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# Town of Columbus, NC Comprehensive Plan



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## SECTION 1. INTRODUCTION

### PLAN PURPOSE

A comprehensive plan is a statement by the Town of what it is today, and what it would like to be in the future. A comprehensive plan is an official public document, adopted by the Town Council. While the preparation of a comprehensive plan will be required by North Carolina legislation as of 2022, there are broader reasons to engage in the planning process. Local government plans and planning efforts affect people's lives. Basically, planning begins with understanding Columbus and its people. Tough choices must be made about the natural, man-made, and financial resources in the Town. The Town's budget should be compared to the plan to ensure that public money will be spent in accordance with the Town's goals and objectives.



View of the Town of Columbus from Little White Oak Mountain.  
Image Source: Insight.

Planning will provide the foundation to preserve what is of value in Columbus and establish a plan of action focused on economic development and community investment. Small towns are attractive because of their human scale of buildings and tight-knit social fabric. Many polls have shown that most Americans would prefer to live in a small town rather than a large city or suburb. The mix of Columbus's residential and commercial uses, the emphasis on walking rather than automobile use, and the human scale of buildings all contribute to both a pleasant environment and a closer, more sociable community.

Specifically, the Town of Columbus 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 Town;
- Part of a continuous planning process that is timely and responsive to the needs/desires of the Town; and
- The legal basis for land use regulations and a guide for Town budgeting.

A comprehensive plan is a statement of policies. The policies of the plan in effect speak to the private sector and to elected officials and say, "when we encounter this situation, we will probably act this way for these reasons." This approach has the advantage of stating a position in advance of heated controversy. To deviate from a policy in the plan should require an argument as convincing as the one in the plan. Departing from the precepts of a plan should always be possible – although not necessarily easy.

A comprehensive plan is indeed comprehensive, in that it includes all areas within the corporate limits of the Town of Columbus. Moreover, the plan includes all elements that have a bearing on the physical development of the Town (utilities, transportation, housing, etc.).

# SECTION 1. INTRODUCTION



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

Specifically, this plan will address the following:

- Clear vision statement
- Historical, current, and forecast data regarding demographics/economics, in-Town and relative to the Town's surroundings
- Future land use
- Recommendations for revisions to Town land development regulations
- Economic development strategies
- Transportation/mobility (including pedestrian and bicycle) to coordinate with the Polk County Comprehensive Transportation Plan
- Housing and neighborhoods
- Public utilities and infrastructure
- Provision of parks, recreation, and open space
- Wildlife/ecology conservation



Downtown Columbus. Image Source: Insight.

## THE PLANNING PROCESS

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

1. **Study and Analysis.** Columbus must study land use, population trends, transportation, the economic base of the Town, and natural features.
2. **Plan or Policy Preparation.** The comprehensive plan must provide a basic statement of how the Town will develop, in which direction, and the pace at which it should proceed.
3. **Basic Goals.** Columbus 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?
4. **Implementation.** To implement the plan, the Town must use such tools as land use regulations, capital improvements, and general guidelines for private development and public investment.
5. **Monitoring and Feedback.** On a continuing basis, the Town must 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.



## SECTION 1. INTRODUCTION

### DEVELOPMENT OF THE COMPREHENSIVE PLAN

The development of this plan was initiated in 2019 by the Columbus Town Council. The Town Council appointed the Planning Board to supervise the preparation of the Comprehensive Plan. The Planning Board members are listed below.

- Kathleen Nowakowski, Chair
- Marshall Watkins
- Cathy Elliot
- Virginia Green
- Jimmi Buell
- Mark Blanton, Alternate
- Ernie Kan, Alternate

#### **Vision Statement**

*The Town of Columbus seeks sustainable growth that protects our natural and historic resources, while preserving our values, qualities, and culture.*

Throughout the process, the Planning Board endeavored to support the Town's vision statement.

### PLAN OVERVIEW

The Town of Columbus Comprehensive Plan is divided into six independent components that focus on various aspects of the community. The following provides a brief synopsis of what will be addressed within each plan element:

#### **Section 1. Introduction**

This plan element provides a general overview of the plan, planning process, and enabling legislation regarding the establishment and use of Comprehensive/Land Use Plans in local government decision-making.

#### **Section 2. Community Profile**

This plan element provides a general overview of existing conditions throughout the Town of Columbus regarding population, housing age and condition, and economic indicators. This section serves as a basic overview of the Town's current state of affairs and as a baseline for discussion regarding growth, development, and public policy.

#### **Section 3. Environment/Existing Conditions**

This plan element focuses on existing environmental and land use conditions throughout Columbus's planning jurisdiction including environmental factors, community facilities and services, transportation, land use/suitability, and neighborhoods. This information provides the data and analysis necessary to make sound decisions regarding development of the Town's Future Land Use Map.

#### **Section 4. Projections/Future Demand**

This section of the plan focuses on future growth and demand which may have an impact on land use and transportation. Citizen input garnered as a result of the plan is also summarized in this section. Forecasts of growth and demand are, at best, difficult. Constantly changing local, regional, national, and international factors significantly influence the Town of Columbus and the surrounding region.



# SECTION 1. INTRODUCTION



## Section 5. Future Land Use

The Future Land Use element defines the framework for future growth and development throughout the Town of Columbus. This framework will include the establishment of wildlife/ecology conservation efforts with a focus on Little White Oak and Chocolate Drop Mountains.

## Section 6. Goals and Strategies

The discussion of goals and implementing strategies will serve as a guide for the integration of the Comprehensive Plan into the Town's day-to-day decision-making process. Additionally, the goals and implementing strategies defined within this plan element will establish an organized and thorough listing of strategies intended to provide for sound principles relating to future growth, economic development, modifications of service delivery, and infrastructure expansion. This section of the plan also provides narrative and tools for implementing the strategies.

## HISTORY

The Town of Columbus, unlike most communities, towns, or cities in western North Carolina, did not grow from its position as a crossroads, its proximity to a body of water, or from a gradual accumulation of residents. Columbus was born overnight, deliberately carved from 100 acres of pure wilderness on what was then known as Foster Race path in the shadow of Fosters Mountain, known today as Chocolate Drop Mountain.



Downtown Columbus. *Image Source: Town of Columbus.*

In 1847, the state legislature's first effort to find a county seat for Polk County was greeted by a public squabble. In 1855, the legislature, in creating Polk County, named three out-of-county men as Commissioners to locate the county seat at or within two miles of the geographical center of the county. They chose Fosters Race path, in the shadow of Fosters Mountain, as that site. The Commissioners were authorized to purchase, or receive by donations, a tract of land, not to exceed 100 acres, on which to locate a county seat.



Polk County Courthouse. *Image Source: Town of Columbus.*

Columbus was divided into 94 lots, with seven lots reserved for public, civic, and spiritual needs. Space for a public square was reserved by the Commissioners at the northern end of the perfectly rectangular 100-acre parcel. Streets were laid out, some as wide as ninety feet, and an auction was held on October 17, 1855, to sell the lots designated for public use. A total of 59 lots were sold, bringing \$16,499 into the County coffers to be used to erect public buildings.

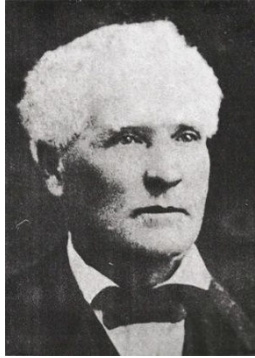
County records do not indicate an official date for the completion of the County Courthouse, but court records indicate that the Courthouse was in use by December 1857. That same structure, now listed in the National Register of Historic Places, remains in use as the County Courthouse today.





## SECTION 1. INTRODUCTION

As the County seat began to take shape from the wilderness, the Town of Columbus needed to be incorporated. The General Assembly approved the Town's incorporation on February 2, 1857. The new Town was given corporate limits of only a half-mile square from the courthouse square - limits that have not been changed, except for voluntary annexations, to this day.



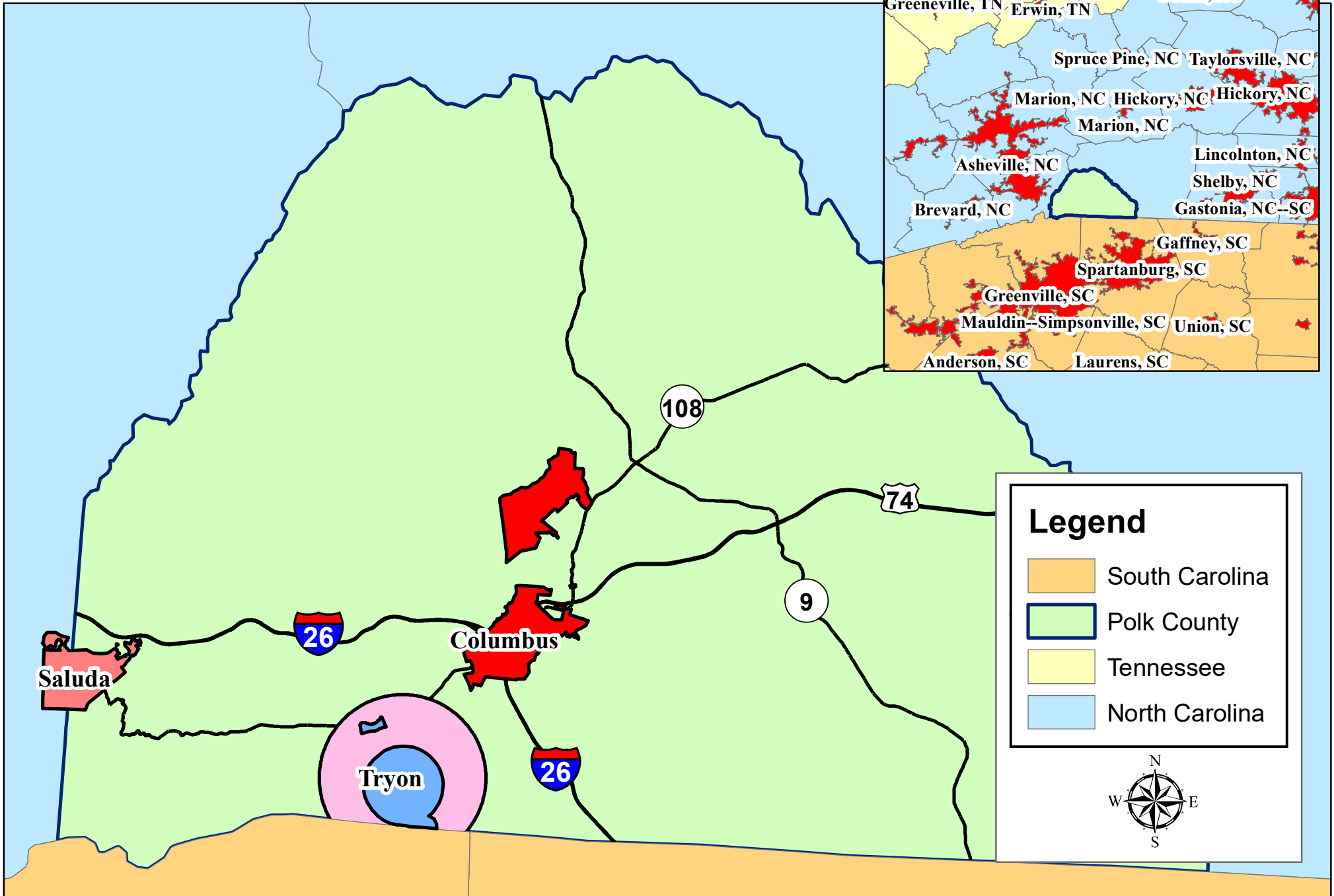
Physician, senator, and farmer are some of the hats worn by Dr. Columbus Mills during the course of his 74 years. He spent most of his adult life in service to his beloved Polk County. Mills has been called the father of Polk County because he worked so tirelessly to carve the new county from Rutherford and Henderson Counties. In 1855, the North Carolina legislature named Columbus, the new county seat, in honor of Dr. Mills.

**Dr. Columbus Mills.**  
*Image Source: Town of Columbus.*

### REGIONAL LOCATION AND CONTEXT

The Town of Columbus is centrally located within Polk County in the foothills of the Blue Ridge Mountains of western North Carolina. The Town is comprised of approximately 1.8 square miles. It is positioned in the transitional area between the Piedmont and the Mountains. The Town is situated at the confluence of US Interstate 26, NC Highway 74, and NC Highway 108. Additionally, the Town is served by NC Highway 9. Within Polk County, Columbus is located roughly five miles north of Tryon and nearly ten miles east of Saluda along I-26. Regionally, Columbus is situated about 42 miles southeast of Asheville and 30 miles northwest of the Greenville/Spartanburg, South Carolina metropolitan area. Map 1 below provides an overview of Columbus's regional location.

# Map 1. Regional Location





# SECTION 2. COMMUNITY PROFILE

## INTRODUCTION

The Community Profile section outlines various demographic information, including population, housing, and economic indicators. The neighboring City of Saluda and Town of Tryon, as well as Polk County at large, are utilized for comparison purposes throughout this section. For the purposes of this plan, and for the sake of consistency, demographic data are sourced primarily from the US Census Bureau American Community Survey. Census data may also be supplemented with figures from the NC Office of State Budget and Management (NCOSBM).

## POPULATION

### Population Growth

Table 1 provides an overview of population growth from 1990 to 2018. Since 1990, population growth within Columbus has been steady. Over this period, the Town’s total population has increased at a rate of 23.6%. This increase is lower than the State overall (56.7%), as well as the Town of Saluda (52.1%) and Polk County (49.4%). Columbus is centrally located along Interstate 26 providing a convenient location for people working throughout the region. Within Polk County, Columbus and Saluda have seen the most significant population growth regarding the total increase in citizens with an increase of 192 and 254 persons, respectively. Much of this growth occurred between the years 1990 and 2000, where the Town’s population increased at a rate of 22.2%.

Jurisdiction	1990	2000	2010	2018 Estimate	% Change '90 to '00	% Change '00 to '10	% Change '10 to '18	% Change '90 to '18
Columbus	812	992	999	1,004	22.2%	0.7%	0.5%	23.6%
Saluda	488	575	713	742	17.8%	24.0%	4.1%	52.1%
Tryon	1,680	1,760	1,646	1,792	4.8%	-6.5%	8.9%	6.7%
Polk County	14,416	18,324	20,510	21,535	27.1%	11.9%	5.0%	49.4%
North Carolina	6,628,637	8,049,313	9,535,483	10,389,148	21.4%	18.5%	9.0%	56.7%

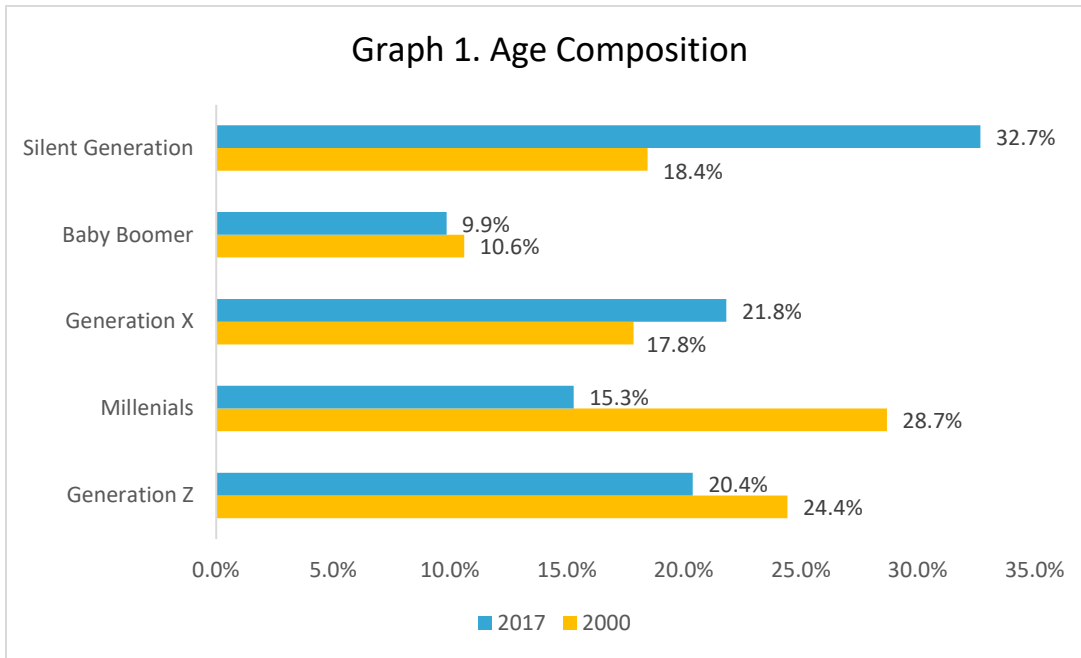
*Source: US Census Bureau; NC Office of Budget and Management, State Demographer.*

### Age Distribution

When considering future facility and service needs, a community must consider the composition of its population base in terms of age. If a community’s population is aging, for instance, a Town should focus on providing services to meet this need. Graph 1 provides a summary of age range within the Town of Columbus broken down by generational descriptors. Generational descriptors are typically used to characterize age ranges that maintain like characteristics. These descriptors are defined as:

- 2000 to present: Generation Z
- 1980 to 2000: Millennials
- 1965 to 1979: Generation X
- 1946 to 1964: Baby Boomers
- 1925 to 1945: Silent Generation

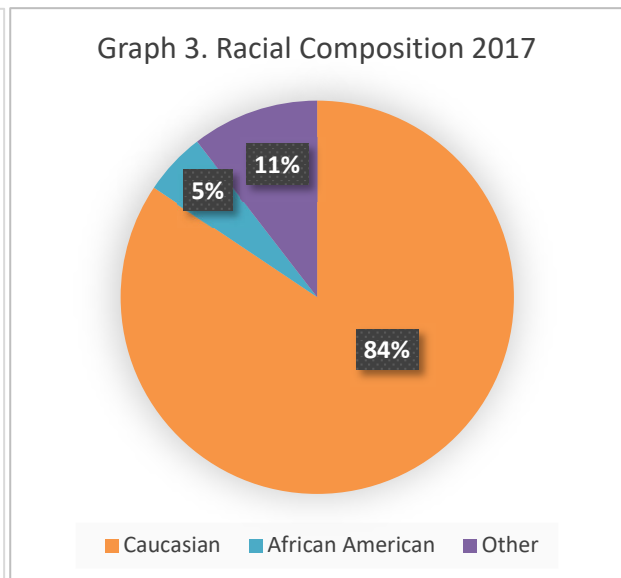
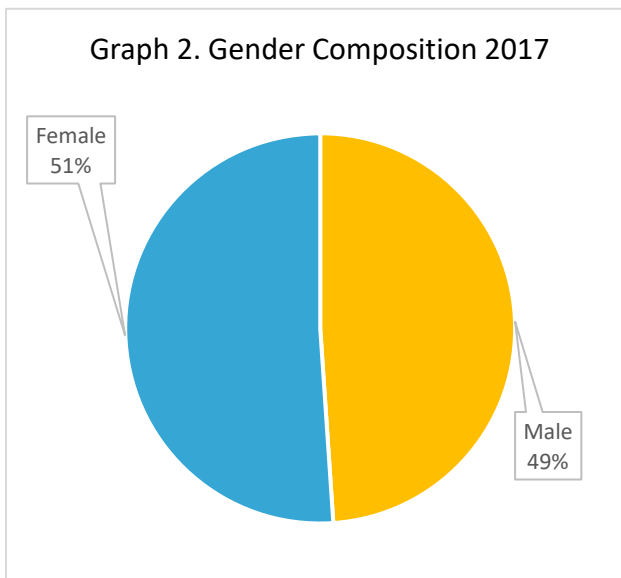
## SECTION 2. COMMUNITY PROFILE



According to this information, as reported by the American Community Survey, the population base within the Town of Columbus is aging. This fact is evidenced by the increased number of individuals falling within the silent generation age cohort between the years 2000 and 2017.

### *Racial Composition and Gender*

The graphs below provide a snapshot of gender and racial composition within the Town of Columbus. The Town's population is evenly split with a makeup of 51.1% female and 48.9% Male. The Town's racial composition is predominantly Caucasian at 84%. Additionally, Columbus maintains a Hispanic population, which comprises roughly 17% of the Town's overall population base. NOTE: Federal policy defines "Hispanic" not as a race, but as an ethnicity.

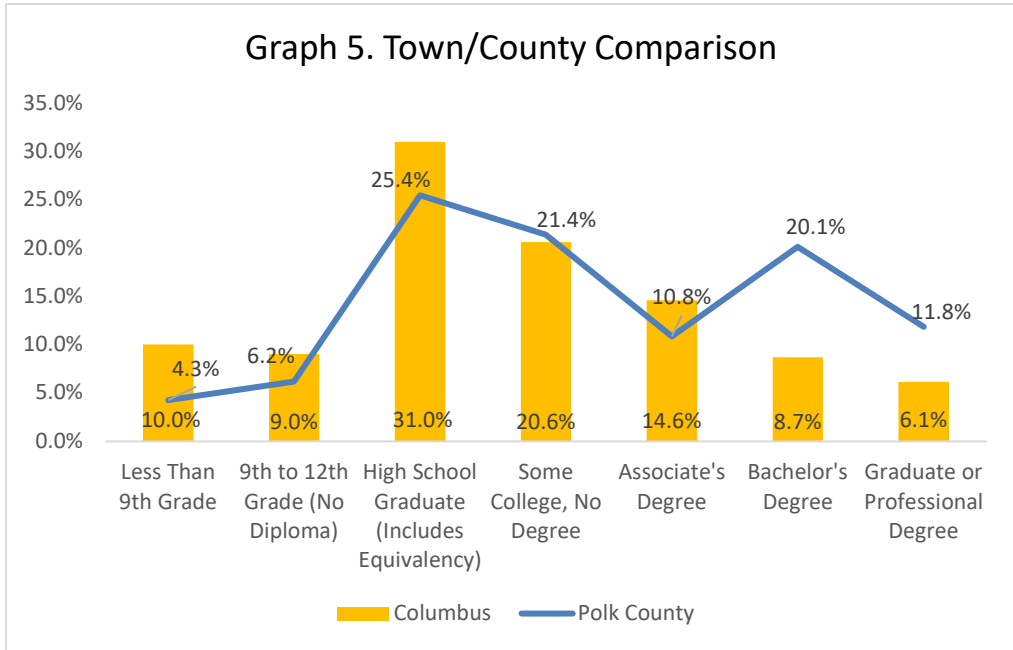
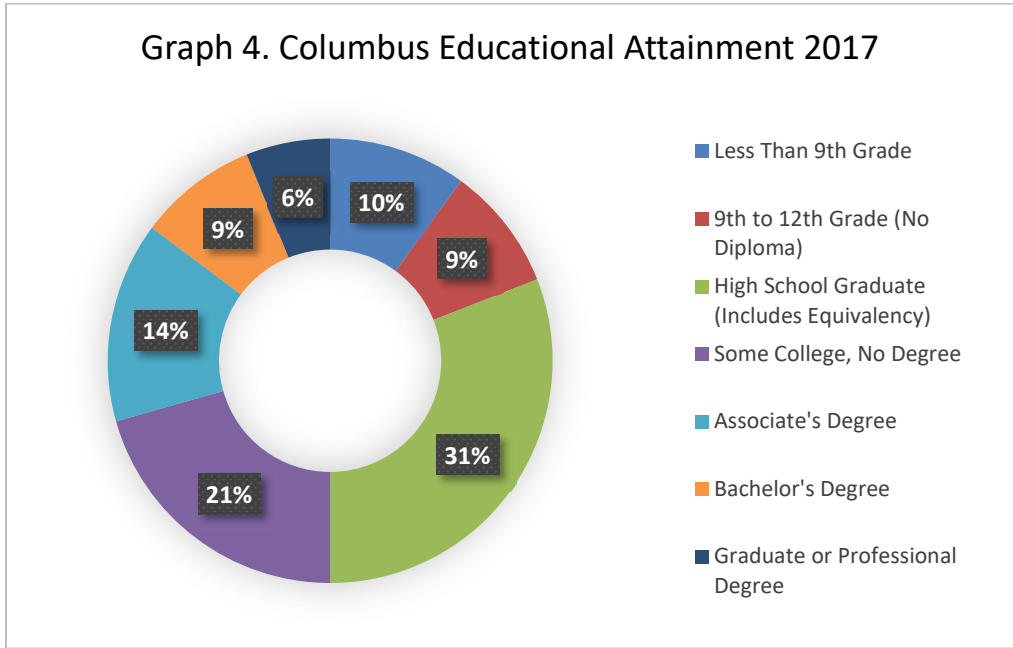




# SECTION 2. COMMUNITY PROFILE

## Educational Attainment

Graphs 4 & 5 provide a breakdown of educational attainment for both the Town of Columbus and Polk County. The overall educational attainment of a given community can be a significant indicator in health concerns, economic mobility, and socioeconomic status. At least 81% of the Town's citizens have a high school degree, while 29% have achieved an Associate's, Bachelor's, or Graduate/Professional degree.



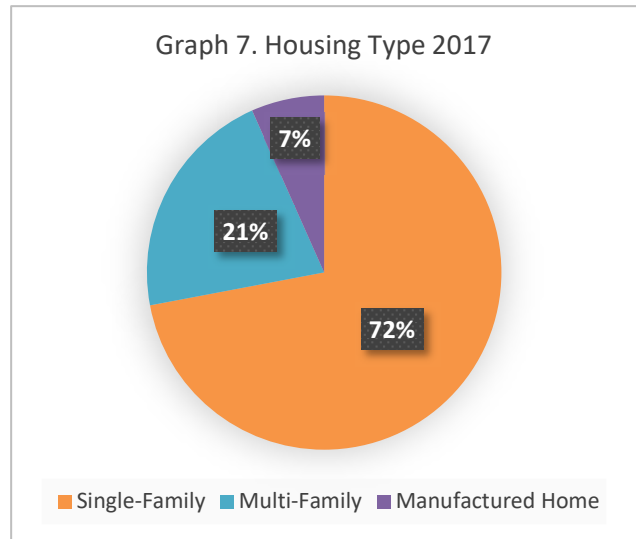
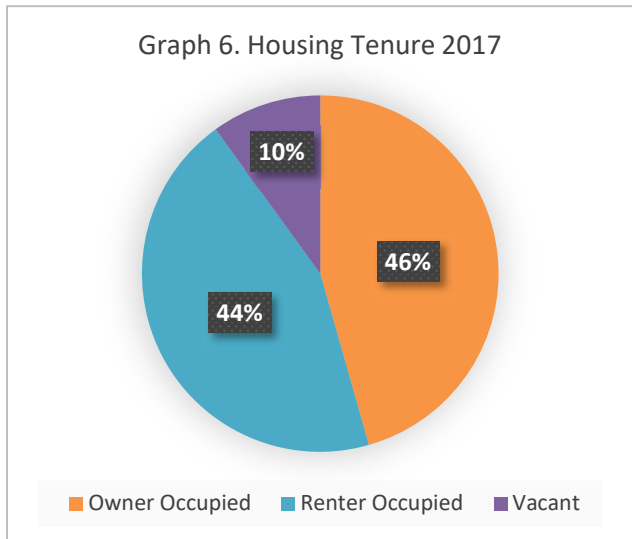
## SECTION 2. COMMUNITY PROFILE



### HOUSING

#### Housing Tenure

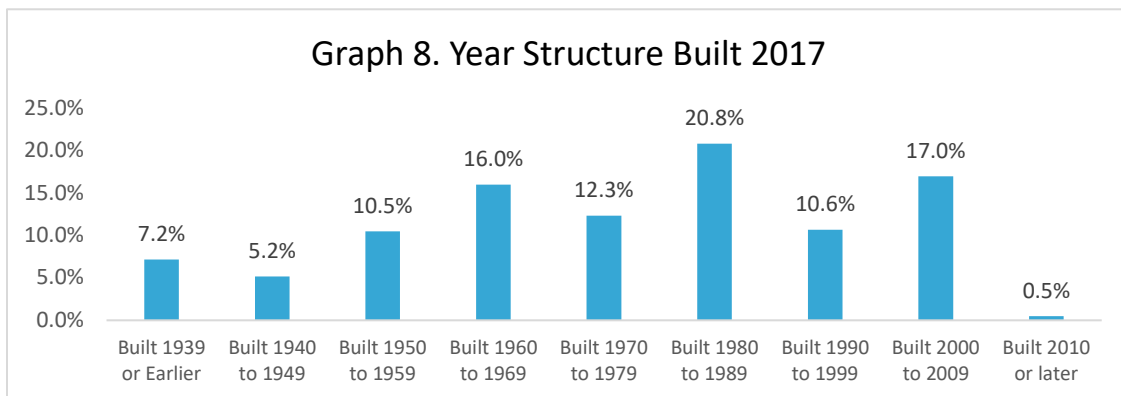
According to the 2017 American Community Survey, the Town of Columbus has approximately 600 total housing units. Since 2000, the number of overall housing units has increased by 35.9% or 159 total housing units. This increase in housing counts is indicative of the Town's population increase over the same period. Graphs 6 & 7 below provides a summary of the town's housing tenure and type.



Housing within the Town is evenly split between owner-occupied and renter-occupied housing, while approximately 10% of the Town's housing stock is reported as being vacant. Most of the housing stock throughout Columbus is comprised of single-family residential housing, although approximately 21% of the Town's housing units are situated within multi-family structures involving three or more units.

#### Year Structure Built

Graph 8 below provides a summary of year structure built for the Town of Columbus. Overall, the housing stock within Columbus is quite "young." Roughly 60% of the Town's housing stock has been developed since 1970. According to the US Census, only 74 homes were constructed prior to 1950.



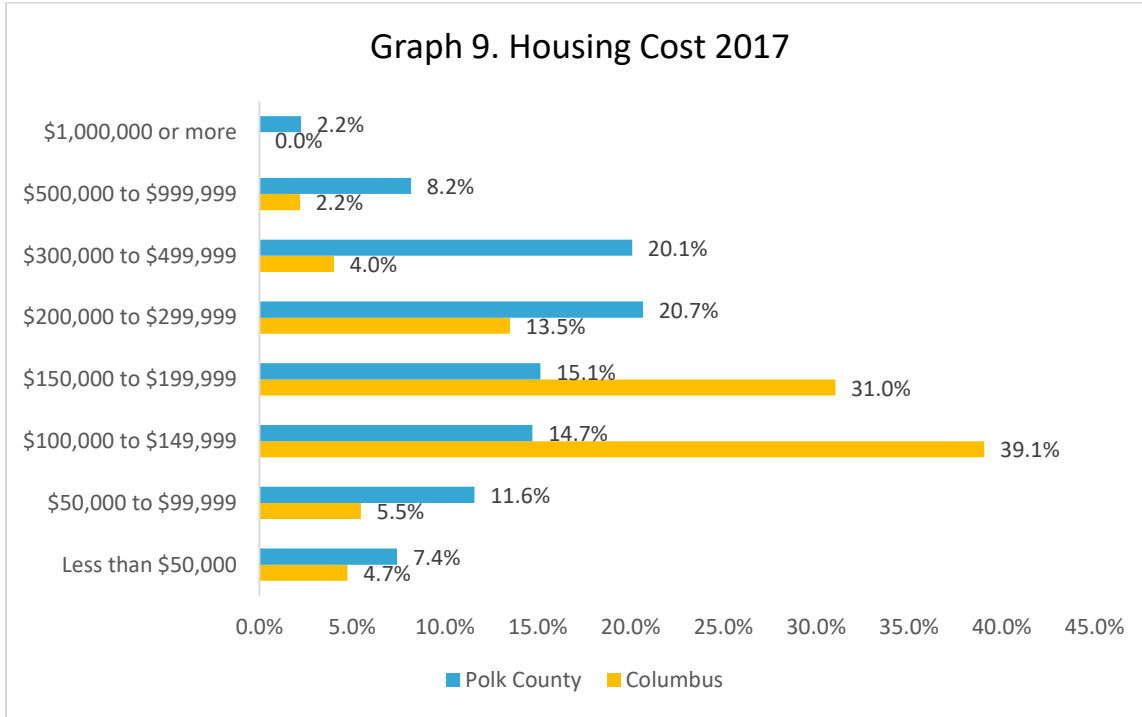




## SECTION 2. COMMUNITY PROFILE

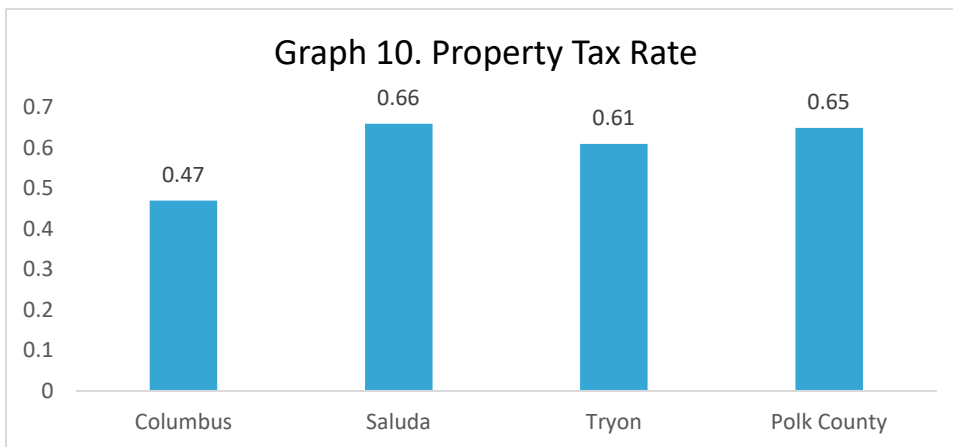
### Housing Value

The housing stock within the Town of Columbus appears to be affordable in relation to the County's other municipalities. As shown in Graph 9, roughly 50% of the Town's housing is valued at under \$150,000. The Town's median home value of \$151,000 is significantly lower than the County overall (\$205,000), as well as the NC State median value of \$185,000. Within Polk County, the Town of Columbus provides the most reasonable housing cost for a municipality.



### Property Tax

The Town of Columbus maintains the lowest property tax rate in Polk County. As shown in Graph 10, the Town's Fiscal Year 19/20 property tax rate is .4746, which is significantly lower than both Tryon and Saluda. It should be noted that the listed tax rates include the required fire tax for each jurisdiction.



## SECTION 2. COMMUNITY PROFILE



### Building Permit Activity

The following table provides a summary of building permit activity for Columbus, as well as the Towns of Saluda and Tryon for the 10-year period of 2009-2019. New construction of residential structures within Columbus has been extremely modest since 2009, resulting in 6 new residential units for a total construction value of \$913,335. This is slightly lower than the Town of Tryon (10), but much lower than Saluda, which experienced development of 37 additional units over the same period.

Jurisdiction	Total Building Permits	Total Construction Cost
Columbus	6	\$913,335
Saluda	37	\$6,667,128
Tryon	10	\$3,215,026

Source: Polk County Building Inspections.

## ECONOMY

### Labor Force

Approximately 58% of the Town's population over the age of sixteen is currently in the labor force. Of this population, all but 3.3% is currently employed. The Town's overall unemployment rate, according to the 2017 American Community Survey, is 5.9%, which compares favorably to Saluda (6.3%), Tryon (7.4%), and Polk County overall (6.3%). Table 3 provides a summary of labor force data for Columbus, Saluda, Tryon, and Polk County.

Jurisdiction	% In Labor Force	Employed	Armed Forces	Unemployment Rate
Columbus	58.6%	53.3%	1.9%	5.9%
Saluda	45.3%	42.4%	0.0%	6.3%
Tryon	45.5%	42.2%	0.0%	7.4%
Polk County	53.2%	49.8%	0.1%	6.3%

Source: US Census Bureau American Community Survey.

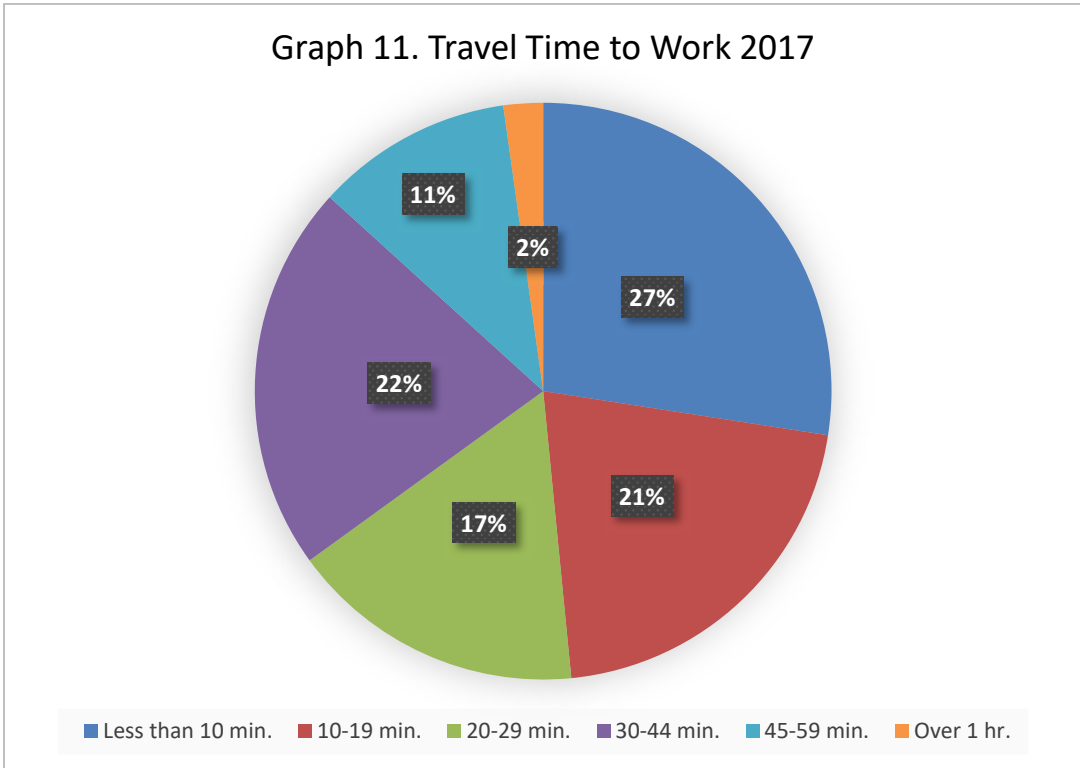
### Travel Time to Work

According to the American Community Survey, roughly 27% of residents have a travel time to work of less than ten minutes. Just under 50% of citizens have less than a 20-minute commute to work, which generally results in employment within Polk County. Approximately 34% of residents have over a 30-minute travel time to work. To put this in perspective, Hendersonville is situated nearly 25 minutes to the northwest of Columbus. There are obviously a number of residents within Columbus that maintain jobs in either Asheville or Hendersonville to the west, or the Greenville/Spartanburg metropolitan area to the southeast (which has a similar travel time). Graph 11 provides an overview of travel time to work for Columbus residents.



## SECTION 2. COMMUNITY PROFILE

**Graph 11. Travel Time to Work 2017**



### **Annual Income**

The median household income for Columbus residents is \$40,491, which is lower than Polk County (\$48,412), and 30.3% less than the North Carolina median of \$52,752. Table 4 provides a summary of annual household income for Columbus, Saluda, Tryon and Polk County overall. A little over forty percent of Columbus households make over \$50,000 a year. Additionally, roughly 13% of households make over \$100,000 dollars annually, which is comparable to Saluda and slightly higher than the Town of Tryon (9.2%).

Table 4. Annual Income, 2017				
Income	Columbus	Saluda	Tryon	Polk County
Less than \$10,000	5.7%	9.8%	7.9%	5.9%
\$10,000 to \$24,999	19.6%	10.1%	18.8%	15.3%
\$25,000 to \$34,999	22.2%	13.4%	17.1%	13.1%
\$35,000 to \$49,999	12.0%	20.3%	12.9%	17.3%
\$50,000 to \$74,999	21.4%	19.9%	15.3%	21.0%
\$75,000 to \$99,999	6.1%	13.7%	18.7%	11.8%
\$100,000 to \$149,999	9.8%	9.2%	8.4%	7.1%
\$150,000 to \$199,999	1.1%	1.6%	0.4%	5.6%
\$200,000 or more	2.0%	2.0%	0.4%	2.9%

*Source: US Census Bureau American Community Survey.*

## SECTION 2. COMMUNITY PROFILE



### Employment by Industry

The graph below provides a summary of employment by industry within the Town of Columbus, as well as Polk County overall. The largest employer within Columbus, as well as Polk County overall is educational services, healthcare and social assistance. The retail trade, construction, and manufacturing industries also provide employment for a substantial percentage of the Town and County's population base.

**Table 5. Employment by Industry, 2017**

<b>Industry</b>	<b>Columbus</b>	<b>Polk County</b>
Agriculture, Forestry, Fishing and Hunting, and Mining	0.0%	1.2%
Construction	10.5%	9.8%
Manufacturing	11.8%	11.8%
Wholesale Trade	3.9%	3.3%
Retail Trade	10.3%	14.0%
Transportation and Warehousing, and Utilities	7.0%	4.0%
Information	0.0%	1.3%
Finance and Insurance, and Real Estate and Rental and Leasing	5.9%	4.8%
Professional, Scientific, and Management, and Administrative, and Waste Management Services	2.5%	10.0%
Educational Services, and Healthcare and Social Assistance	24.6%	23.8%
Arts, Entertainment, and Recreation, and Accommodation and Food Services	14.1%	8.8%
Other Services, except Public Administration	5.0%	3.9%
Public Administration	4.5%	3.5%

*Source: US Census Bureau American Community Survey.*



# Population, Housing, And Economy Summary

THE TOWN OF COLUMBUS HAS A TOTAL POPULATION OF 1,004 PERSONS AS OF 2018. THIS MARKS A 23.6% INCREASE FROM THE YEAR 1990, THE SECOND LARGEST POPULATION INCREASE IN POLK COUNTY.

THE LARGEST GENERATIONAL AGE COHORT WITHIN THE TOWN OF COLUMBUS IS THE SILENT GENERATION. THIS GENERATION IS COMPRISED OF INDIVIDUALS BORN BETWEEN 1925 AND 1945.

A MAJORITY OF HOMES WITHIN THE TOWN OF COLUMBUS ARE COMPRISED OF SINGLE-FAMILY RESIDENTIAL DWELLINGS. SINGLE-FAMILY HOMES MAKE UP 72% OF HOUSING, WHILE MULTI-FAMILY (21%), AND MANUFACTURED HOMES (7%) MAKE UP THE REMAINING DWELLINGS.

THE HOUSING STOCK WITHIN COLUMBUS CORPORATE LIMITS IS QUITE "YOUNG", WITH ONLY 74 HOMES REPORTED AS BEING CONSTRUCTED PRIOR TO 1950. ADDITIONALLY, SIXTY PERCENT OF THE TOWN'S ROUGHLY 600 RESIDENTIAL STRUCTURES HAVE BEEN BUILT SINCE 1970.

ROUGHLY 58% OF COLUMBUS'S POPULATION OVER THE AGE OF SIXTEEN IS CURRENTLY ACTIVE IN THE LABOR FORCE. ADDITIONALLY, THE UNEMPLOYMENT RATE FOR THE TOWN WAS REPORTED AS 5.9% BY THE 2017 AMERICAN COMMUNITY SURVEY.

REGARDING TRAVEL TIME TO WORK, 27% OF TOWN RESIDENTS HAVE A COMMUTING TIME OF LESS THAN TEN MINUTES. APPROXIMATELY 34% OF RESIDENTS TRAVEL OVER THIRTY MINUTES TO WORK, WHICH TYPICALLY INDICATES AN OCCUPATION LOCATED OUTSIDE OF POLK COUNTY.



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

### ENVIRONMENTAL FACTORS

#### Climate

The Town of Columbus climate is influenced by the overall Polk County 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° Fahrenheit, with an average low temperature of 32° Fahrenheit. The average summer temperature is 76° Fahrenheit, with an average high temperature of 87° Fahrenheit.

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.

Table 6 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 6. Weather Summary Normal Monthly Mean Temperature and Precipitation in Polk County**

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

*Source: North Carolina State Climate Office.*

#### Geology

Columbus 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 zones together are referred to as regolith, the porous layer that serves as a storage reservoir or “sponge” for groundwater.



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

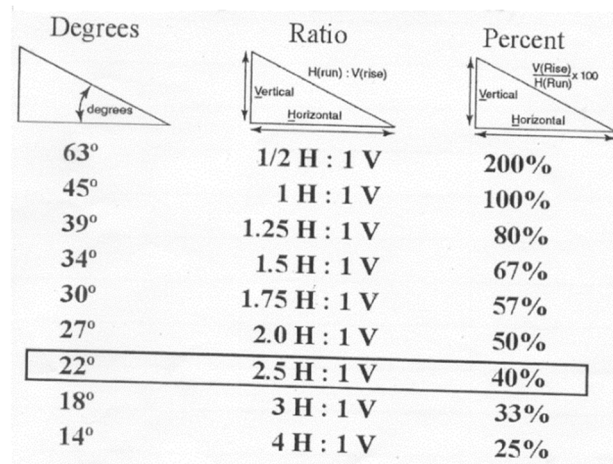


This “sponge” slowly drains water to streams (why they continue to flow during dry periods) and to fractures in the underlying bedrock. The bedrock fractures are the “pipes” that convey water within the groundwater system.

### Topography

The elevations in Columbus’s contiguous corporate limit area range from approximately 712 feet to 1,618 feet on Chocolate Drop Mountain. Elevations in the satellite annexation area extend up to 1,710 feet. Slopes in Columbus vary from gently rolling to steep in the satellite annexation area and on Chocolate Drop Mountain in the northern corner of the contiguous corporate limits.

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.



**Slope Measurements** (Image Source: Rick Wooten, engineering geologist at the NC Geological Survey.)

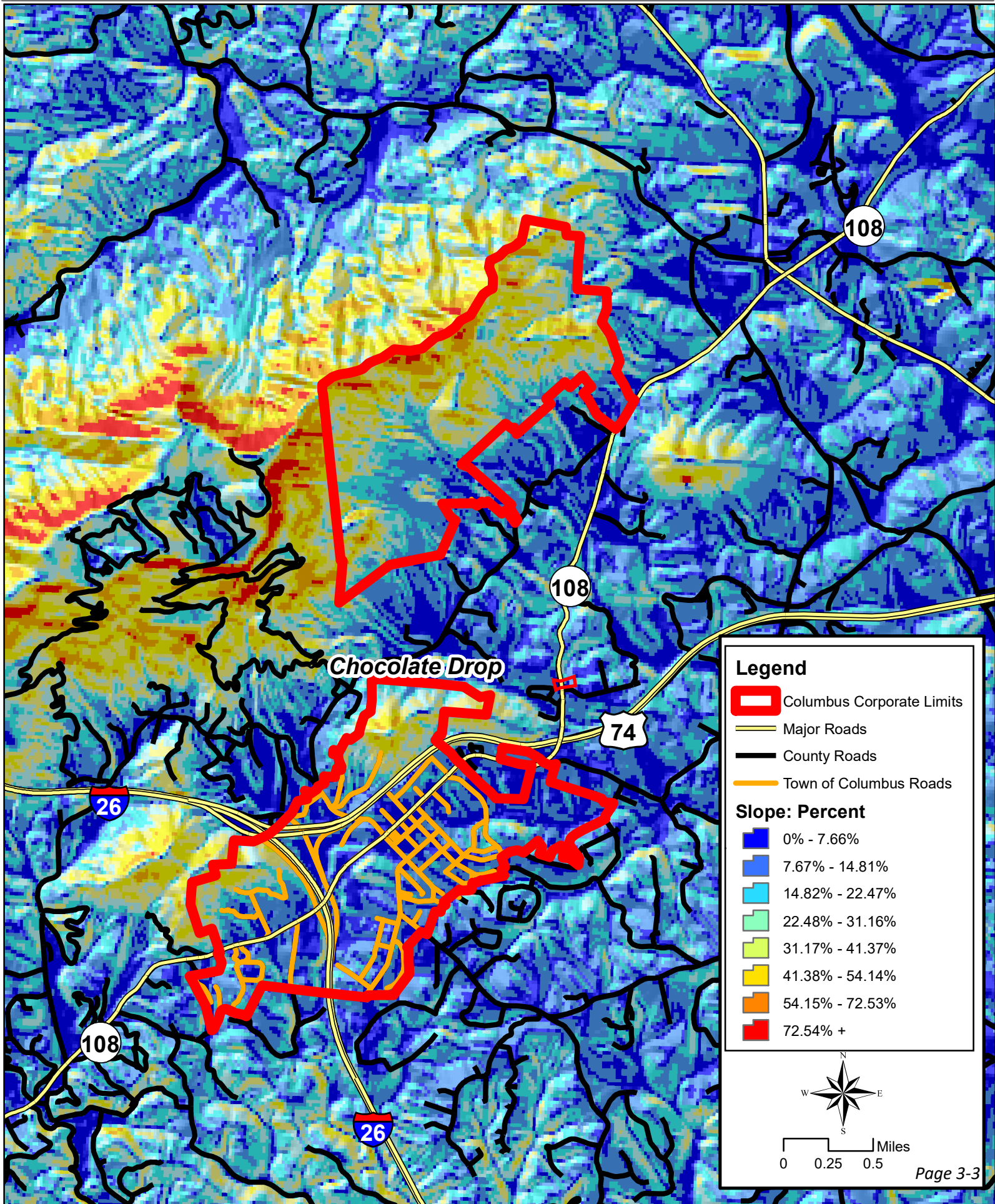
Slope reaches or exceeds 40% on portions of Chocolate Drop Mountain and portions of the satellite annexation area. In the primary corporate limits area, most slopes do not exceed 14.8%, with some limited areas (not on Chocolate Drop Mountain) reaching 22.47%. Map 2 provides a delineation of elevation distribution in the Town of Columbus and surrounding area.

### Surface Waters

The Town of Columbus is located in the Broad River Basin. The following provides a description of the river basin taken from the Broad River Basinwide Water Quality Plan, December 2008.

The Broad River 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 Congaree and Santee Rivers and then the Atlantic Ocean.

# Map 2. Hillside Slope Conditions



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



The geography of the Broad River Basin itself contributes to its ecological significance. The basin drains a section of the Blue Ridge escarpment, but the area is primarily within the piedmont. This provides a wide range of habitat types. The Broad River Basin is home to 15 rare aquatic and wetland-dwelling animal and plant species and includes a considerable portion of the South Mountains – a biologically rich area that is considered of national importance for its ecological assemblage. Five Natural Heritage Program (NHP) Priority Areas are found in the basin: the Rollins/South Mountains Natural Area, Hickory Nut Gorge, the Green River Gorge, the Pacolet River Gorge, and Pinnacle Mountain. Chimney Rock State Park and a portion of Crowders Mountain State Park are also located in the basin.

It also contains 1,508 miles of freshwater streams. The average drainage area is 0.98 square miles per stream mile, but the average is much smaller in the western portion of the basin where there is mountainous terrain. Areas with high drainage density (total length of streams divided by total drainage basin) are associated with high flood peaks, high sediment production, relatively low suitability for traditional agriculture, and high development costs for the construction of buildings and the installation of roads and bridges.

Columbus is located in the North Pacolet River watershed. The 2008 Broad River Basinwide Water Quality Plan provides the following watershed description:

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 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 stormwater runoff and wastewater treatment plants.

Biological monitoring was conducted at three basinwide 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.



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

The basin includes the municipalities of Saluda, Tryon, and Columbus. All surface waters in Columbus's jurisdiction are classified as Class C (see Map 3). The following descriptions these classifications:

- **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.

There are no Trout Waters, High Quality Waters, or Outstanding Resource Waters in Columbus' jurisdiction. Water quality problems in the Broad River Basin are attributable to both point and non-point sources. Point sources are primarily wastewater treatment plants and industrial discharges. Sedimentation is a continuing problem in the basin. Much of the sedimentation is the result of stream bank erosion.

### **Floodplain**

Floodplain designations in Columbus incorporate the following classification as reflected on Digital Flood Insurance Rate Maps (DFIRMs).

- **Zone AE.** Special Flood Hazard Areas inundated by the 100-year floodplain, determined by detailed methods, with base flood elevations shown at selected intervals.

Map 4 delineates the floodprone area within the Columbus planning jurisdiction with current zoning indicated, which is limited to Horse Creek. The flood area within Columbus is only 50.2 acres and is not developed. The AE floodplain is zoned either Highway Commercial or Low-Density Residential.

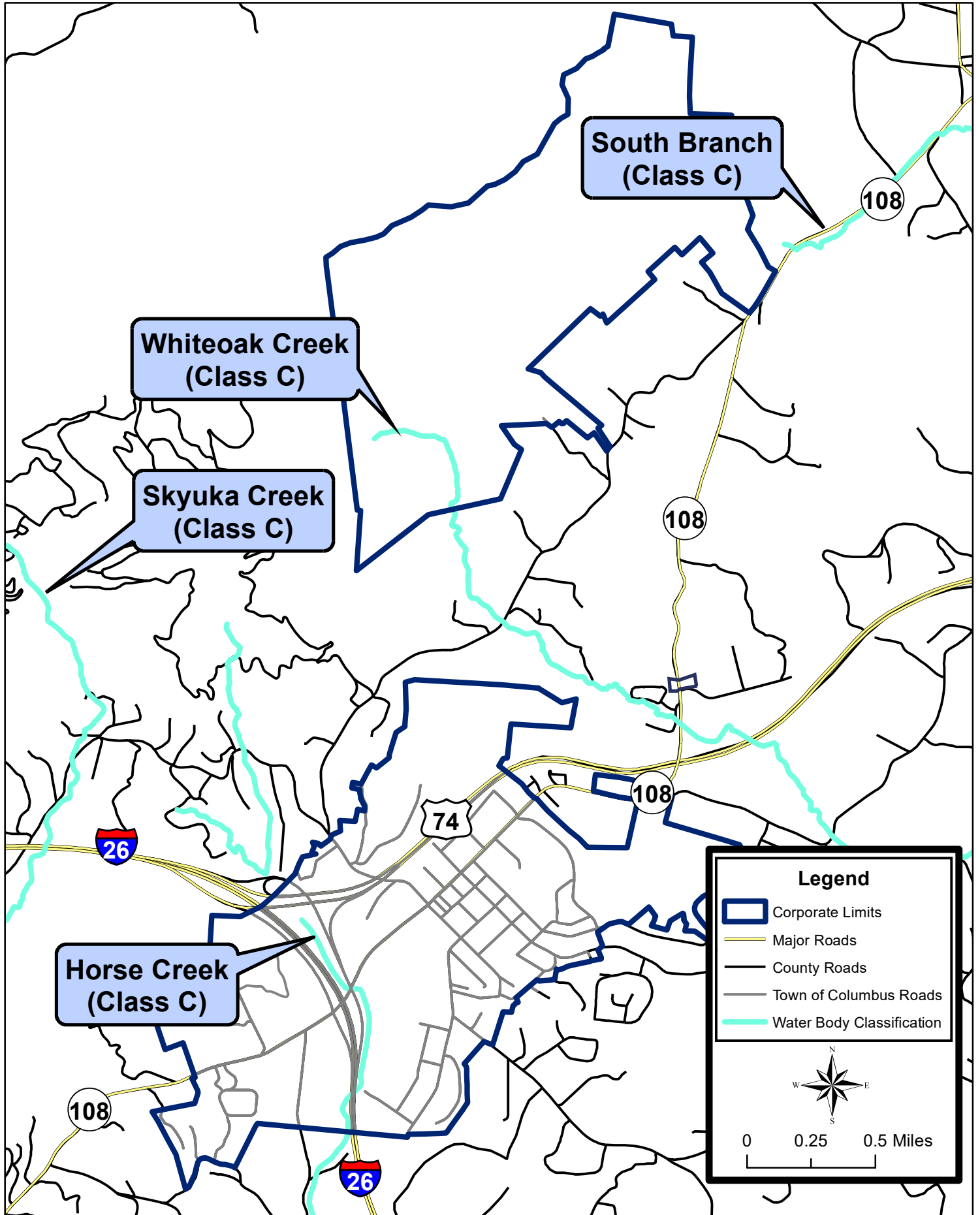
The Town participates in the National Flood Insurance Program (NFIP) and must do so to receive disaster assistance (Disaster Mitigation Act of 2000) and for residents to be provided with insurance in potentially affected areas. Catastrophic storms such as Hurricanes Katrina, Sandy, Matthew, Florence, and Michael have presented a huge financial burden on the NFIP program. Therefore, the federal government is phasing out subsidies for houses that were "grandfathered in" prior to adoption of flood insurance rate maps. This situation will begin to have a significant impact on property owners that are typically not well-informed regarding floodplain impacts, management, and home construction as they must assume the real risk of living in or owning property in a floodplain.



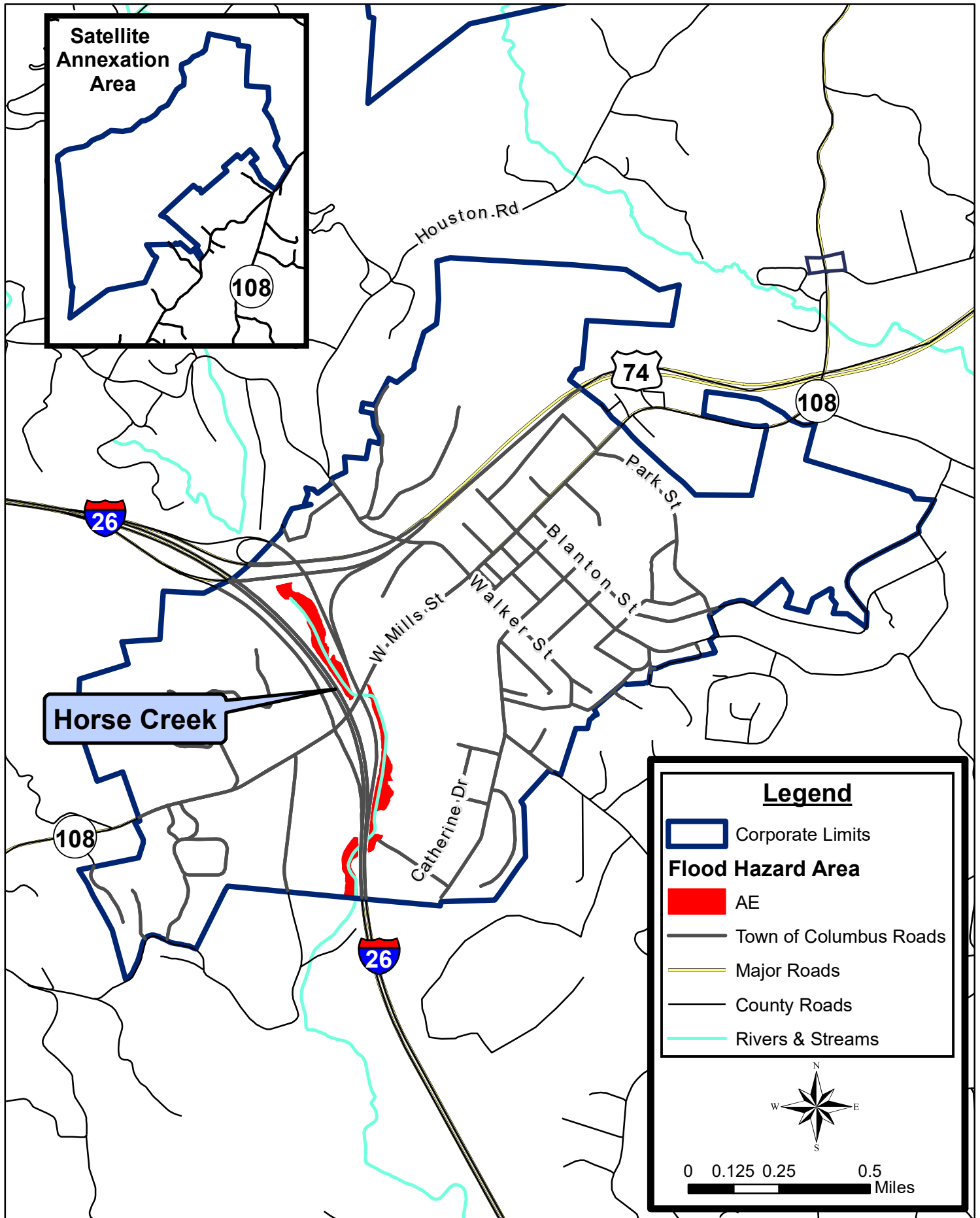
Although protection of public and private property is important, the larger concern is for public safety. Columbus needs to ensure that its residents will be protected. The safest form of protection is to avoid construction of homes and infrastructure in lake and riverine floodplains. If that cannot be achieved, then impacts need to be minimized to the greatest extent possible. Columbus should consider eliminating future construction of homes and businesses in the AE floodplain unless they can be demonstrated to be water-dependent structures. Water-dependent structures are structures such as boathouses, riverwalks, docks, piers, or other structures associated with recreation, education or fisheries. Lots should not be platted in a designated floodplain. Not only will this practice protect lives, it has the added benefit of positively impacting water quality and critical habitat and will minimize the cost of emergency response.



# Map 3. Water Body Classification



# Map 4. Flood Hazard Area





## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



### Soils

The Town of Columbus contiguous corporate limits is primarily developed and all properties within the contiguous corporate limits have access to central sewer service. Thus, soil conditions do not present much of a problem regarding future development throughout the Town. It should be noted, however, that the portion of Town that was satellite annexed does not currently have a solution regarding central sewer service. This issue will have to be resolved prior to development, and soil conditions may factor into this discussion if the development does not utilize the Town's existing system.

The US Department of Agriculture Natural Resources Conservation Service serves as the single authoritative source for soil information. The general soil map for Polk County includes the Town of Columbus. The soil survey identifies seventeen soil types and eight soil series (see Map 5 and Table 7).

Table 7. Soil Types in Columbus

Soil Type	Map Code	Prime Farmland	Typically Wetland	Acres
Cecil-Pacolet (HwB <sub>2</sub> , CeB <sub>2</sub> )		Yes		206.8
Cowee-Ashe-Cleveland (AsF)				131.4
Evard-Fannin-Cowee (FcE, FcD, FcF)				872.0
Hayesville (GrE)				51.8
Pacolet-Bethlehem-Rion (HwC <sub>2</sub> , PbC <sub>2</sub> )		Farmland of Statewide Importance		61.8
Pacolet-Madison-Rion (MaC <sub>2</sub> , MaD <sub>2</sub> , Ud, MsB, PaD <sub>2</sub> )		Farmland of Statewide Importance		843.9
Riverview-Chewacia-Buncombe (DoB, ChA)		Yes	Yes	107.2
Tate-Greenlee (TaC, TaD)			Yes	135.4

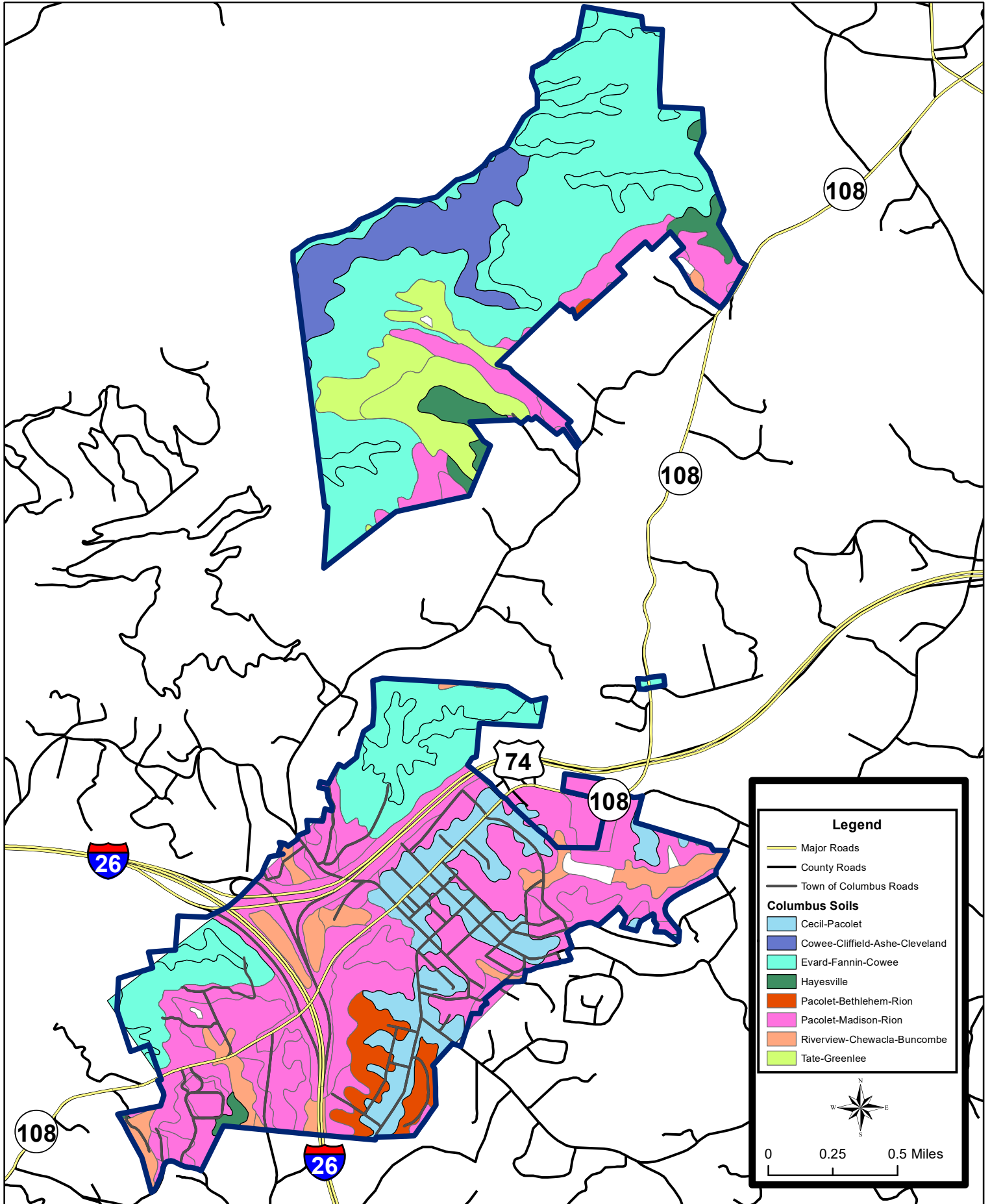
Source: Polk County Soil Survey.

### The Green Growth Toolbox and the Piedmont/Blue Ridge Ecoregions

The Green Growth Toolbox has been adopted for use by Town of Columbus resolution (to be adopted upon plan completion). It provides a highly beneficial planning tool for examining natural resources within the area including wetlands, natural heritage areas, and wildlife (including rare and endangered species). The Town of Columbus falls within two defined ecoregions, the Blue Ridge and the Piedmont. The Town's primary corporate limits fall completely within the Piedmont ecoregion, while the satellite annexation area north of Town is situated right on the edge of the Blue Ridge ecoregion. Thus, it is important to identify sensitive natural resources and wildlife in the land use plan in order to guide development away from these sensitive areas and towards less sensitive areas. The Green Growth Toolbox provides data and recommendations to create and implement such land use plans. Doing so will provide direct benefits to Columbus's health, quality of life, and economy.

Protecting biodiversity does not happen at a localized scale. Each of these identified habitats exists in a landscape and it is at this scale that biodiversity is assured. Connections between protected lands should be maintained and restored to protect all species for the long term. Maintaining core habitat hubs and habitat corridors through the Comprehensive Plan, UDO, and development design should be the main focus for habitat conservation.

# Map 5. Soils



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



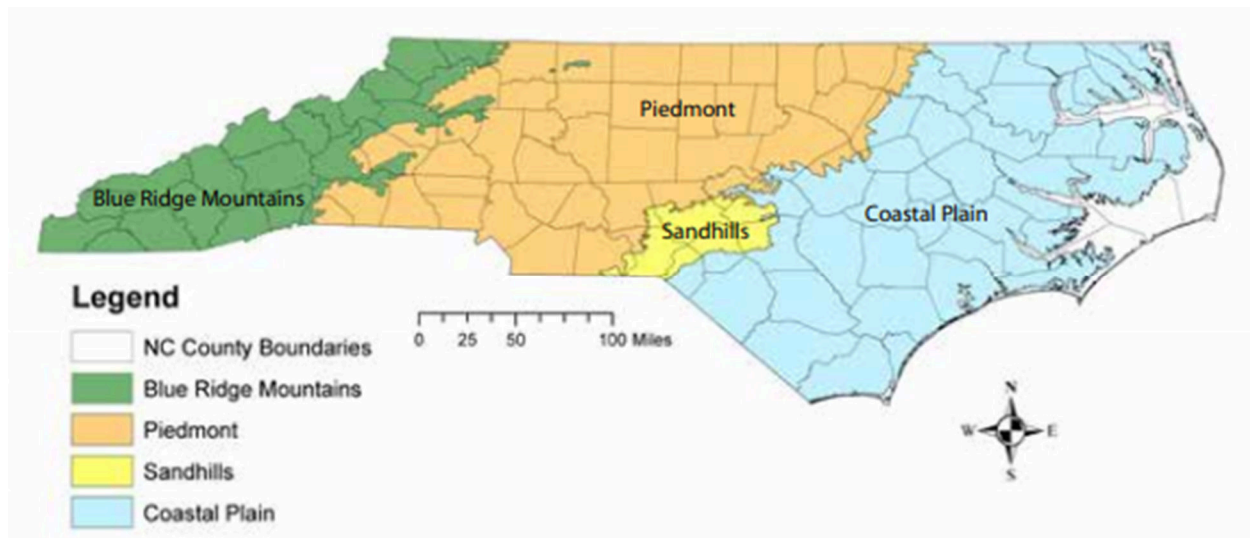
The Green Growth Toolbox presents regional data in two tiers. The first includes Sensitive Wildlife and Natural Resource Areas. These are areas that are important to set aside from development as much as possible. If development occurs, it is recommended that conservation principles be used to minimize fragmentation, sedimentation, loss of natural vegetation, and introduction of non-native invasive plants.

Tier Two resources are areas in which wildlife habitats, corridors, and buffers for wildlife or recreation take place. These areas are less sensitive to rural development. Conservation design principles should be used to minimize fragmentation and other impacts.

The Green Growth Toolbox focus of this plan should accomplish the following to protect wildlife:

- Establish sound passive recreation options for Chocolate Drop Mountain.
- Define conservation strategies that incentivize the following:
  - Major development in and next to existing urban areas as opposed to rural areas.
    - Urban service areas that manage the extension of sewer and annexation. This practice will save taxpayers because development will occur closer to other development, as opposed to the lines potentially never paying for themselves.
    - Transfer of development rights.
  - A development density bonus in exchange for:
    - Riparian and wetland buffers.
    - Connecting all habitat conservation areas in large equally sized areas to minimize habitat fragmentation.
    - Connecting natural areas set-aside on site with natural areas on adjacent parcels.
    - Connecting developed area with adjacent developed areas.
    - Use of other LID techniques to treat all stormwater onsite for the 25, 50 or greater-year storm.

The following provides a brief overview of these two ecoregions, as outlined within the 2015 North Carolina Wildlife Action Plan.



North Carolina Ecoregions (Image Source: 2015 North Carolina Wildlife Action Plan).



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

### Blue Ridge Ecoregion

The mountainous western portion of North Carolina makes up the majority of the Southern Blue Ridge ecoregion. Elevations reach 6,684 feet (Mt. Mitchell) and habitats range from high peak spruce-fir forest to low floodplain valleys. The spatial heterogeneity of the ecoregion's topography (slope, aspect, and elevation) and its unique geologic history has resulted in a broad array of biodiversity. Moreover, the region receives the highest rainfall in the United States east of the Cascades and is home to a range of climate types from warm temperate to boreal. The combination of these conditions, and the fact that this ecoregion escaped glaciation, has provided specialized habitat for the evolution and persistence of a vast and diverse floral and faunal assemblage, including over 400 endemic species – the most found in any ecoregion in North America.

The southern Appalachian region is the world's center for plethodontid salamander diversity. According to the Southern Appalachian Biodiversity Institute, nearly 10% of global salamander diversity and 10% of freshwater mussel diversity occur in this region. Why is species diversity so high in the region? For many typically "northern" species, the Southern Blue Ridge is the southern limit of their distribution. In addition, gradients in elevation, aspect, slope, and rainfall contribute to a range of available niches and habitats.

Many of the factors impacting species conservation in this region can be traced to larger habitat-level issues. The decline of high elevation forests is one of the most pressing habitat concerns in the region. The southern Appalachian spruce-fir forest is considered the second most endangered ecosystem in the United States. The major cause of the decline is attributed to an exotic insect pest, the balsam wooly adelgid. Timber harvest early in the twentieth century also contributed to the forest loss. Loss of spruce-fir forest has severely limited habitat availability for many bird species endemic to the region.

### Piedmont Ecoregion

The Piedmont ecoregion makes up the central portion of North Carolina. Habitats range from mid-elevation forest and bogs at the edge of the Blue Ridge escarpment, to low floodplain valleys towards the east. Species diversity for some animal groups is relatively high in the Piedmont. According to the World Wildlife Fund, Southern Mixed Forests (which encompasses the Piedmont ecoregion) rank among the top 10 ecoregions in North America in richness of amphibians, reptiles, and birds, and among the top 10 ecoregions in number of endemic reptiles, amphibians, butterflies, and mammals. In the context of the eastern United States, many northern and southern species overlap their ranges in North Carolina and in the context of the state, examples of both predominantly montane and coastal fauna are found within the Piedmont region. However, many of the natural habitats within the Piedmont have been altered by human development and intensified forestry and agricultural practices. Less protected public land exists in the Piedmont compared to the Mountain and Coastal Plain regions of the State. Remaining hot spots of biodiversity include high quality stream, floodplain, and wetland habitats, in addition to well managed farm and forest lands.

Many of the factors impacting species conservation in this region can be traced to larger habitat-level issues. Species diversity and conservation in the Piedmont is heavily impacted by rapid development.

## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



### *Regional Habitats*

There are a range of habitat types within and adjacent to the Town of Columbus corporate limits. These habitat types support a wide array of plant and animal species. Additionally, several of these habitats are threatened by various forms of human interventions. The following provides an overview of habitats that should be considered regarding future development within the Town of Columbus, as well as through the planning process.

#### Cove Forest

Montane cove forest occurs in low to mid-elevation sites in moist, protected areas. Coves are generally stable, uneven-aged climax forest, characterized by a dense tree canopy. Common tree species may include yellow poplar, sugar maples, yellow buckeye, basswood, beech, black cherry, white ash, red maple, hemlock, black birch, umbrella tree, fraser magnolia, and northern red oak. Generally, rich coves have a relatively open midstory with a dense herb layer of ferns and numerous herbaceous plants. Appalachian cove hardwood forests represent some of the most diverse ecosystems in the world outside of tropical zones. In general, the most significant problem affecting cove hardwood habitat is its conversion to other uses, primarily in the form of residential development.

#### Dry Coniferous Woodlands – Southern Blue Ridge Ecoregion

This habitat type occurs on sites that are dryer than most mountain sites, including ridgetops, spur ridges, and along steep slopes, generally in the low to middle elevations below 3,500 feet on southern or western aspects. These sites contain shallow, often extremely acidic soils. Typically, lower elevation sites are dominated by Virginia or pitch pine. Canopy species may include table mountain pine, pitch pine, Virginia pine, chestnut oak, Carolina hemlock, or white pine. Fire and other disturbances have played a critical role in the establishment, maintenance, composition, and structure of dry coniferous woodlands. The most significant problem affecting dry coniferous forests in North Carolina is the lack of regular fires needed to maintain and reproduce this habitat type. Fire suppression, or the inability to use fire as a management tool, is resulting in a decline in both quantity and quality of this habitat.

#### Dry Coniferous Woodlands – Piedmont Ecoregion

This habitat type occurs on extremely dry Piedmont sites, including ridgetops and steep slopes. Piedmont Monadnock Forest is a specific community type (distinguished from other dry oak-pine communities by the dominance of chestnut oak) that can include pine species such as Virginia and shortleaf pine in the canopy, a patchy shrub layer and a sparse herb layer. Monadnocks are exposed and subject to disturbance by high winds and lightning and can contain old trees. The location of dry coniferous woodlands along ridgetops and well-drained slopes makes this habitat more prone to fire, including occasional catastrophic fires, than more mesic or sheltered habitats. Other problems affecting species and habitats within this area include human disturbance leading to erosion and mass movement of soil, tree pests and diseases, and development causing habitat loss and fragmentation.

#### Oak Forest (including mixed hardwoods and pine)

This habitat includes a range of moisture and topographic gradient, from dry to mesic and from the Piedmont to some of the highest mountain ranges. The driest sites are dominated by chestnut oak and/or scarlet oak, often with an understory of sourwood, black gum, and red maple. Montane oak-





## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

hickory forests, one of the most abundant ecological community types of this habitat, contain a mixture of oak species (often white oak dominates). By virtue of the production of vast quantities of acorns, hickory nuts, and a wide variety of soft mast associates, the wildlife food production capacity of oak forests is immense. With regard to oak forest habitat, three main categories of problems currently recognized include habitat loss, insects and/or diseases, and inappropriate management. Specifically, these include the following historic and ongoing problems:

- Loss or conversion of habitats (e.g., due to human development, agriculture).
- Increased development leading to greater degrees of habitat fragmentation.
- Amphibian species impacted by loss of embedded ephemeral pool habitats.
- Chestnut blight, oak decline, gypsy moths, and other diseases/pests may significantly affect the composition and diversity of hardwood stands throughout the Southern Appalachians.
- Fire suppression is a major factor affecting species diversity and richness, also affecting the composition, structure and diversity of hardwood stands throughout the Southern Appalachians.
- Homogeneity of stand age has resulted in decreasing habitat for bird species that rely on diverse understory development (lack of understory development).

### [Low Elevation Cliffs/Rock Crops](#)

This habitat category includes areas that are characterized by exposed rock, sometimes supporting forest canopy, but often these areas are too steep or rocky to support a closed canopy. These habitats can be found in the Southern Blue Ridge, but also in some areas of the Piedmont. Often these areas contain patchy vegetation, reflecting the variability in soil depth and moisture content. Seepage may provide some moisture for mosses, lichens, and wetland vegetation.

### [Caves and Mines](#)

Caves are found scattered across the Southern Blue Ridge physiographic province, and some do occur in other regions of the state as well. There are several different types of caves; however, the most common types of caves are solution caves, fissure caves, and rock shelter/boulder caves. Definition of caves and mines habitat type is intended to include only mines which contain subterranean excavations such that conditions inside the mine shafts and tunnels resemble conditions in caves. That being said, the range of variability of those conditions is extensive. The North Carolina Cave Survey has documented over 1,300 caves in the state. However, there is no accurate assessment of the availability of abandoned mines in North Carolina and their individual suitability for use by cave dwelling animals or plants.

### [Bogs and Associated Wetlands](#)

This habitat type is a complex of multiple natural communities found throughout the western portion of the state, including swamp forest-bog complex, Southern Appalachian bog, Southern Appalachian fern, Hillside seepage bog, high elevation seep, and meadow bogs. In addition, these wetlands can be contained in landscapes of montane/piedmont alluvial forest and contain floodplain pool communities. Beavers play a significant role in shaping the hydrologic and vegetative characteristics of these wetlands. Mountain bogs form in poorly drained depressions or on gentle slopes, generally in relatively flat valley bottoms that are not subject to flooding. They are often small (less than 2 acres). Most often they are fed by seepage or springs; however, some are associated with beaver activity and thus impoundment of surface waters. Human activities such as livestock grazing play a major role in the current vegetation



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



makeup of mountain bogs. Most of the known occurrences of them are situated along (both above and below) the Blue Ridge escarpment. Some estimates indicate that fewer than 500 acres of mountain bogs in North Carolina remain. Mountain bogs have suffered dramatic declines at the hand of humans.

Certainly, a significant number of bogs have been destroyed to make way for industrial, commercial, and residential development. Agriculture in North Carolina, both historically and currently, plays a significant role in the availability and condition of mountain bogs. Numerous bogs have been destroyed by agricultural practices including draining, filling, or pond creation. However, many of the remaining mountain bogs are located on agricultural lands dominated by livestock grazing. In fact, most of the more productive bog turtle sites that remain today are found upon grazed lands.

### Floodplain Forest

Floodplain forests of the Southern Blue Ridge physiographic province in western North Carolina are ecologically rich and diverse. Montane floodplain forests are relatively narrow and do not contain well-developed levees, sloughs, and ridges. They are generally restricted to larger streams and rivers with relatively low gradients, since smaller, high gradient streams often do not have representative floodplains, but instead have riparian zones embedded within other habitat types. They are subject to sporadic high-intensity flood events of short duration. Often, floodplain forest, riparian forest, and bottomland forest are used interchangeably to describe habitats associated with mountain waterways. Most of the species associated with floodplain forest will utilize other habitat types, and have been able to survive even in the face of dramatic loss of habitat. Floodplain forests are particularly important habitats for breeding amphibians in the region, mainly due to the inclusion of floodplain pools, and semi-permanent impoundments (i.e., beaver ponds).

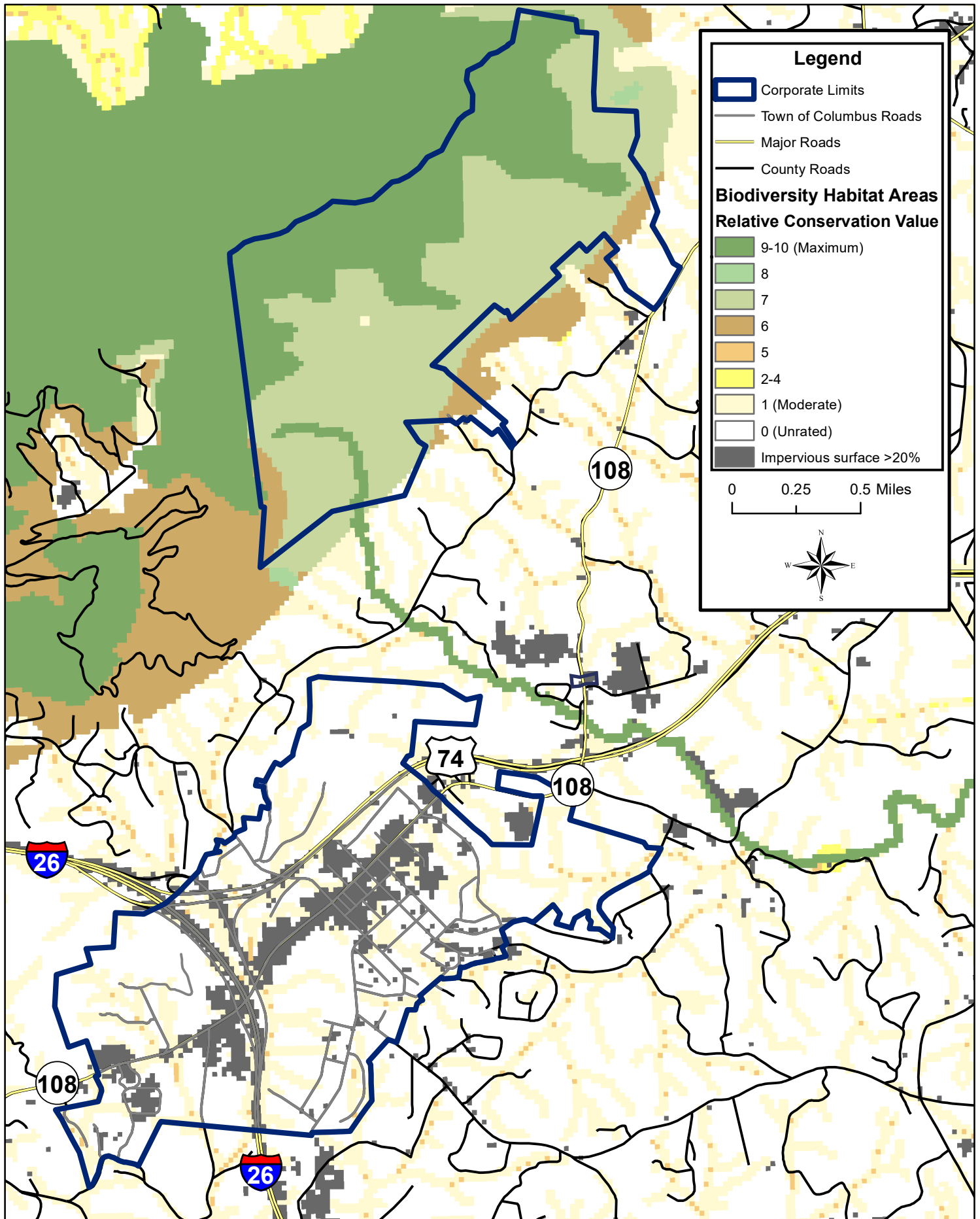
### Riverine Aquatic Communities

Riverine aquatic habitat encompasses the vast array of mountain rivers and streams from headwater seeps and springs through major waterways, including impoundments upon those waterways. Montane riverine habitats are important for a number of reptiles and amphibians including certain turtles, frogs, and salamanders that utilize aquatic habitats during part or all of their life cycle. Human-influenced alterations have affected much of the Mountain Region riverine and floodplain habitats. Water quality and quantity have been impacted by run-off from municipalities and slope development.

### ***Biodiversity and Wildlife Habitat Assessment***

The Biodiversity and Wildlife Habitat Assessment (BWHA) is a map that represents the highest priority areas for conservation of wildlife habitat and biodiversity in North Carolina (see Map 6). The assessment is based on the best science and expertise from multiple sources. Areas with more rare, abundant, and diverse species and habitats are rated as a higher conservation value on a scale of 10 to 1 in the map layer. The areas with a relative conservation value of maximum (10) to very high (7) are the most sensitive with the rarest species and habitats. These are the most important areas to conserve, buffer, and connect for wildlife purposes. Areas with a rank of 6 to 1 are of high (6) to moderate (1) conservation priority. They play an important role in maintaining habitat connectivity and biodiversity but may not be as sensitive or rare as the higher ranked areas. The areas that appear as grey have at least 20 percent impervious surface and likely have the least habitat value. They have been assigned the value of -1. White areas are of unknown value and most have not been inventoried.

# Map 6. Biodiversity Habitat Areas



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The BWA identifies important habitats and wildlife travel corridors that can be used in transportation plans, land use plans and other plans, incentives, and ordinances. The greatest conservation measures should be placed in areas that rank from 10 to 7 in the BWA. High priority areas can be connected by maintaining low density but clustered development in or outside low-ranking areas. All areas with a value equal to or greater than 1 are very important to maintaining a healthy natural environment.

Chocolate Drop Mountain has a BWA assessment of 1 along the headwater streams. Little White Oak Mountain has BWA ratings of 7 and 10.

### *Natural Heritage Areas*

By consolidating information about hundreds of rare species and natural communities, the North Carolina Natural Heritage Program (NHP) ensures that the public is able to get the information that is needed to weigh the ecological significance of various sites and to evaluate the ecological impacts of development. The information aggregated and shared by NHP, using methodology developed by the Nature Conservancy and maintained by NatureServe, helps project planners and landowners make land use decisions that have the most benefit for society and the economy, while having the least ecological impact.

There is only one Natural Heritage Area within the Town of Columbus which is in the Town's satellite annexation area located north of the contiguous corporate limits. Map 7 depicts the location of the Little White Oak/Tryon Peak Natural Heritage Area. This area extends well beyond the satellite corporate limits into unincorporated Polk County.

### *Conservation Lands and Environmentally Sensitive Lands*

In addition to defined natural heritage areas located within the Town's corporate limits, there are other portions of land that are either under conservation easements, or are considered environmentally sensitive. These include lands secured by conservation easements and Wildlife Resources Commission property. Map 7 provides an overview of all of these lands beyond natural heritage areas to include the Pacolet Area Conservancy, land located within the special flood hazard area, the White Oak Creek and North Pacolet River (situated within the Biodiversity Planning Boundary), and properties atop Chocolate Drop Mountain that have been protected by deed restrictions through the Saluda Mountain Land Trust. Map 7 also includes a defined biodiversity planning boundary. This boundary extends one mile beyond the Town's principal corporate limit line and is intended to establish an area beyond the corporate limits within which the Town will work with Polk County to establish effective conservation planning measures. When discussing planning issues associated with biodiversity, all natural features and conservation areas within this one mile radius will be discussed. Within this boundary, the Town of Columbus in concert with Polk County should consider the following green growth principles:

- Maintain large, wide blocks of contiguous habitat to avoid habitat fragmentation.
- Maintain functional connections between core habitat areas that wildlife can travel through to avoid isolating habitats. Major roads and large developments make wildlife travel difficult or impossible while working farms and forests are more conducive to species movement.



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

- Protect rare landscape elements, sensitive areas and associated species. Not all open spaces are created equal. Natural open spaces – such as wetlands, riparian and native upland forests – will protect water, air, and wildlife much better than manicured open spaces.
- Allow patterns of natural disturbance to continue such as periodic fire and river flow patterns. Encourage habitat management, which can be funded by homeowner associations and parks departments.
- Minimize the introduction and spread of nonnative, invasive species.
- Minimize the human introduction of nutrients, chemicals and pollutants, particularly near wetlands and streams.
- Avoid and compensate for adverse effects of development on natural processes, such as the cumulative effects of stormwater runoff on aquatic ecosystems. Maintain or mimic the natural hydrology on development sites.
- Avoid land uses that deplete or degrade natural resources in environmentally sensitive areas, including habitat for species of conservation concern.

The protection of these areas provides a wide range of benefits ranging from natural hazard protection to ecosystem and habitat integrity. The following provides a summary of some of these benefits:

### Floodplains

The protection of floodplains helps to keep forests intact, which serve as an important wildlife habitat. Conservation of floodplains can help in keeping species off of the endangered species list. Many floodplain pools provide important habitat for breeding turtles, salamanders, and frogs. Additionally, when intact floodplains provide mitigation corridors for birds and mammals.

In order to increase the benefits of floodplains, potential development limitations falling within defined protection areas within and adjacent to defined floodplains can be established. In order to achieve this, the Town of Columbus should consider the following:

- Where the floodplain is wider than required stream buffers, protect the full extent of the 100-year floodplain.
- Where feasible, do not place sewer lines, water lines, manholes and other utility infrastructure in the 100-year floodplain.
- Try to avoid clearing, excavating, filling, altering, draining, or placing structures of any kind within the floodplain boundaries. This will also help to prevent or reduce the burden to taxpayers from disaster clean up.

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### Rivers/Streams

Map 7 defines both the White Oak Creek and North Pacolet River as environmentally sensitive areas. Much like floodplains, land adjacent to these waterbodies should be protected from encroaching development. Carrying out these regulations will require amendments to either or both the Town's Zoning Regulations and Subdivision Regulations. This effort can be achieved through the following:

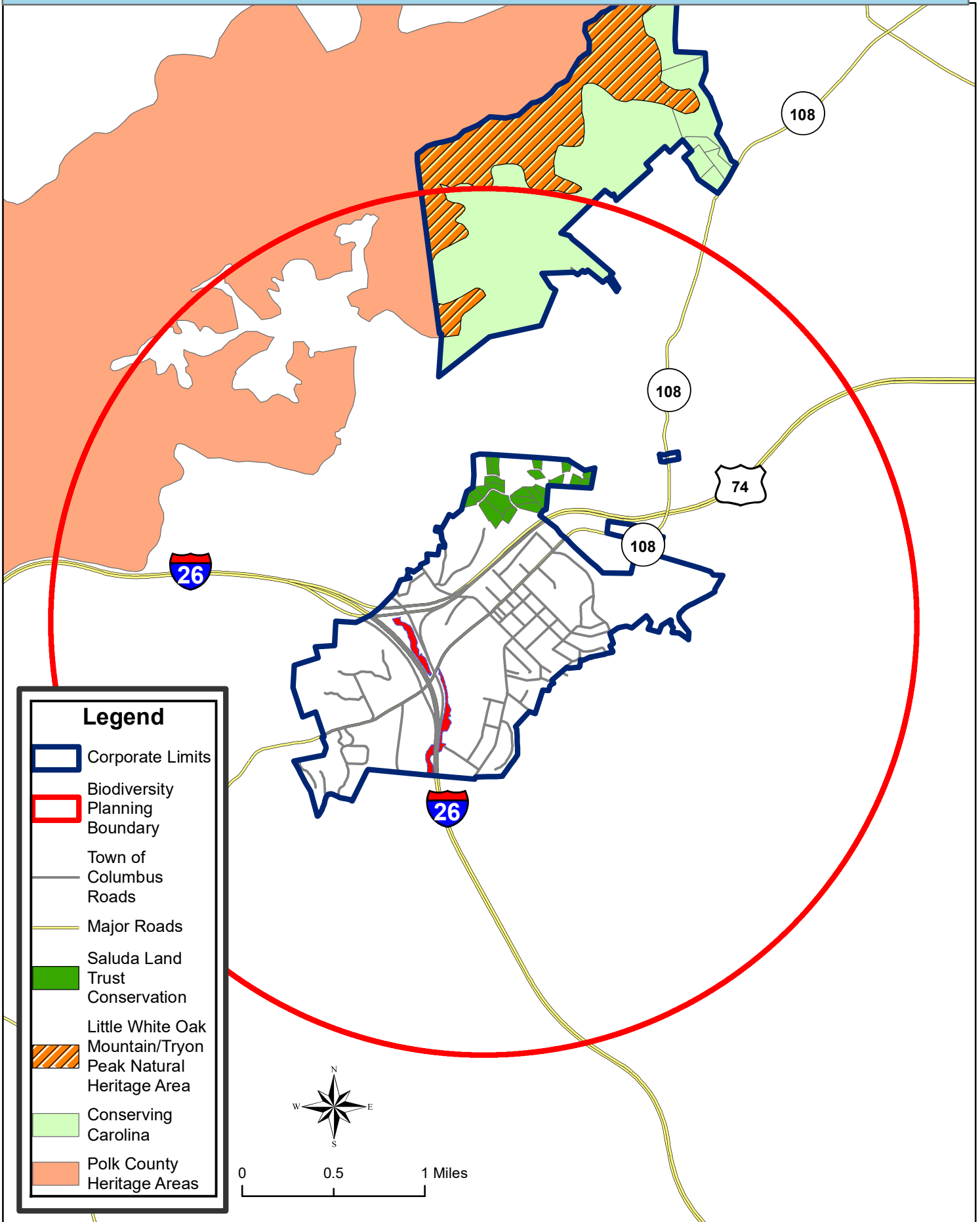
- In subwatersheds without federally listed aquatic species:
  - Preserve 100-foot native, forested buffers on *each side* of perennial streams.
  - Preserve 50-foot native, forested buffers on *each side* of intermittent streams.
- In subwatersheds that contain federally listed aquatic species:
  - Preserve 200-foot native, forested buffers on *each side* of perennial streams.
  - Preserve 100-foot native, forested buffers on *each side* of intermittent streams.
- In all watersheds, buffer ephemeral streams and drainages. Narrower buffers than those recommended for perennial streams will suffice, but again, wider is better.

### Upland Forest

Upland forested habitats area areas that support a wide range of both plant and animal species. It is important that, where feasible, this land not become fragmented in an effort to maintain existing habitats and establish suitable migration corridors. This effort requires that buffers be established within existing and/or proposed conservation areas adjacent to developed/developing properties. In order to achieve this, the following may be considered:

- Try to conserve a connected network of forests and create plans to properly manage habitats post-construction.
- It is recommended that as little development as possible take place in Natural Heritage Natural Areas, areas with natural vegetation within Natural Heritage Element Occurrence polygons or within Landscape Habitat Indicator Guilds that rank at 7 to 10 on the Biodiversity and Wildlife Habitat Assessment.
- Try to conserve larger, wide blocks of forest with less edge on open areas. This effort can be done by encouraging connection of natural open space among parcels. Forest dwelling priority species need the following areas of forest in North Carolina:
  - Contiguous upland, floodplain and wetland forest blocks of at least 500 acres in the Mountains, Southern Piedmont, and Coastal Plain.
  - Seventy-five contiguous acres of non-floodplain (upland) forests in the Piedmont and Coastal Plain can support most priority bird species.
  - Cerulean warblers in the southwest Mountains and many fire dependent species in the Sandhills and the Coastal Plain only occur in forests of over 1,750 acres.
  - Smaller blocks of forest have conservation value as bird migration stop over areas but do not support as many priority species.

# Map 7. Environmentally Sensitive Lands





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### Listed Species

The NC Wildlife Resources Commission designates plant and animal species of significance. The listing indicates if species are threatened or endangered. The following identifies species in Polk County. Some of these species may be located within the Town of Columbus contiguous or satellite annexation area.

Common Name	Scientific Name	Federal Status	State Status
Four-toed Salamander	<i>Hemidactylium scutatum</i>		SC
Green Salamander	<i>Aneides aeneus</i>		E
Spotted Dusky Salamander	<i>Desmognathus conanti</i>		
Yonahlossee Salamander	<i>Plethodon yonahlossee</i>		
American Black Duck	<i>Anas rubripes</i>		
American Kestrel	<i>Falco sparverius</i>		
Barn Owl	<i>Tyto alba</i>		
Cerulean Warbler	<i>Setophaga cerulea</i>		SC
Kentucky Warbler	<i>Oporornis formosus</i>		
Loggerhead Shrike	<i>Lanius ludovicianus</i>		SC
Northern Bobwhite	<i>Colinus virginianus</i>		
Northern Saw-whet Owl	<i>Aegolius acadicus</i>		T
Peregrine Falcon	<i>Falco peregrinus</i>		E
Prairie Warbler	<i>Dendroica discolor</i>		
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>		
Ruffed Grouse	<i>Bonasa umbellus</i>		
Rusty Blackbird	<i>Euphagus carolinus</i>		
Savannah Sparrow	<i>Passerculus sandwichensis</i>		
Swainson's Warbler	<i>Limnithlypis swainsonii</i>		
Worm-eating Warbler	<i>Helmitheros vermivorum</i>		
Eastern Small-footed Myotis (bat)	<i>Myotis leibii</i>		
Indiana Myotis (bat)	<i>Myotis sodalist</i>	E	E
Little Brown Myotis (bat)	<i>Myotis lucifugus</i>		
Rafinesque's Big-eared Bat	<i>Corynorhinus rafinesquii</i>		T
Bog Turtle	<i>Glyptemys muhlenbergii</i>	T	
Eastern Box Turtle	<i>Terrapene Carolina</i>		
Timber Rattlesnake	<i>Crotalus horridus</i>	SC	

Source: NC Wildlife Resources Commission.

Although not recently located in Polk County, the Northern Long-Eared Bat is present in all counties surrounding Polk County. In an effort to protect this species, which is nearing extinction, special measures should be taken during the planning and development of potential development projects. The Wildlife Commission recommends that development projects demonstrate their projects will not impact federally listed species at the first state of development design. Northern Long-Eared Bats are listed as federally threatened because the majority have died from White Nose Syndrome, a fungus that overtakes



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

these and other bats in caves during hibernation. Conservation strategies for all bats include avoiding habitat impacts within 150 feet or more of caves, mines, and rock outcrops; conserving as many older trees or snag trees as possible while minimizing forest fragmentation; and supporting prescribed burning of all habitats.

### **Wetlands**

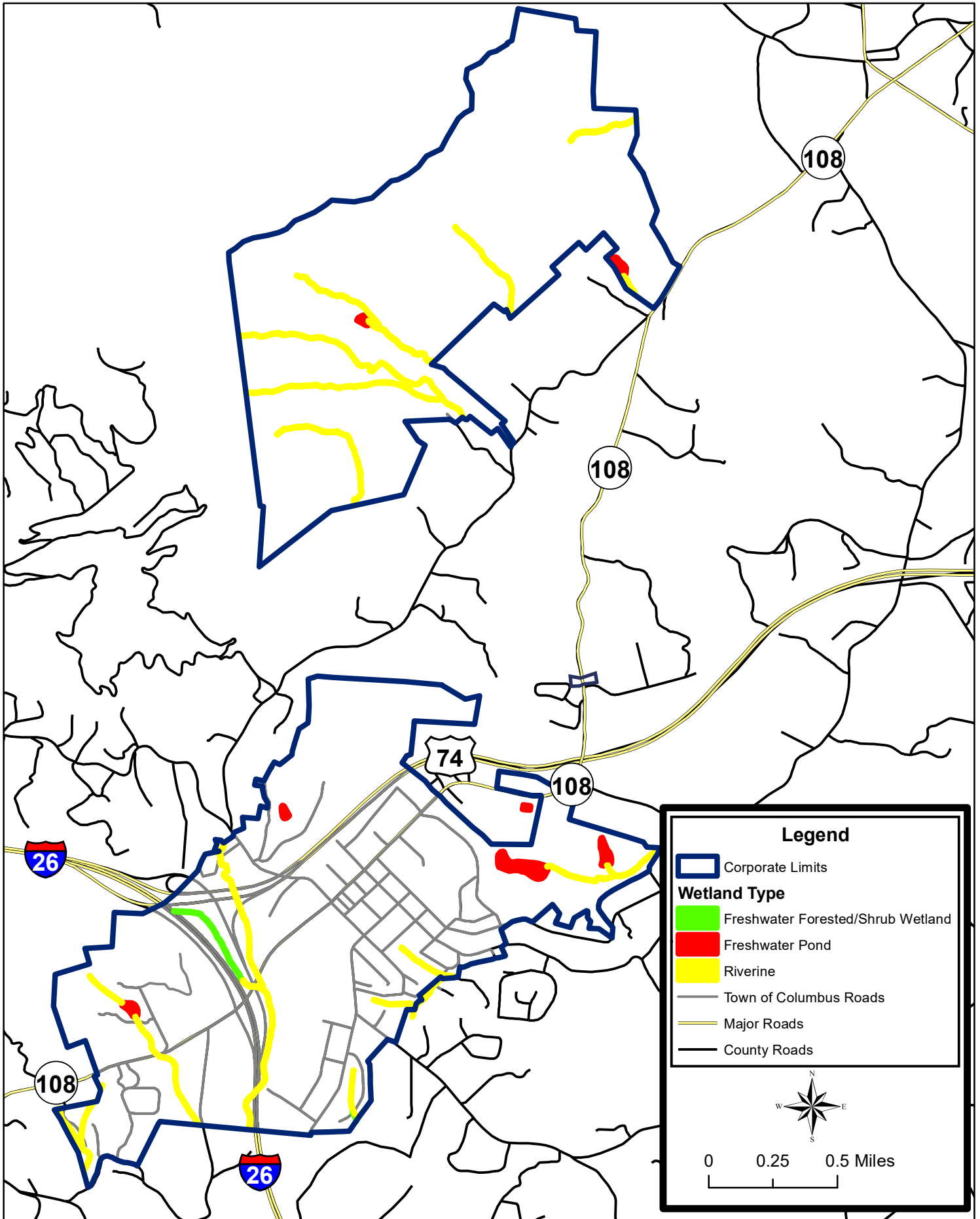
Wetlands provide a multitude of ecological, economic, and social benefits. They provide habitat for fish, wildlife, and plants - many of which have a commercial or recreational value - recharge groundwater, reduce flooding, provide clean drinking water, offer food and fiber, and support cultural and recreational activities. The US Army Corps of Engineers defines wetlands as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The US Fish and Wildlife Service (FWS) is the principal federal agency tasked with providing information to the public on the status and trends of the Nation's wetlands. The US FWS National Wetlands Inventory (NWI) is a publicly available resource that provides detailed information on the abundance, characteristics, and distribution of US wetlands. The following table and supporting map provide a summary of wetland areas located throughout the Town of Columbus's corporate limits. There are only 100 acres of wetlands located in the Town's corporate limits. Most of those wetlands (86.36 acres) are riverine.

<b>Wetland Type</b>	<b>Acres</b>	<b>% of Total Corporate Limits</b>
Freshwater Forested/Shrub	4.30	0.18%
Freshwater Pond	9.98	0.41%
Riverine	86.36	3.57%
<b>Total</b>	<b>100.64</b>	<b>4.16%</b>

*Source: National Wetlands Inventory.*

# Map 8. Wetlands





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## COMMUNITY FACILITIES

### Water System

Based on the 2018 Division of Water Resources local water supply plan, the Town of Columbus operates its own municipal water system. The water supply is provided by the following four wells:

**Table 10. Town of Columbus Water System**

Number	MDG	Days Used	Max Day Withdrawal (MGD)	12-Hour Supply (MGD)
1	0.0320	365	0.157	0.1580
2	0.0520	361	0.122	0.2520
3	0.0720	364	0.108	0.1730
4	0.0760	362	0.350	0.2740

*Source: 2018 Local Water Supply Plan.*

There is a total of 831 residential connections and 175 commercial connections serving Town residents and businesses, as well as some properties located outside the Town’s corporate limits. The overall system is comprised of 32 miles of water lines. The Town has a purchase agreement with the Town of Tryon for 0.5 MGD which expires in 2028. There are no violations of North Carolina Division of Water Resources operational standards.

### Sewer System

The Town of Columbus operates a sanitary sewer collection and waste treatment system. The system serves 584 customers through a system comprised of 18 miles of line. There are 455 water service connections with septic systems. The Town is planning to expand its wastewater treatment facilities within the next ten years. The treatment plant discharges into a branch of White Oak Creek, which flows to the Broad River. The Town is not under any orders for violation of State of North Carolina water quality standards. The following provides a summary of monthly sewer discharges for January to December 2018.

**Table 11. Town of Columbus Sewer System**

Month	Average Daily Discharge (MGD)	Month	Average Daily Discharge (MGD)	Month	Average Daily Discharge (MGD)
January	0.1320	May	0.1460	September	0.1390
February	0.1400	June	0.1440	October	0.1380
March	0.1350	July	0.1560	November	0.1200
April	0.1510	August	0.1530	December	0.1150

*Source: 2018 Local Water Supply Plan.*

### Storm Drainage

There are two significant storm drainage issues in the Town of Columbus. The first area starts at Wall Street and Simms Street and continues to an off-road “wastewater” easement. The second area starts on Main Street and continues on Houston Road to the corporate limit line. Both problem areas are under study by the Town. It should also be noted that the east side of Town drains to White Oak Creek, which

## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



ultimately drains to the Broad River, while the west side of Town drains to Horse Creek, which ultimately drains to the North Pacolet River.

Storm drainage and flooding has become a significant issue for both County and Municipal governments in recent years. Development within communities that do not deal with excessive flooding will become more desirable as this issue continues to become more problematic. Columbus is unique in that it is situated along the ridge of two watershed boundaries.

Within the Town, there are several stormwater detention ponds engineered to collect and control rainwater. During extreme rain events, it is possible that these facilities will overflow resulting in non-point source stormwater runoff. Future developments may utilize the Community Conservation Assistance Program to utilize funding-focused Low Impact Development (LID) Best Management Practices (BMP) facility construction. Additionally, the Town and County will work with developers to promote building practices that consider conservation design principles. Through implementation of the plan, the Town will work in conjunction with the County to develop materials and provide them to contractors through the project approval process.

### **Solid Waste**

The Town of Columbus contracts with Waste Industries for weekly solid waste pickup of residential and small commercial businesses. The pickup day is on Tuesday. Curbside pickup is provided to all residences within the Town with containers no larger than 90 gallons.

The Town Public Works Department picks up limbs and yard debris on Friday. Yard waste is collected at the roadside weekly. Items that may be put out for collection include grass clippings, leaves, and limbs. Limbs must be in lengths no longer than six feet.

The Town also offers a Spring Clean-Up Week during which almost anything is picked up except for hazardous waste. Dates for Spring Clean-Up Week are advertised in the media each year.

### **Administration**

The Town of Columbus operates under the council-manager form of government. In 2004, the Town switched from a council-administrator form of government to a town manager form of government. The Town Council saw a need to have more formal administration to handle and deal with the growth and change the Town is facing. The Town Manager conducts the overall administration of the Town as allowed by the North Carolina General Statutes, and coordinates all activities of the Town and all policies and actions of the Town Council. The Mayor is elected every two years, and three Council seats are eligible for election each two years. The Council member with the highest vote receives a four-year term, with the other two winners receiving two-year terms.



The Town employees provide services of police, water, sewer, and street maintenance. Administrative staff consists of the Town Manager, Town Clerk/Assistant Finance Director, Assistant Town Clerk, and a Customer Service Representative.



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The Town Manager serves as the Town Planner and handles permit review, provides staff recommendations, and serves as the Staff liaison to the Town's Planning Board and Board of Adjustment at their board meetings held monthly. The Budget and Finance Department, led by the Town Manager and the Assistant Finance Director, is responsible for the preparation of each year's annual operating budget and, along with an outside independent auditor, the Comprehensive Annual Financial Report which is submitted to North Carolina's Local Government Commission.

The Town has been awarded the prestigious Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association of the United States and Canada (GFOA) since 2009. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

### **Fire Department**

The Columbus Volunteer Fire Department provides fire protection to the Town of Columbus and the entire Columbus Township area (54 square miles). Staff support includes six (6) full-time firefighters (24/7 shifts) and 28 volunteers. The staff includes a Fire Chief and all firefighters are certified by the State of North Carolina. Calls for assistance in the Township total 1,500 per year. Other capabilities include 22 certified EMTs and a certified swift water team. The Department maintains an Insurance Services Office (ISO) rating of 5. In 2018, the Department was rated as one of the Top 10 volunteer fire departments in North Carolina. Equipment includes the following:

- One 75-foot aerial truck (500-gallon capacity)
- Four Class A engines
  - 1,200-gallon capacity
  - 2,000-gallon capacity
  - 2 tanker trucks
- Two brush trucks
- One service truck
- One rescue truck with rescue equipment



### **Police Department**

The Columbus Police Department is an award-winning department that has been recognized statewide for outstanding service and diligence to the community. The Columbus Police Department strives to create and maintain an environment for safety that promotes respect for and appreciation of freedom, human diversity and cultural pluralism, characteristic of the Columbus community.

Safety and security are coordinated by the Chief of Police, with a force of 9 sworn police officers and 6 sworn reserve officers. The Police Department provides 24-hour service within the Town limits. The Department maintains mutual aid agreements with all surrounding law enforcement agencies.

Police officers are graduates of the North Carolina Justice Training Academy with full arrest powers throughout the Town limits and extraterritorial one-mile jurisdiction. They undergo continued training to upgrade their skills. Many of the





## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



department's police officers have two- and four-year college degrees. Others are pursuing their college degrees to enhance their level of service to the citizens of Columbus.

Officers conduct foot and vehicular patrols in the community 24 hours a day. They are responsible for reporting and investigating crimes and traffic accidents, enforcing state laws and local ordinances, and all other incidents requiring police assistance.

### **Healthcare**

St. Luke's Hospital has provided healthcare services for more than 80 years. The hospital, with a medical staff of 75 and a hospital staff of 100, is a critical access hospital that serves Polk County and upper South Carolina. As a non-profit facility, St. Luke's has benefitted from the generous support of the community.

St. Luke's offers advanced orthopedic and general surgery, geriatric psychiatry, digital imaging services, laboratory, pharmacy, respiratory therapy and rehabilitation. Also residing on the St. Luke's campus are Polk County EMS and a medical helicopter pad. St. Luke's Surgical Associates, Rosenberg Bone and Joint, Foothills Medical Associates, and Saluda Family Medicine are offsite medical providers.

St. Luke's Hospital enjoys close affiliations with trauma centers in Spartanburg, Asheville, Greenville, and Charlotte, all just a short distance away by helicopter or ambulance. The hospital is affiliated with Atrium Health (formerly Carolinas HealthCare System) of Charlotte for purchasing, contracting, and management assistance.

St. Luke's Hospital was recognized by The Joint Commission as a Top Performer on Key Quality Measures for 2013 and is one of 39 hospitals in North Carolina to be recognized as a Top Performer in quality measures for treating pneumonia and for surgical care. St. Luke's Hospital was also recognized by iVantage Health Analytics for overall experience in quality and patient satisfaction. In 2018, Press Ganey ranked St. Luke's Hospital in the Top 10 percent for patient satisfaction.



### **Recreation**

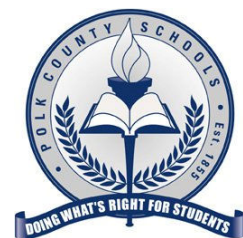
The Town of Columbus does not maintain/operate any recreational facilities. However, Polk County maintains three recreational facilities within the Town including:

- Gibson Park and Pool which also includes a ballfield and playground equipment.
- Stearns Gym which also houses County offices and classrooms. Activities include day camp programs, basketball, volleyball, and pickleball.
- Stearns Park which includes a paved walking loop, playground, gazebo, and picnic tables.
- Walking trail behind the Columbus Library.

### **Education**

The Town of Columbus is served by the Polk County School System. The schools serving the Town include the following:

- Polk County Early College





## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

- Polk County High School
- Polk County Middle School
- Tryon Elementary School

Generally, the Polk County School System is well regarded with all system schools achieving North Carolina Report Cards of A or B with no achievement or graduation gaps.

Isothermal Community College, a member of the North Carolina Community College System, is a comprehensive, two-year, public institution that serves the individuals in Rutherford and Polk counties. In addition to individual courses, the College offers certificate, diploma, and degree programs enabling students to either transfer to a four-year institution or acquire skills for new or current employment, as well as function effectively as responsible citizens. The College also provides training for area business and industry, personal enrichment courses, remedial and developmental courses, and community service activities. While the main campus is located in Spindale, NC, the Isothermal Polk Center is a continuing education center situated on Highway 108 (West Mills Street) in Columbus, North Carolina. The Polk Center provides continuing education opportunities in Allied Health, including Nurse Aide; College and Career Readiness, Customized Training, including Hospitality Institutes and the One-Minute Ambassador course; Groom Elite; Massage Therapy; Occupational Extension programs for emergency services personnel; Small Business Center services, including seminars and individual consultations.

### *Library*

The Town of Columbus does not maintain/operate a library. However, the main branch of the Polk County Public Library System is located in Columbus. The branch is a 18,000 square foot facility located adjacent to the Columbus campus of the Isothermal Community College. The facility holds over 44,000 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.



### *Natural Gas*

Dominion Energy 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.

### *Electricity*

The Town of Columbus is provided electrical service by Duke Energy Carolinas.

### *Historic Properties*

The National Register of Historic Places is the official list of the nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources. There

## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



are currently two (2) listings in Columbus on the National Register of Historic Places. These listings include the J.G. Hughes House and the Polk County Courthouse.

### TRANSPORTATION

The Town of Columbus is centrally located within Polk County, and is dissected by several major transportation corridors. The presence of these corridors provides efficient ingress and egress to the Town from the north, south, east, and west. US Highway 74 enters Columbus from the North and heads towards Gastonia and Charlotte. Interstate 26 heads to the Greenville/Spartanburg region to the South and Hendersonville/Asheville to the north. Within Town, Columbus owns and maintains 8.65 miles of public right-of-way. Ownership of the roads throughout the Town's corporate limits is defined on Map 9. This map provides a summary of average annual daily traffic counts recorded by NCDOT in 2016. According to these counts, the most traveled street segment is along US Highway 74 between the Town limits and Interstate 26. The most utilized local access street is along South Peak Street.

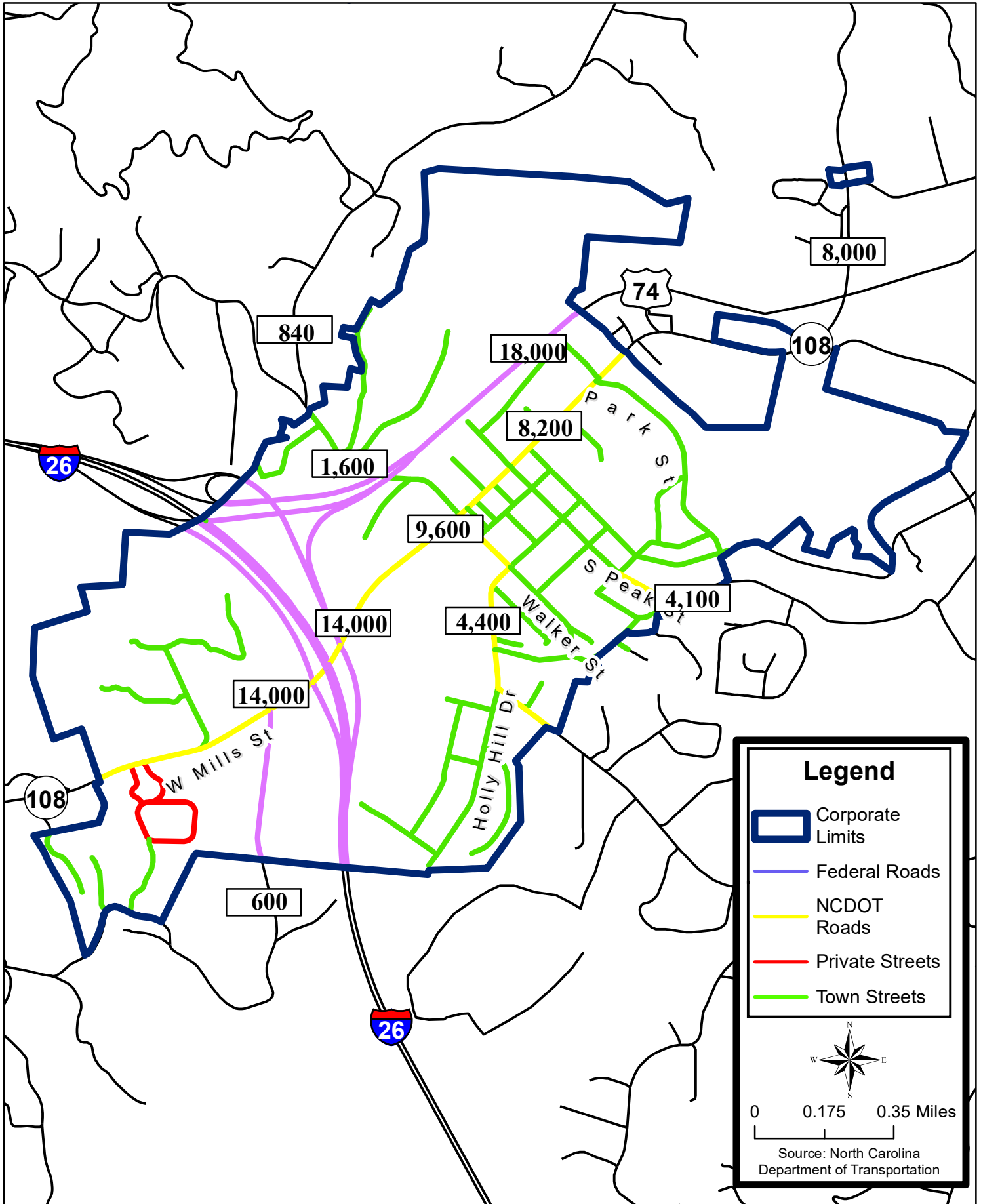
The Town of Columbus received \$13,760 for fiscal year 2020 for the maintenance of Town streets through the NC Powell Bill program. The Powell Bill program provides funding to municipal local governments for the purposes of maintaining, repairing, and constructing streets. This money is allocated from funds collected from the state's gas tax and distributed based on a community's population and street mileage.

Columbus provides accommodations for pedestrian traffic through the Town's central business district. Sidewalks are situated along both sides of Mills Street most of the way through Town. Additionally, there are some sidewalk facilities traversing a portion of Walker Street leading up to the Town's Municipal Building. There are currently no multi-modal paths or bicycle facilities incorporated into any of the Town's existing right-of-way.

In addition to this infrastructure, Polk County provides low/no-cost transportation to Town residents. Transportation is funded through the Rural Operating Assistance Program and is intended to serve the elderly, as well as low income individuals requiring transportation to work. Citizens must apply for eligibility annually.

The citizens of Columbus have regional access to three airport facilities. The closest airport is the Hendersonville Airport. The Hendersonville Airport is a general aviation airport for local use, but does not support commercial traffic. The closest airports supporting commercial air carriers is the Asheville Regional Airport and the Greenville-Spartanburg International Airport. The Asheville airport is a Class C airport accommodating approximately 200 aircraft operations per day. The Greenville-Spartanburg International Airport (GSP) is located in Greer, South Carolina. It is currently the second busiest airport in the state of South Carolina and provides a range of commercial flight options. More than 2.3 million passengers are served each year at GSP.

# Map 9. Town Streets & Daily Traffic Counts





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### EXISTING LAND USE

The following provides a summary of existing land use for the Town of Columbus. Existing land use conditions provide a snapshot of the existing urban condition. Land use patterns with maps and associated data enable policy makers to make more informed decisions about future service needs and future land use demands. This effort, in turn, assists elected officials, planning board members, and citizens at-large in making educated decisions about rezoning cases (map amendments), quasi-judicial hearings, and zoning ordinance text amendments.

Existing land use should not be confused with zoning. Existing land use classifies the current land use, which may differ from current zoning. The following provides a summary of the existing land use categories utilized:

#### **Multi-Family Residential**

Residential developments with three or greater units per acre on a single lot.



Example of Multi-Family Residential (Image Source: Insight).

#### **Single-Family Residential**

All residential properties with fewer than three units on a single lot.



Example of Single-Family Residential (Image Source: Insight).



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### **Commercial**

Retail, wholesale, and service establishments.



Example of Commercial (Image Source: Insight).

### **Light Industrial**

Light manufacturing and/or warehousing facilities.



Example of Light Industrial (Image Source: Insight).



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS



### *Office and Institutional*

Government, churches, offices, and schools.



Example of Office and Institutional (Image Source: Insight).

### *Recreational*

Portions of Town dedicated to the provision of active and passive recreation.



Example of Recreational (Image Source: Insight).



## SECTION 3. ENVIRONMENT/ EXISTING CONDITIONS

### Existing Land Use Acreages

The Polk County tax parcel file, in coordination with aerial photos, was used to determine the existing land use classification for properties throughout Columbus. Field surveys and Google Map street view were used to confirm the accuracy of the aerial photos and tax data. Further, property value was used to ensure whether parcels were unimproved. See Table 12 and Map 10 for more information. This information is broken down by acreage in the contiguous corporate limits and acreage associated with the Town's satellite annexation area to the north.

**Table 12. Existing Land Use – Contiguous Corporate Limits**

Land Use	Acres	% of Total
Commercial	72.8	6.7%
Light Industrial	34.0	3.1%
Office & Institutional	89.3	8.2%
Recreation	6.2	0.6%
Multi-Family Residential	16.6	1.5%
Single-Family Residential	394.8	36.2%
Vacant	476.8	43.7%
Total	1,090.5	100.0%

*Source: Polk County Tax Office, Insight Planning & Development.*

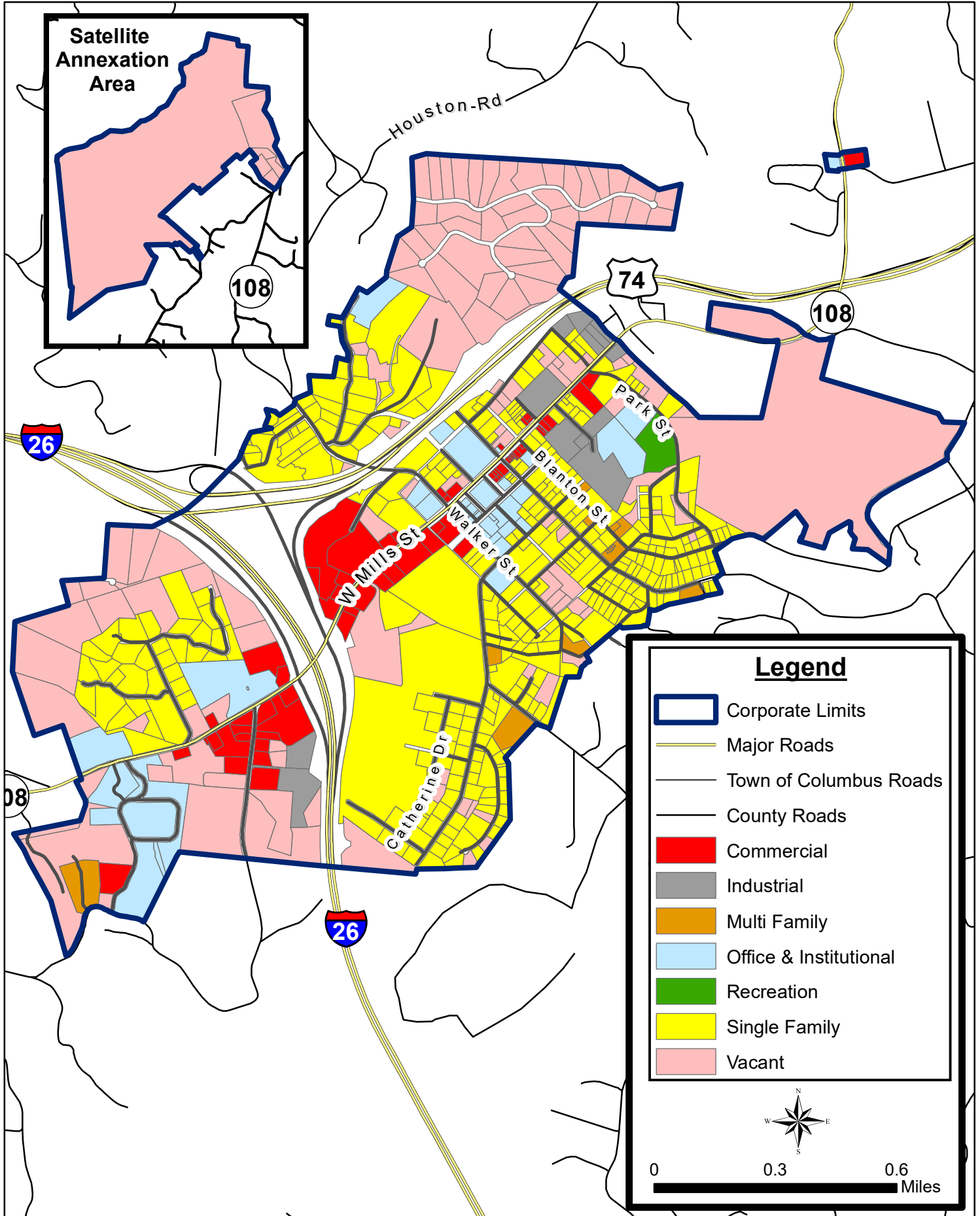
**Table 13. Existing Land Use – Satellite Corporate Limits**

Land Use	Acres	% of Total
Commercial	2.2	0.2%
Vacant	1,053.1	99.8%
Total	1,055.3	100.0%

*Source: Polk County Tax Office, Insight Planning & Development.*

One factor that should be considered when discussing existing land use is the number of county-owned properties within the Town's jurisdiction. The Town does not collect taxes on these properties which cannot be developed/redeveloped through economic development efforts.

# Map 10. Existing Land Use





## Environment/Existing Conditions Summary

THE AVERAGE WINTER TEMPERATURE IN THE TOWN OF COLUMBUS IS 44 DEGREES WITH AN AVERAGE LOW OF 32 DEGREES. THE AVERAGE SUMMER TEMPERATURE IS 76 DEGREES WITH AN AVERAGE HIGH OF 87 DEGREES.

THE TOWN OF COLUMBUS HAS A VERY LIMITED AREA AFFECTED BY FLOODPLAIN. ONLY ABOUT FIFTY ACRES OR 2% OF THE TOWN'S TOTAL ACREAGE FALLS WITHIN A DEFINED SPECIAL FLOOD HAZARD AREA.

THE TOWN OF COLUMBUS FALLS WITHIN TWO OF NORTH CAROLINA'S ECOREGIONS, THE PIEDMONT AND THE BLUE RIDGE. THE CORPORATE LIMITS OF THE TOWN FALLS ALONG A PORTION OF THE STATE DESCRIBED AS THE BLUE RIDGE ESCARPMENT.

THE TOWN OF COLUMBUS OPERATES BOTH A MUNICIPAL WATER AND SEWER SYSTEM. THE TOWN'S WATER SYSTEM PROVIDES SERVICE TO 831 RESIDENTIAL CUSTOMERS AND 175 COMMERCIAL USERS, WHILE THE SEWER SYSTEM CURRENTLY HAS 584 CUSTOMERS.

THE TOWN OF COLUMBUS OPERATES UNDER A COUNCIL-MANAGER FORM OF GOVERNMENT, HAVING SWITCHED FROM A COUNCIL-ADMINISTRATOR FORM OF GOVERNMENT IN 2004.

EIGHT LAND USE CLASSIFICATIONS THROUGHOUT THE CORPORATE LIMITS ARE DEFINED WITHIN THE PLAN. THESE INCLUDE: COMMERCIAL, LIGHT INDUSTRIAL, OFFICE & INSTITUTIONAL, RECREATION, MULTI-FAMILY RESIDENTIAL, SINGLE-FAMILY RESIDENTIAL, RIGHT-OF-WAY, AND VACANT.



## SECTION 4. PROJECTIONS/FUTURE DEMAND

### INTRODUCTION

Forecasting demographic/economic change and associated service demand is often difficult. The reader should consider all forecasts as a “moving target” which must be continuously monitored. The forecasts provided in this section are guidelines for the Town’s future growth.

### POPULATION

The Columbus population is forecast to increase to 1,299 by 2040, a total 20-year population increase of over 28.6%. This growth rate is generally consistent with that of Polk County through 2040. It should be noted that most of Polk County’s anticipated growth is expected to occur in the vicinity of Columbus, Saluda, and Tryon. The Columbus population may be impacted in the next five years by the construction of 32 workforce dwelling units situated within the satellite annexation area. If this construction occurs, the Town’s population could increase by an additional 81 persons (based on a 2017 average owner-occupied household size of 2.52).

**Table 14. Population Projections, 2020-2040**

Jurisdiction	2020*	2025	2030	2035	2040	% Change
Columbus	1,010	1,076	1,146	1,220	1,299	28.6%
Polk County	21,852	22,605	23,299	24,070	24,482	12.0%

*\*The 2020 population is based on the 2018 population provided in Table 1, but accounts for projected growth over the two-year period.*

*Source: NCOSBM; Insight Planning & Development.*

### HOUSING

In 2017, the Columbus average household size for owner-occupied housing was 2.52. Based on a forecast population increase of 289 people by 2040, approximately 115 additional dwelling units would be required. This figure does not differentiate between rental and owner-occupied dwelling units. In 2019, there were approximately 298 acres of vacant land zoned for residential development (refer to Table 16). The available vacant residential property in the contiguous corporate limits could accommodate approximately 588 dwelling units (assuming a minimum lot size of 20,000 square feet). This figure does not account for the 138 acres zoned Traditional Neighborhood. The development density within this area will be determined through the development review process. Additionally, there are 16 lots owned by individual property owners in the Chocolate Drop subdivision. These parcels may or may not be built upon based on site conditions and the availability of infrastructure; however, it is anticipated that this growth will occur. The satellite annexation area located north of the corporate limits may include 32 additional dwelling units within the next five years. These will be “workforce” affordable dwelling units which will support overall economic development in Polk County. However, the remainder of the satellite annexation area is expected to be dedicated to conservation.





### ECONOMIC DEVELOPMENT

The Columbus economy is built upon entrepreneurship in the private sector and public service employment. The private sector segment of the economy is supported by tourism and traffic along the I-26 and US 74 highway corridors. Significant activity at the nearby Tryon International Equestrian Center are increasingly impacting the Columbus economy.

In May 2013, the Columbus North Carolina Community Assessment Report was prepared through a collaboration between HandMade in America and the NC Department of Commerce Division of Community Assistance Western Regional Office, Advantage West, the Town of Columbus, and the Polk County Community Foundation. The report was divided into the following five sections: Organization, Promotion, Economic Restructuring, Design, and Resource Team and Steering Committee Members. The recommendations outlined in this report are still relevant. For the purposes of this plan, the most important recommendations are those which address economic restructuring and design. The following summarizes those recommendations:

#### ECONOMIC RESTRUCTURING

- **Encouraging Entrepreneurial Activity**
  - Develop an entrepreneur network
    - Currently, the Town of Columbus does not have an established entrepreneur network, giving voice and representation to the established local business owners. Fostering an environment of stability and support of small business within a community is vital in developing a strong economic base and advancing tourism appeal to an area.
- **Retaining and Recruiting Businesses**
  - Target specific business ventures or niche markets that fit with the image of Columbus.
  - Evaluate what and who is already available.
- **Involving the Next Generation**
  - Engage and inspire young populations and schools to get involved.
- **Healthy Initiatives**
  - Consider opportunities to grow on the healthy initiatives in the community.

#### DESIGN

- **Design & Enhance the Historic Old Town Center**
  - Create a unified streetscape design plan.
- **Lively Gathering Areas**
  - Improve opportunities at Columbus parks.
- **Connectivity**
  - Create an inviting entrance to Old Town.
  - Incorporate flags to direct visitors to the House of Flags Museum and unify the look.
  - Create a wayfinding system.
  - Create a pleasant walking experience throughout Old Town.
- **Historic Preservation, Adaptive Reuse, & Infill Development**
  - Work to preserve the nostalgic, historic structures.







## SECTION 4. PROJECTIONS/FUTURE DEMAND

- **Parks, Greenways, & Trails**
  - Create a variety of programs for Stearns and Veterans Park, as well as the Courthouse Square.
  - Develop a bikeway/greenway to Foster Creek Preserve.
  - Create a greenway/bicycle/pedestrian connection from Foster Creek Preserve to Old Town.

The complete Community Assessment report is available on the Town of Columbus website at the following link: <https://www.columbusnc.com/?SEC=078B4331-9905-4462-BFC1-FF7ABD396A29>.

It will become increasingly important for the Columbus economy and the Polk County economy to interface. Increased workforce housing is needed in Polk County. The Urban Land Institute (ULI) defines workforce housing as housing which is affordable to households earning between 60 and 120 percent of area median income, which for Polk County was \$48,834 in 2018. Workforce housing should be constructed with access to infrastructure and public/private sector services. The Town of Columbus can expand its economy and support overall Polk County economic development by supporting workforce housing. The Town should be supportive of a significant first-class hotel. Such a hotel would provide support to the overall Polk County economy and allow the Town to be involved in developing economic activities such as the Tryon International Equestrian Center.

### WATER

The 2018 Town of Columbus Local Water Supply Plan provides the following water supply demand data through 2040.

**Table 15. Demand Vs. Percent of Supply (MGD)\***

	2018	2020	2030	2040
Surface Water Supply	0.0000	0.0000	0.0000	0.0000
Ground Water Supply	0.8570	0.8570	0.8570	0.8750
Purchases	0.0000	0.0000	0.0000	0.0000
Future Supplies		0.0000	0.0000	0.0000
Total Available Supply (MGD)	0.8570	0.8570	0.8570	0.8570
Service Area Demand	0.2306	0.2395	0.2430	0.2485
Sales	0.0000	0.0000	0.0000	0.0000
Future Sales		0.0000	0.0000	0.0000
Total Demand (MGD)	0.2306	0.2395	0.2430	0.2485
Demand as Percent of Supply	27%	28%	28%	29%

*\*Million gallons per day.  
Source: NC Division of Water Resources Local Water Supply Plan.*

This data is based on a 2040 population forecast which is 30% lower than the population forecast contained in Table 14; however, because the demand as percent of supply is only 29% of the water supply plan population forecast population, the increase in population growth will not result in a depletion of the water supply. No problems with the quality of the water supply are anticipated.

## SECTION 4. PROJECTIONS/FUTURE DEMAND



### SEWER

As stated in Section 3, the Town intends to expand its wastewater treatment facilities within the next ten years. Specific plans for the expansion of the wastewater treatment plant have not been prepared.

### STORMWATER

The Town's current stormwater needs are discussed on page 3-23. While there are currently two primary problem areas, a Town-wide stormwater management plan is needed. This plan should be coordinated with a current capital improvements plan.

### ADMINISTRATION

There are no major administrative staff or services changes anticipated during the planning period. The Town does need a capital improvements plan which should be updated annually and coordinated with the Comprehensive Plan.

### FIRE

Future growth, especially commercial, could create a need for upgraded fire equipment. Currently, the volunteer fire department can accommodate up to a six-story building due to recent improvements outlined in Section 3. Four stories and above will require upgraded equipment with a ladder truck and platform for evacuation purposes. This upgrade is important for expanded commercial development. Also, upgraded equipment will require ten-foot access lanes to buildings.

### POLICE

No significant increases in Police Department personnel are anticipated during the planning period. However, staffing should be monitored as development occurs and population increases to ensure adequate response time. This fact is especially true for development in the satellite annexation area. Other police service needs/concerns may include the following:

- Increasing traffic control issues/demands.
- Recruitment of police officers.
- Maintaining a police department which is technologically current.
- Establishment of a K-9 unit.
- Establishment of a vehicle rotation schedule.
- Maintain a vigorous police training program.

### HEALTH CARE

As noted earlier, St. Luke's Hospital is a 25-bed critical access facility providing healthcare services to Polk County and upper South Carolina. Federal guidelines restrict the hospital's ability to expand beyond its current size; however, St Luke's may focus on the expansion of outpatient services. Over the next 10-15 years, the hospital will continue to expand its outpatient service delivery. The hospital maintains several facilities in Town and owns a large 30-acre tract at the rear of the existing hospital site.



## SECTION 4. PROJECTIONS/FUTURE DEMAND

### CHOCOLATE DROP MOUNTAIN PRESERVATION

Chocolate Drop Mountain is located within the northeastern portion of the Town of Columbus corporate limits (see Figure 1). Chocolate Drop has a peak elevation of roughly 1,580 feet. In 2007, the mountain was cleared for a residential subdivision development that was initiated in 2006. The clearing of Chocolate Drop Mountain resulted in the failing of the slope's integrity, thus compromising the developer's ability to construct homes on the site. This scenario led to legal action against the developers on the part of the North Carolina Department of Environment and Natural Resources, as well as individual property owners who claimed that they had been sold unbuildable lots.



Chocolate Drop Mountain: This photograph illustrates the impact of development on steep slopes.

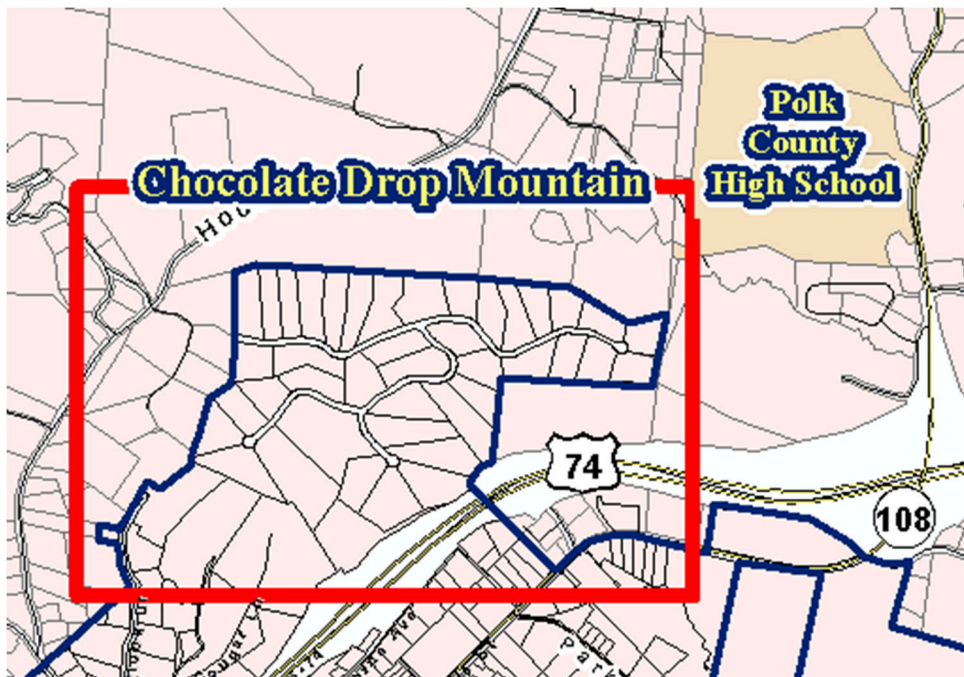


Figure 1. Location of Chocolate Drop Mountain Subdivision

Arguments surrounding Chocolate Drop Mountain continued until 2013 when the Saluda Community Land Trust (SCLT) became involved and approached the Chocolate Drop Property Owner's Association. The Saluda Community Land Trust was created by a group of concerned citizens who realized that as Saluda loses more and more agricultural and forest land, less is available for farming, gardening, or just walking in the woods. With the support of the Polk County Community Foundation, these citizens came together in 2007 and formed the Saluda Community Land Trust (SCLT). SCLT was incorporated in March 2007 and is a 501(c)(3) non-profit organization with the goal of helping to preserve the rural character and open spaces of Saluda and the surrounding area.

## SECTION 4. PROJECTIONS/FUTURE DEMAND



Since its existence, SCLT has created 6 nature parks open to the public (Little Park, Judd's Peak & Saluda Nature Park, Bradley Nature Preserve, Twin Lakes, Round Mountain and the Missing 40 Trail). This effort has been possible through support from both private citizens, grants, foundations, and many, many dedicated volunteer hours.

Since 2013, the Saluda Community Land Trust has secured twenty-eight lots within the Chocolate Drop Mountain subdivision, either through acquisition or donation. These lots have been secured through a land trust to be maintained as open space in perpetuity. Figure 2 depicts the parcels that the SCLT has secured within the subdivision, as well as several pieces of property that are adjacent to the development.

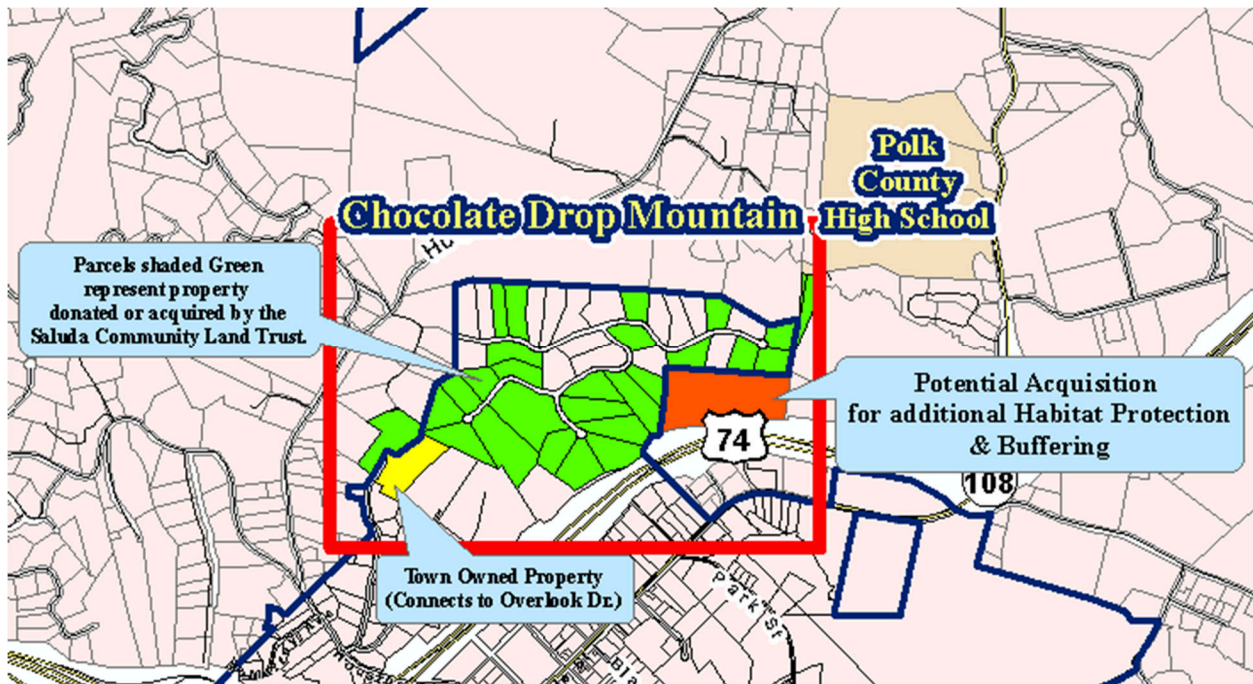


Figure 2. SCLT Acquired Parcels.

The long-range plan for these properties is to establish a nature preserve/educational hiking trail that extends from the Polk County High School site to the peak of Chocolate Drop Mountain. There are clearly impediments to achieving this goal; however, the Chocolate Drop Property Owner's Association has exhibited interest in facilitating these efforts. The logistics involved in funding and development of this facility are complex and have yet to be established. The Saluda Community Land Trust will aim to work with the Town of Columbus to establish a program and solution that will not only preserve the existing habitat and natural environment, but utilize these assets to educate and provide opportunities to all citizens and visitors to the Town of Columbus, as well as Polk County overall.

There are several additional parcels that may potentially be involved in this effort as outlined above. Establishment of this facility, as well as the steps to secure funding and establish any necessary shared use agreements, will be detailed in the Goals and Strategies portion of this plan. Ultimately, the Saluda Community Land Trust would like to secure this property through a land trust and donate it to the Town of Columbus for the purposes outlined above. Carrying out development of the facility will take place through implementation of the plan.





## SECTION 4. PROJECTIONS/FUTURE DEMAND

### HABITAT CONSERVATION

In consideration of the extensive valuable wildlife habitat areas located in Columbus's jurisdiction, the NC Wildlife Resources Commission (NCWRC) recommends the following considerations for future development:

- Preserve habitat areas on Chocolate Drop Mountain.
- Connect Little White Oak Mountain and Chocolate Drop Mountain via a wildlife friendly greenway.
- Connect the Polk County High School campus to the Chocolate Drop Mountain habitation areas via a hiking trail.
- Craft conservation development standards or incentives.
- Establish density bonuses and other incentives to protect riparian and wetland forest buffers and habitat corridors.
- Require major development (50 parcels or larger) to employ Low Impact Development techniques to treat stormwater onsite using the natural topography and vegetation.
- Utilize the NCWRC Green Growth Toolbox as a guide for future development. See <https://www.ncwildlife.org/conserving/programs/green-growth-toolbox/download-handbook> for more information on the Green Growth Toolbox.

The publication Forest Connectivity in the Developing Landscape, prepared in September 2019 by The Green Infrastructure Center, contains a green infrastructure/conservation plan for Little White Oak Mountain and the 30-acre tract for the workforce housing development area. The publication can be accessed at [http://gicinc.org/PDFs/DesignGuide\\_final.pdf](http://gicinc.org/PDFs/DesignGuide_final.pdf). Strategies from the plan will be incorporated into the Goals and Strategies section of this plan.

### RECREATION

As noted earlier in the plan, the Town of Columbus does not maintain any parks and recreation facilities. Polk County completed the Polk County Recreation Plan in 2013, which outlines potential improvements to facilities situated within the Town of Columbus corporate limits. These facilities include the Stearns Park/Gym and Gibson Park.

The Stearns Gym was recently renovated to include a new floor and bleachers. Other improvements were made to office and classroom space. The Gibson Park pool, while older, is well maintained and heavily used. A state required lift for disabled persons was purchased and installed for the 2013 season.

The county must assess the long-term viability of the pool for serving the needs of the county. The county could benefit from a specific study about the current pool and how much longer it can be effectively used. That study will determine when plans should commence for replacement of the pool.

The combination of Stearns Gym and school gymnasiums does serve the community needs for sports like basketball and volleyball. Stearns has limitations though including space for spectators and insufficient bathrooms.

## SECTION 4. PROJECTIONS/FUTURE DEMAND



For the foreseeable future, both Stearns Gym and the Gibson Park pool must be maintained and utilized to their fullest extent. They appropriately serve the community's long-term needs, however, both facilities may need to be replaced during the scope of this plan.

### EDUCATION

The Polk County School Board is proposing a \$25 million, 10-year facilities plan outlining significant capital improvements that will be needed at all school sites. The proposed plan includes projects to address improvements to security, aging infrastructure, systems maintenance and upgrades, and technology needs.

Some of Polk County Schools immediate needs include renovating the septic system at Polk Central Elementary School, estimated at \$500,000; upgrading the HVAC system at Polk County High School, estimated at \$3.5 million (in stages over three years); replacing steam lines in the boiler system at Saluda Elementary School, estimated at \$150,000; creating a buffer at the main entrance of Saluda Elementary, Sunny View Elementary, and Polk County Middle Schools to force all visitors to travel through the main office, estimated at \$50,000 each; and replacing the roof of the gym building at Sunny View Elementary School, estimated at \$200,000.

The following provides a summary of overall expenses for each school facility projected over the next ten years.

- Polk Central Elementary School - \$2,445,000
- Saluda Elementary School - \$920,000
- Sunny View Elementary School - \$1,320,000
- Tryon Elementary School - \$3,910,000
- Polk County Middle School - \$1,640,000
- Polk County High School - \$12,765,000
- Polk County Early College - \$270,000
- District-Wide Improvements - \$2,050,000

### TRANSPORTATION

The current Polk County Comprehensive Transportation Plan was adopted by the Town of Columbus in March 2008. This plan defines several long-range transportation improvements associated with NC Highway 108 and State Road 1137 (see Map 11). The following provides a summary of capacity issues associated with these thoroughfares, as well as NCDOT's proposed improvements.

#### NC 108

##### Summary of Need

There is a need to improve NC 108 between Columbus and Tryon to accommodate projected traffic volumes and to relieve anticipated congestion along this facility.

##### Summary of Purpose

Improving NC 108 between Columbus and Tryon should enable the roadway to better accommodate projected traffic volumes by providing additional roadway capacity.





## SECTION 4. PROJECTIONS/FUTURE DEMAND

### Roadway Conditions

**Existing Characteristics:** NC 108 is a mostly two-lane roadway, which begins at US 176 in Tryon, bisects Columbus and runs southwest-to-northeast through Polk County, connecting to US 221 in Rutherford County. NC 108 intersects with I-26 near Columbus and carries traffic to and from this facility. It connects the towns of Columbus, Tryon, and Rutherfordton. Many residents of Columbus travel south on NC 108 to US 176 and to Landrum, SC. Tryon residents travel north to Columbus for work and shopping. It has some sections with three or four lanes. The speed limit along the facility is 35-45 miles per hour (mph) between Tryon and Columbus and 45-55 mph north of Columbus. The roadway serves both commercial and industrial traffic in the planning area.

**Existing Conditions:** The current capacity of this road is 8,000 – 12,000 vehicles per day (vpd). 2003 average annual daily traffic (AADT) along the facility ranges from 8,500 vpd just north of Tryon to 11,000 vpd inside Columbus to 13,000 vpd on sections between Tryon and Columbus. The existence of many driveways accessing NC 108 at various points is a factor that contributes to reducing the roadway capacity.

**Projected Conditions:** Population growth and residential development in the county is expected to increase 2030 traffic volumes along NC 108 to 12,000 - 16,000 vpd. Without any improvements, the level of service by the year 2030 will deteriorate as traffic is expected to continue to grow.

### Safety Issues

For the period from January 1, 2003, to December 31, 2005, there were more than 120 crashes reported along NC 108. If no improvements are made to NC 108, the increase in congestion will create the potential for even more traffic crashes. The widening of this facility will provide increased capacity and greater maneuverability resulting in safer driving conditions.

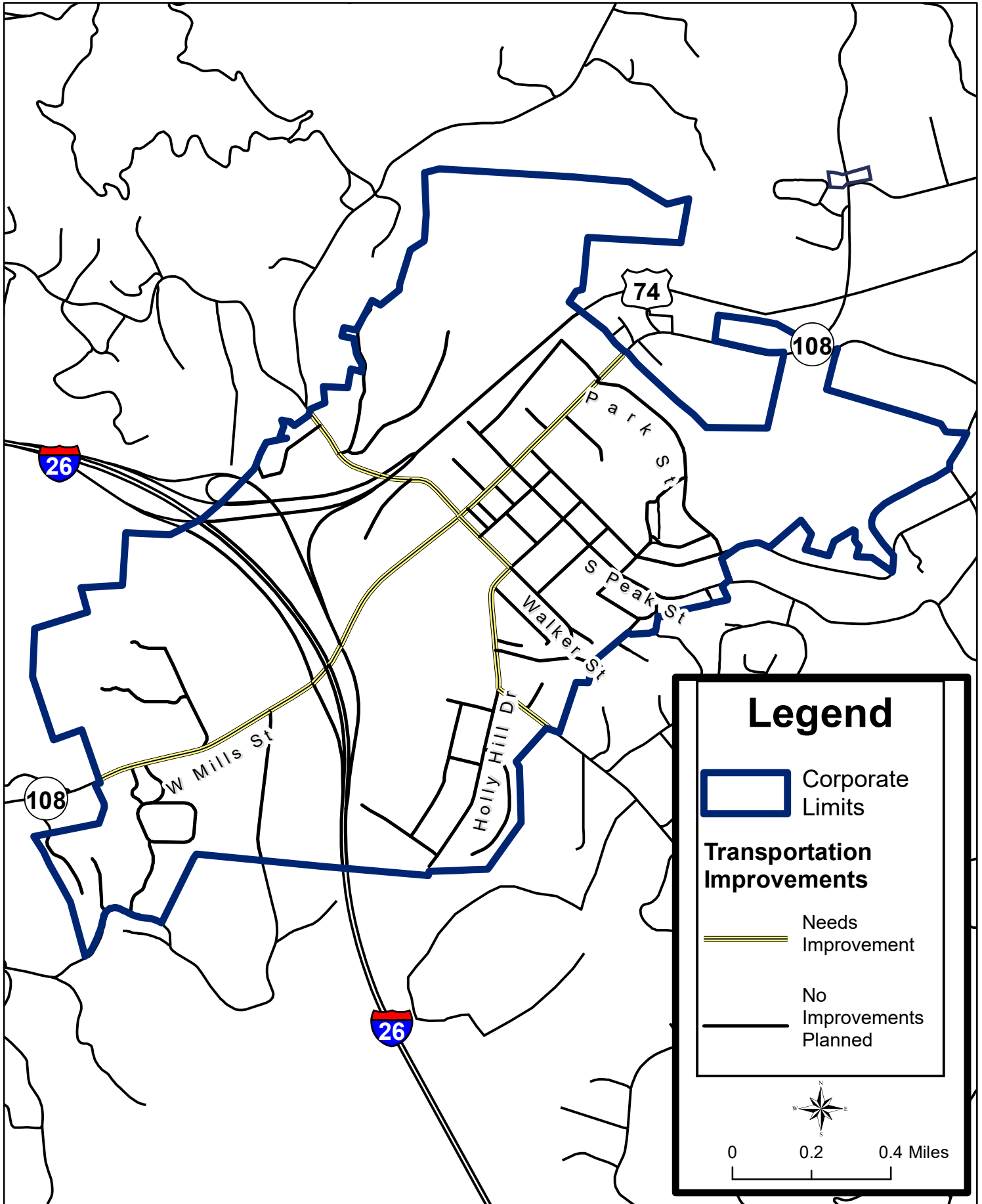
### Relationship to Other Plans

The 1996 Thoroughfare Plan for the Towns of Columbus and Tryon identified the need to widen NC 108 to a four-lane facility, but this recommendation received countywide opposition. A feasibility study addressing proposed improvements to the I-26/US 74/NC 108 interchange has been completed, and recommendations were made to replace the existing interchange with a new structure and configuration. This project, I-4729, is unfunded in the 2009-2015 Transportation Improvement Program (TIP).

### Project Recommendations

Since this is a NC route, the NCDOT has a vested interest in maintaining it. The ultimate recommendation for this facility is upgrading the section from US 74 to US 176 to a four-lane divided section. In the interim, several options exist for improving the route until a major widening is needed. These options include adding turn lanes, adding a center turn lane, access management, widening shoulders, and signal timing improvements. All of these options should be considered before implementing a major widening.

# Map 11. Transportation Improvement Plan





# SECTION 4. PROJECTIONS/FUTURE DEMAND

## Minor Widening Improvements

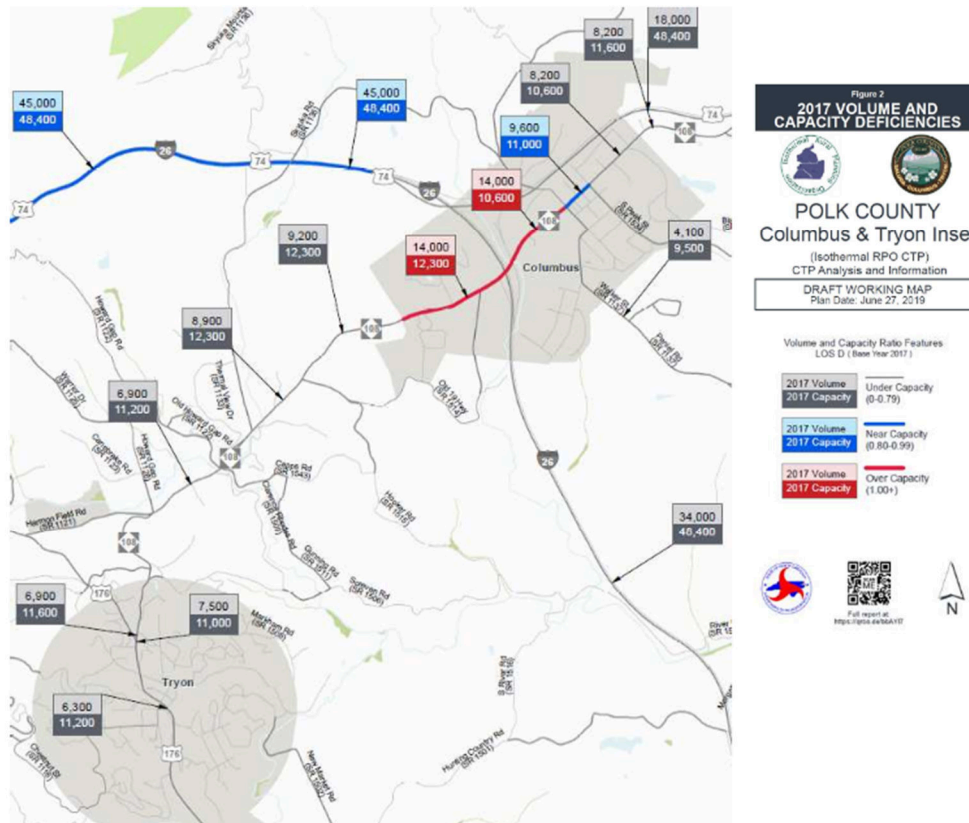
For driver convenience, ease of operation, and safety, it would be desirable to widen all existing roads and highways to provide a minimum lane width of 12 feet. However, when considering overall statewide needs and available highway revenues, implementation of this standard statewide would be impractical. Therefore, to develop economically feasible recommendations, it is necessary to establish minimum tolerable widths for existing roadways, based on functional classification and projected traffic volumes. It is recommended to widen the lane widths following minor arterials. Future traffic on these roadways is expected to exceed 2,000 vpd. In addition to the improvements proposed for NC Highway 108, it is also recommended in the Polk County Comprehensive Transportation Plan that State Road 1137 be widened from 10 feet to 11 feet.

## Comprehensive Transportation Plan Update

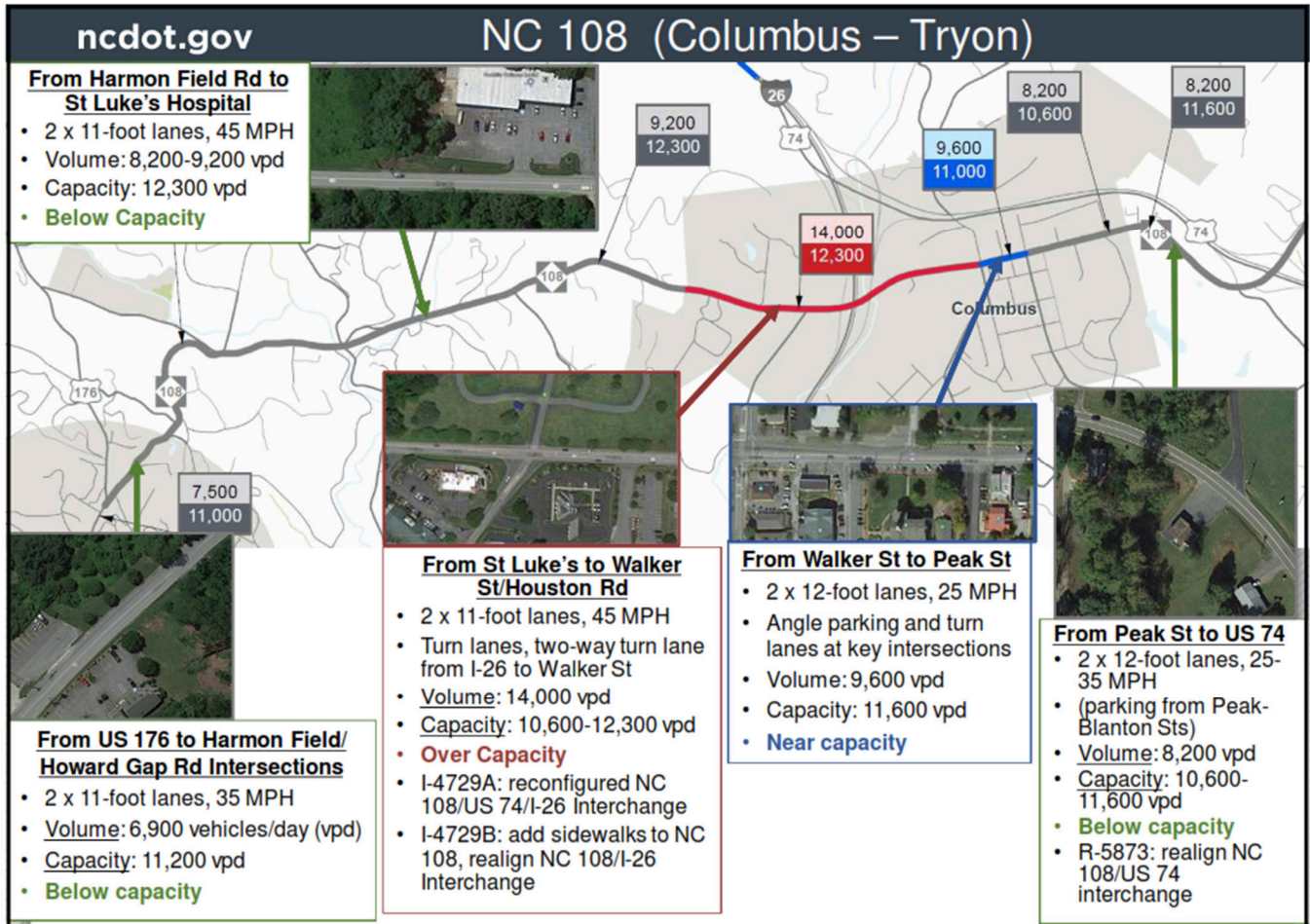
The planning process for the update of the Polk County Comprehensive Transportation Plan was underway in late 2019, with completion anticipated mid to late 2020. This plan will define the community’s transportation needs over the next 25 to 30 years. Not only will this plan address road and highway needs, but also needs and opportunities regarding multi-modal transportation facilities including public transportation, bicycle, and pedestrian.

The following maps were developed in the initial stages of this process and provide an overview of capacity issues for roadways within and around the Town of Columbus. Addressing these capacity issues will be a main focal point of the planning process.

### ncdot.gov Volume/Capacity Analysis – Columbus & Tryon



# SECTION 4. PROJECTIONS/FUTURE DEMAND







## SECTION 4. PROJECTIONS/FUTURE DEMAND

### Projections/Future Demand Summary

IT IS PROJECTED THAT THE POPULATION OF THE TOWN OF COLUMBUS WILL INCREASE 28.6% BY THE YEAR 2040. POLK COUNTY IS EXPECTED TO GROW BY 12.0% OVER THE SAME PERIOD.

BASED ON AN AVERAGE HOUSEHOLD SIZE OF 2.52, THE TOWN OF COLUMBUS HOUSING STOCK WILL INCREASE BY 115 DWELLING UNITS BY THE YEAR 2040. THIS FIGURE IS BASED ON A POPULATION INCREASE OF 289 PERSONS.

THE TOWN DOES NOT ANTICIPATE ANY SIGNIFICANT CHANGES TO EITHER POLICE OR FIRE SERVICE DELIVERY OVER THE PLANNING PERIOD.

THE TOWN OF COLUMBUS IS WORKING CLOSELY WITH THE SALUDA COMMUNITY LAND TRUST TO PROTECT A LARGE PORTION OF LAND ASSOCIATED WITH THE CHOCOLATE DROP MOUNTAIN SUBDIVISION. THE INTENT IS TO DEVELOP A TRAIL THAT WILL RUN FROM OVERLOOK DRIVE TO THE HIGH SCHOOL.

THE POLK COUNTY SCHOOL SYSTEM IS WORKING TOWARDS ADOPTION OF A \$25 MILLION DOLLAR 10-YEAR FACILITIES PLAN FOCUSED ON SUBSTANTIAL CAPITAL IMPROVEMENTS AT ALL SCHOOL SITES THROUGHOUT THE COUNTY.

POLK COUNTY INITIATED DEVELOPMENT OF AN UPDATED POLK COUNTY COMPREHENSIVE TRANSPORTATION PLAN ON JULY 17, 2019. THIS PLANNING PROCESS WILL ADDRESS ALL COUNTY TRANSPORTATION NEEDS INCLUDING THE DEVELOPMENT OF MULTI-MODAL FACILITIES TAILORED TO PEDESTRIANS AND CYCLISTS.



# SECTION 5. FUTURE LAND USE

## URBAN GROWTH ESTIMATES

This section of the plan addresses Future Land Use (FLU) for the Town of Columbus corporate limits. The projected uses, or Future Land Use Designations, have been based on the Town’s existing zoning standards. Although zoning was a substantial factor in determining the FLU district boundaries, considerations were also attributed to emerging developments trends, as well as historical “Urban Form.” Urban form can be defined as a city’s physical characteristics. It refers to the size, shape, and configuration of an urban area or its parts. How it will be understood, structured, or analyzed depends on scale. Characteristics of the urban form range from, at a very localized scale, features such as building materials, facades, and fenestration to, at a broader scale, housing type, street type, and their spatial arrangement or layout.

It should be noted that zoning and future land use are very different in terms of their respective impact on future development. Zoning regulations act as “Land Use Law,” while a community’s Future Land Use Map serves as guidance and/or policy. A community’s Future Land Use Plan presents the desired future vision of the Town, while zoning designations more specifically define what kinds of uses may be allowed on specific parcels.

The following table presents a summary of the vacant acreage in relation to the Town’s existing zoning districts. This table is intended to provide a snapshot of how many units can be forecasted within each defined zoning district, based on current minimum development standards. The term “units” refers to the number of structural development units that may be potentially established, dependent upon the underlying zoning use restrictions.

It should be noted that this summary is based on minimum standards and also takes into account the need for right-of-way accommodation. To address this issue, a twenty percent (20%) reduction in overall buildable acreage was deducted from each district’s land availability. The figures presented should be considered estimates. The reasoning behind this approach relates to proper planning regarding infrastructure carrying capacity and municipal expansion.

**Table 16. Vacant Land By Zoning District\***

Zoning District	Acres	Minimum Lot Size (sq ft)	Potential # of Units
Highway Commercial District	66.7	20,000	145
Public Service District	1.9	20,000	4
Low Density Residential	20.0	20,000	44
Medium Density Residential	238.2	20,000	528
Residential Estate**	47.8	N/A	16
Traditional Neighborhood District***	138.2	N/A	N/A
<b>Total</b>	<b>512.8</b>		<b>737</b>

*\*It should be noted that these figures do not include either the vacant acreage associated with Little White Oak Mountain (with the exception of the 38 acres within the Little White Oak Subdivision) nor the parcels situated on Chocolate Drop Mountain that have been protected through conservation measures by Conserving Carolina and the Saluda Community Land Trust , respectively.*  
*\*\*There are only 16 platted lots available for development within the Residential Estate zoning district.*  
*\*\*\*The development density and number of units must be determined through the development review process.*  
*Source: Polk County Tax Office, Insight Planning & Development.*



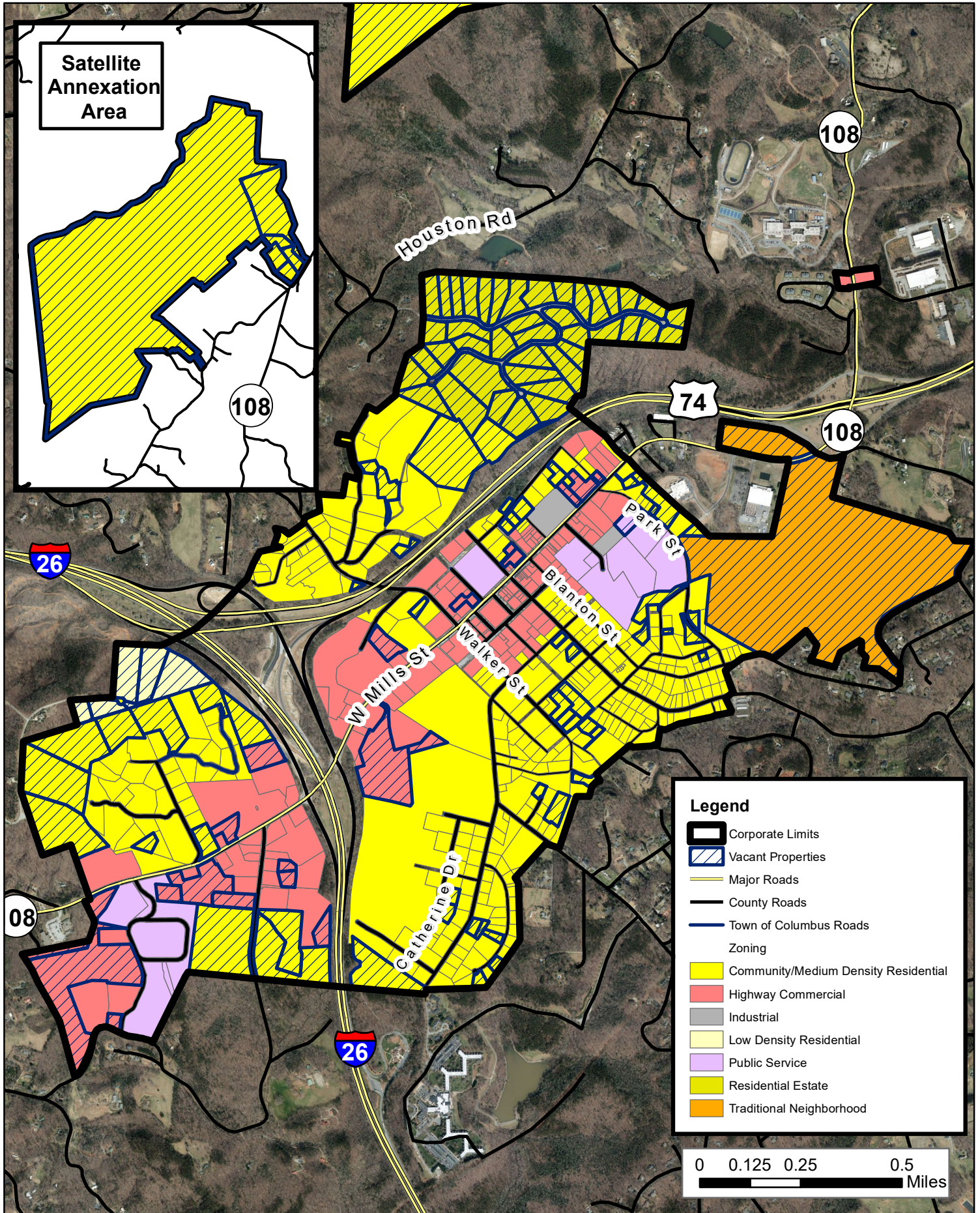
## SECTION 5. FUTURE LAND USE



According to these figures, the Town has zoned vacant land to accommodate 625 new units based on currently adopted zoning regulations. A majority of these anticipated units (79%) will be developed in the form of single- and/or multi-family housing. There is no accurate way to forecast how many of the projected residential units will be multi-family versus single-family in nature. The determining factor regarding use will be based on two things, land availability and the preference of the developer. Currently, the maximum number of residential units on a single parcel has been capped at four within the Medium Density Residential District.

Lastly, all parcels acquired through the Saluda Community Land Trust on Chocolate Drop Mountain have also been designated as Conservation areas. Map 12 depicts the zoning classification of all vacant parcels within the Town's corporate limits.

# Map 12. Vacant Land by Zoning





## SECTION 5. FUTURE LAND USE



### FUTURE LAND USE CATEGORIES

The following provides a definition of each Future Land Use category as depicted on Map 13.

#### ***Low Density Residential***

These areas are planned primarily for single-family and duplex structures. Portions of Town falling within this category should only support large lot single-family development. Development within this district can be supported by central water and sewer services and/or septic and well.

#### ***Medium Density Residential***

These areas are planned for single-family, duplex structures, or multi-family structures (maximum of four units per parcel) in the future, and it is the Town's intent to limit future multi-family structures to these areas only. This category includes several multi-family structures; however, the predominant land use is single-family detached housing.

#### ***Neighborhood Commercial***

These areas have been identified as portions of Town that will accommodate varying land uses (residential, including multi-family, and non-residential) within the same future land use district. The district is intended to provide housing choices, goods and services for the surrounding neighborhoods, as well as the community overall, and to promote quality redevelopment in those areas.

#### ***Highway Commercial***

This future land use district is intended to provide flexibility regarding non-residential development. Uses within this district should either provide service to those individuals utilizing Highway 108 and/or Interstate 26, or support businesses that rely on proximity to key transportation corridors.

#### ***Central Business District***

This area of the Town is dedicated to commercial land uses intended to provide goods, tourism-based services, and businesses and professional services to both citizens and visitors. The CBD is defined by boundary, and includes a mix of uses. The CBD is also home to most of the Town's and County's administrative facilities.

#### ***Office/Institutional***

Uses within this category have been located primarily in areas that have already been developed or require buffering to prevent potential conflicting land uses. For example, Office/Institutional/High Density Residential land uses may be located between commercial/industrial and residential land uses throughout the Town's corporate limits.

#### ***Mixed Use***

This future land use district should allow a mixture of varying residential density, office-institutional, limited commercial, and open space uses. This category may have an impact on or produce some conflict with adjacent lower density districts. Buffering or separation should be required; transportation impact should be a consideration. Both vertical and horizontal mixed uses will be permitted. Office and institutional usage is recommended as a buffer/transition between lower and higher density land uses.



## SECTION 5. FUTURE LAND USE

### **Conservation**

This future land use category addresses land that is either situated within the Town's defined flood hazard area, or on property that has been protected through deed restrictions associated with land conservation. Both areas are important in establishing and maintaining key wildlife corridors within portions of the Town of Columbus which are facing increased development pressure.

The riverine habitat encompasses a vast array of wildlife habitat and is home to a variety of species throughout western North Carolina. These habitats are important for a number of reptiles and amphibians including certain turtles, frogs, and salamanders that utilize aquatic habitats during part or all of their life cycle, as well as bird species who rely upon aquatic habitats including rivers and streams to provide for a food base. Due to this fact, maintenance of the Town's floodplain as a conservation easement is critical as development continues to occur.

In addition to protection of the floodplain, the Town of Columbus is fortunate to have the Saluda Community Land Trust (SCLT) and Conserving Carolina operating within its corporate limits. As discussed earlier in the plan, the SCLT and Conserving Carolina are non-profits that focus on land conservation efforts throughout Polk County. The SCLT and Conserving Carolina have secured substantial land holdings on Chocolate Drop Mountain and Little White Oak Mountain.

### **Open Space/Parks**

This future land use category accounts for all property reserved for the purpose of providing passive and active recreation.

### **Conservation Overlay District**

The conservation overlay district is intended to promote the use of Green Growth and low impact development techniques. Within portions of the Town falling within the conservation overlay, development should be limited to single-family development on larger lots. This overlay will serve as the basis for development of new zoning standards which will define incentive-based standards in relation to the following:

- Conservation development incentives.
- Steep slope protection.
- Density bonuses in exchange for at least 40-50% set aside of contiguous natural area.
- Establishment of connected natural areas across parcel boundaries.
- Promote development that minimizes development pressure on natural areas.
- Promote development that minimizes forest fragmentation.

## SECTION 5. FUTURE LAND USE



### FUTURE LAND USE ACREAGES

Map 13 and Tables 17 and 18 provide a summary of Future Land Use within the Town of Columbus corporate limits.

**Table 17. Future Land Use – Contiguous Corporate Limits**

Land Use	Acres	% of Total
Low Density Residential	66.3	6.1%
Medium Density Residential	572.8	52.5%
Neighborhood Commercial	41.6	3.8%
Highway Commercial	99.6	9.1%
Central Business District	20.1	1.8%
Office & Institutional	85.0	7.8%
Mixed Use	133.9	12.3%
Conservation	60.8	5.6%
Open Space/Parks	10.4	1.0%
Total	1,090.5	100.0%

*Source: Polk County Tax Office, Insight Planning & Development.*

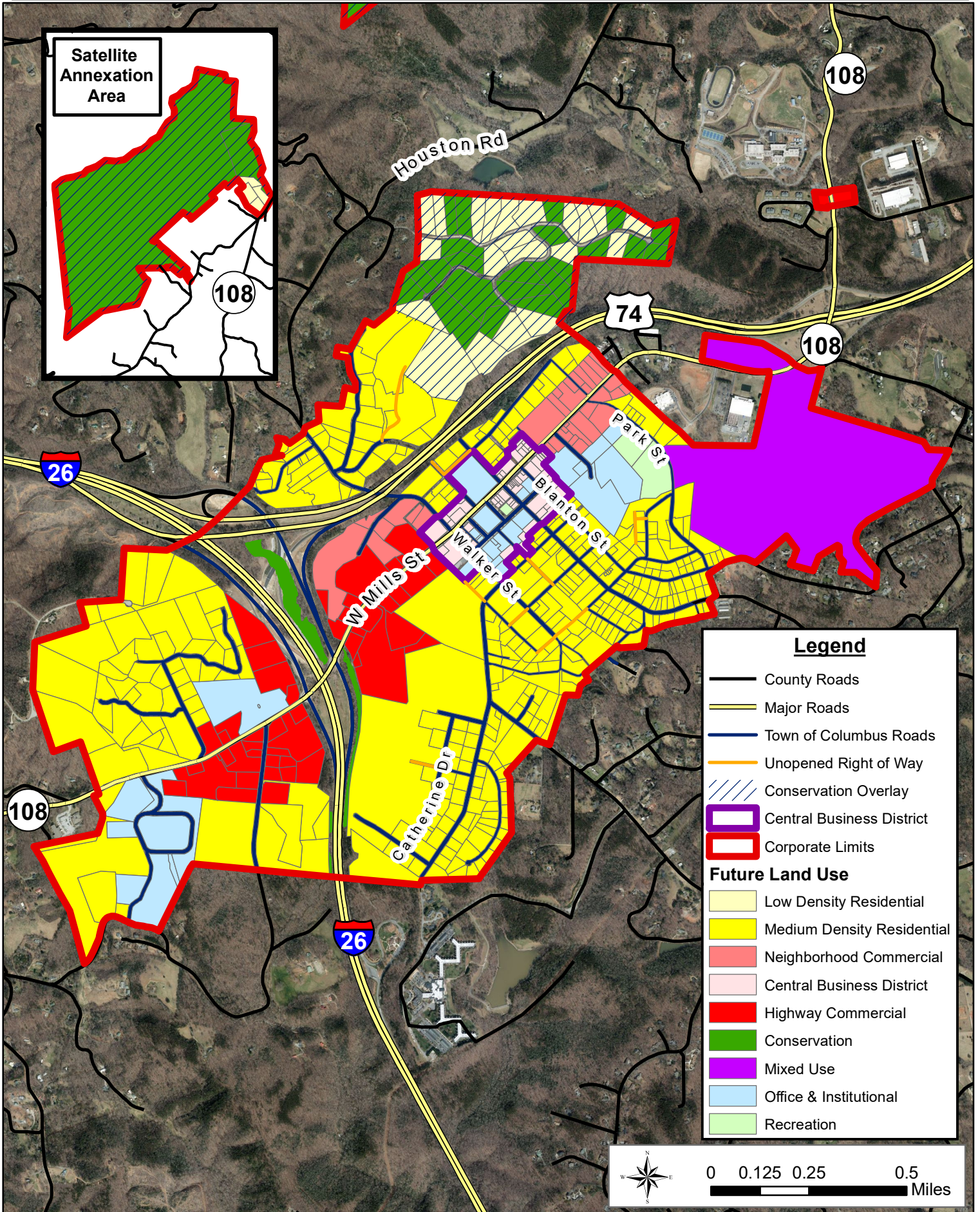
**Table 18. Future Land Use – Satellite Corporate Limits**

Land Use	Acres	% of Total
Low Density Residential	30.8	2.9%
Highway Commercial	2.2	0.2%
Conservation	1,022.3	96.9%
Total	1,055.3	100.0%

*Source: Polk County Tax Office, Insight Planning & Development.*



# Map 13. Future Land Use





# SECTION 5. FUTURE LAND USE

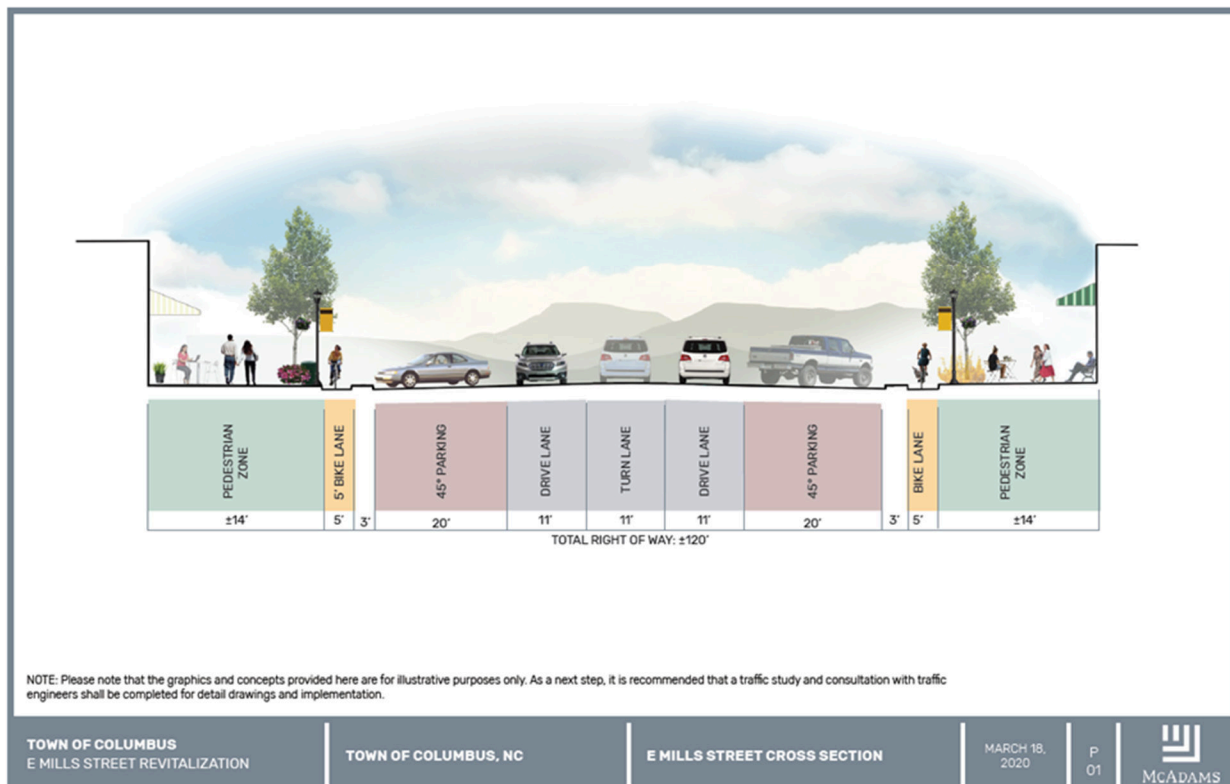


## CBD GOVERNMENT SERVICES AREA RECOMMENDATIONS

The Future Land Use Map (Map 13) defines the Town’s Central Business District and provides for a range of uses including commercial, residential, office and institutional, as well as vertical and horizontal mixed use. In order to maximize development potential, as well as promote a more inviting and walkable environment, modifications should be made to the existing right-of-way that is available. These recommendations are intended to apply within the Central Business District along Mills Street between Walker and Blanton Streets.

East Mills Street, as the main commercial street corridor, presents a great opportunity for the Town of Columbus to revitalize the downtown area. The central idea of the revitalization efforts lies in the concept that a well-designed street is a social magnet for a small community. It brings people together for a variety of reasons including daily shopping, weekly marketing, and special events. It attracts tourists interested in a taste of local community by preserving the character, historic buildings, and offering recreation opportunities. A successful mixed-use environment along the corridor accommodates all users - pedestrians, bicyclists, and motorists of all ages and abilities.

The following section provides an overview of a proposed road diet that will serve to maximize the benefit of the existing 120-foot right-of-way. Currently, there is an abundance of underutilized traveled way resulting in a constricted sidewalk and an absence of dedicated bike lanes. Figure 3 depicts a revised cross section of Mills Street which will maximize the use of this space. The revised right-of-way provides for an expanded sidewalk of fourteen feet, a five-foot dedicated bike lane (with a three-foot safety zone), 20-foot on-street parking spaces, and 11-foot drive lanes with an 11-foot middle turn lane.





## SECTION 5. FUTURE LAND USE

The streetscape concept also includes intersection bulb outs to be used as parklets with bistro tables, benches, and landscaped areas. The Courthouse Square is another area where an updated parking lot and expanded sidewalk for weekly farmer's market is proposed. The addition of two-post permanent canopy structures will provide a permanent shelter space for vendors without compromising the ability to park during weekdays. The addition of removable bollards on either side of the Courthouse Square will help ensure that the space can be closed off for vehicles during operation of the farmer's market.

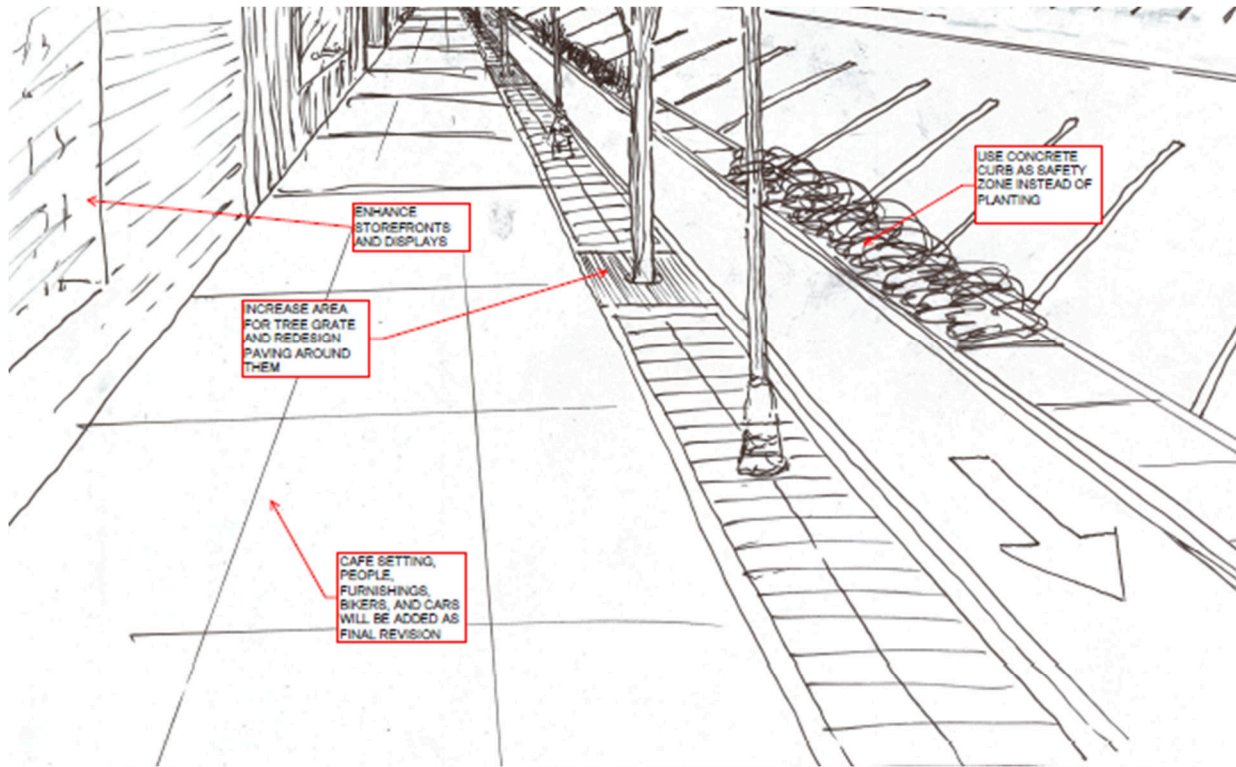
Aesthetic enhancements to the overall street corridor include addition of street trees as well as shrubs, ornamental grasses, and ground cover in parking islands to create a pleasant experience with proposed hardscape enhancements.

The following images provide before and after graphics for a portion of Mills Street centrally located within the central business district.



Mills Street - Before (Image Source: Insight).

# SECTION 5. FUTURE LAND USE



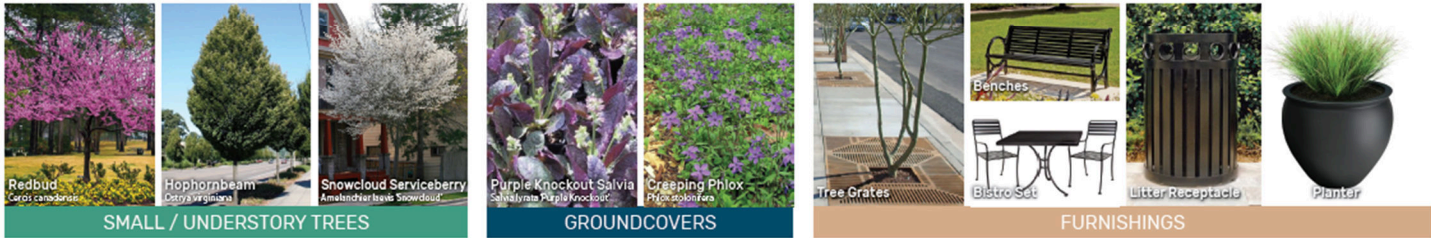
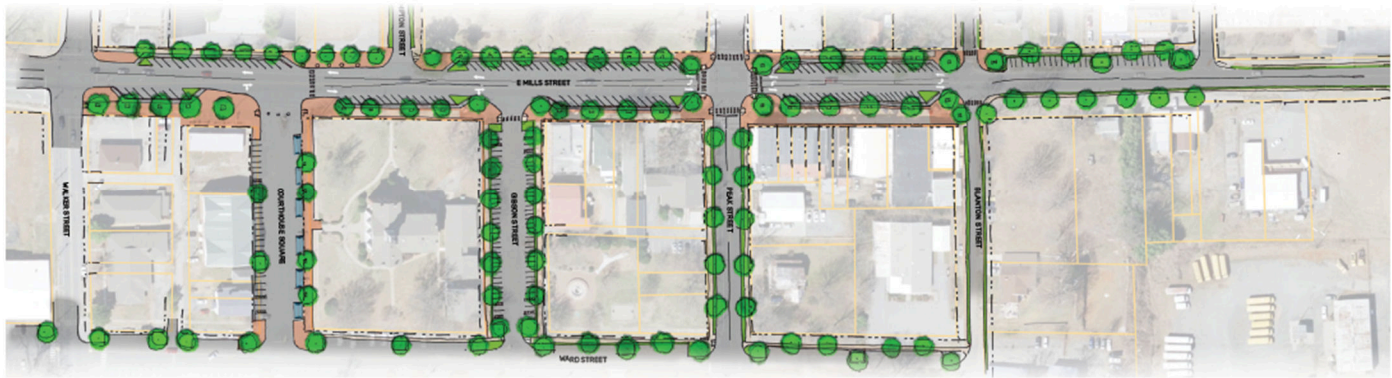
Mills Street - After (Image Source: McAdams).

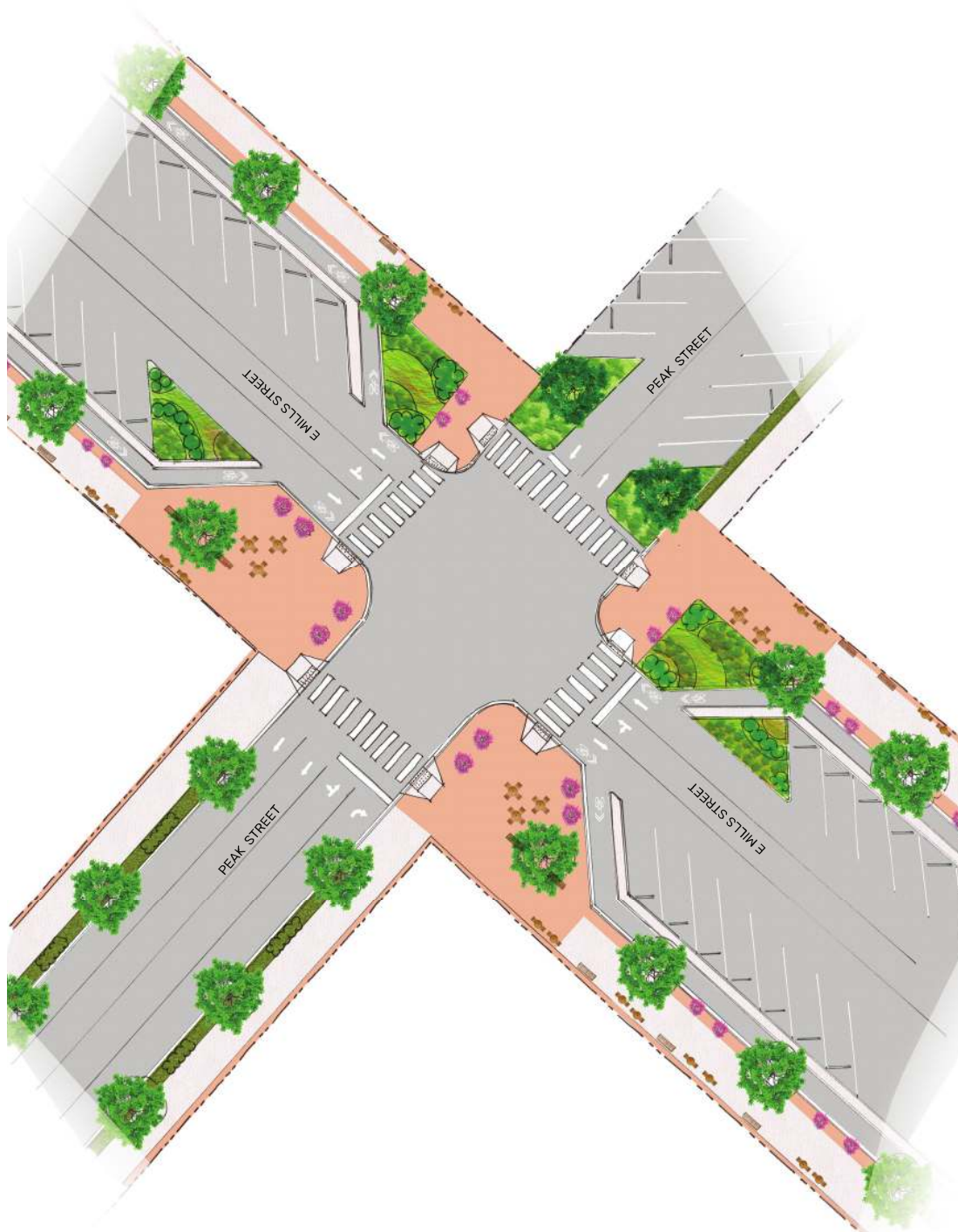




# SECTION 5. FUTURE LAND USE

The following graphics provide an overview of proposed improvements along the entire Mills Street corridor, as well as the intersection of Mills and Peak Streets. The Mills Street diagram is accompanied by recommendations regarding plant species, street furniture, as well as other accompaniments intended to improve the overall aesthetic of Columbus’s Central Business District.





NOTE: Please note that the graphics and concepts provided here are for illustrative purposes only. As a next step, it is recommended that a traffic study and consultation with traffic engineers shall be completed for detail drawings and implementation.





## SECTION 6. GOALS AND STRATEGIES

### INTRODUCTION

This plan establishes goals and strategies for the land use/quality of life issues that will affect Columbus's future. This section provides guidelines and implementation strategies designed to address issues which have been identified by the Planning Board, staff, elected officials, and citizens of the Town of Columbus.

Guidelines are provided for daily planning functions such as rezoning requests, site plan review, subdivision plat review, zoning text amendments, conditional use permits, and variance requests. The goals and recommendations will also assist Town officials in making long-range decisions in such areas as economic development, provision of community services and facilities, transportation planning, community preservation, and environmental management, including preservation of wildlife habitat areas.

The responsibility for implementing the recommendations included in this plan belongs to the Town of Columbus elected officials. The adoption of this plan is not the end but rather the beginning of a continuous pragmatic process. Opportunity exists for the Town to provide positive direction to development as it occurs. How well this plan serves the Town depends on the quality of the plan and how Columbus officials administer local land use ordinances and capital spending programs. Local administration is often the weakest feature of a Town's planning efforts. The creation of a 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. Some of the policies contained in this plan may be implemented in months while others may require years to accomplish effectively. Planning is only as good as the commitment and abilities of the people responsible for implementing the plan.

The goals and strategies frequently utilize the following words: continue, encourage, enhance, identify, implement, maintain, promote, provide, should, support, and work. The intent of these words is defined as follows:

- *Continue*: Follow past and present procedures to maintain desired goal, usually with Town staff involved at all levels from planning to implementation.
- *Encourage*: Foster the desired goal through Town policies. Could involve Town financial assistance.
- *Enhance*: Improve current goal to a desired state through the use of policies and Town staff at all levels of planning. This could include financial support.
- *Identify*: Catalog and confirm resource or desired item(s) using Town staff and actions.
- *Implement*: Take actions to guide the accomplishment of the Plan recommendations.
- *Maintain*: Keep in good condition the desired state of affairs using Town policies and staff. Financial assistance should be provided if needed.
- *Promote*: Advance the desired state using Town policies and Planning Board and staff activity at all levels of planning. This may include financial support.

## SECTION 6. GOALS AND STRATEGIES



- *Provide:* Take the lead role in supplying the needed financial and staff support to achieve the desired goal. The Town is typically involved in all aspects from planning to implementation to maintenance.
- *Should:* Follow an officially adopted course or method of action to implement the community goals. Though not mandatory as “shall,” it is still an obligatory course of action unless clear reasons can be identified that an exception is warranted. Town staff and Planning Board should be involved at all levels from planning to implementation.
- *Support:* Supply the needed staff support, policies, and financial assistance at all levels to achieve the desired goal.
- *Work:* Cooperate and act in a manner using Town staff, actions, and policies to create the desired goal.

### PUBLIC INPUT

A successful planning process must have comprehensive, inclusive, and constructive input from the public. The plan will serve the needs of Columbus’s citizenry and should, therefore, be written on their behalf. Throughout the planning process, multiple methods were used to solicit public input. A Citizen Participation Plan was adopted on September 19, 2019, and is included as Appendix A. The Town’s Planning Board, made up of key community representatives and citizens, was tasked with steering the consultant throughout the process. In addition to input received from the Planning Board, all meetings relating to plan development were open to the public and also used to gather citizen input.

#### *Project Website*

At the outset of the project, a website dedicated to the preparation of the Comprehensive Plan was established (<https://plancolumbus.com/>). All information concerning plan development was posted on the site. The site provided continuous access for the public to obtain information and provide input.

#### *Public Meetings*

The Planning Board conducted five (5) meetings to review/discuss the preparation of the Comprehensive Plan. All meetings were advertised and open to the public.

- Joint Town Council/Planning Board Work Session – September 19, 2019
- Planning Board Work Session #1 – November 21, 2019
- Planning Board Work Session #2 – January 14, 2020
- Public Input Forum/Planning Board Work Session #3 – February 4, 2020
- Planning Board Work Session #4 – March 3, 2020
- Planning Board Work Session #5 – July 7, 2020



## SECTION 6. GOALS AND STRATEGIES

### GOALS

The following twelve (12) goals have been heavily influenced by public input/opinion received during the planning process. An annual review of these goals should be conducted by the Town Council and Planning Board, and updated as implementation is accomplished. These goals are interrelated and, therefore, are not prioritized.

- To maintain Columbus's warm, hospitable environment as the Town grows.
- To continue to support educational systems.
- To continue to support business growth.
- To give Main Street a "facelift."
- To keep Columbus family friendly.
- To develop walking and biking trails.
- To ensure that natural habitats are preserved as new neighborhoods are developed.
- To support the preservation of wildlife habitat areas on Chocolate Drop Mountain.
- To improve roads.
- To develop an architectural appearance ordinance.
- To update the Town's sign ordinance.
- To update Town land development ordinances to be consistent with state statutes.



### IMPLEMENTING STRATEGIES

This section is organized around implementing strategies/actions that apply to the Town as a whole. These action statements are directed towards the following areas of concern:

- Land Use and Urban Design
- Health and Wellness
- Environmental Management
- Economic Development
- Community Services/Recreation
- Transportation
- Continuing Planning Process

Implementing strategies are intended to work in concert with the Future Land Use Map (see Map 13). When considering potential zoning and land use development/policy changes, the Town's Planning Board and Town Council should take into account all factors including future land use designations and use considerations, applicable strategy statements, and any relevant environmental or demographic data outlined in this plan. NOTE: The implementing strategies are number consecutively throughout the plan for ease of reference.

## SECTION 6. GOALS AND STRATEGIES



### *Land Use and Urban Design*

#### *Implementing Strategies - General*

**I.1** Review and revise all land development ordinances to comply with NCGS 160D. This effort must be accomplished prior to July 1, 2021.

**I.2** Aggressively support infill development. Infill development is the process of developing vacant or under-used parcels within existing urban areas that are already largely developed. Generally, such areas and/or sites are not particularly of prime quality; however, they are usually served by or are readily accessible to the infrastructure (services and facilities) provided by the Town. To encourage infill development, the Town of Columbus may provide a possible waiver or reduction of utility connection fees; consideration of density bonuses for development of vacant parcels; and consideration of reduced performance standards such as parking for infill development.

#### *Implementing Strategies - Residential*

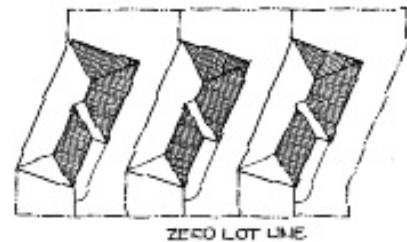
**I.3** Add townhouse zoning and subdivision provisions. A townhouse is a building on its own separate lot containing one dwelling unit that occupies space from the ground to the roof and is attached to one or more other townhouse dwelling units by at least one common wall. This effort will require amendments to the Town's zoning and subdivision regulations.

**I.4** Establish mixed use zoning provisions for properties located within the Central Business District Future Land Use Category. These provisions should accommodate for vertical mixed-use, as well as lateral mixed-use, upon issuance of a conditional use permit. This effort will require amendments to the Town's zoning and subdivision regulations.

**I.5** Revise the zoning ordinance to provide for "artisan's workshop" as an indoor home occupation. This use would include limited display and sale of artwork.

**I.6** Revise the zoning ordinance to add Planned Unit Development provisions to increase flexibility, including an increase in the allowable percentage of developed area. Including provisions for PUDs could provide an incentive to encourage developers to petition for voluntary annexation.

**I.7** Add zero lot line provisions to the zoning and subdivision ordinances which would allow the location of a building on a lot in such a manner that one or more the building's sides rests directly on a lot line and complies with all fire and building code requirements for construction on a lot line.



**I.8** Revise the zoning ordinance to add provisions for temporary family health care structures as defined in the NC General Statutes. The statute provides for these structures for a person who is a resident of this State and who requires assistance with two or more activities of daily living (bathing, dressing, personal hygiene, ambulation, transferring, toileting, or eating) as certified in writing by a physician licensed to practice in North Carolina.



## SECTION 6. GOALS AND STRATEGIES

**I.9** Revise the zoning ordinance to provide for work-at-home village regulations. The work-at-home village is specifically designed to accommodate both residential and commercial activity with the basic appearance of a residential subdivision. Part of the village's environment and amenities would include the normal amenities that are an important part of working in an office and are part of sharing creativity. While some routine face-to-face contact has been replaced by social media websites and virtual meeting platforms, gathering together is an important part of community life. Consequently, the work-at-home village would include a gathering place in the form of a village center with some limited retail and personal services and meeting space. The village should not be divided by arterial streets and could be compared in concept to a golf course subdivision. This work-at-home village provision could provide an incentive to encourage developers to petition for voluntary annexation.

### *Implementing Strategies - Nonresidential*

**I.10** Revise the zoning ordinance to provide provisions for art manufacture in the Central Business District.

**I.11** Consider revising the zoning ordinance to provide maximum parking standards to regulate/reduce the construction of large impervious surface lots.

**I.12** Consider revising the zoning ordinance to require the establishment of bicycle parking for new and redeveloped commercial and institutional uses within the Central Business District.

**I.13** Review and update the zoning ordinance to increase the potential for varied nonresidential uses throughout all defined zoning districts.

**I.14** Revise the zoning ordinance to provide regulations for microbreweries and distilleries.

**I.15** Revise the zoning ordinance to include nonresidential architectural standards including architectural lighting.

**I.16** Provide zoning regulations/standards for wind farm development and accessory wind generating devices.

**I.17** Provide zoning regulations/standards for solar farm development and accessory solar energy generating devices.

**I.18** Provide zoning provisions to accommodate electric vehicles including battery exchange, electric vehicle charging stations.

**I.19** Revise the subdivision ordinance to add specific requirements for the interconnectivity of subdivisions.

**I.20** Consider revising the zoning ordinance to enhance/strengthen non-residential landscaping requirements.

**I.21** Consider adding a conservation zoning district to the zoning ordinance which will focus on Green Growth Toolbox recommendations, as well as development incentives. This district should be considered within areas falling within the Conservation Overlay district on the Future Land Use Map (Map 13).



## SECTION 6. GOALS AND STRATEGIES



### *Health and Wellness*

#### Implementing Strategies

**I.22** Work with the Polk County Extension Office and the Polk County Public Health Department to achieve the following:

- Support new opportunities for distribution of locally and regionally produced foods.
- Work to address disparities in access to healthy foods in inadequately served populations and neighborhoods.

**I.23** To ensure that Columbus residents have access to local healthy foods, the Town will:

- Support agribusiness as part of the Town's commercial diversity.
- Continue support of the Polk County Farmers Market.
- Allow for roadside sale of produce from local gardens without a zoning permit provided parking does not present a transportation hazard.
- Consider revising the Town's zoning ordinance to make urban agriculture an allowed use in specific zones.

**I.24** Consider factoring issues relating to the promotion of public safety into the normal review process for development proposals. Themes associated with Crime Prevention through Environmental Design (CPTED) should be utilized to improve upon overall community safety and appearance. This effort should address a range of issues including lighting, building deterioration, provide for "eyes on the street," and open space design.

**I.25** Consider the development and adoption of a complete streets policy. This policy should focus on providing a wide range of transportation options including bicycling lanes, sharrows, greenways, sidewalks, and pedestrian-friendly intersections. Increased attention should be given to streets programmed for resurfacing and/or expansion.

**I.26** Consider developing a map of Town-wide bicycle routes and make it available to citizens in hard copy format as well as on the Town's website.

**I.27** Promote active transportation through provision of a connected network of multi-use paths (greenways), sidewalks, and pedestrian-friendly intersections.

**I.28** Provide adequate street and park furniture: benches, resting places, and awnings for shade.



## SECTION 6. GOALS AND STRATEGIES

### ***Environmental Management***

#### ***Implementing Strategies***

**I.29** Support preservation of habitat areas on Chocolate Drop Mountain.

**I.30** Support connecting Little White Oak Mountain and Chocolate Drop Mountain via a wildlife friendly greenway. Coordinate this effort with Polk County.

**I.31** Support connecting Polk County High School campus to the Chocolate Drop Mountain habitation areas via a hiking trail.

**I.32** Craft conservation development standards or incentives for inclusion in the Town's land development ordinances.

**I.33** Establish density bonuses and other incentives to protect riparian and wetland forest buffers and habitat corridors.

**I.34** Support 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. Site plan review should encourage LID practices.

**I.35** Adopt the NCWRC Green Growth Toolbox as a guide for future development.

**I.36** Support the Forest Connectivity in Developing Landscape (2019) conservation plan for Little White Oak Mountain and the 30-acre tract for workforce housing development area.

**I.37** Support actions by the Saluda Community Land Trust and committee(s) established to control invasive exotic plants in habitat areas including Chocolate Drop Mountain. Invasive plant control is critical to forest trail preservation, fire line protection, and engineered infrastructure.

**I.38** Revise land development ordinances to require major development (50 parcels or larger) to require low impact development techniques.

**I.39** Coordinate with NCDOT to install wildlife road greenways when improvements are made.

**I.40** Emphasize the important economic, tourism, and community image benefits of attractive major travel corridors throughout the Town's planning area. Such entryway corridors shall receive priority attention by the Town for improved appearance and development standards, including landscaping, signage, and tree preservation.

**I.41** Coordinate public works projects with the NC Division of Archives and History to ensure the identification and preservation of significant archaeological sites.

## SECTION 6. GOALS AND STRATEGIES



**I.42** Protect viewsheds of Columbus’s surrounding scenic vistas.

**I.43** Through zoning regulations, oppose the disposal of toxic wastes, as defined in the U.S. Environmental Protection Agency’s Listing of Hazardous Substances and Priority Pollutants (developed pursuant to the Clean Water Act of 1977), within the city’s planning jurisdiction.

**I.44** Emphasize the preservation of open space through the use of innovative site planning and subdivision design (see I.34, LID).

**I.45** Develop an “eco-economy” program to encourage environmentally sound services and businesses.

**I.46** Coordinate with developers building in proximity to the Town to encourage conservation design to ensure that projects can be annexed if requested and approved by the Town.

**I.47** Avoid stormwater detention ponds or minimize them by using LID techniques (see I.34, LID).

**I.48** Work closely with Polk County to establish and adopt planning and development standards within the limits of the Biodiversity Planning Area defined on Map 7, Environmentally Sensitive Lands.

### ***Economic Development***

#### ***Implementing Strategies***

**I.49** Strive to rely consistently on the following six (6) ingredients of successful economic development:

- Take advantage of local resources such as location, physical assets, and people.
- Maintain a strong comprehensive planning effort.
- Support good leadership.
- Provide good job training through strong educational systems.
- Be aggressive in the pursuit of grant funds.
- Be creative.

**I.50** Encourage new and expanding businesses which: (1) diversify the local economy, and (2) increase area residents’ incomes.

**I.51** Protect, enhance, and encourage a “small town” quality of life, image, and cultural amenities as an effective approach to economic development.

**I.52** Actively recruit and retain a younger workforce to the Town and County by supporting diverse, affordable workforce housing.

**I.53** Public policies and actions shall support the maintenance and revitalization of the Downtown area and adjoining neighborhoods as an historic and cultural center of the community.

**I.54** Support the economic restructuring actions stated on page 4-2 of this plan.

**I.55** Support (revitalize) the Discover Columbus committee.

**I.56** Fully support renovation of the Central Business District/Government Services Area in accordance with the actions outlined in Section 5 of this plan (page 5-8).



## SECTION 6. GOALS AND STRATEGIES

- I.57** Work with NCDOT to use the I-26 Welcome Center as a resource to promote Columbus.
- I.58** Continue to support the activities of the NC Division of Travel and Tourism; specifically, monitoring the growth of tourism-related industry and efforts to promote tourism-related commercial activity.
- I.59** Continue to support agriculture as a valuable part of the area's economy.
- I.60** Actively recruit and retain a younger workforce to the Town by enhancing cultural and recreational opportunities and diverse affordable workforce housing.
- I.61** Market the Town/County's natural assets, such as Chocolate Drop Mountain and Little White Oak Mountain, as regional attractions which will support ecotourism.

### ***Community Services/Recreation***

#### ***Implementing Strategies***

- I.62** Use community services and facilities as incentives to stimulate population growth, tax base, and the economy.
- I.63** Emphasize/support the repair of failing infrastructure systems in infill areas.
- I.64** Continue to prepare and update annually capital facilities improvements plan (CIP).
- I.65** Continue to work with state, county, and local partners to enhance emergency preparedness and maximize resiliency in response to all types of disasters – natural and manmade.
- I.66** Ensure that infrastructure is maintained as it relates to the safety of the community, to meeting the economic development needs of businesses, and to the general welfare of the community.
- I.67** Seek state and federal technical and financial assistance to provides facilities for physically challenged persons.
- I.68** As Planning Board membership vacancies occur, recruit members who have interest and/or expertise in public health, represent the 40-year old and younger population, and community diversity.
- I.69** Support firefighting facilities which offer maximum protection and services to Columbus's citizens.
- I.70** Support the police, fire, healthcare, and administration needs cited in Section 4, Projections/Future Demand.
- I.71** Prepare a comprehensive town-wide stormwater management plan.
- I.72** Foster and support excellent educational and recreational opportunities and facilities for all ages.
- I.73** Maintain and expand the quality and location of public spaces throughout Columbus, including the introduction of pocket parks in infill areas to serve as accessible public gathering spaces within nodes of activity.
- I.74** Continue to coordinate with and support Polk County efforts to provide recreational facilities and services to Columbus.

## SECTION 6. GOALS AND STRATEGIES



I.75 Consider the development of neighborhood pocket parks in under-served portions of the Town.

### **Transportation**

#### **Implementing Strategies**

I.76 Consider the development and adoption of a complete streets policy. This policy should focus on providing a wide range of transportation options including bicycle lanes, sharrows, greenways, sidewalks, and pedestrian-friendly intersections. Increased attention should be given to streets programmed for resurfacing and/or expansion.

I.77 Consider engaging in the following in order to promote alternative means of transportation:

- Encourage clinics to teach safe cycling to school-age children.
- Strategically place signs and provide maps outlining existing and proposed pedestrian and bicycle routes.

I.78 Support the transportation improvements cited on pages 4-8 to 4-11 of this plan.

I.79 Apply a “complete streets” policy for new transportation projects. A complete streets policy requires that all new transportation projects provide facilities for pedestrians, bicyclists, and transit, as well as private vehicles.

I.80 Implement the Polk County Comprehensive Transportation Plan.

I.81 Promote safe and effective traffic flow through traffic calming measures.

I.82 Address the public transportation needs of the senior population and include ADA compliance.

I.83 Require residential subdivisions generating 200 or more peak hour trips to prepare a traffic impact analysis/study, including mitigative action to reduce impact.

I.84 Consider conducting a public awareness campaign through radio and the Town’s website to increase the safety of bicyclists and pedestrians.

I.85 Consider the adoption of maximum parking standards that alleviate the need to provide large surface lots on valuable infill land.

I.86 Promote neighborhood designs which limit access to adjacent arterials and utilize street patterns which promote slower internal traffic speeds.

I.87 Proactively implement the proposed improvements along Mills Street outlined in Section 5. The “road diet” defined within that section will ensure that the Town is efficiently utilizing all available right-of-way.





## SECTION 6. GOALS AND STRATEGIES

### *Continuing Planning Process*

Implementation is a continuing process. Without effective implementation, this plan will have no value. The following steps are appropriate in implementing the Town of Columbus Comprehensive Plan:

- Prior to zoning departures from the Future Land Use Map, this plan should be reviewed to determine if a change in the future land use map should be made. Through this procedure, the impact of a change on the entire map and plan should be considered. This process will reduce land use and zoning decisions which are made in a vacuum, and consistency of the plan and land development ordinances will improve.
- The Columbus Planning Board and Town Council should consider the following during the deliberation of all zoning requests:
  - All uses which are allowed in a zoning district must be considered. A decision to rezone or not to rezone 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.
  - Zoning decisions will not be based on aesthetic considerations.
  - Requests for zoning changes will not be approved if the requested change will result in spot zoning. Spot zoning is a form of discretionary 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. Although changing the zoning classification of any parcel of land to permit a more intensive use could possibly constitute spot zoning, the test lies in its relationship to the existing zoning pattern and guidelines of the local land use plan. Spot zoning is based on the arbitrary and inappropriate nature of a rezoning change rather than, as is commonly believed, on the size of the area being rezoned.
  - The concept of uniformity will 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 treatment must be justified by showing different circumstances.
  - Zoning regulations will be made in accordance with the Town of Columbus Comprehensive Plan and designed to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements. The regulations shall be made with reasonable consideration, among other things, as to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout Columbus's planning jurisdiction.

## SECTION 6. GOALS AND STRATEGIES



- Specifically, the Planning Board and Town Council should ask the following questions:
  - Does Columbus need more land in the zone class requested?
  - Is there other property in the Town that might be more appropriate for this use?
  - Is the request in accordance with the Town of Columbus Comprehensive Plan?
  - Will the request have a serious impact on traffic circulation, parking space, sewer and water services, and other utilities?
  - 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? Do standards exist to govern these disturbances?
  - Does the request raise serious legal questions such as spot zoning hardship, violation of precedents, or need for this type of use?
- Following adoption of the plan, the Town may implement the following to ensure effective citizen participation:
  - Encourage diverse public participation in all land use decisions and procedure development processes and encourage citizen input.
  - Publicize all meetings of the Planning Board and Board of Adjustment through newspaper advertisements and public service announcements.
  - Utilize broad-based advisory committees to assess and advise the Town on special planning issues/needs.
  - Ensure that all planning activities are available on the Town's website.
  - At a minimum, update this plan every five to seven years.



## APPENDIX A. CITIZEN PARTICIPATION PLAN

### TOWN OF COLUMBUS COMPREHENSIVE PLAN CITIZEN PARTICIPATION PLAN

#### **Introduction**

The Town of Columbus has initiated the preparation of a Comprehensive Plan for the Columbus planning area. The final document will serve as comprehensive plan for future public investment to achieve the community's overall vision. 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 the Town of Columbus.

Recognizing that a collaborative effort with the public is essential, the initial step in the planning process is the adoption of this Citizen Participation Plan (CPP) by the Columbus Town Council. Approval of the CPP was accomplished on September 19, 2019.

#### **Responsibility**

The Town of Columbus Planning Board will supervise the preparation of the Comprehensive Plan. The town's staff and consultant will serve in an advisory capacity to the Planning Board. The Comprehensive Plan will be drafted by Holland Consulting Planners, Inc., the town's consultant. Final approval will be by the Columbus Town Council.

#### **Meetings**

All Planning Board meetings will be conducted in an open format which will encourage public involvement/engagement. The Planning Board will conduct up to four (4) work sessions to prepare the Comprehensive Plan. All meetings of the Planning Board will be advertised, posted on the project and Town websites, and open to the public. At a minimum, the following meetings will be conducted throughout the plan preparation process:

- Up to four (4) work sessions with the Planning Board and one (1) work session with the Town Council will be conducted. At each meeting, the location, date, and time of the succeeding meeting will be determined.
- A mid-project public review meeting to report overall project status and to obtain public input on progress to date. This meeting will be scheduled approximately five (5) months into the project, and will provide a summary of all data and issues identification obtained to date in the process.

## APPENDIX A. CITIZEN PARTICIPATION PLAN



- Submittal of draft plan to the Planning Board by the consultant. Following approval of a draft plan by the Planning Board, one (1) open house meeting for public review will be conducted to allow the public to question and comment on the draft plan prior to formal public hearing(s).
- Submit the plan to the Town Council for work session and consideration prior to public hearing.
- Present the final plan at a public hearing.

### **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:

- Sign-up sheets will be placed in the Columbus Town Hall. Individuals who place their names on this list will be mailed or emailed notices announcing meeting times for review of the Comprehensive Plan.
- Notices of all public meetings will be advertised in a Public Notices section of the local newspaper, in addition to being placed in the Town Hall.
- Notices of all public meetings will be, at a minimum, emailed to civic groups and other interested groups (to be determined in concert with the Town).
- The Consultant will create and maintain an **interactive project-dedicated website** to both collect and disseminate information regarding the project. The draft plan (as well as all notices) will be posted on this Comprehensive Plan website so that citizens may review the document. Having the Comprehensive Plan posted online will ensure that the most recent information is available and will reduce printing costs. Information regarding the project website will be posted in the local newspaper.

### **Dissemination of Information**

The following procedures will be utilized to ensure the availability of information:

- Copies of the draft plan will be placed at the Town Hall for citizen review, as well as being available at all meetings to ensure that the citizens in attendance can review items being discussed.
- The draft Plan will be posted on the Town of Columbus Comprehensive Plan website as it is developed for online review or printing. Information regarding the location of the document online will be included in all published notices of Planning Board meetings.



## APPENDIX A. CITIZEN PARTICIPATION PLAN

- Sections of the proposed plan will be provided to the Planning Board prior to any meetings at which the draft plan section(s) will be discussed.
- Copies of the draft plan or sections of the draft plan may be obtained from the Town Hall.

### **Public Comment**

Throughout the process, the public will have the following opportunities for input:

- At each Planning Board 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 email.
- The town-wide mid-project status meeting/public input session, Planning Board work sessions, open house, and public hearing will all provide additional opportunities for public input and questions.

### **Schedule**

The Comprehensive Plan planning process will utilize the following schedule:

Phase	Project Task	Timeframe
<b>Phase I:</b>	● Issue Notice to Proceed	July 2019
	● Project Initiation/Public Involvement Strategy	July-September 2019
<b>Phase III:</b>	● Plan Format/Development	October 2019-November 2020
<b>Phase IV:</b>	● Submit Final Plan to Planning Board and Town Council for Consideration	December 2020
	● Public Hearing	