit/acre
Local Street	Permitted	Major Subdivision (see Note 1)	1 dwelling unit/acre
Public Drive/Path	Permitted	<b>Appropriate Land Use Types</b>	
Private Drive/Path	Permitted	Undisturbed Open Space	Not Preferred
Pedestrian & Bicycle Trails	Permitted	Conservation Areas	Not Preferred
Sidewalks	Permitted	Parks & Recreation	Permitted
<b>Open Space Types (see Appendix 2)</b>		Agricultural/Viticulture	Not Preferred
Playground	Permitted	Equestrian Facilities	Not Preferred
Square	Permitted	Civic Uses (Government)	Permitted
Park	Permitted	Civic Uses (Includes places of worship)	Permitted
Greenway	Permitted	Single-Unit Residential	Permitted
Green	Not Permitted	Multi-Unit Residential (see Note 2)	Permitted
Greenbelt	Not Permitted	Commercial/Office	Permitted
Agricultural Preserve	Not Preferred	Retail	Permitted
Nature Preserve	Not Preferred	Mixed Use	Permitted
		Industrial	Conditional

NOTE 1: All subdivisions - One dwelling unit/acre maximum built density. However, major subdivisions will require a conditional use permit with a requirement for hydrologic analysis that could reduce average built density below the one dwelling unit/acre maximum and/or area ratios for non-residential development; NOTE 2: All will require conditional use permit with maximum twelve (12) dwelling units/acre and requiring a groundwater hydrologic study/analysis to aid in determining maximum density.



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

**F. ADDITIONAL SECTORS**

**1. Development Nodes**

Development nodes are sub-districts that should be situated around key intersections or existing and anticipated concentrations of non-residential and mixed use development. These nodes represent the need for special consideration within the context of the land use planning process. These nodes will serve as commercial/mixed use focus areas. The circular shapes of the nodes are not intended to be applied literally. They are intended to represent a concept or desire to concentrate commercial development in a predominantly nodal fashion. It should be noted that the location and size of the nodes included in the plan are not intended to be static. As the area surrounding the nodes develop, larger node definitions and possibly even shifts in location from one intersection to another may be warranted. In addition, as the development nodes occur, they should be buffered from surrounding uses by office/institutional or other transitional land uses. The exact size of the recommended buffer is not predetermined. The required buffer width should be determined when the ultimate extent of the development node is known. As a result, it will be necessary to periodically revise the future land use map as development continues and patterns change.

Nodes may be placed within portions of the county that do not currently support a significant level of development activity. As progress and development pressure continues, the county may take steps to address the need for small area planning within these nodes. Nodes may either be established as a static district, or be incorporated into the future land use map as an overlay to the underlying base district.

Within the context of the comprehensive plan, once identified, these nodes will be analyzed independently in an effort to address specific needs and development constraints. Ultimately, nodes may require special exceptions with relation to standard zoning regulations to accommodate desired growth patterns and building form. Once defined, the next step in the planning process will be to define the character, demands, and future impact of each node within the context of the surrounding area.

**2. Special Districts**

Special districts should be defined for portions of the county intended to accommodate land use types that do not conform with the underlying base future land use districts. Special districts are intended to provide the county with the option of defining development conditions on a case-by-case basis when deemed necessary. Some land use types that may require delineation of a special district are: heavy industrial uses, industrial parks, school campuses, large infrastructure facilities, and large all-inclusive retail plazas.

It is not necessary that the county define special districts within the comprehensive planning process. This district will enable the county to make future land use map amendments in the future to accommodate unique land use types. Generally, these developments will be conditional in nature, enabling the county to negotiate development requirements.

**G. FUTURE LAND USE ACREAGES**

The land use sectors include the following approximate future land use acreages:

Land Use	Acres	% of Total
Conservation	15,657.5	10.9%
Greenspace	80,225.5	56.0%
Restricted Growth	40,167.5	28.0%
Controlled Growth	5,675.2	4.0%
Intended Growth	362.3	0.3%
Development Nodes	166.1	0.1%
Special Districts	1,054.6	0.7%
	<b>143,308.7</b>	<b>100.0%</b>



**POLK COUNTY VISION PLAN  
SECTION VI FUTURE LAND USE**

Map 24 - Future Land Use



## POLK COUNTY VISION PLAN SECTION VII POLICIES AND IMPLEMENTING ACTIONS

### SECTION VII. POLICIES AND IMPLEMENTING ACTIONS

#### A. INTRODUCTION

One of the major objectives of the 20/20 Vision Plan is to establish policy statements on the land use/quality of life issues that will affect Polk County during the planning period. This section of the land use plan provides goals and implementing actions designed to address land development and growth management issues which have been identified by the Polk County Visioning Committee, county staff, and citizens of Polk County throughout the development of this plan. The policies and implementing strategies are to be applied equally regardless of cultural, economic, or racial composition of the county.

Policy statements will aid Polk County by establishing guidelines for planning endeavors such as re-zoning requests, site plan review, subdivision plat review, zoning text amendments, conditional use permits, and variance requests. The policy statements and recommendations will also assist county officials in making long-range decisions in such areas as environmental management, provision of utilities and other public services, thoroughfare planning, water supply, watershed protection planning, development of economic development policies and strategy, school facility planning, and intergovernmental coordination.

In order to effectively support the policies and strategies included in this plan and achieve the desired land use patterns portrayed on the county's future land use map, numerous specific implementing actions must occur. This section of the plan includes policies and specific implementing

actions for each of the following five areas of concern:

- Land Use Compatibility
- Natural Environment
- Economic Development
- Community Services and Facilities
- Land Use Plan Administration

The responsibility for implementing the recommendations included in this plan rests squarely on the shoulders of the Polk County elected officials. The adoption of this plan is not the end but rather the beginning of a continuous pragmatic process. Polk County has started to feel development pressure. A window of opportunity exists for the county to provide positive direction to development as it occurs. How well this plan serves depends on the quality of the plan and how Polk County officials administer local land use ordinances and capital spending programs. Local administration is often the weakest feature of a county's planning efforts. The creation of a county plan, workable conditions, and capital spending programs is not overly difficult. The true test will come in putting this plan, ordinances, and programs into action on a day-to-day basis. Implementation of the policies contained in this plan will be an ongoing process. Some of the strategies contained in this plan may be implemented in months while others may require years to effectively accomplish. Planning is only as good as the commitment and abilities of the people responsible for implementing the plan.

#### B. LAND USE COMPATIBILITY

Land use compatibility includes multiple interrelated subcategories including:



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### **SECTION VII POLICIES AND IMPLEMENTING ACTIONS**

housing, farmland preservation, office/commercial/industrial land use, public facilities land use, and general/regulatory controls. While these land uses/concerns are interrelated and impact one another, policies are provided for each individual subcategory.

Note: policies and implementing actions are numbered consecutively throughout this document with the letter "P" denoting a policy and the letter "I" denoting an implementing action.

#### **Policies – Housing:**

- P.1 Polk County shall encourage development to occur at densities consistent with this 20/20 Vision Plan.
- P.2 Residential developments in the greenspace and restricted growth areas of the county shall be encouraged to employ cluster development as an environmentally sound, economically cost-effective, and visually attractive alternative to large lot development.
- P.3 Polk County will discourage residential development which will expose residents to the harmful effects of incompatible development or to environmental hazards.
- P.4 Residential developments should be consistent with Polk County's ability to provide services.
- P.5 Polk County will encourage flexible land use planning and development practices to create neighborhoods which better safeguard land, water, and other natural resources.
- P.6 Polk County will discourage all forms of housing development from generating sprawl (see Appendix 2) into the conservation and greenspace land use sectors which would destroy the rural, natural character of the county and make services more costly to homebuyers and taxpayers.
- P.7 Polk County will seek to accommodate the development and

appropriate placement of a variety of housing types in the intended growth and controlled growth sectors, including both single- and multi-family dwelling units.

P.8 Polk County shall discourage residential and commercial strip development along the county's NC and US designated primary roads in the greenspace and restricted growth sectors.

P.9 Polk County considers the provision of affordable housing to be a high residential priority.

P.10 Polk County considers the preservation and expansion of its affordable housing inventory essential to effective commercial and industrial development.

P.11 Polk County supports expansion of affordable housing which meets the special needs of the elderly.

#### **Implementing Strategies - Housing:**

I.1 On October 19, 2009, the Polk County Board of Commissioners initiated the formation of a Polk County Affordable Housing Task Force (AHTF).

Affordable housing is clearly a need in Polk County. This need should be defined as providing housing affordable to the Polk County population and not solely as "public" or subsidized housing. The AHTF can lead the way to affordable housing by studying the problem, assessing the options, and providing specific recommendations.

The AHTF should bring together differing perspectives to identify housing needs, opportunities, and barriers. The AHTF may include representatives of local and state government, the housing sector, businesses, non-profits, school systems, and agriculture.



## **POLK COUNTY VISION PLAN**

### **SECTION VII POLICIES AND IMPLEMENTING ACTIONS**

Implementing actions to be considered by the AHTF may include, but not be limited to, the following:

- Establish affordable housing zoning districts which may include multi-family residential.
- Consider density bonus provisions for affordable housing in the controlled growth and intended growth land use categories. This will allow more compact neighborhoods with lower land and infrastructure costs. Such compact development may require provisions for lot size reductions, below the major subdivision seven (7) acre minimum lot size.
- Consider the need for inter-generational assisted living housing centers/villages.
- Consider options for affordable housing/"starter homes" and senior homes.
- Interview people who appear to be in need of affordable housing to determine their housing requirements and the limitations on their ability to secure adequate housing.
- Establish provisions for mixed residential/non-residential use in the intended growth, development node, and special districts land use categories.
- Consider tax incentive financing of affordable housing.
- Establish a land banking program to acquire individual plots through tax foreclosure. Such properties may be committed to the provision of affordable housing.
- Investigate fund assistance through state/federal and private endowment funding options.
- Consider adaptive re-use of vacant commercial/industrial buildings.
- Consider inclusionary zoning. Inclusionary zoning provides regulations which will increase housing choice by providing the

opportunity to construct more diverse and economical housing to meet the needs of low- and moderate-income families.

- Such regulations may require a minimum percentage of housing for low- to moderate-income households in new housing developments, in conversions of apartments to condominiums, in rehabilitation projects, or in mixed use projects. Inclusionary zoning may require selective reductions in lot sizes, below the major subdivision seven (7) acre minimum lot size.

I.2 Revise the Polk County zoning ordinance to make all major subdivisions conditional uses and not permitted uses-by-right. This will require the establishment of criteria for approval such as: traffic impact, impact on the school system and other county services, lot size considerations, consistency with the 20/20 Vision Plan, impact on county water resources, (including groundwater recharges areas), etc.

I.3 Establish residential zoning districts in the "unzoned" areas of the county. The intended purposes of the districts will be the regulation, location, and size of major subdivisions and not specific use.

I.4 Consider a minimum housing code to ensure that all occupied residential structures are fit for human habitation.

I.5 Revise the manufactured home ordinance to make it more compatible with adjacent properties/development and a more desirable option for affordable housing.

I.6 Establish an abandoned manufactured homes program as authorized by S.L. 2008-136 (H1134). This will require that Polk County state in its comprehensive solid waste management plan its intention to initiate an abandoned manufactured home program and define a written plan to describe its inventory.



## **POLK COUNTY VISION PLAN**

### **SECTION VII POLICIES AND IMPLEMENTING ACTIONS**

#### **Policies – Farmland Preservation:**

- P.12 Polk County considers the preservation of farmland essential to maintaining a strong local economy.
- P.13 Polk County will not support heavy industries which generate air pollution, damage surface and ground water, and have other side effects detrimental to agriculture.
- P.14 Polk County supports development/expansion of the agri-tourism industry.
- P.15 Polk County considers the equine industry essential to the strength of the county's economic future.
- P.16 Polk County will support land use decisions which will protect agricultural lands and encourage new developments to locate near towns and existing subdivisions.
- P.17 Farms (including equestrian farms) and woodlands shall be recognized as an integral part of the county's open space system.
- P.18 New development should not support sprawl from existing municipalities and developed areas extending into the conservation and greenspace land use sectors.
- P.19 Polk County regulatory actions should protect existing agricultural and forestry activities from incompatible land uses.

#### **Implementing Strategies – Farmland Preservation:**

- I.7 Utilize the conservation, greenspace, restricted growth, and controlled growth land use sectors to preserve agricultural lands.
- I.8 Ensure that all zoning decisions and revisions to the future land use map (Map 24) are consistent with policies P.12 to P.19.
- I.9 Revise the Polk County zoning ordinance to support the agricultural

policies and implementing strategies contained in this plan.

- I.10 Consider the impact of zoning and land use decisions on equine activities including but not limited to: loss of passage (trail system), loss of or damage to stabling/ training facilities, and loss of or damage to pasture/fodder lands.
- I.11 Encourage, through educational support, agricultural and forestry management practices (see Appendix 3).
- I.12 Support North Carolina legislative changes which will enable the transfer of development rights as an aid to the preservation of farmland and open space.
- I.13 Pursue grant funds which may assist with the preservation of agricultural lands.
- I.14 Continue to support expansion of voluntary and enhanced voluntary agricultural district areas.
- I.15 Require that all prime farmland soils within the greenspace, restricted growth, and controlled growth land use sectors (see Map 16) be delineated on site plans and major subdivision preliminary plats.
- I.16 Utilize the greenspace land use sector to protect the viticulture corridor along NC 9 from US 74 south to the county line.

#### **Policies – Office/Commercial/Industrial Land Use**

- P.20 Polk County supports the development of commercial nodes. Commercialization should be concentrated in the nodes and not allowed to extend in continuous strips along the county's roads.
- P.21 Polk County supports highway beautification and landscaping of commercial areas.



## POLK COUNTY VISION PLAN SECTION VII POLICIES AND IMPLEMENTING ACTIONS

P.22 Polk County supports the utilization of office and institutional development as a transitional buffer between residential and commercial/industrial uses.

P.23 Polk County supports the recruitment and siting of environmentally compatible light industrial establishments within its borders in areas that are already similarly developed or in public or private industrial parks to minimize the sacrifice of prime agricultural lands and conservation areas for such development.

P.24 Industries which are noxious by reason of the emission of smoke, dust, glare, noise, odor, and vibrations, and those which deal primarily in hazardous products such as explosives, should not be located in Polk County.

P.25 Industry should be located in conformance with this plan. This includes placing emphasis on light industrial development and location in industrial parks.

P.26 Light industrial development is crucial to economic growth in Polk County.

### **Implementing Strategies – Office/ Commercial/Industrial Land Use**

I.17 Implement the following commercial design and locational considerations in review and approval of development proposals:

- Commercial and office development should be located in mixed-use shopping centers and office parks to minimize the proliferation of strip development.
- Mixed-use developments, planned from the outset, which allow for a compatible mixture of uses with a pedestrian scale and design, are encouraged. Similarly, businesses may be located adjoining (and therefore convenient to) an existing residential area, when such businesses can be shown to satisfy design considerations

similar to a newly planned, pedestrian-scaled, mixed-use development.

- Neighborhood and convenience commercial centers should be encouraged to locate at the intersection of primary neighborhood or subdivision streets.
- Highway oriented commercial uses should be clustered along segments of highways and contain land uses which are mutually compatible and reinforcing in use and design; they should be designed in such a way as to minimize signage, access points, and uncontrolled strip development.
- Support developing system(s) of paralleling access roads.
- Commercial uses shall be encouraged to develop by consolidation and expansion of existing property, when such consolidation and expansion does not encroach upon a viable residential area, conservation area, or agricultural area.
- Strip development along the county's major streets and highways shall be discouraged. Existing strip development shall be reduced and/or development standards should be made more restrictive when redevelopment opportunities permit.
- Attractive, environmentally beneficial landscaping shall be provided by new commercial or office developments, and in the rehabilitation and upgrading of existing developments. Effective buffering should be provided when commercial or office development adjoins existing or planned residential uses.
- New or redeveloped commercial development along major county roadways shall be encouraged to retain or create a buffer of trees



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adjoining the road right-of-way. The intent is to retain or create the look of “corridors of trees” along the County’s major travel ways.

- Office and institutional development shall be encouraged to locate as a transitional land use between residential areas and commercial and industrial activities of higher intensity, where appropriate. “Activities of higher intensity” are typically automobile oriented commercial development but may also include heavily traveled thoroughfares.

I.18 Prepare specific development plans for each development node or special district as shown on the Future Land Use Map, when intensive development is initiated (a surge in building permits or rapid increase in acreage included in development proposals). This should be reviewed annually as part of the continuing land use plan administration.

I.19 Support commercial forestry activities, provided significant adverse impacts on natural resource systems are fully mitigated. Such activities should be considered in accordance with the standards and recommendations of the US Forest Service. The County also advocates the voluntary participation of commercial forestry interests in the State of North Carolina’s best management practice program for forestry management.

I.20 Implement the following industrial locational strategies:

- Light industries (lower impact/generally smaller than heavy industry) should have easy access to major transportation facilities and infrastructure but be compatible with nearby residential, agricultural, and conservation areas.
- Industrial development shall

not be located in areas that would diminish the desirability of existing and planned non-industrial areas, nor shall incompatible non-industrial uses be allowed to encroach upon existing or planned industrial sites.

- Industrial development shall be located on land that is physically suitable and has unique locational advantages for industry. Advanced planning for the identification of such land should be encouraged. The special districts land use category may be used for this purpose.
- Industrial uses should be located in or near existing built up areas to take advantage of available services. Careful design and/or buffering shall be required to ensure compatibility with surrounding areas.
- Warehousing, storage, and distribution facilities should have access to appropriate thoroughfares and should be visually buffered according to their location.
- New industrial development should be encouraged to locate in existing and/or planned industrial parks.

I.21 Encourage “knowledge-based” companies to locate within the connectivity corridor of Tryon, Columbus, Mill Spring, NC 9, and US 74 by promoting (through education) the fiber network in the county.

#### **Policies – Public Facilities Land Use**



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P.27 Major extensions of public water service which could encourage scattered development and costly provision of other services should be discouraged.

P.28 Polk County supports directing more intensive land uses to controlled growth, intended growth, development nodes, and special districts that have existing or planned infrastructure.

P.29 Polk County supports efforts and measures to efficiently and economically collect and dispose of solid waste, and supports recycling and the maintenance of recycling centers in locations compatible

P.30 Polk County will support maintaining an adequate transportation network including:

- Maintaining adequate road capacity and minimizing delays due to traffic congestion;
- Maintaining road safety, so that roads are safe for drivers, pedestrians, and bicyclists, as well as the residents and businesses located along the roads;
- Protecting primary road corridors from inappropriate development patterns;
- Protecting scenic road corridors from clearing and encroachment of development.

P.31 Polk County supports cost-effective public transportation.

P.32 Polk County supports implementation of the 2009-2015 North Carolina Transportation Improvement Program (see page IV-2).

P.33 Polk County shall encourage local access street connections between adjoining residential subdivisions which have public roads, and connections between parking lots of adjoining commercial developments.

P.34 Polk County supports the provision of public recreational facilities and will pursue grant funds for recreation facilities.

P.35 Polk County supports programs and efforts to provide an affordable, adequate, and dependable supply of electric power with reserve capacity and looping designs.

P.36 Polk County supports programs and efforts to provide affordable, adequate, and dependable cable television services.

P.37 Polk County supports the expansion of natural gas service within the county.

P.38 Polk County supports the location of commercial wind-driven power generating facilities within the county which comply with the Polk County ~~Mountainside and Ridgeline Protection Ordinance~~ and the county's Tower Ordinance.

P.39 If the NC Department of Environment and Natural Resources approves any package treatment plants, the county requests preparation of a specific contingency plan specifying ongoing private operation and maintenance of the plant detailing provisions for assumption of the plant into a public system or other approved system should private operation fail.

#### **Implementing Strategies – Public Facilities Land Use**

I.22 Support provision and/or expansion of centralized water services when such services:

- Will provide water service to critical public service and health care facilities in Polk County.
- Will result in the development of new or expanded industry and the creation of permanent jobs and salaries at levels commensurate with the level of support required.
- Will encourage a more compact development pattern in areas adjoining existing urban areas,



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thereby conserving farmland and other open spaces.

- Will serve to steer development away from valuable environmental areas, such as floodplains, water supply watersheds, and fragile, highly productive, diverse ecosystems.
- Will comply with the other policies contained in this plan.

I.23 Annually consider water policies to ensure that public/private cooperation in the provision of infrastructure to serve new development is encouraged.

I.24 Prepare, in response to GS 143-355.2, a water shortage response plan which includes tiered levels of water conservation measures based on drought severity.

I.25 Review new proposals against the Future Land Use Map to ensure consistency, when considering new public facilities. If the proposal is inconsistent, the proposal will be revised or the county will review the 20/20 Vision Plan to see if revisions are needed.

I.26 Review of all development proposals will be coordinated with the Polk County School System to determine and mitigate impact(s) on the school system.

I.27 Require that water systems be constructed with lines designed and sized for adequate fire protection and sufficient water pressure.

I.28 Consider the adoption of a local ordinance requiring water-conserving plumbing fixtures in all new construction.

I.29 Adopt a water utilities ordinance to require developers to extend water lines to subdivisions in intended growth and controlled growth land use sectors.

I.30 Provide sufficient emergency management facilities to adequately serve the projected population growth.

I.31 Implement the following in support of bikeways and pedestrian paths/trails:

- Encourage appropriate thoroughfares (state-maintained roads) to include bike lanes as they are designed and expanded, especially along routes providing access to schools.
- Support the NCDOT Safe Routes to School initiative for community greenways, walkways, and bikeways.
- Coordinate efforts for construction of bike and pedestrian paths with county and municipal park systems.
- Include bike and pedestrian trails at all county parks.
- Consider securing access to and provide for natural low-impact bike and pedestrian trails along rivers and streams.
- Consider developing requirements for bikeways and pedestrian paths to access schools and other key destination points where practicable (see I.45).

I.32 Coordinate all proposed development with the 2009-2015 Transportation Improvement Program (see page IV-2).

I.33 Coordinate transportation considerations with the Isothermal Rural Planning Organization (RPO).

I.34 Consider impacts on all significant historic sites during the county's review of all development proposals (see Map 7, page IV-3, and page IV-43, Historic Sites)

I.35 Make all Polk County locational decisions for community facilities in consideration of the facility impact on adjacent land uses and infrastructure capacity for support including the water system and transportation system.

I.36 Support development of the Isothermal Regional Trail System Plan and coordinate local trail system planning with the regional plan.



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I.37 Annually review threshold performance standards (see Appendix 4) to ensure consistency with current community facilities capabilities.

I.38 Require that all necessary infrastructure firefighting capability/capacity be provided in new subdivisions and non-residential developments.

I.39 Coordinate housing code enforcement/redevelopment projects with the NC Division of Archives and History to ensure that any significant architectural details or buildings are identified and preserved consistent with the right of the property owner to maintain, modernize, and improve the property (see I.4).

### **Policy – General/Regulatory:**

P.40 It is Polk County's policy to support the following growth principles in the establishment and implementation of its land use regulatory documents:

- Encourage compact building design in the controlled growth and intended growth land use categories.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, farmland, natural beauty, and critical environmental areas.
- Strengthen and direct developments towards existing communities.
- Encourage community and stakeholder collaboration in development decisions.
- Provide locations to support broad-based economic development.
  - Encourage historic preservation.

### **Implementing Strategies – General/Regulatory:**

I.40 Revise the Polk County zoning ordinance to support implementation of the Polk County 20/20 Vision Plan, to include the following:

- Expand the ordinance to provide county-wide zoning.
- Redefine the zoning districts to be supportive of the 20/20 Vision Plan land use categories.
- Incorporate changes to support/accommodate affordable housing.
- Require buffers/transition areas between residential and nonresidential development.
- Improve/strengthen zoning regulations to protect agricultural and forestry use, including the county's farmland preservation ordinance.
- Coordinate open space preservation (coordinate with Future Land Use Map).
- Include low impact development standards to address stormwater impacts.
- Provide for residential/nonresidential mixed use zoning.
- With the exception of the conservation sector (which excludes major subdivisions), require conditional use permits for all major subdivisions in all land use sectors. Conditional use permit issuance shall require: (1) hydrologic analysis to aid in determining lot size and floor area ratios for non-residential development; (2) traffic impact analysis; (3) impact on surrounding area/county; and (4) demand(s) for services/facilities.
- Revise the zoning map to accomplish greater consistency with the Future Land Use Map.
- Stop the proliferation of residential lots stripped along major



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highways.

- Encourage commercial development to locate in clusters/nodes, special use districts and intended growth and controlled growth land use categories.
- Incorporate commercial off-street parking requirements which encourage (1) parking to be located to the side or rear of businesses, and (2) adjoining parking lots to be connected.
- Incorporate/coordinate with the voluntary agricultural district program and encourage its expansion.
- Provide specific site design requirements for nonresidential land use.
- Establish a conservation zoning district designed to protect the conservation areas depicted on the future land use map.
- Establish commercial building design standards.
- Incorporate provisions addressing "big box" developments.
- Establish conditional use permit requirements to address scattered commercial, office, retail, and mixed use in the greenspace land use sector.
- Establish conditional use permit requirements for multi-unit residential development.
- Encourage mixed land uses in the intended growth, controlled growth, special districts, and development node land use sectors.
- Incorporate subdivision access road requirements which require grades/slope acceptable for adequate emergency vehicle access.
- Create distinct zoning districts with different densities to curtail sprawl (see Appendix 2).

I.41 Consider adoption of performance standards to coordinate development with the availability of infrastructure and

services (see Appendix 4 for an example).

I.42 Allow/encourage cluster development or consider establishment of Polk County Land Preservation Districts in the greenspace and restricted growth land use sectors (see Appendix 5).

I.43 Revise the Polk County Subdivision Ordinance to accomplish the following:

- Require that interior subdivision road systems in major subdivisions provide vehicular access to lots abutting primary roads.
- For conditional use permit approval, require expanded impact statements (including traffic impact) for all major subdivisions. NOTE: Minimum lot numbers may be established to "trigger" the environmental impact requirement. Specific impact statement requirements will need to be defined.
- Encourage road interconnectivity of subdivisions in the controlled growth, intended growth, development nodes, and special districts land use sectors.
- Where practical, make subdivisions "walkable" communities including coordination with and access to existing Polk County trail systems.
- Provide specific stream protection requirements through vegetative buffering.
- Require tree preservation plans for all major subdivisions. Emphasis shall be placed on preserving trees along roadways.
- Consider impact on prime agricultural lands.

I.44 Establish a development proposal (site plans and subdivision plats) technical review committee. This committee should include, at a minimum, the Polk County Agricultural Economic Development Director and representatives of all emergency service providers.



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I.45 Prepare a comprehensive county-wide pedestrian trail/walkway/ bicycle plan. This plan should:

- Address the appropriate utilization of abandoned rail lines in the county;
- Emphasize the use of natural corridors such as streams and floodplains;
- Emphasize man-made corridors such as utility and transportation rights-of-way and easements;
- Be coordinated with the Isothermal Regional Trail System Plan.

I.46 Update the Polk County Recreation Plan.

I.47 As necessary, revise/update the Polk County ~~Mountainside and Ridgeline Protection~~ Ordinance and the Polk County Tower Ordinance.

#### C. NATURAL ENVIRONMENT

The natural environment policies and implementing strategies address the county's natural assets and conditions. These policies and strategies focus on the environmental factors section of this plan, Section IV (pages IV-22 to IV-43). Implementation of these policies and strategies is crucial to the sound economic/cultural development of the county and preservation of the county's environment.

##### Policies:

P.41 Polk County supports preservation of its rural atmosphere.

P.42 Polk County considers the protection of its natural assets to be crucial to the preservation of the county's overall quality of life.

P.43 Polk County supports efforts to maintain and enhance public and private gamelands, including habitat protection and management.

P.44 Polk County shall take no action which would irreparably harm the long term viability to valuable natural heritage areas and conservation areas in the county (see Map 17, page IV-40 and Map 18, page IV-42). If action must be taken to achieve public health, safety, and welfare objectives, project designs shall seek to incorporate features which preserve and protect natural features as an integral part of the project design.

P.45 Polk County supports the regulation of development in floodprone areas (see Map 14, page IV-34).

P.46 Polk County supports the preservation of prime farmlands (see Map 16, page IV-39) as both natural and economic assets.

P.47 Polk County supports protection of its ridgeline areas as a valuable aesthetic, natural, and economic resource.

P.48 Polk County will continue to support a proactive role in the development of stormwater management and design standards intended to protect the quality of the county's streams and rivers.

P.49 Polk County will support reducing soil erosion, runoff, and sedimentation to minimize the adverse effects on surface and subsurface water quality.

P.50 Polk County supports federal, state, and local efforts to protect the quality of surface area waters, whether such protection involves controls over point source discharges, surface runoff, or other appropriate means, including upstream activities.

P.51 Polk County will support local sedimentation and erosion control standards which may exceed minimum state requirements.

P.52 Polk County recognizes the value of water quality maintenance to the protection of fragile areas and supports the control of stormwater runoff to aid in the preservation of water quality. The



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county will support existing state regulations relating to stormwater runoff resulting from development. The county also supports development of more stringent impervious surface requirements based on the following DWQ findings:

- Areas with impervious surfaces of 10% or greater can be linked to local stream degradation.
- Biological diversity has been shown to drop when impervious surfaces increase beyond 10-15%.
- Stream stability is affected when impervious surfaces approach 10% in an area.
- Estuaries generally degrade with impervious surfaces of 10% or greater.
- Sensitive fish species loss increases after about 12% impervious surface.

P.53 Polk County supports the maintenance of vegetative buffers along its streams and rivers with the intent of reducing the flow of nutrients and other contaminants into the county's surface waters.

P.54 Polk County supports a long-term sustainable ground water supply.

P.55 Polk County's groundwater resources shall be recognized as an invaluable source of public and private potable water and shall receive the highest level of protection when considering county policies, standards, and actions.

P.56 Polk County supports low impact development (LID).

NOTE: LID is an ecologically friendly approach to site development and stormwater management that aims to minimize development impacts to land, water, and air. The approach emphasizes the integration of site design and planning techniques that conserve natural systems and hydrologic functions on a site. Low

impact development is not a land use control, but a management and design strategy that is integrated into the proposed land use. It has also been shown to decrease costs to developers and to increase the desirability and value of the property. LID practices can also benefit the environment by helping maintain the integrity of a natural ecosystem and protecting water quality.

P.57 Polk County opposes the disposal of any toxic wastes, as defined in the US Environmental Protection Agency's Listing of Hazardous Substances and Priority Pollutants (developed pursuant to the Clean Water Act of 1977), within its planning jurisdiction.

P.58 Polk County supports regulation of underground storage tanks in order to protect its groundwater resources.

P.59 Polk County supports the policy that all State of North Carolina projects should be designed to limit to the extent practicable storm-water runoff into public waters.

P.60 Polk County supports protection of those waters known to be of the highest quality or supporting biological communities of special importance.

P.61 Polk County will support septic systems approved by the Polk County Health Department and package treatment plants approved by the NC Department of Environment and Natural Resources (see P.39).

#### **Implementing Strategies:**

I.48 Revise the Polk County zoning and subdivision ordinances in order to improve water quality (see I.40 and I.43), to include the following:

- Incorporate LID standards.
- Protect sensitive natural areas.
- Establish buffer networks.
- Minimize impervious cover in site



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design.

- Limit erosion during construction.
- Restoration of impaired waters.
- Management of the cause and sources of pollution to ensure the protection of receiving waters.
- Encourage/require water harvesting devices, such as cisterns and rain barrels.

I.49 Prepare nuisance ordinances which include consideration of underground chemical and petroleum products storage regulations to ensure a minimum of risk to local groundwater resources.

I.50 Implement a public awareness/education program which supports the following water quality and water conservation related actions:

- Plant during the spring and fall when the water requirements are lower.
- Use a layer of organic mulch around plants to reduce evaporation.
- Divide watering cycles into shorter periods to reduce runoff and allow for better absorption.
- Only water lawns when needed.
- Adjust lawn mowers to a higher setting. Longer grass shades root systems and holds soil moisture better than a closely clipped lawn.
- Use porous materials for walkways and patios to keep water in the yard and prevent wasteful runoff.
- Direct downspouts and other runoff towards shrubs and trees, or collect and use water in gardens.
- Limit watering of lawns to no more than one inch of water per week.
- Reduce the amount of grass in yards by planting shrubs, and organic ground cover.
- Do not water lawns on windy days.
- When watering grass on steep slopes, use a soaker hose to prevent wasteful runoff.
- While fertilizers promote plant growth, they also increase water consumption. Apply the minimum

amount of fertilizer needed based on soil test.

- When adding or replacing a flower or shrub, choose a low water use plant for year-round landscape color.
- Landscape with native vegetation trees, plants, and groundcovers.
- Water only as rapidly as the soil can absorb the water.

I.51 Utilize the future land use map as a development management tool to protect valuable resources. The map is coordinated with the land suitability map (Map 19).

~~I.52—Utilize the Mountainside and Ridgeline Protection Ordinance to regulate ridge development.~~

I.53 Work with economic development agencies to promote reuse of abandoned commercial and industrial sites, and to explore funding opportunities for brownfield site cleanup and redevelopment.

I.54 Consider adoption of a local stormwater control ordinance which would assume responsibility for stormwater regulation at the county level.

I.55 Require that subdivision and commercial development impact statements (see I.43) include a requirement that the statement clearly define that adequate groundwater resources are available to support the development if Polk County public water service is not available. In addition, the impact statement should address effects of development on groundwater recharge. Such water resource analysis should be performed by a qualified engineer/hydrologist.

I.56 Consider the following groundwater sustainability effects on runoff and recharge when reviewing development proposals:



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- High intensity storm - greater runoff, less recharge.
- Forest vegetation - less runoff, more recharge.
- Meadow, farmland – moderate runoff, moderate recharge.
- Lawns, disturbed/compacted open areas – greater runoff, less recharge.
- Sloped settings – greater runoff, less recharge.
- Impervious cover (roads, rooftops, etc.) – High runoff, little recharge.
- 

I.57 Support the mapping of water supply wells throughout the county.

I.58 Require groundwater recharge areas for major subdivisions (coordinate with I.2).

I.59 Consider forming a Groundwater Sustainability Committee to advise the county and other stakeholders on this issue. The Committee would be responsible for fleshing out the key technical questions facing the county, determining whether adequate data exist to answer these questions and, if not, the specific data that are needed and recommendations on how to collect these data (grant funds, volunteers, existing government, academic, or community organizations, etc.). The Committee might also research the approaches taken by other counties and make recommendations to the county commissioners accordingly.

I.60 Support the protection of natural heritage and other natural resource areas through easements and outright acquisition by private entities and state/federal agencies. This will be emphasized in the conservation and greenspace land use sectors.

I.61 Consider establishing a County Conservation Fund to support the acquisition of conservation properties and/or easements.

I.62 Support the development of a management plan for utilization of the Green River from Lake Adger to the Broad River.

#### **D. ECONOMIC DEVELOPMENT**

The economic development policies and implementing strategies address the economic concerns identified in this plan and support both the Economic Development Strategic Plan for the Economy of Polk County, North Carolina, May 1, 2006, and the Isothermal Planning Region's Comprehensive Economic Development Strategy, July 2008. The economic policies and strategies stated in this plan seek to achieve a mutually beneficial balance between preservation of natural assets and economic growth.

#### **Policies:**

P.62 Polk County supports the development of the county's education system to produce a skilled workforce appropriate for county needs.

P.63 Polk County supports a competitive environment for agriculture/ viticulture, cultural, and equestrian activities to maintain the rural flavor of Polk County.

P.64 Polk County supports efforts of the Isothermal Planning and Development Commission to diversify the manufacturing community in the county and the region.

P.65 Polk County supports development of new businesses which will create new products, new processes, and new business models.

P.66 Polk County supports a more diversified economic base including development of health care services.

P.67 Polk County considers local entrepreneurship to be crucial to a stable local economy.



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P.68 Polk County will give preference to “clean” industries/businesses including eco- and agri-tourism.

P.69 Polk County supports efforts to improve overall community appearance as an aid to industrial/business recruitment.

#### Implementing Strategies:

I.63 Assist the Polk County Economic Development Council (EDC) with its efforts to develop a National Equine Center.

I.64 Support the efforts of the EDC to improve and expand its Certified Entrepreneurial Community Program which provides start-up and continuing operational guidance and data resources to entrepreneurs and small businesses.

I.65 Support development, through the EDC, of an affordable housing center/program to study, design, and build affordable housing. This effort would result in local and regional affordable housing benefits.

I.66 Support the EDC’s efforts to develop a job creation strategy focusing on agriculture, tourism, and health care. These segments of the economy have numerous economic multipliers including retail sales, equine hospital, education programs, renewable energy supply chain companies, restaurants, and lodging.

I.67 Develop, in concert with St. Luke’s Hospital and the St. Luke Hospital Foundation, a health care provider recruitment plan.

I.68 Develop, in concert with the EDC, a “green” industrial park which should be located in a special district land use sector.

I.69 Support the EDC’s efforts to accomplish the following:

- Target and recruit companies specializing in equestrian and cultural based manufacturing, including research and

development and field-testing operations.

- Focus recruiting campaign efforts to small to medium enterprises (\$2-10 million dollar companies).
- Encourage the enhancement of veterinary sciences and services in the county by actively working to foster a relationship with institutes of higher learning in North Carolina (and the region, GA, SC and TN) by partnering with university networks to create distance learning opportunities at the Polk Campus of Isothermal Community College and other facilities in the county.
- Actively recruit and retain a younger workforce to the county by enhancing nature-based recreation opportunities in the county and by adopting a younger more contemporary aesthetic to publications targeted to this audience.
- Use a broad based incentives grants program to create conditions in the county that support private investment in developing suitable buildings for light manufacturing consistent with the rural character of the county.
- Enhance the county leisure activity infrastructure by encouraging private investment in the leisure-based industry.
- Encourage agricultural industries including research and development, hydroponics, and nursery-based crops throughout the county.
- Encourage native tree and shrub production programs on traditional farm properties no longer in production.
- Develop a comprehensive county-wide farmland preservation management plan that includes utilizing farm based support industries suitable for future recruitment such as farm



## **POLK COUNTY VISION PLAN**

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equipment manufacturing, farmland research management and testing equipment manufacturing, and natural resource management testing Identify and recruit heritage based service industries in fields which include: wayfinding and signage manufacturing, recreational equipment and furnishing manufacturing, arts and crafts based manufacturing, toy and other educational manufacturing including digital and data based research and development.

- Actively encourage private investment in hospitality based industry development (including but not limited to conference and retreat based enterprises) through planning and partnering with the private sector on infrastructure development.
- Develop and enhance regional clustering of senior services and healthcare management services including retirement, financial management services, and banking.

I.70 Support the Polk County Community Appearance Commission, which focuses on:

- Community appearance education.
- Roadside litter pick-up.
- Community appearance as an industry/ business recruitment tool.
- Recruitment of volunteers for community appearance efforts.
- Overall aesthetics in the county, including the consideration of the specific goals set forth in Appendix 7.

#### **E. COMMUNITY SERVICES AND FACILITIES**

The community services and facilities policies and implementing strategies are intended to address support for Polk County's population and its economic community. These policies/strategies respond to Section IV, Environment/ Existing Conditions and Section V, Polk Projections/Future Demand. Adequate community services and facilities are essential to maintaining a high quality of life in Polk County.

##### **Policies:**

P.70 Polk County supports the mission of Isothermal Community College in meeting the educational and job readiness requirements of county residents.

P.71 Polk County supports the efforts of the county's libraries in fostering the development of a literate and well-informed resident population.

P.72 Polk County supports intergovernmental cooperation with its municipalities for the provision of community facilities and services.

P.73 Polk County will continue to support the art community in its efforts to expand cultural opportunities.

P.74 Polk County supports efforts, initiatives, and programs – both public and private – that provide new buildings and facilities, or serve to make existing buildings and facilities accessible and available to physically challenged persons.

P.75 Polk County supports efforts and initiatives to provide quality, affordable health care to its citizens and the continued effective operation of the Polk County Health Department.

P.76 Polk County supports improvement and expansion of fire protection and emergency management services including fire/rescue services.



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P.77 Polk County supports efforts, programs, laws, and regulations that create a safe, crime free environment for its citizens and visitors.

P.78 Polk County supports a comprehensive recreational program to provide a broad range of recreational facilities for its citizens.

P.79 Polk County supports future park development and open space preservation which will provide for the distribution of recreation and open space opportunities within the county.

#### **Implementing Strategies:**

I.71 Consider the multiple objectives of natural area conservation, visual enhancement, promotion of cultural and historic preservation, watershed and floodprone area protection in determining future sites for park, recreation, and water access facilities.

I.72 Continue to work cooperatively with the county school system to maximize the use of recreation facilities located at existing public school sites, and to foster the joint development of additional public park facilities at new public school sites.

I.73 Prepare and update annually a capital facilities improvements plan (CIP).

I.74 Seek state and federal technical and financial assistance to provide facilities for physically challenged persons.

I.75 Investigate, with the Institute of Government, the use of impact fees as a way of making new development pay for the services demanded.

I.76 Seek educational grants to subsidize in-county continuing education by nearby colleges and universities and support community education programs.

I.77 Coordinate development in the county's jurisdiction with that contained in

municipal jurisdictions by supporting the following:

- Coordinate with municipalities to ensure that municipality and county decisions regarding the type and intensity of land uses within and adjacent to the municipal planning areas are consistent with the Future Land Use Map.
- Coordinate with the municipalities to ensure that all new development requiring wells and/or on-site wastewater systems will not be permitted in designated municipal service areas, whenever practicable.
- Seek mutually acceptable standards for public facilities, infrastructure, and other services with the municipalities to ensure that services can be provided relatively seamlessly across jurisdictional boundaries.
- Coordinate municipal capital improvements plans with those of the county and other service providers to more efficiently serve the county residents/ businesses.

I.78 Support the following St. Luke's Hospital expansion/service plans:

- Phase I
  - Enlarge orthopedic office space.
  - Add physician office technology for in-office x-ray review.
  - Add electronic surgery scheduling system.
  - Add medical/dental clearance on site.
  - Enhance customer service, marketing, and public relations.
  - Add C Arm Fluoroscopy (x-ray) technology.
- Phase II
  - Construct six post-surgical inpatients rooms to enhance patient safety, outcomes, and comfort, including accommodation for private baths with ADA



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accessibility and square footage reflective of current hospital design standards.

- Total anticipated construction is approximately 5,000 square feet within existing hospital structure.
- Phase III
- Construct operating rooms with sub-sterile room, pre-operative and recovery spaces to accommodate current generation technology for all surgical procedures, including orthopaedics.
- Build shell for future rehabilitation space.
- Phase IV
- Construct rehabilitation therapy space.
- Install elevator.
- Renovate final two patient rooms.
- Phase V
- Construct on-campus addition of new Medical Office Building (approximately 10,000 square feet) to house physicians along with Rehabilitative Services for seamless, integrated care.

This multi-phase program will be completed sequentially and does not have a specific timeframe. The anticipated total to complete all five phases is \$7.8 million.

I.79 Support development of the following community facilities as fiscal resources permit:

- Expansion of the Polk County water system (see Section V, pages V-11 to V-15).
- Construction of a new Department of Social Services building.
- Construction of a mental health services facility.
- Expansion/improvement of school facilities.
- Improvements to the Isothermal Community College facilities.
- Continued development of the Senior Center and adult day care facilities.

I.80 Support the preparation of a county-wide historic sites survey.

#### **F. LAND USE PLAN ADMINISTRATION**

This land use plan must be utilized in the county's day-to-day decision-making processes. If it is not, the time and money invested in the preparation of this document will have been wasted. The impact of deviations from the guidance offered by this plan should be carefully considered. This is an integrated document and changes to one "part" may affect the whole.

This plan provides the framework upon which zoning and subdivision regulations and the capital improvements program should be based. In fact, the preparation of a land use plan and map is mandated by legislation as a prerequisite for zoning. North Carolina General Statute 153A-341 states the following about the purpose for land use plans:

"Zoning regulations shall be made in accordance with a comprehensive plan. Prior to adopting or rejecting any zoning amendment, the governing board shall adopt a statement describing whether its action is consistent with an adopted comprehensive plan and explaining why the board considers the action taken to be reasonable and in the public interest. That statement is not subject to judicial review.

The Planning Board shall advise and comment on whether the proposed amendment is consistent with any comprehensive plan that has been adopted and any other officially adopted plan that is applicable. The Planning Board shall provide a written recommendation to the Board of County Commissioners that addresses plan consistency and other matters as deemed appropriate by the Planning Board, but a comment by the Planning Board that a proposed amendment is inconsistent with



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the comprehensive plan shall not preclude consideration or approval of the proposed amendment by the governing board.

Zoning regulations shall be designed to promote the public health, safety, and general welfare. To that end, the regulations may address, among other things, the following public purposes: to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; and to facilitate the efficient and adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. The regulations shall be made with reasonable consideration as to, among other things, the character of the district and its peculiar suitability for particular uses, and with a view of conserving the value of buildings and encouraging the most appropriate use of land throughout the County. In addition, the regulations shall be made with reasonable consideration to expansion and development of any cities within the County, so as to provide for their orderly growth and development.”

Specifically, in implementing this plan, the following should serve as guiding land use/planning principles:

- Consider the future land use map as part of the policies included in this plan.
- Consult the 20/20 Vision Plan, including the future land use map, during the deliberation of all re-zoning requests and proposed text amendments, as required by NCGS 153A-341.
- Consider the following in deliberation of all zoning petitions:
  - All uses that are allowed in a zoning district must be considered. A decision to re-zone or not to re-zone a parcel or parcels of property cannot be based on consideration of only one use or a partial list of

the uses allowed within a zoning district.

- Requests for zoning changes should not be approved if the requested change will result in spot zoning. Spot zoning is a form of discriminatory zoning whose sole purpose is to serve the private interests of one or more landowners instead of furthering the welfare of the entire community as part of an overall zoning plan. Spot zoning is based on the arbitrary and inappropriate nature of a re-zoning change rather than, as is commonly believed, on the size of the area being re-zoned.
- Zoning which will result in strip development should be discouraged. Strip development is a melange of development, usually commercial, extending along both sides of a major street. Strip development is often a mixture of auto-oriented enterprises (e.g., gas stations, motels, and food stands), and truck-dependent wholesale and light industrial enterprises along with the once-rural homes and farms that await conversion to commercial use. Strip development may severely reduce traffic-carrying capacity of abutting streets by allowing for excessive and conflicting curb cuts.
- The concept of uniformity should be supported in all zoning deliberations. Uniformity is a basic premise of zoning which holds that all land in similar circumstances should be zoned alike; any different circumstances should be carefully balanced with a demonstrated need for such different treatment.
- Zoning regulations should be made in accordance with this 20/20 Vision Plan.
- Specifically, the Planning Board and Board of Commissioners



## **POLK COUNTY VISION PLAN**

### **SECTION VII POLICIES AND IMPLEMENTING ACTIONS**

should ask the following questions:

- Is the request in accordance with this plan?
- Will the request have a serious adverse impact on traffic circulation, water services, and other infrastructure?
- Will the request have an adverse impact on other county services, including police protection, fire protection, or the school system?
- Is there a good possibility that the request, as proposed, will result in lessening the enjoyment or use of adjacent properties?
- Will the request, as proposed, cause serious noise, odors, light, activity, or unusual disturbances?
- Does the request raise legal questions such as spot zoning, hardship, or violation of precedents?
- Does the request adversely impact water quality or other natural resources?

Polk County will utilize the following additional tools to implement this plan:

- Conduct annual training sessions for the Polk County Planning Board and Board of Adjustment.
- The Planning Department staff, in concert with the Planning Board, shall prepare an annual report assessing the effectiveness of plan implementation. This report shall be presented to the Board of Commissioners.
- At a minimum, update the 20/20 Vision Plan every two years.
- At least annually, conduct a joint meeting of the Polk County Board of Commissioners and the county's Planning Board to identify planning issues/needs.

- Annually review the county's existing land use related regulatory ordinances to ensure their consistency with the recommendations of this plan and the evolving nature of the county.

Citizen participation was instrumental in the preparation of this plan and should be an ongoing process. At the outset of the preparation of this plan, Polk County adopted a citizen participation plan. A copy of that plan is included as Appendix 6. Following adoption of this plan, Polk County will implement the following to ensure adequate continuing effective citizen participation:

- Encourage public participation in all land use decisions and procedure development processes and encourage citizen input via its boards and commissions.
- Publicize all meetings of the county's Planning Board and Board of Adjustment through newspaper advertisements and public service announcements.
- Utilize advisory committees to assess and advise the county on special planning issues/needs.
- All Planning Department activities will be available on the county's website. The site will include this plan.
- Ensure that the membership of all planning related and ad hoc advisory committees has a broad cross section of the county's citizenry.



## POLK COUNTY VISION PLAN APPENDIX I - PCENSUS SUMMARY

### Appendix 1 PCensus Summary

PCensus is a geographic information software tool that gives access to detailed demographic information for any location in the United States, including Census data, current and future year estimates.

PCensus allows the user to define a geographical area such as a county, a neighborhood, a circular area, or an arbitrary boundary to create a detailed report of its demographic characteristics.

#### Data Sources Include:

- 2000 Census: Summary Files 1 & 3

The summary File 1 (SF1) contains 286 detailed tables focusing on age, gender, race, and housing units.

The Summary File 3 (SF3) database consists of over 813 detailed tables of social, economic and housing characteristics compiled from a sample size of 19 million housing units.

- Applied Geographic Solutions (AGS): Core Demographics

The AGS database includes a wide range of core demographic variables for 1980, 1990, and 2000 censuses, the current year and for 5-year projections, covering five broad topic areas: population, households, income, labor force, and dwellings. The current year estimates and projections series make use of extensive base Census information from the 2000 Census Summary File 1 & Summary File 3 data as well as results from the American Community Survey (ACS).

The AGS dataset allows the PCensus user to extract Census, current year, and projection data from user-defined geographic boundaries. Rather than using the year 2000 predefined census boundaries, data was extrapolated from political boundaries in their current state. More importantly, this allows the user to identify and delineate boundary areas that are not available in a predefined format. For example, Census boundaries do not provide an area for the unincorporated portion of the county. This also allows the user to define the geographic area considered in the Polk Economic Impact Area. This may lead to slight discrepancies in past Census figures. For example, Tryon's 2000 predefined Census population is 1,799 while the user-defined corporate limit boundary yields a population of 1,774 for the year 2000. This results in a 1% margin of error, but more importantly allows for the proper demarcation of the current political boundaries in an effort to arrive at the most accurate present and projected figures.



## **POLK COUNTY VISION PLAN APPENDIX 2- DEFINITIONS**

### **Appendix 2 Definitions**

#### **Agricultural Preserve**

Open spaces designated as agricultural preserves shall be used for active farming in the form of crop cultivation, the keeping of livestock, or equestrian facilities. Agricultural preserves are encouraged to protect areas of agricultural and rural heritage and promote compatible active agricultural operations.

#### **Bona Fide Farm**

The production and activities relating or incidental to the production of crops, fruits, vegetables, ornamental and flowering plants, dairy, livestock, poultry, and all other forms of agricultural products having a domestic or foreign market.

#### **Cluster Development**

A development design technique that concentrates buildings in specific areas on a site to allow remaining land to be used for recreation, common open space, or the preservation of historically or environmentally sensitive features.

#### **Conditional Use**

A use permitted in a particular zoning district after the County holds a public hearing and determines that the use in a specified location complies with certain findings of fact as specified in the County's Zoning Ordinance.

#### **Development**

Anything which disturbs the natural landscape. To construct or alter a structure, to make a change in use or the appearance of and/or to divide land into parcels.

#### **Freeboard**

A flood protection elevation requirement designed as a safety factor which is usually expressed in terms of a certain amount of feet above a calculated flood level.

#### **Green**

A green is an open space in a built up area which is more natural. Like the square, it is small and surrounded by buildings. Unlike the square, it is informally planted and may have irregular topography. Greens are usually landscaped with trees at the edges and open lawns at the center. Greens should contain no structures other than benches, pavilions, and memorials; paths are optional.

#### **Greenbelt**

Greenbelts run along the perimeter of a neighborhood, and serve to buffer a neighborhood from surrounding non-compatible uses such as a highway corridor or industrial district, or a developed area from agricultural areas or adjacent towns. Greenbelts differ from the other types of open spaces in that they are left natural, and are not intended for recreational use.

#### **Greenway**

Greenways are large, irregular open spaces designed to incorporate natural settings such as creeks and significant stands of trees within and between neighborhoods. Greenways are typically more natural and may contain irregular topography. Greenways shall be used for certain active recreational uses



## **POLK COUNTY VISION PLAN APPENDIX 2- DEFINITIONS**

including, at a minimum, trails for walking, jogging, or biking. Greenways shall connect points of interest in the community such as schools, parks, and other civic uses.

### **Heavy Industry**

A use engaged in the basic processing and manufacturing of materials or products predominately from extracted or raw materials, or a use engaged in storage of or manufacturing processes using flammable or explosive materials, or storage or manufacturing processes that potentially involve hazardous or commonly recognized offensive conditions.

### **Household**

A household includes all people who occupy a housing unit as their usual place of residence.

### **Impervious Surface**

Any structure, material or ground cover consisting of, but not limited to, asphalt, concrete, stone, brick, terrazzo, roofing, ceramic tile or any other natural or man-made material that prevents the absorption of surface water into the soil.

### **Light Industry**

A use that involves the manufacturing, production, processing, fabrication, assembly, treatment, repair, or packaging of finished products, predominantly from previously prepared or refined materials (or from raw materials that do not need refining). Warehousing, wholesaling, and distribution of the finished products produced at the site is allowed as part of this use. Light Industry is capable of operation in such a manner as to control the external effects of the manufacturing process, such as smoke, noise, soot, dirt, vibration, odor, etc.

### **Nature Preserve**

Open spaces designated as nature preserves shall be left largely undisturbed except for the optional clearing of underbrush for the provision of a walking trail (mulch or other natural material only). Nature preserve areas are encouraged to protect large stands of trees, wildlife, and natural water features. Nature preserves are the preferred form of open space for steep slopes in excess of 25% grade.

### **Park**

Parks may be designed for passive and/or active recreational use. Parks shall be bounded by streets on a minimum of 10% of their perimeter. Large parks should create a central open space which services an entire neighborhood or group of neighborhoods; or incorporates physical features which are an asset to the community (i.e., lake or river frontage, high ground, significant stands of trees). Undergrowth should be limited and landscaping shall be installed in a manner that promotes attractiveness and safety. Parks may be combined with greenways and greenbelts and may include golf courses and community gardens.

### **Playground**

Playgrounds are for active recreational use and provide sunny and shaded play equipment and play areas for children as well as open shelter with benches. Playgrounds may be part of other types of open space, such as parks, or may stand alone.



## **POLK COUNTY VISION PLAN APPENDIX 2- DEFINITIONS**

### **Quasi-Judicial Decisions**

Those zoning decisions that require the finding of facts and the application of standards that involve judgement and discretion. Examples include special and conditional use permits and variances.

### **Sprawl**

The process by which the spread of development across the landscape far outpaces the population growth. The landscape sprawl creates has four dimensions: (1) a population that is widely dispersed in low-density development; (2) rigidly separate homes, shops, and workplaces; (3) a network of roads marked by huge blocks and poor access; and (4) a lack of well-defined thriving activity centers such as commercial/service centers. Most other features usually associated with sprawl (e.g., the lack of transportation choices, relative uniformity of housing options, or the difficulty of walking) are the results of these conditions.

### **Square**

Squares are areas for passive recreational use. Squares shall be bounded by streets on a minimum of 50% of their perimeter. Squares are encouraged to be entirely bounded by streets and/or lanes. Squares shall be planted parallel to all streets and shall contain canopy trees along street frontages.

### **Standard Metropolitan Statistical Areas (SMSA)**

Geographic entities defined by the US Office of Management and Budget (OMB) for use by Federal statistical agencies in collecting, tabulating, and publishing Federal statistics.

### **Strip Commercial**

A pattern of commercial development located along one or both sides of a street which is generally one lot in depth and is characterized by multiple and relatively closely spaced driveways, low open space and landscaping ratios, and high floor area ratios.

### **Traditional Neighborhood Development (TND)**

A development that offers a mixture of: housing types and prices; predominantly sited civic or community building(s); and stores/offices/workplaces to provide a balanced mix of activities. It is sensitive to the environmental characteristics of the land and facilitates the efficient use of services. A TND has a recognizable center and clearly defined edges; optimum size is a quarter mile from center to edge.

### **Urban and Rural Classifications**

For Census 2000, the Census Bureau classifies as "urban" all territory, population, and housing units located within an urbanized area (UA) or an urban cluster (UC). It delineates UA and UC boundaries to encompass densely settled territory, which consists of:

- core census block groups or blocks that have a population density of at least 1,000 people per square mile and
- surrounding census blocks that have an overall density of at least 500 people per square mile

In addition, under certain conditions, less densely settled territory may be part of each UA or UC.

The Census Bureau's classification of "rural" consists of all territory, population, and housing units located outside of UA's and UC's. The rural component contains both place and nonplace territory. Geographic entities, such as census tracts, counties, metropolitan areas, and the territory outside metropolitan areas, often are "split" between urban and rural territory, and the population and housing units they contain often are partly classified as urban and partly classified as rural.



**POLK COUNTY VISION PLAN**  
**APPENDIX 3 – AGRICULTURAL AND FORESTRY BEST MANAGEMENT PRACTICES**

**Appendix 3 Agricultural and Forestry Best Management Practices**

I. Crop and Pasture Lands

A. BMPs for Sediment Control

- Conservation Tillage System
- Critical Area Planting
- Diversion
- Field Border
- Filter Strip
- Grade Stabilization Structure
- Grassed Waterway
- Rock-Lined Waterways or Outlets
- Sediment Control Structure
- Sod-Based Rotation
- Stripcropping
- Terrace
- Water Control Structure
- Pastureland Conversion

B. BMPs for Nutrient Control

- Legumes in Rotation
- Soil Testing
- Liming
- Setting Realistic Crop Yield Goals (determines fertilization rates)
- Fertilizer Waste Application (method, rate, and timing)
- Sediment Control BMPs

C. BMPs for Pesticide Control

- Alternative Pesticides
- Optimize Pesticide Formulation, Amount, Placement, Timing, Frequency
- Crop Rotation
- Resistant Crop Varieties
- Other Cultural or Biological Controls
- Optimize Crop Planting Time
- Plant Pest Quarantines
- Proper Disposal of Obsolete Pesticides and Containers
- Certification of Applicators
- Sediment Control BMPs

II. Animal Production (esp. Confined Animal Operations)

BMPs for Bacteria and Nutrient Control

- Grade Stabilization and Nutrient Control
- Heavy Use Area Protection
- Livestock Exclusion
- Spring Development
- Stock Trails and Walkways
- Trough and Tank
- Waste Management System
- Waste Storage Pond
- Waste Storage Structure



**POLK COUNTY VISION PLAN**  
**APPENDIX 3 – AGRICULTURAL AND FORESTRY BEST MANAGEMENT PRACTICES**

Waste Treatment Lagoon  
Land Application of Waste  
Water Control Structure

Source: North Carolina Department of Agriculture and Consumer Services.

**FORESTRY BEST MANAGEMENT PRACTICES**

1. Properly design and place access roads, skid trails, and loading areas on forestland.
  - a. Avoid streambanks and channels except when crossing streams.
  - b. Install water management structures and techniques.
  - c. Stabilize bare soil areas.
  - d. Prevent steep slopes on roads and trails.
2. Designate streamside management zones (SMZ) which are undisturbed strips of vegetation parallel and adjacent to the stream channels.
3. Avoid placing debris in stream channels (Stream Obstruction Law).
4. Use practices which minimize soil exposure when reforesting.
5. Use environmentally safe procedures when applying chemicals in forested areas.
6. Train forestry related personnel in nonpoint source pollution control methods.

Source: NC Division of Forest Resources.



**POLK COUNTY VISION PLAN**  
**APPENDIX 4 – PERFORMANCE STANDARD EXAMPLE**

**Appendix 4 Performance Standard Example**

As Polk County changes and grows, the county should protect its natural resources and its investment in public facilities/services. There are various approaches to guiding development with performance standards. One approach is to develop threshold standards reflecting either current or desired levels of service and then measure the effects of growth against those standards each year.

Threshold Standards are intended to be applied in three distinct ways:

1. Many of the standards could be used in the evaluation of the county’s Land Use Plan to ensure that goals and objectives are being met;
2. Certain standards could be used in the evaluation of individual development projects to determine the possible impacts of the project and to apply appropriate conditions and requirements in order to mitigate those impacts; and
3. All of the standards would be monitored on an annual basis to ensure that the cumulative impacts of new growth did not result in a deterioration of quality of life, as measured by these standards.

The following threshold standards have been provided to serve only as an example to assist in the reader’s understanding of the threshold concept. It is not being recommended that these threshold standards be adopted by Polk County. Polk County would need to determine its own level of service requirements and threshold standards to implement this “smart growth” technique.

EXAMPLE THRESHOLD STANDARDS	
Air Quality	Annual report required from NC Division of Air Quality on impact of growth on air quality.
Fiscal	Annual report required to evaluate impacts of growth on county operations, capital improvements, and development impact fee revenues and expenditures.
Police	Respond to ___% of the Priority I emergency calls within seven minutes and maintain average response time of ___ minutes. Respond to ___% of Priority II urgent calls within seven minutes and maintain average response time of ___ minutes.
Fire/EMS	
Schools	Annual report required to evaluate school district’s ability to accommodate new growth.
Health Care	Annual report required to evaluate health care facilities’ ability to accommodate new growth.
Parks and Recreation	Maintain ___ acres of mini, neighborhood and community parkland with appropriate facilities per 1,000 residents.
Water	Annual report from water service agencies on impact of growth and future water availability.
Drainage	Storm flows and volume shall not exceed Engineering Standards to be established by Polk County.
Traffic	Maintain Level of Service (LOS) “C” or better as measured by observed average travel speed on all signalized arterial streets, except, that during peak hours, a LOS “D” can occur for no more than any two hours of the day.



**POLK COUNTY VISION PLAN**  
**APPENDIX 4 – PERFORMANCE STANDARD EXAMPLE**

EXAMPLE THRESHOLD STANDARDS	
	Thoroughfares that do not meet the above standard at the present time may continue to operate at their existing LOS, but shall not worsen.

Threshold standards could be used to evaluate the impacts of individual development projects that are undergoing discretionary planning review by Polk County. The county can use threshold standards for traffic, police, fire, schools, and other public services as the basis for analyzing the impacts of a project on these services, and for determining appropriate mitigation measures. The use of these standards provides for a consistent method of analysis as well as a clear and legally defensible basis for determining conditions of approval of individual projects.

Perhaps the most difficult aspect of implementing threshold standards is dealing with the cumulative impacts of new development over time. The analysis of the impacts of multiple projects in multiple locations over a certain period of time requires:

- 1) accurate forecasts of the location, timing, and amount of development over a given period of time;
- 2) methods for analyzing the cumulative impacts of this forecasted development on various systems, such as the local roadway network; and
- 3) a program for monitoring actual results on a regular basis, in order to determine that the standards are in fact being met, and that the analytical methods are sound.

It will take a considerable commitment on the part of Polk County and its residents to provide the staffing, review, monitoring, and other necessary resources to implement performance standards. However, it is an effort that would provide considerable return in the quality of life of Polk County residents.



## POLK COUNTY VISION PLAN APPENDIX 5 – MODEL LAND PRESERVATION DISTRICT

### **Appendix 5 Model Land Preservation District**

The intent of the “Land Preservation District” (“LPD”) is to preserve open space and natural lands on development parcels of \_\_\_ (size to be determined) or more acres, while also permitting full-equity development in the form of compact residential areas carefully located and designed to concentrate intensity. This approach will have to be integrated into the Polk County Zoning and Subdivision Ordinances. This approach may be used as an alternative to the seven (7) area lot size minimum and current subdivision cluster provisions which are inflexible.

The following description of an LPD is provided to serve only as an example to assist in the reader’s understanding of the LPD. It is not being recommended that the following specifications be exactly adopted by Polk County. Polk County will need to draft its own specifications to achieve its objectives. For example, the LPD might allow smaller lots of 20,000 square feet.

The LPD would include an open space requirement, which is achieved by reducing new houselots to specified square foot size. Criteria for these neighborhoods will limit their size to a maximum number of dwellings, with each such housing group separated from others by buffer areas. Those with more than \_\_\_ (to be determined) dwellings will be required to provide readily accessible recreational open space at the rate of \_\_\_\_\_ square feet per dwelling unit, typically in the form of a village common or green. Siting of compact residential lots are also controlled so that they will avoid sensitive natural areas (prime farmland, stream corridors, etc.), and be screened from nearby public roads, by being tucked behind topographic features or hidden by pre-existing or newly planted native trees and shrubs set out in a naturalistic manner.

In addition to the compact neighborhoods, a limited number of estate lots will also be allowed in LPDs. Comprising part of the protected open land, these lots must be at least \_\_\_, \_\_\_, or \_\_\_ acres in area, depending on whether the total tract is \_\_\_ to \_\_\_ acres, \_\_\_ to \_\_\_ acres, or more than \_\_\_ acres in area. Standards restrict the building area, driveway, lawn, and gardens to a single acre of such estate lots, the remainder of which would be placed under permanent conservation easement to prevent further subdivision and domestic “improvements” (such as lawn/garden extensions). These lots are also subject to the same locational criteria as neighborhood groupings, that is, away from sensitive lands and concealed from public view to the maximum extent feasible. The purposes of these estate lots are to help retain working farms and to deal with local concerns about continued management of the preserved open space.

All dwellings in the LPDs (except estate lots) will be required to be served by a central water supply, either public or private. Septic waste disposal may be via individual septic systems, public sewer, or community systems, typically large absorption fields or “spray irrigation/land treatment.”



## POLK COUNTY VISION PLAN APPENDIX 5 – MODEL LAND PRESERVATION DISTRICT

**Figure 1** illustrates the contrast between conventional two-acre lots and more compact neighborhoods designed according to alternative LPD criteria to protect farmland or to preserve woodland.



Figure 1: These three sketches show a rural neighborhood and two alternative future scenarios. One is to become blanketed with wall-to-wall subdivisions, each consisting of a checkerboard of houselots and streets. Another is to preserve large blocks of land, with many open spaces adjoining one another through cluster designs on each parcel.



**POLK COUNTY VISION PLAN  
APPENDIX 6 – CITIZEN PARTICIPATION PLAN**

**Appendix 6 Citizen Participation Plan**

**Introduction**

Polk County has initiated the preparation of a county-wide Comprehensive Plan. The final document will provide a creative and dynamic plan to guide future long-term growth and development throughout the next fifteen to twenty years. The intent of this project is to draft a plan that will establish a solid foundation of the ongoing planning program and to serve as the primary policy guide for short and long-range planning, zoning and development related decision-making within Polk County. The Comprehensive Plan shall also serve as a necessary first step and guideline toward systematic revision of the county’s existing land use and development regulations as well as thoroughfare plans.

The initial step in the planning process is the adoption of this Citizen Participation Plan (CPP) which defines a collaborative effort with the public. Approval of the CPP by the Polk County Board of Commissioners was accomplished November 17, 2008, prior to implementation of the planning process. In addition, on November 17, 2008, a public information meeting was conducted to accomplish the following objectives: provide an overview of the project and define what is expected to be accomplished; define roles and responsibilities of everyone involved in the project; generally discuss accepted principles, practices, and methods associated with modern planning efforts; and generally discuss local issues to be addressed by the plan.

**Comprehensive Plan Advisory Committee**

The Polk County Board of Commissioners has appointed a Comprehensive Plan Advisory Committee (CPAC). This committee will supervise the preparation of a draft Comprehensive Plan for presentation to the Polk County Planning Board and Board of Commissioners. The committee is composed of nine (9) primary members with one (1) alternate member for each primary member. The CPAC includes the following members:

	Primary	Alternate
Columbus Township	Evangelena Barber	Dave Herbert
Cooper Gap Township	Roger Odel	Bob Strickland
Green Creek Township	Doug Harmon	A.Y. Brown
Saluda Township	Jim Carson	Susan Welsh
Tryon Township	Emily Clark	Mark Byington
White Oak Township	Ernest Giannini	Christel Walter
Town of Columbus	Maryneal Jones	Kathleen Kent
City of Saluda	Hal Green	Henry Bright
Town of Tryon	John Walters	Katharine Smith



## **POLK COUNTY VISION PLAN APPENDIX 6 – CITIZEN PARTICIPATION PLAN**

On November 17, 2008, the Polk County Board of Commissioners adopted rules and procedures for the conduct of business at CPAC meetings.

### **Meetings**

The CPAC will conduct approximately eight (8) to ten (10) work sessions to prepare the draft Comprehensive Plan. All meetings of the CPAC will be advertised and open to the public. CPAC meeting locations may be rotated throughout the county to facilitate optimum participation. At a minimum, the following meetings will be conducted:

- Monthly (or at a minimum semi-monthly) meetings of the CPAC. At each CPAC meeting, the location, date, and time of the succeeding meeting will be determined.
- Special meetings, as may be called at the discretion of the Chairman.
- The CPAC will conduct county-wide meetings to report overall project status and to obtain public input on progress to date. These meetings will be scheduled approximately nine (9) to ten (10) months into the project and the meeting locations will be determined by the CPAC.
- Following approval of a draft plan by the CPAC, two open house meetings (locations and dates to be determined) will be conducted to allow the public to question and comment on the draft plan.
- The CPAC will present the draft Comprehensive Plan to the Polk County Planning Board for recommendation of the plan to the Polk County Board of Commissioners. Upon recommendation of the CPAC and Planning Board, the Polk County Board of Commissioners will conduct a public hearing on the plan.

### **Public Notification**

To ensure that the public is informed of meeting times and has access to the draft Comprehensive Plan throughout this process, the following steps will be taken:

- All CPAC meetings will be advertised in a non-legal advertisement section of the Tryon Daily Bulletin at least ten (10) calendar days prior to the meeting.
- Notices of all CPAC meetings will be posted on the Polk County website.
- A sign-up sheet will be placed in the Polk County Administration Building and at all CPAC meetings. Individuals who place their names and addresses on this list will be mailed /e-mailed notices announcing meeting times for review of the Comprehensive Plan.
- Notices will be placed in the Polk County Administration Building and the County Libraries.
- Notices will be distributed to local civic groups and churches in the county.
- Notices will be run on the local radio station.
- Notification will be made to the Chairperson of the Democratic and Republican parties for Polk County.

### **Dissemination of Information**

The following procedures will be utilized to ensure the availability of information:

- Copies of the draft Plan will be available at all meetings to ensure that the citizens present can review items being discussed.
- Copies of the document will be placed at the County Administration Building and in the Polk County Public Libraries as it is developed for citizen review.
- The draft Plan will be posted on the Polk County website as it is developed so that citizens may either review the document online or print it out. Information regarding the location of the document online will be included in all published notices of CPAC meetings.



## **POLK COUNTY VISION PLAN APPENDIX 6 – CITIZEN PARTICIPATION PLAN**

- Sections of the proposed plan will be provided to the CPAC prior to any meetings at which the draft plan section(s) will be discussed.
- Copies of draft sections of the plan will be provided at the County Planning Department for check-out.
- Copies of the draft plan or sections of the draft plan may be purchased from the Polk County Planning Department for the cost of reproduction.

### Public Comment

Throughout the process, the public will have the following opportunities for input:

- At each CPAC meeting, time will be allocated for public comments and/or questions.
- At any time during the preparation of the draft Plan, the public may obtain information and/or offer comments via e-mail ([planning@polknc.org](mailto:planning@polknc.org)).
- The county-wide status meetings, open houses, and public hearing will all provide additional opportunities for public input and questions.

### Schedule

The Comprehensive Plan planning process will utilize the following schedule:

#### November 2008

- Conduct initial scoping meeting.
- Conduct a Public Information Meeting with the Board of Commissioners.
- Adopt a Citizen Participation Plan (determine citizen participation schedule).
- Conduct initial CPAC organizational meeting.

#### November 2008 - March 2009

- Conduct background information review.
- Conduct data collection and analysis.
- Conduct monthly (or at a minimum semi-monthly) meetings with CPAC. NOTE: Eight (8) to ten (10) CPAC meetings are anticipated during plan development.

#### April - August 2009

- In concert with the CPAC, assess future demands, prepare recommendations, and develop the future land use map.
- Conduct two (2) public information meetings to provide a Comprehensive Plan status report, present preliminary findings, and obtain public input (April, 2009).

#### September 2009

- Present draft Land Use Plan to the CPAC.
- Conduct two (2) open house meetings to allow public input on the draft Plan.
- Conduct CPAC review of open house input and modify draft Plan, if necessary.

#### October - November 2009

- Present draft Plan to the Planning Board.

#### December 2009 - January 2010

- Schedule and conduct a Public Hearing.
- Polk County Board of Commissioners will consider Comprehensive Plan adoption.
- Provide final maps and text.



## **POLK COUNTY VISION PLAN APPENDIX 6 – CITIZEN PARTICIPATION PLAN**

### Status Reports

Holland Consulting Planners, Inc. (HCP), the county's planning consultant for the preparation of the Comprehensive Plan, will present written monthly progress reports to the Polk County Planner for review by the CPAC. Monthly updates will be presented to the Board of County Commissioners by a representative of HCP. The progress report with an updated schedule will be limited to two (2) pages and shall include at a minimum the following:

- Specific activities completed
- Information generated
- Contacts made
- Percentage of the study completed to date by task
- Costs incurred to date by task
- Next month's activities by task

Copies of the status report will be available at the Polk County Planner's office.

Adopted the 17<sup>th</sup> day of November, 2008.