

16 South Corridor Development Plan



“You Can See It From Here”

Catawba County

August 15, 2011

16 South Corridor Development Plan

Introduction

“You can see it from here”, has a great deal of significance and meaning for several reasons. The development of the new segment of the NC 16 Bypass has made it possible to see the skyline of the City of Charlotte in a dramatic way. It also serves as a constant reminder of our close proximity to one of the top 10 fastest growing cities in the U.S. over the last decade. It brings the southern portion of Catawba County within the range of the average U.S. commute time (24.3 minutes) to a major metropolitan area offering multi-modal transportation facilities, financial, cultural, and sports centers.

Just as there are many benefits and attractions to living, working, and playing in the Charlotte area, the southern portion of Catawba County also has much to offer such as:

16 South Corridor Development Plan

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- Abundance of farm land and open space
- Rural and low density development
- Scenic viewsheds
- Quality education system
- Competitive land prices
- Availability of cost effective public utilities



NC 16 Bypass South of Anderson Mountain

The opening of NC 16 Bypass places this area of Catawba County in a better position to attract economic development. Locating within this area of Catawba County offers businesses an attractive alternative to the congested Charlotte metropolitan area.

Over the past 15 years, Catawba County has adopted/accepted long-range planning initiatives for the purpose of providing the framework for coordinated growth and development. These plans included a county-wide comprehen-

sive plan, referred to as VisionQuest 2010 (1996) and smaller focused plans referred to as “Small Area Plans” (SAP). The two plans associated with the NC 16 corridor are Sherrills Ford SAP (February 2003) and Balls Creek SAP (June 2003).

PURPOSE

The purpose of the 16 South Corridor Development Plan, hereafter referred to as the “Plan”, is to: (1) review previously adopted/accepted plans relative to the Plan area, (2) develop a set of goals based upon applicable principles and recommendations in the Sherrills Ford and Balls Creek SAP , and (3) prepare a series of Plan Action Strategies (PASs) with measurable outcomes, timelines and relevant agreements. See the Plan Action Strategy (PASs) Legend at the end of this chapter and each Plan Action Strategy (PASs) table at the end of their respective chapters. The legend explains the symbols, prioritization, and timelines associated with each PASs. The appendix also has a consolidated PASs table for convenience. The plans described in the *Background* section are still valid and serve as the foundation for this Plan.

More specifically, the Plan addresses a series of issues focusing upon:

- A smaller geographic area than what was previously defined within the Sherrills Ford and Balls Creek SAPs;
- The coordination of utilities between Catawba County and Lincoln County through a signed agreement with defined boundaries;
- An improved multi-modal transportation network;
- A more defined development approach for the NC 150/NC 16 Bypass interchange and the Anderson Mountain Little Mountain Airport;
- Identifying a proposed small scale industrial park centered around the Little Mountain Airport with a focus upon aerospace, technology, and transportation industries; and
- Modifying land use regulations and design standards.

PLAN AREA

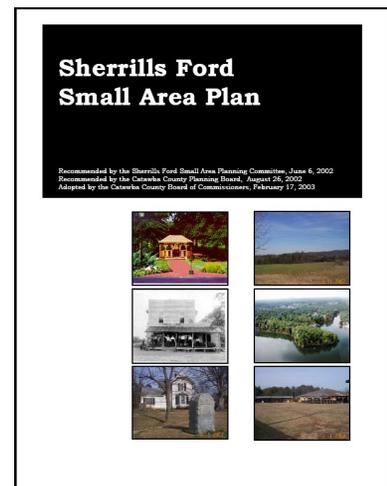
The Plan Area includes the land centered around existing NC 16 and NC 16 Bypass and is bounded on the north by Mountain Creek, on the west by portions of Airport Road, Anderson Mountain Road, and Lebanon Church Road, on the south by the Catawba-Lincoln county line, and on the east by a boundary line extending from the County line in a northerly direction to Mt. Beulah Road then further northward on Little Mountain Road with its intersection of Mountain Creek. The boundary for the Plan is depicted on *Map 1: Plan Area*. *Note: All maps referenced in the Plan document are located at the end of the relevant chapter.*

BACKGROUND

As noted in the *Introduction* above, two plans have been adopted/accepted which include components relative to the NC 16 corridor. Following is an overview of those plans and key components, several of which are incorporated into this Plan.

SHERRILLS FORD SMALL AREA PLAN (2003) - This plan is one of seven plans prepared for the unincorporated areas of the County resulting from the County's Long Range Strategic Growth Plan. The small area plan addresses a host of recommendations some of which are listed below:

- Land Use and Community Design
 - ◊ Designate a “regional commercial center” at the intersection of the existing Hwy. 150/16 and the new Hwy. 150/16 interchange. The regional commercial center is designed to provide a mixture of uses such as commercial, office-institutional and multi-family to serve the needs of a population service district of 40,000 - 150,000 people within a 20-30 minute drive. Development of this center would be coordinated with Lincoln County. The average size of a commercial center development would be 150,000 square feet of leasable area on an individual site greater



than 10 acres.

- ◇ Designate office-institutional uses to be allowed in the Hwy. 150 corridor, the Hwy. 150/16 regional commercial center.

- Transportation

- ◇ Rewrite the County Thoroughfare Plan immediately and update the Plan every 3 – 5 years.
- ◇ Depending on the Highway 150 and Hwy. 16 Feasibility Study results, implement measures to protect and preserve enough right-of-way for widening (or relocation). This may include land acquisition by the County or density bonuses.
- ◇ Explore mass transit connection with Mooresville and the Charlotte Area Transit System (CATS) when the Iredell County extension develops. This may include smaller shuttle buses or van pools. *(Consideration should also be given to a similar approach with Denver and CATS along Highway 16.)*
- ◇ When roads and highways are resurfaced, add additional pavement to accommodate the construction of bicycle lanes along Highway 150.
- ◇ Pursue funding for the Highway 150 at NC 16 “gateway” improvements.

- Public Services and Community Facilities

- ◇ Coordinate with school facility planners to review potential sites for new schools.
- ◇ As new school facilities are constructed, locate them contiguous to one another in order to allow for shared facilities, such as ball fields, media centers, etc.
- ◇ In order to support the land use recommendations contained within this plan, there is a need for public water and sewer on a regional basis.

- Economic Development

Chapter 1 Introduction

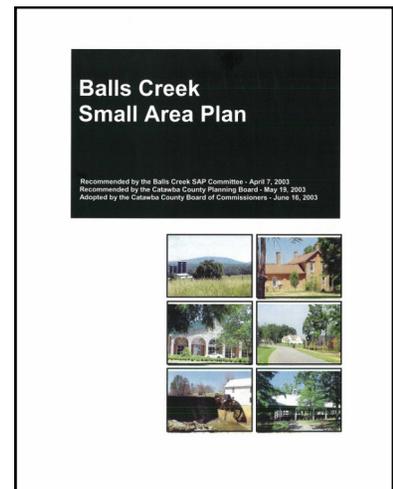
- ◇ Industrial uses in the Little Mountain Airport area are encouraged to develop in a park-like manner.
- Natural Resources
 - ◇ Establish voluntary agricultural districts as a means of protecting the rights of farmers to continue to farm.

BALLS CREEK SMALL AREA PLAN (2003) -This plan is also one of seven plans prepared for the unincorporated areas of the County resulting from the County's Long Range Strategic Growth Plan. The small area plan addresses a host of recommendations some of which are listed below:

- Land Use and Community Design
 - ◇ Pursue a high quality business park along the Highway 16 corridor near Highway 150.
 - ◇ Develop a mechanism for preservation of open space resources by creating voluntary agricultural districts and conservation easements.
- Transportation
 - ◇ Increase pavement width to the maximum extent feasible on East Maiden Road from the new four-lane NC Highway 16 west to the intersection of Lebanon Road.
 - ◇ Explore possible local scenic highway designation for East Maiden Road.
 - ◇ Increase pavement width to the maximum extent feasible along the following roads for bicycle routes:
 - ⇒ Balls Creek Road
 - ⇒ East Maiden Road
 - ◇ Encourage and promote ridesharing/vanpooling to Charlotte through the Piedmont Wagon and the Charlotte Area Transit Systems.



Little Mountain Airport





*Greenway Transit
(Former Piedmont Wagon)*

- ◇ Encourage Piedmont Wagon to schedule trips to coordinate with the Western North Carolina passenger rail service.

- Community Facilities and Public Services

- ◇ Explore funding options for construction of school facilities.
- ◇ Catawba County should revisit the EMS study to see if recent residential development in the Balls Creek area warrants additional consideration for an EMS base in the area, with a special focus on locating such a facility within proximity of the schools.

- Economic Development

- ◇ Business development, including new development along the widened NC Highway 16 Corridor, should observe the following appearance and design criteria:
 - ⇒ landscaped areas along road frontage,
 - ⇒ limitation on size of signs,
 - ⇒ driveway cuts - interconnectivity.
- ◇ Pursue a high-quality, attractive office-institutional business park along the NC 16 Corridor near NC Highway 150.

- Natural Resources

- ◇ Establish standards for new development on Anderson Mountain above the 1,100 foot elevation in the area designated as "Mountain Protection District". All new major subdivisions will be subject to a planned development process which will address the following:

- ⇒ lot clearing limits based on percent slope;
- ⇒ height restrictions;
- ⇒ building material and finishes of homes and signage to be compatible with the natural environment;
- ⇒ environmentally sensitive road and lot



Bandy's Fire Station #2

configurations; and

⇒ the average density allowable is one unit per two acres. To minimize the impacts to environmentally sensitive areas, the transferring of densities within the development will be strongly encouraged. Partner with municipalities to provide utilities consistent with adopted land use plans and smart growth principles.

- ◇ Encourage residential subdivisions to follow design criteria for preserving trees within subdivisions.
- ◇ Work through county, state and federal agencies to expand educational efforts to farms about voluntary agricultural districts to preserve their farmland and their livelihood.



Anderson Mountain

PROCESS

The Plan was drafted by the Catawba County Planning staff with technical assistance from the following:

- Catawba County Utilities and Engineering
- Catawba County GIS
- Western Piedmont Council of Governments
- Economic Development Commission
- NCDOT
- Cooperative Extension
- Catawba County Schools
- Catawba County Historical Association

The Plan was presented to the public at a meeting on July 12, 2011. Approximately 50 citizens attended this meeting to provide feedback on the plan recommendations and implementation strategies. Additionally, the Planning Board conducted a public hearing on the plan at its July 25, 2011 meeting. Two people spoke in reference to the plan. The Planning Board recommended the Plan to the Board of Commissioners.



Street Tree Preservation



The Board of Commissioners similarly conducted a public hearing on the plan at its August 15, 2011 meeting. No one spoke in reference to the plan. The Board discussed the plan and accepted the plan as presented.

Table 1: Plan Action Strategies *(PASs) Legend						
Chapter Title (Key letter underlined)	Letter (symbolizing chapter title)	Chapter Number	Chapter Principal (P)	Chapter Goal (G)	**Timeframe Ranges: Short, Mid, Long	***Priority (H), (M), (L)
<u>E</u>conomic Development	E	2	EP	EG	**	(H), (M), (L)
<u>L</u>and Use	L	3	LP	LG	**	(H), (M), (L)
<u>T</u>ransportation	T	4	TP	TG	**	(H), (M), (L)
<u>P</u>ublic Service and Community Facilities	P	5	PP	PG	**	(H), (M), (L)
<u>N</u>atural/ <u>C</u>ultural Resources and Open Space	N	6	NP	NG	**	(H), (M), (L)

*PASs- Plan Action Strategies were formulated using the “SMART” criteria:

- Specific- Is it specific enough?
- Measurable- Can you measure it?
- Achievable- Is it achievable and supported among stakeholders?
- Realistic- Is it cost effective?
- Timely- What is the timeframe?

**Timeframe- Each priority level is further categorized by the estimated timeframe (See Table 2, “timeframe”) to implement the PASs as follows:

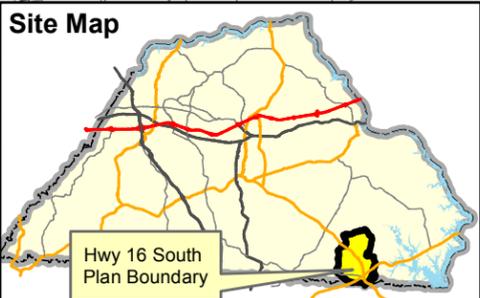
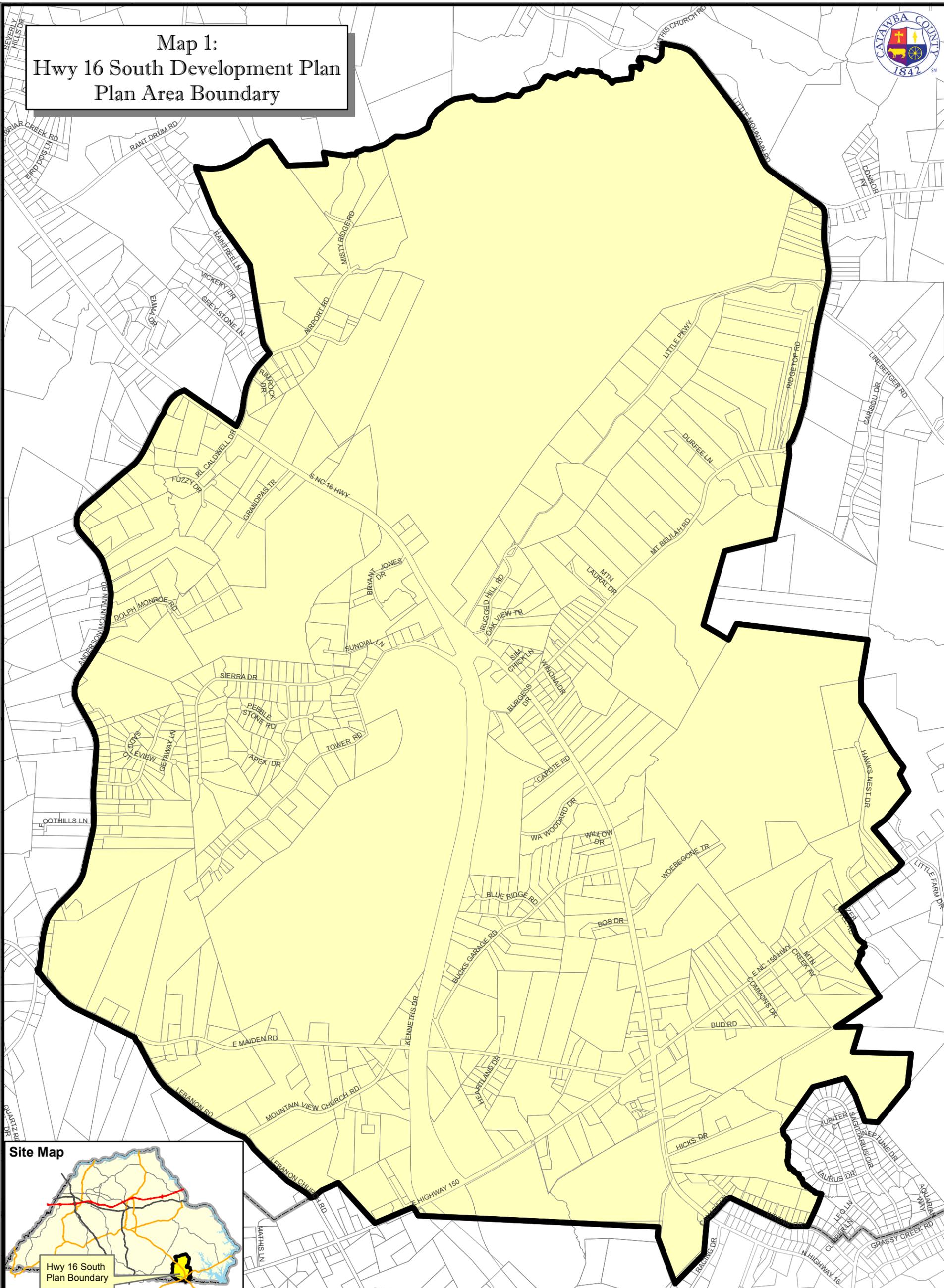
- 3-6 months Short Range
- 6-18 months
- 18 months-3 years
- 3-5 years Mid Range
- 5-10 years
- 10 + years
- Ongoing Long Range

***Priority Criteria is based on ease of implementation, political and community support, cost /benefit, and funding availability, and timeframe.

- High-(H)
- Moderate-(M)
- Low- (L)



Map 1: Hwy 16 South Development Plan Plan Area Boundary



- Plan Boundary
- County Boundary
- Parcels
- City Limits
- ETJ

0 0.125 0.25 0.5 Miles



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Economic Development

CURRENT CONDITIONS AND TRENDS

Catawba County’s economy continues to move away from its historic reliance upon traditional manufacturing industries such as textile, hosiery and furniture. As Catawba County’s economy has become more diverse over the last decade, a shift from the production of goods to the provision of services in sectors such as: health care, finance, retail, food, and administration has occurred.

The steady loss of manufacturing jobs has had a significant impact upon Per Capita Personal Income (PCPI). Modest gains have not offset this trend. Statistics provided by the Western Piedmont Development Board, published in its newsletter (summer 2010), indicated that the PCPI for the Hickory Metropolitan Statistical Area (MSA) rate of growth of 7.2 % from 2004-2007 was less than the national average (13.4%) and the North Carolina average (10%). By 2007, the region had fallen to 319th out of 366 metro areas in PCPI. The decline in the rankings is due to the loss of higher paying manufacturing jobs in the Hickory Metro Area.

Economic Development

Current Conditions and Trends	1
Guiding Principles	3
Plan Goals	3

The Hickory MSA continues to suffer under a high unemployment rate falling near or at the bottom of the 14 MSAs in North Carolina. The current rate is 12.7% as pointed out in the fall 2010 Western Piedmont Development Board newsletter. While the unemployment rate has improved from the summer rate of 13.3%, it still remains at a level that contributes to an anemic local economy.

It is imperative to aggressively pursue economic opportunities that will help turn these negative economic indicators around. Factors which make this corridor so attractive are its accessibility to major transportation arteries, close proximity to a major international airport, a regional airport, and two metropolitan areas.

There are three major opportunity sites within the Plan area which offer a foundation for future growth and development. Two of the three projects have recently been approved in anticipation of the opening of the new NC 16 By-



Lowe's Home Improvement Center



"Bridgewater" by Crosland



*Little Mountain Airport
Anderson Mountain*

pass. The third opportunity site includes an existing public/private airport adjacent to 900 acres of undeveloped land. Each will contribute to a stronger economic outlook and are further described below.

Lowe's Home Improvement Center — This approved project is located in the northeast quadrant of the NC 150/NC 16 Bypass interchange. The center will be located on a 23 acre parcel, designed to accommodate approximately 155,000 square feet.

The corporation stands at 42nd in the top 100 companies in the Fortune 500 rankings . It is the world's second largest home improvement retailer. According to Fortune 500 magazine Lowes is recognized for its excellent customer service and innovative use of sophisticated logistics to carefully control how much inventory is delivered to its stores.

Bridgewater — This approved project is located in the southeast quadrant of the NC 150/NC 16 Bypass interchange. This project, to be developed by Crosland will encompass approximately 91 acres of which 54 acres are located within Catawba County. The gross floor area of the BridgeWater project is proposed to be 704,900 sq. ft. consisting of retail, office, and flex-industrial uses. Approximately 400,000 sq. ft. of retail uses will be in Catawba County. The remaining square footage is proposed to be located in Lincoln County.

Crosland is one of the leading diversified real estate companies in the Southeastern Region of the US. It traces its roots to the 1930s when John Crosland, Sr. began building houses in Charlotte, North Carolina.

Today, Crosland manages, acquires and builds apartment communities, shopping centers and office and industrial space. They also administer and develop residential and commercial land, and pursue a broad range of general contracting assignments. One of the core values of Crosland is creating community oriented developments which is evident in the design of the Bridge-water project.

Little Mountain Airport/Anderson Mountain — The airport is home to Mountain Air Cargo, Inc. which is an express cargo carrier providing flight and maintenance services throughout the eastern half of the United States, Canada, and the Caribbean Islands. They operate more than 60 aircraft, and are presently flying

more than 100 flights per day, and carrying an average of 5 to 6 million pounds of cargo per month. They have pilots and mechanics based in approximately 35 cities.

Attributes such as innovation, creativity, philanthropy, and resourcefulness are associated with the three business ventures described above. They serve as catalysts for building momentum toward economic growth for the area.

GUIDING PRINCIPLES

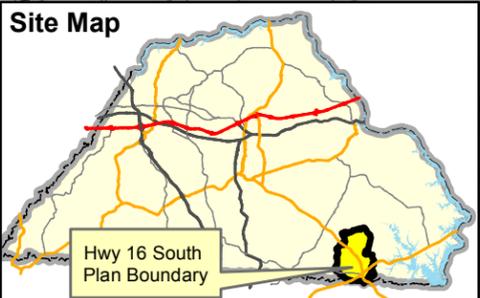
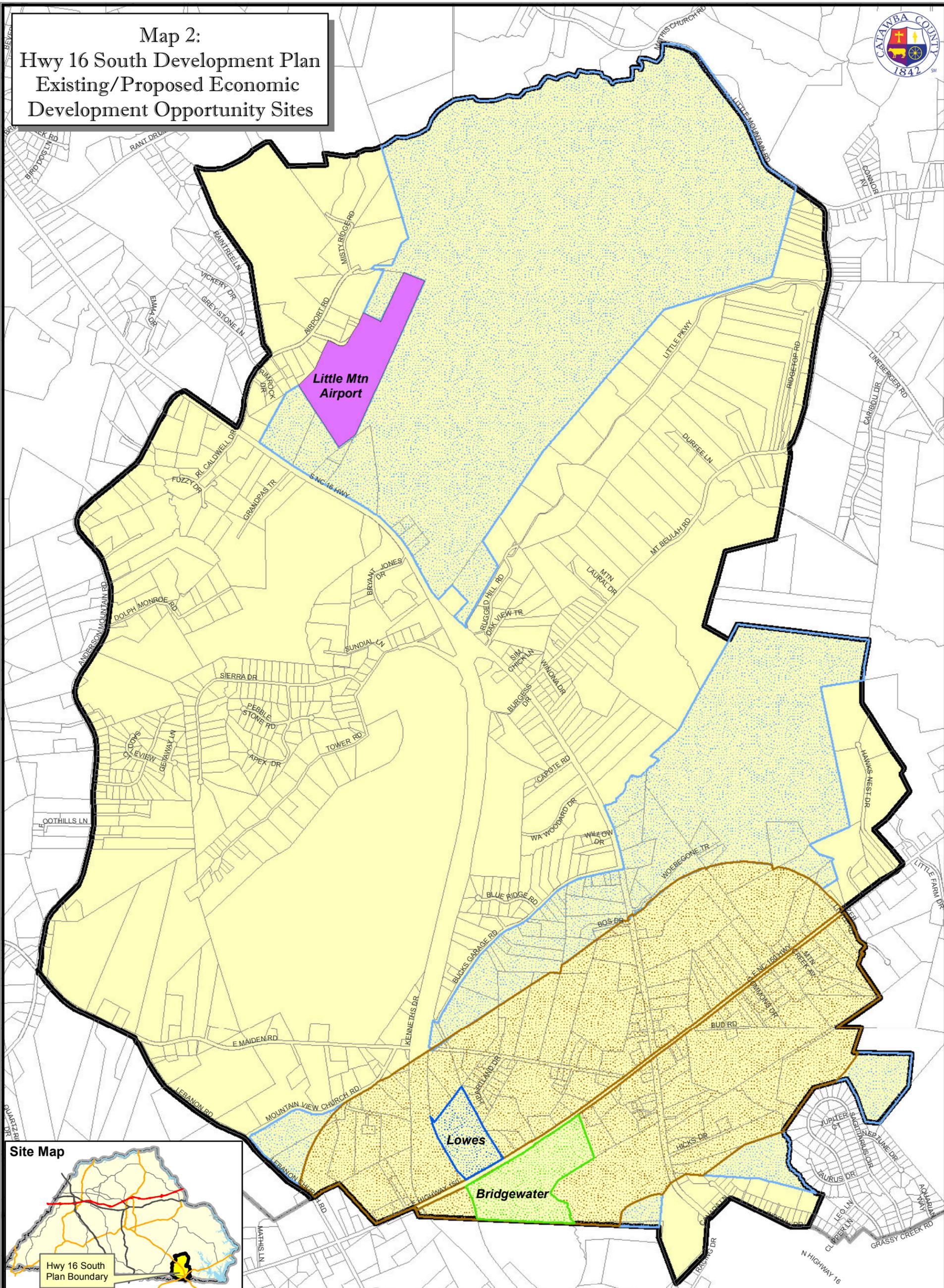
The following principals were carried forward from the adopted/accepted Sherrills Ford and Balls Creek Small Area Plans and serve as a foundation for the goals and Plan Action Strategies (PASs).

- EP-1 Facilitate and encourage new, community-focused economic development.
- EP-2 Create more high quality aesthetically pleasing commercial, industrial and mixed-use developments.
- EP-3 In efforts to redirect a portion of day-to-day consumer spending to Catawba County and Sherrills Ford (from Iredell County, Charlotte, etc.) new retail development opportunities should be encouraged in Sherrills Ford.
- EP-4 Provide more opportunities for a variety of job types in efforts to improve the employment base in Sherrills Ford and to reduce travel trips outside of the County.

PLAN GOALS

- EG-1 Pursue the development of a business and light industrial park taking advantage of air transportation centered around Little Mountain Airport. *See Map 2: Existing and Proposed Economic Development Opportunity Sites.*
- EG-2 Encourage and promote mixed-use development at Little Mountain Airport and at the intersection of NC 16 Bypass and NC 150. *See Map 2: Existing and Proposed Economic Development Opportunity Sites.*

**Map 2:
Hwy 16 South Development Plan
Existing/Proposed Economic
Development Opportunity Sites**



- Plan Boundary
- County Boundary
- Parcels
- Mixed-Use Opportunity Sites
- Transitional Opportunity Sites
- Lowes
- Little Mtn Airport
- Bridgewater

0 0.125 0.25 0.5 Miles

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**Plan Action Strategies (PASs)
Economic Development**

PASs #	CATEGORY	GOAL	LEAD AGENCY	ACTION STEPS	CHAPTER #	PRINCIPAL #	GOAL #	TIMEFRAME	PRIORITY
1	Economic Development	Pursue the development of a business and light industrial park taking advantage of air transportation centered around Little Mountain Airport.	Economic Development Commission and Planning	Coordinate efforts to secure sufficient land around the existing airport to accommodate related facilities which can be served by public infrastructure.	2	EP-2	EG-1	Ongoing	H
2	Economic Development	Encourage and promote mixed-use development on the east side of NC 16 at Anderson Mountain and at the intersection of NC 150/NC 16 Bypass.	Planning and Developers	Work with developers in formulating a conceptual plan for a mixed-use development on the east side of NC 16 at Anderson Mountain and at the intersection of NC 150/NC 16 Bypass.	2	EP-3	EG-2	Ongoing	H

LAND USE AND COMMUNITY DESIGN

CURRENT LAND USE

Residential uses and open space occupy the vast majority of land in the Plan boundary. Manufacturing/industrial uses, Mountain Air Cargo and Martin Marietta Denver Quarry, are located north of Anderson Mountain and south of the NC 150/16 intersection respectively and a few light industrial (warehousing) uses are along NC 150. Commercial and office-institutional uses exist at the intersection of NC 150/16, south of the intersection along NC 16, and along NC 150. Commercial uses have been approved to the east of NC 16 Bypass at its intersection with NC 150. Public service facilities (wireless communication towers) are located at the peak of Anderson Mountain. *See Map 3: Current Land Uses.*

Land Use And Community Design

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Table 3: Acreage by Use		
LAND USE	Acreage	% of Total
Open Space	2,708	55%
Residential	1,976	40%
Office-Institutional	48	<1%
Commercial	63	1%
Industrial/Manufacturing	85	<2%
Utility	20	< 1%
Total Acreage	4,900	100%

Source: Catawba County GIS, 2010

Fifty-five percent (55%) of the land remains vacant (open space). A total of 40% is used for residential purposes. Industrial and manufacturing uses occupy less than 2% of the land area. Commercial occupies 1% of the land area and office-institutional and public service utilities occupy less than 1% each. *See Table 3: Acreage by Use.*

Table 4: Acreage by Zoning District					
ZONING DISTRICT	Acreage	Occupied Acreage	Vacant Acreage	% Occupied	% Vacant
Residential (R-40, R-20)	4,559	3,338	1,221	73%	27%
Industrial (I)	106	75	31	70%	29%
Commercial (PD, PD-CD, HC, RC)	218	88	130	40%	60%
Office-Institutional (O-I)	17	7	10	41%	59%
Total	4,900	3,508	1,392	72%	28%

Source: Catawba County GIS, 2010

CURRENT ZONING

There are 4,900 acres (excluding rights-of-way) within the Plan boundary. Residential zoning occupies 4,559 acres and non-residential (industrial, commercial, and office-institutional) zoning encompasses the remaining 341 acres. *See Table 4: Acreage by Zoning District.*

The vast majority of residential properties located within the Plan boundary are classified as R-40 which is intended to accommodate low-density (one house per acre) single-family development and agricultural uses. Residential properties located along NC 150 are predominately classified as R-20 which is intended to accommodate higher-density (two houses per acre) single-family development and agricultural uses.

Property zoned for industrial development (GI) is southeast of Airport Road. The General Industrial district allows for primarily intensive manufacturing, processing, and assembly uses with accessory office uses permitted.

Property zoned Office-Institutional (O-I) exists at three locations on NC 16 south of NC 150, one site on NC 150 east of NC 16, and east of NC 16 just north of where NC 16 Bypass merges with existing NC 16. The O-I zoning district allows for office, institutional, civic, or other low intensity commercial uses. This district may buffer residential uses from commercial districts.

There are two properties zoned Rural Commercial RC in the vicinity of the NC 150/16 intersection. The RC zoning district allows small areas for offices, services, and retail uses designed in scale with residential uses. Highway Commercial HC zoning is designated for the majority of properties at the intersection of NC 150/16 and along the southern side of NC 150. This district provides for regional highway-oriented business, office, service, and civic uses.

Properties zoned Planned Development-Conditional District PD-CD exists to the east of NC 16 Bypass along NC 150. Each location is associated with approved commercial projects that are subject to development conditions such as: façade treatments, pedestrian mobility and amenities, specific uses, square footages, etc. There are quite a few properties located along NC 150 east of NC 16 zoned Planned Development PD. Planned

developments encourage master planning of large scale, multiple and/or mixed-use development. *See Map 4: Current Zoning.*

EXISTING ZONING OVERLAY DISTRICTS

The Watershed Protection-Overlay establishes watersheds designed to protect sources of water supply for public water systems by regulating density. The WS-IV Watershed Protect Area extends throughout all properties east of NC 16 and a considerable portion of the properties to the west of NC 16 within the Plan boundary.

Only new development activities requiring an erosion/sedimentation control plan under State law are required to meet WS-IV standards. In such cases, development is limited as required by the NC Water Supply Watershed legislation. The Protected Area requires 20,000 square feet (slightly less than one-half acre) for each single-family residential lot unless public water or sewer are available. In such instances, the minimum lot size is 15,000 square feet. All other residential and non-residential development in the Protected Area is limited to 24% lot coverage if a curb and gutter system is installed or 36% lot coverage without curb and gutter systems.

The Rural Preservation-Overlay exists along of NC 16. This overlay establishes a 100-foot front setback or buffering option depending on the proposed development. It establishes a balance between development and the rural character of the corridor.

Approximately 155 acres to the north and south of Airport Road are within the Double-wide Manufactured Home-Overlay. Double-wide manufactured homes are permitted by right within this overlay. Other opportunities for single-wide and double-wide placement exist throughout the Plan boundary, but are limited.

The Mountain Protection-Overlay extends across 785 acres. This overlay applies to land at an elevation of 1,100 feet above sea level on Anderson Mountain to the east and west of NC 16. This overlay serves to protect the character of the mountain including its scenic and natural qualities by providing such development standards as increased lot size, reduced structure height,

use of natural colors on building exteriors, and limited clearing of vegetation.

There are 845 acres within the Mixed-Use Corridor-Overlay (MUC-O). This overlay extends approximately 2,000 feet on both sides of the right-of-way along NC 150. Only at the western portion of the Plan does the MUC-O decrease to 500 feet on the north side of NC 150.

The purpose of the MUC-O is to establish building form and architectural standards compatible with the historic character of the area, provide a mixture of commercial, office, and residential uses, assure that uses are pedestrian friendly by providing convenient walkable pathways and connections, and promoting higher standards along major road corridors in the County. *See Map 5: Current Zoning Overlay.*

SITE DEVELOPMENT PATTERNS AND LAND DESIGN TRENDS

Historically, rural and agricultural uses were the most dominant land use in the Plan boundary. In recent decades, several housing developments have been built throughout the area. The majority of residential developments have occurred on the north side of Anderson Mountain to the west of NC 16, on the south side of Anderson Mountain to the east of NC 16 and along Bucks Garage Road. More growth is expected in areas where public water and sewer lines are extended. Generally, residential activity has consisted of a mixture of site-built subdivisions and manufactured housing. High-density housing could be considered in the MUC-O once public sewer is available.

Non-residential activity has increased at the NC 150/16 intersection since the early 1980s. Two large commercial projects (Lowe's Home Improvement and Crosland's Bridgewater, a 400,000 square foot retail center) have been approved at the northeastern and southeastern quadrants of the NC 150 and NC 16 Bypass intersection in 2008. Additional non-residential uses are anticipated along NC 150, properties along NC 16 south of Bucks Garage Road, and along East Maiden Road east of NC 16 Bypass, once supporting infrastructure is in place.

FUTURE LAND USE CLASSIFICATIONS

In order to guide development in the Plan area, future land use classifications have been depicted on *Map 5: Future Land Use Recommendations*. The map is separated by classifications of differing land uses based upon an analysis of existing land uses, economic potential, future utilities, road projects, and environmental conditions. Following is a description of the land use classifications:

OPEN SPACE

The open space classification is applied to land that is currently (or can in the future) be permanently protected through a conservation-based organization. This land cannot be developed for residential or non-residential uses but it is conserved land which may also serve a public recreation purpose, such as a greenway system.

RESIDENTIAL—LOW DENSITY

The low density residential classification applies to the land area in the majority of the Plan area. This area is rural in character and should remain rural based upon its current development pattern, rural viewshed and limited infrastructure availability. The low density residential area would allow single-family residential uses on one-acre lots or larger. Non-residential uses (excluding churches, schools and public facilities) should not be permitted.

RESIDENTIAL— MEDIUM DENSITY

The medium density residential classification applies to the land area north of Hwy. 10 and extends to the northern Plan area boundary. Most of this land area has access to public water and/or sewer; therefore, more dense residential development is allowed on lots less than one-acre. Non-residential uses (excluding churches, schools and public facilities) should not be permitted.

RESIDENTIAL— HIGH DENSITY

The high density residential classification applies to the land area within and adjacent to the MUC-O district. This land area has access to water and may have access to public sewer in the future. Multi-family housing functions well in close proximity to commercial services because of reduced cost of living (travel), amenities associated with commercial development, and pedestrian

oriented designs.

TRANSITIONAL

The transitional classification serves several purposes. It identifies land that has the potential for mixed use development, with multi-family and/or commercial uses and light industrial with the goals of this Plan in the future. These transitional areas should be within a local government's intended service delivery area.

MIXED-USE

The mixed-use classification is limited to property adjacent to or within a relatively short distance of the NC 150 and NC 150/16 intersections. Within the mixed use classification, higher density residential, commercial and office-institutional uses are allowed but never exclusively single-family homes. The mixed-use classification supports the goals of this Plan.

INDUSTRIAL

The industrial classification, like the mixed-use classification, is located within proximity to the NC 16 Bypass. Large-scale, campus style (preferred) light industrial developments are the types of uses allowed in the industrial classification. The industrial classification supports the development goals of this Plan.

GUIDING PRINCIPLES

The following principals were carried forward from the adopted/accepted Sherrills Ford and Balls Creek Small Area Plans and serve as a foundation for the goals and Plan Action Strategies (PASs).

RESIDENTIAL

- LP-1 Balance growth with the community's rural character.
- LP-2 Organize and plan residential development.
- LP-3 Encourage development designs that create a sense of place; distinct, cohesive, livable and walkable neighborhoods and communities; promote quality of design in future public and private development.
- LP-4 Reserve open space in new subdivisions.



Entryway Sign

COMMERCIAL

- LP-4 Encourage development of well-planned integrated retail centers of varying sizes and functions where adequate traffic carrying capacity is available. Such centers should be limited to the intersection of major highways.
- LP-5 Improve the aesthetic and functional character of development along the area's major corridors to create an attractive contemporary environment suitable for commercial, office/service, and higher-density residential use.



Mountain Air Cargo

INDUSTRIAL

- LP-6 Limit industrial growth within the Plan boundary.

PLAN GOALS

RESIDENTIAL

- LG-1 Designate transitional areas for the following locations. *See Map 6: Future Land Use Recommendations.*
- The northern slope of Anderson Mountain to the southern property line of Mountain Air Cargo east of NC 16.
 - An area north of NC 150 and east of NC 16.
 - An area north of East Maiden Road between Bucks Garage Road and west of NC 16.
- LG-2 Apply Rural Preservation-Overlay (RP-O) along the NC 16 Bypass to the south from the Lincoln/Catawba County line to the intersection of NC 16 and the Bypass to the north.
- LG-3 Relocate the Rural Preservation-Overlay (RP-O) from the existing NC 16 to the new NC 16 Bypass from the Lincoln/Catawba County line north to its intersection with existing NC 16.



North Slope of Anderson Mountain

COMMERCIAL

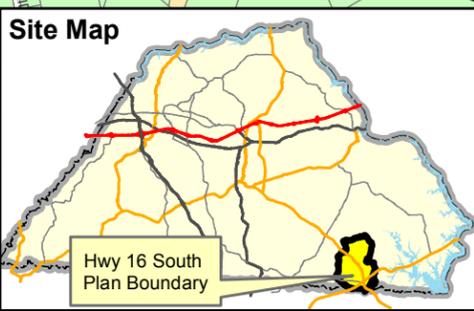
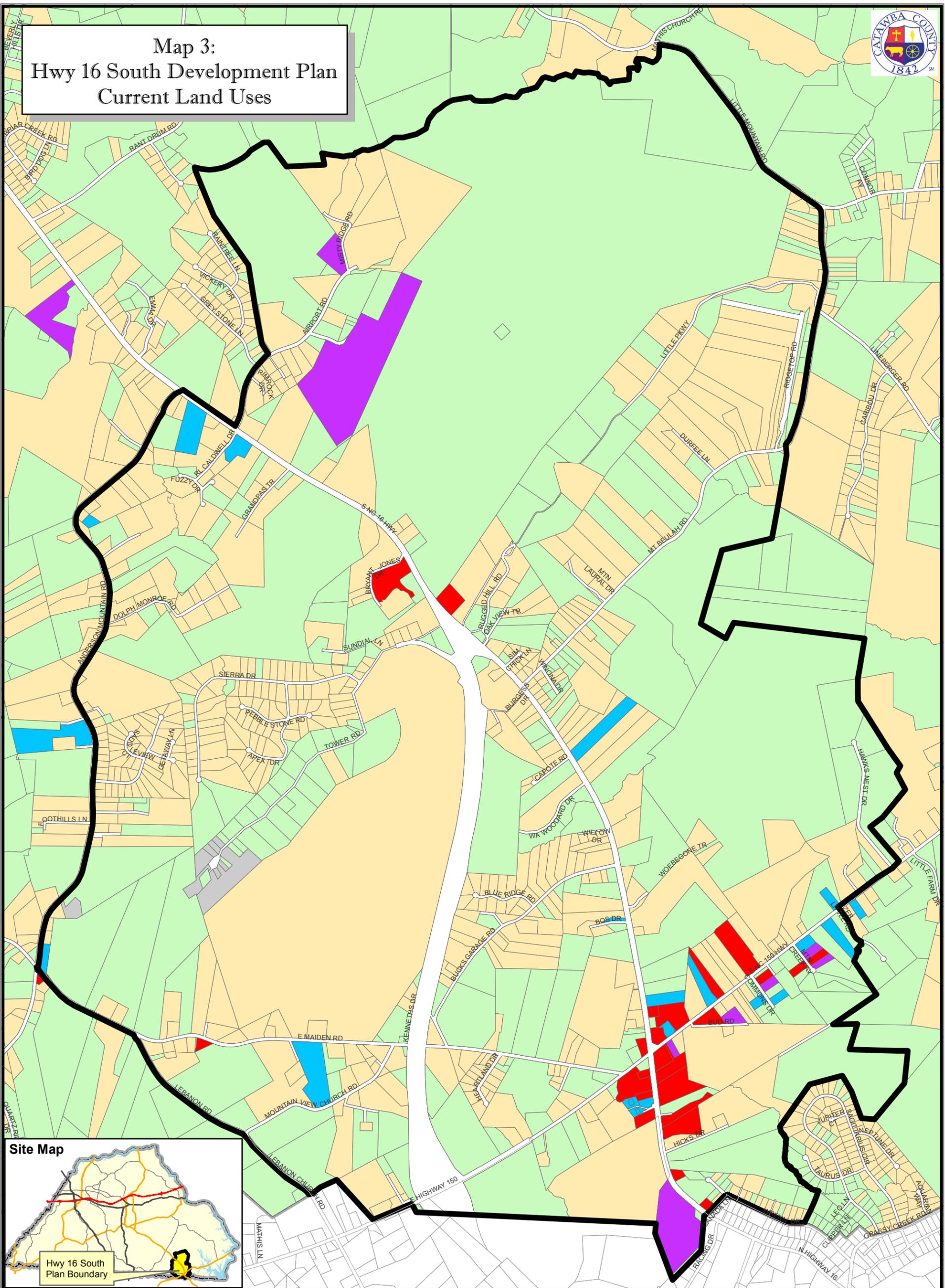
- LG-4 Interconnectivity including driveway, pedestrian walkways and shared parking should be provided for small-scale development projects.
- LG-5 Individual and plaza (multi-tenant) signs are encouraged to be monument style designs.

INDUSTRIAL

- LG-5 Allow for additional light industrial uses adjacent to the airport north of Anderson Mountain and east of NC 16. *See Map 6: Future Land Use Recommendations.*



Map 3: Hwy 16 South Development Plan Current Land Uses



Land Uses		
Plan Boundary	No Data	Open/Vacant
County Boundary	Commercial	Residential
Parcels	Manufacturing/Industrial	Public Service Facility
	Office-Institutional	

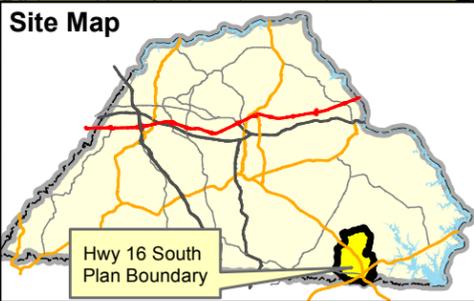
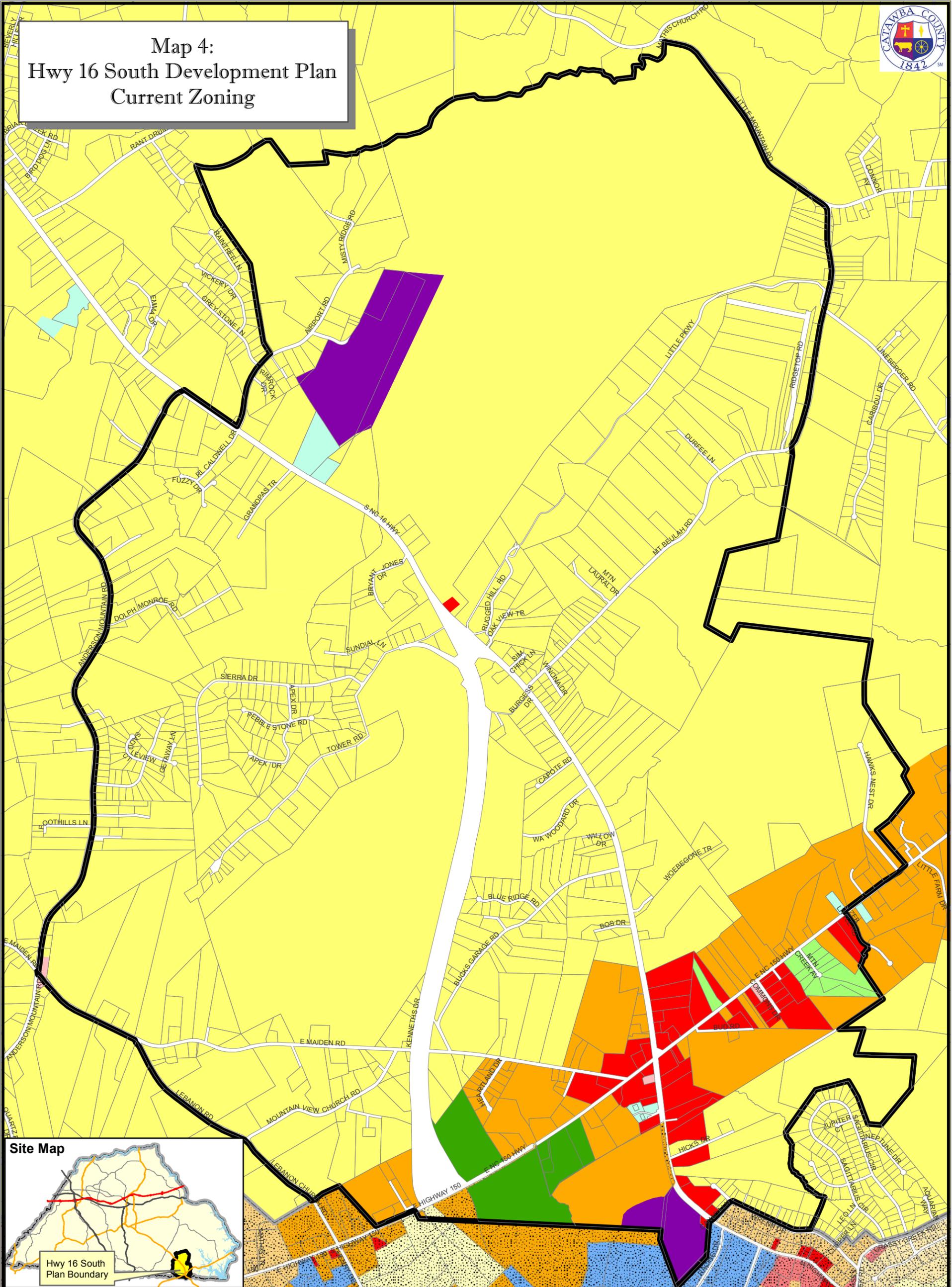
0 0.125 0.25 0.5 Miles

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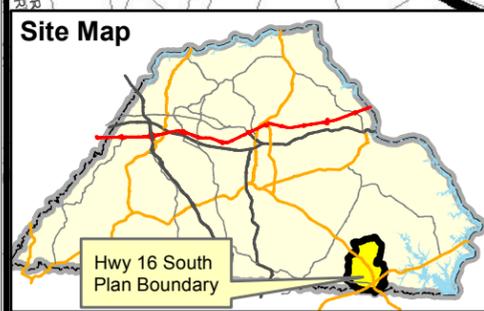
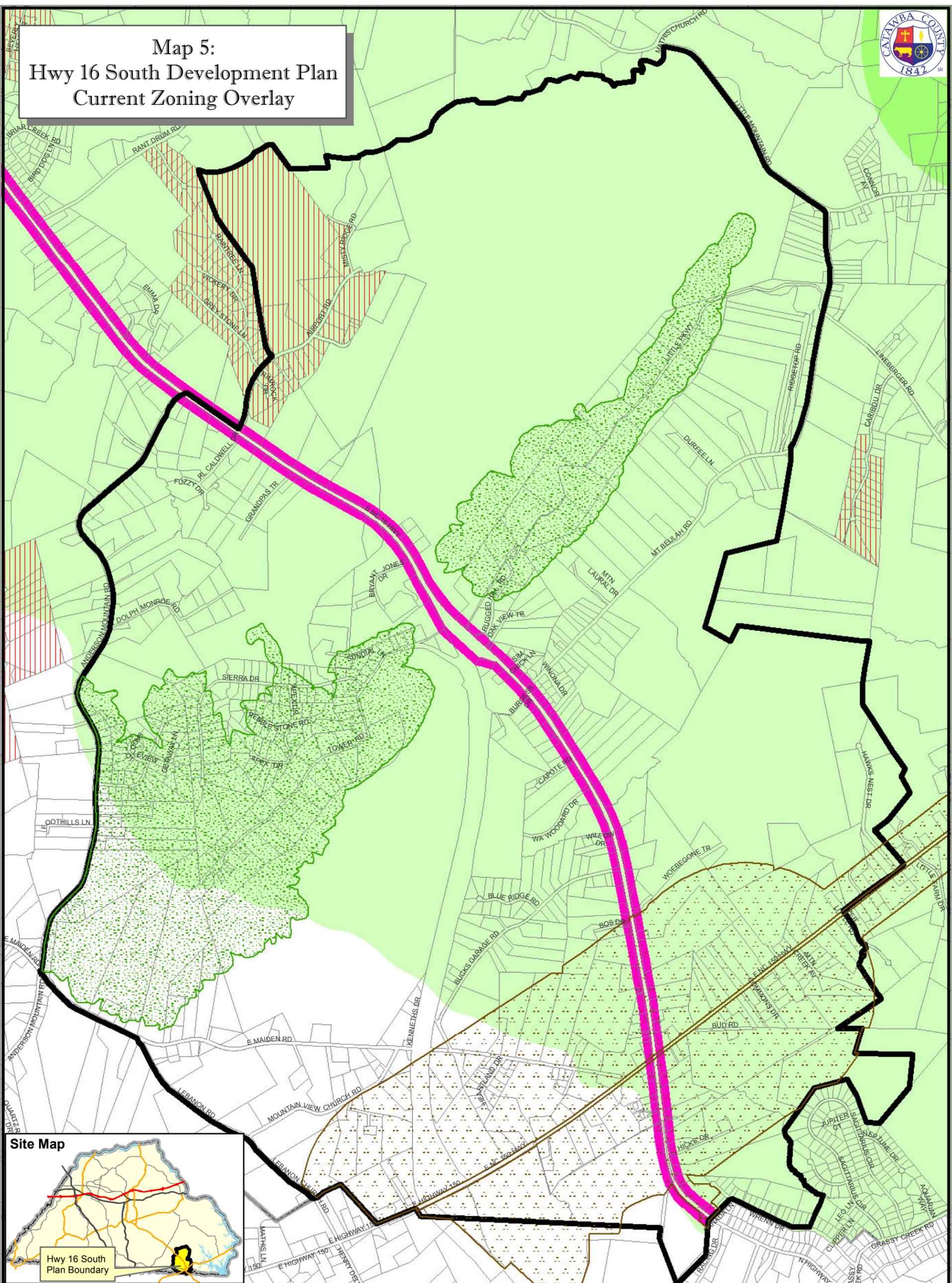
Map 4: Hwy 16 South Development Plan Current Zoning



County Zoning 			Lincoln County Zoning 			 <small>This map product was prepared from the Catawba County, NC, Geographic Information System. Catawba County has made substantial efforts to ensure the accuracy of location and labeling information contained on this map. Catawba County promotes and recommends the independent verification of any data contained on this map product by the user. The County of Catawba, its employees and agents disclaim, and shall not be held liable for any and all damages, loss or liability, whether direct, indirect or consequential which arises or may arise from this map product or the use thereof by any person or entity.</small>
 Plan Boundary County Boundary Parcels	 GI HC O-I PD PD-CD R-20 R-30 R-40 R-80 RC RC-CD	 B-G General Business B-N Neighborhood Business I-G General Industrial P-R Planned Residential R-S Residential Suburban R-SF Single Family Residential R-T Residential Transitional				



Map 5: Hwy 16 South Development Plan Current Zoning Overlay



- Plan Boundary
- Parcels
- County Boundary
- DWMH-O
- MUC-O
- RP-O
- MP-O
- WP-O - WSIV-Critical
- WP-O - WSIV-Protected

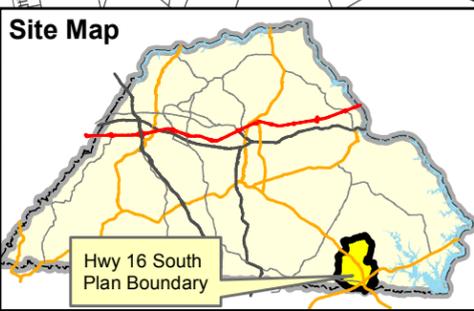
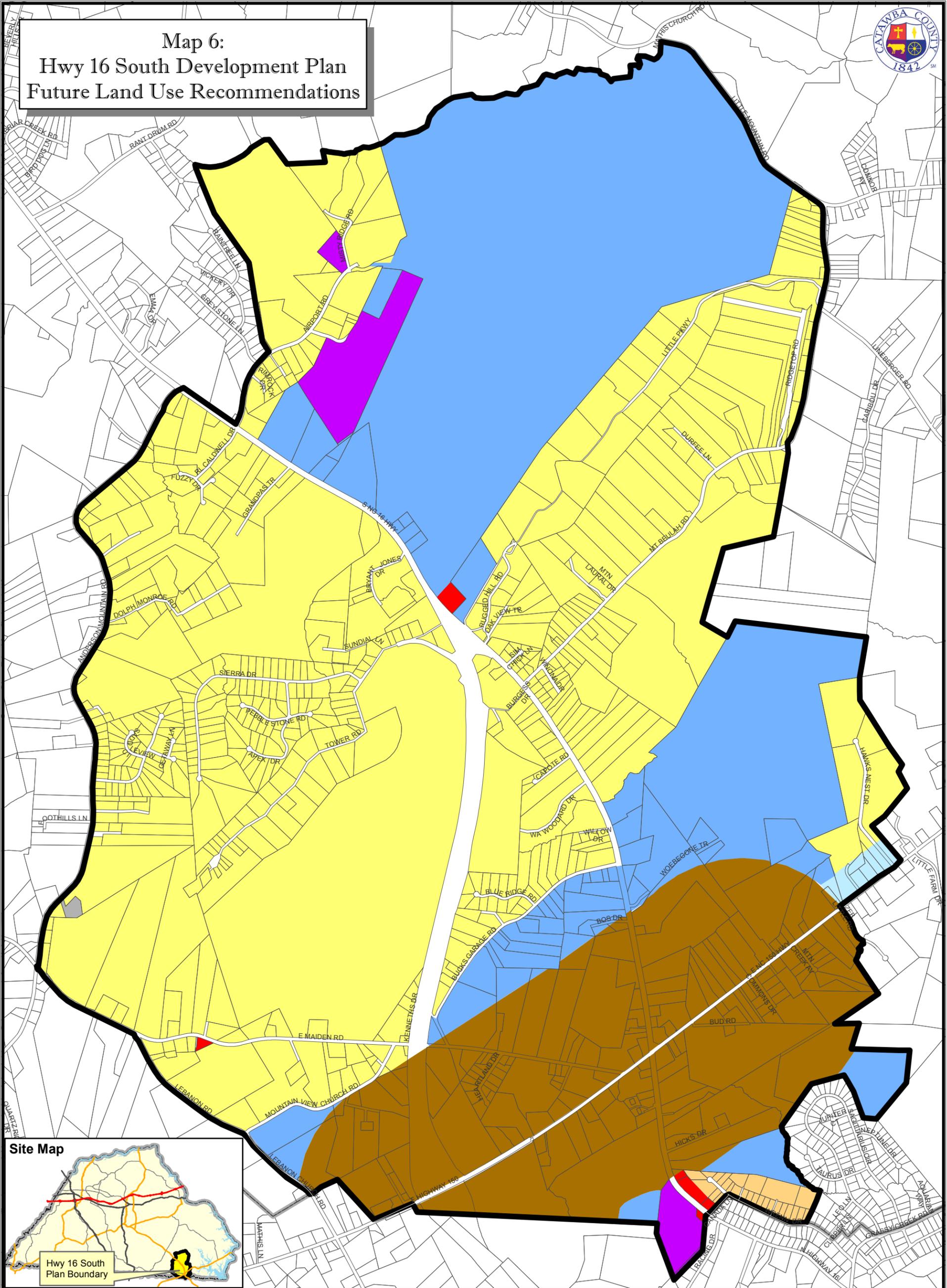
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Map 6:
Hwy 16 South Development Plan
Future Land Use Recommendations



Future Land Uses

Plan Boundary	Mixed Use	Low Density Residential
County Boundary	Commercial	Medium Density Residential
Parcels	Manufacturing/Industrial	Office-Institutional
	Transitional	Public Service Facility

0 0.125 0.25 0.5 Miles

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**Plan Action Strategies (PASs)
Land Use**

PASs #	CATEGORY	GOAL	LEAD AGENCY	ACTION STEPS	CHAPTER #	PRINCIPAL #	GOAL #	TIMEFRAME	PRIORITY
3	Land Use	Apply Rural Preservation-Overlay (RP-O) along the NC 16 Bypass to the south from the Lincoln/Catawba County line to the intersection of NC 16 and the Bypass to the north.	Planning	Amend the Official Zoning Overlay Map reflecting the addition of the RP-O Rural Preservation-Overlay along the NC 16 Bypass from the County line to the NC 16/NC 16 Bypass intersection.	3	LP-1	LG-2	6 - 18 Months	H
4	Land Use	Remove the Rural Preservation-Overlay (RP-O) along NC 16 from the Lincoln/Catawba County line north to the intersection of NC 16 and the Bypass.	Planning	Amend the Official Zoning Overlay Map reflecting the omission of the Rural Preservation-Overlay district along the existing NC 16 south of the intersection of NC 16 and NC 16 Bypass and	3	LP-1	LG-3	6 - 18 Months	H

Transportation

ROADS AND HIGHWAYS

The NCDOT Secondary Road system serves the Plan area, except for the state highways, NC 150 and NC 16. NC 150 is a minor arterial recently recognized as a Strategic Highway Corridor. It passes through the southeastern portion of Catawba County, connecting Mooresville, Lincolnton, and Shelby. NC 16, the other minor arterial, bisects the Plan area from north to south and connects areas south of Charlotte to north of Jefferson, North Carolina.

Average daily traffic counts (number of vehicles per day or ADT) are available for various locations in the Plan area. Data for 2003 through 2009 are actual numbers recorded on site. Traffic projections for 2025 are based on NCDOT modeling. *See Table 5: Average Daily Traffic Count.*

Transportation

Roads and Highways	1
Pedestrian and Bicycle System	5
Transit System	7
Guiding Principles	7
Plan Goals	8

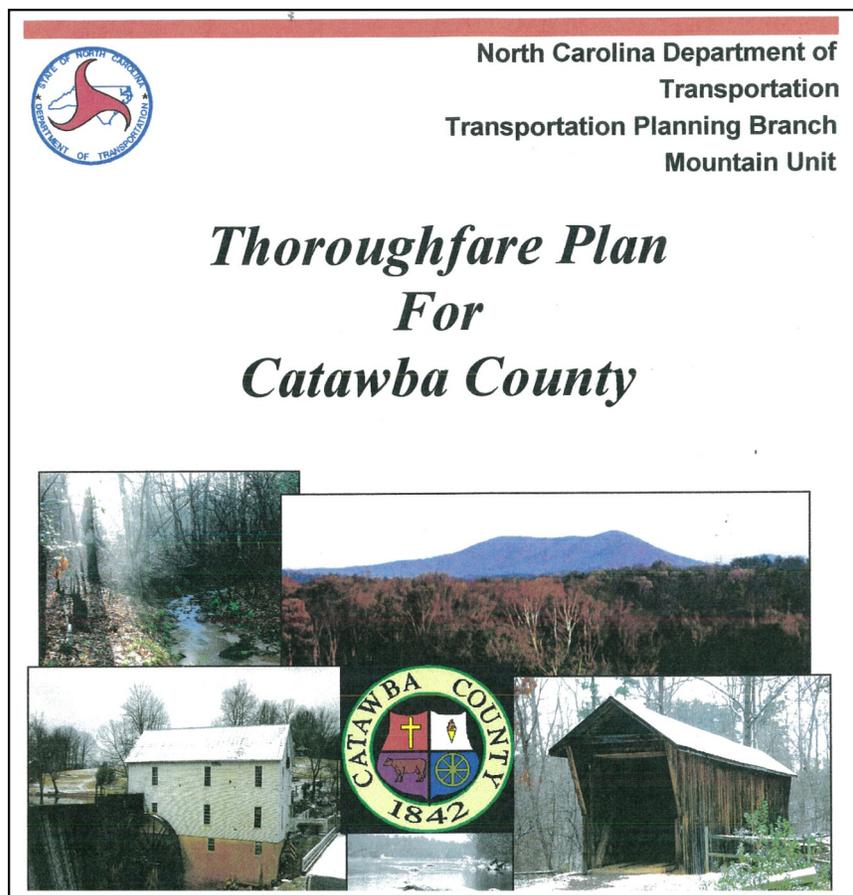
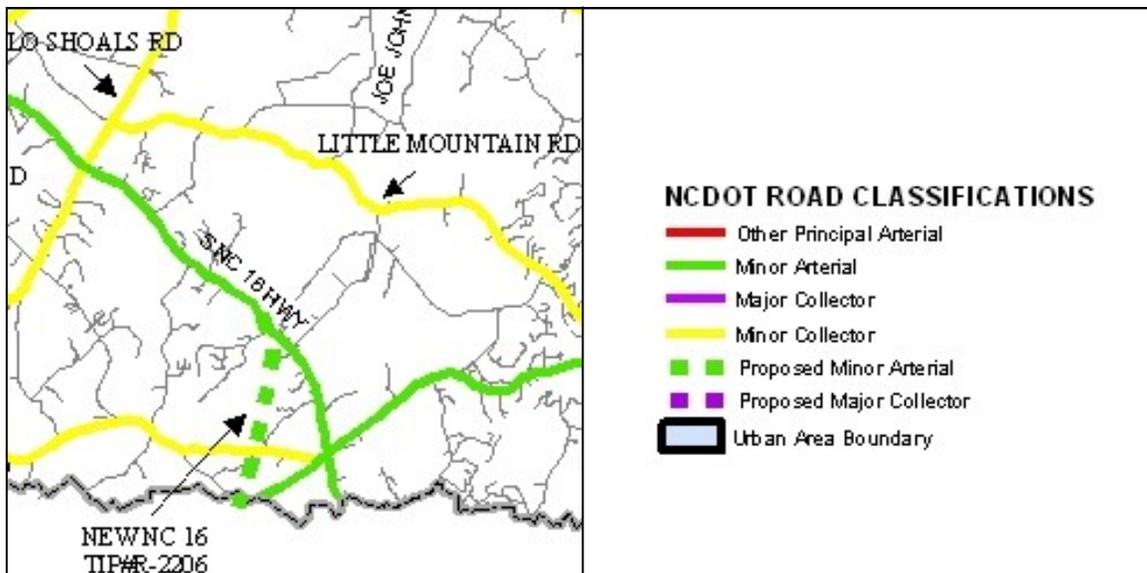


Table 5: 16 South Corridor Development Plan Average Daily Traffic Count 2003-2035						
	NC 150 (West of NC 16)	NC 16 (South of NC 150)	East Maiden— SR 1855 (West of NC 150)	Anderson Mountain Road— SR 1857 (South of NC 16)	Mt. Beulah Road— SR 1846 (South of Little Mtn. Road)	NC 16 Bypass
2003	12,000	12,000	3,100	650	620	N/A
2005	12,000	13,000	2,900	560	590	N/A
2007	12,000	14,000	2,700	570	630	N/A
2009	12,000	13,000	2,700	550	680	N/A
2025	26,000	5,000	4,300	N/A	N/A	16,000

Source: NCDOT AADT Maps, 2003-2009; and 2007 Thoroughfare Plan for Catawba County (for 2025 projections)
 Note: Traffic count projections (Year 2025) are provided for segments of transportation facilities while average daily counts are taken at specific locations.



Portion of County Thoroughfare Plan (2007) Depicting Road Classifications for the 16 South Corridor Area

The 2009 ADT counts generally represent a decrease from the 2007 counts, which is representative of the traffic counts found throughout the MPO region. It is thought that the downturn in the economy, with the resulting loss in jobs and reduction in disposable income, is the basis for the decline in the traffic counts.

Transportation planning for the Plan area is coordinated by the Unifour Rural Planning Organization (RPO). The RPO provides opportunities for local officials of rural areas outside of the urban areas to work with NCDOT toward development of short-range and long-range transportation planning for rural areas. Future transportation needs for the NC 150, NC 16, NC 16 Bypass, and East Maiden Road are included in the Thoroughfare Plan for Catawba County (2007).

The Thoroughfare Plan for Catawba County (2007), adopted by the County Board of Commissioners and North Carolina Board of Transportation, documents findings of a study performed by NCDOT to update the 1991 County Thoroughfare Plan. This Plan is multi-modal and will guide the planning and development of the rural area's transportation systems for a 25-year horizon period. The Transportation Plan covers recommendations for road improvements in the corridor area which include road widening and construction of new road facilities within the Plan area.

The Thoroughfare Plan includes several projects that impact the Plan area. Following is a general description of the projects and the funding status which are depicted on *Map 7: Transportation Recommendations* with a Road Project (RP) reference number that corresponds to the map.

NC 150 (RP-1):

The entire section of NC 150 in the Plan area is expected to exceed its capacity for a 2-lane road over the next 25 years. It is recommended that the road be widened to a 4-lane divided boulevard with a grass median. This project is unfunded in the State Transportation Improvement Program (STIP).

NC 16, North of Intersection with new NC 16 Bypass (RP-2):

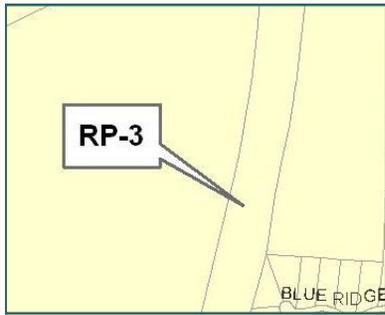
This 2-lane road operates at a level that has reasonable flow, but can deteriorate quickly with additional traffic. As such, concerns are that the 4-lane sections of NC 16



NC 150



NC 16, Above Intersection with NC 16 Bypass



NC 16 Bypass

to the north and south will contribute significantly to traffic problems along this 2-lane section. This section is expected to nearly exceed capacity within the next 25 years. Improvements to NC 16 are scheduled in the STIP with right-of-way acquisition in 2013 and completion in 2016.

NC 16 Bypass (RP-3):

This facility parallels the existing NC 16 starting in Gaston County, ending just north of Tower Road (SR 1895) as it merges with existing NC 16. It is expected to be completed in 2011.

East Maiden Road (RP-4):

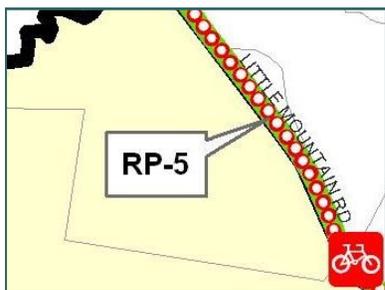
This road connects the Town of Maiden to the NC 150/16 area passing through rural landscapes offering vistas of Anderson Mountain. The Balls Creek SAP recommends exploring the designation of this road as a NCDOT Scenic Byway and the Thoroughfare Plan recommends minor widening for safety reasons when funding is available.



East Maiden Road

Little Mountain Road (RP-5):

This road parallels a portion of Lake Norman and serves to connect NC 150 to the Balls Creek Community. It is also an alternative route to NC 16 for area residents. The Thoroughfare Plan recommends minor widening for safety reasons when funding is available.



Little Mountain Road

PEDESTRIAN AND BICYCLE SYSTEM

Pedestrian and bicycle system planning for the County has been conducted over the last five years and is formulated in several documents: The Greater Hickory Recreation/Tourism Plan (2006), Catawba County Master Parks and Recreation Plan (2007), and the Carolina Thread Trail Master Plan (2010). These plans have identified pedestrian and bicycle trail segments within the Plan area:

Alternative Thread Trail Route —This proposed 5.49 mile greenway segment extends from the Mathis Church Road/Little Mountain Road intersection southeast along Little Mountain Road then south following Mt. Beulah Road to NC 16. It then continues south to Bucks Garage Road where it heads southwest to East Maiden Road

where it once again goes southeast to the County line. This route serves as an alternative to the primary Thread Trail route, but could also provide greater connectivity to the primary Thread Trail.

In addition to the trail projects above, the Sherrills Ford and Balls Creek Small Area plans recommended several on-road bicycle routes throughout the Plan area which have been incorporated into a draft NCDOT Bicycle Route Map. The draft map and signing project, funded by NCDOT, is expected to be completed in 2012.

The proposed pedestrian and bicycle facilities within the Plan area are shown on *Map 7: Transportation Recommendations*.

In order to implement the planned pedestrian and bicycle facilities, Catawba County's Unified Development Ordinance requires improvements for new development. Sidewalk construction in new residential development is required when 25 or more lots are proposed within the R-20 or higher density districts. For less dense residential development, open space is required with a portion to be improved with a trail system. In addition, sidewalks are required along the frontage of new residential and non-residential developments on major thoroughfares in urban areas and major collectors or higher road classifications in rural areas. A fee-in lieu of option in place of sidewalk construction or the provision of open space may be allowed by the County. These funds are to be used for installation of sidewalks, trails, bicycle paths or capital projects based upon the identified needs in the County Master Parks and Recreation Plan. Bicycle parking facilities are required under the UDO when non-residential and multi-family developments are located within 500 feet of bicycle corridors in officially adopted bikeway plans and within the Mixed Use Corridor-Overlay.

It is now the policy of the MPO and NCDOT to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossover) and bicycle accommodations.

TRANSIT SYSTEM

A consolidated public transportation system was estab-



Thread Trail Alternative and Bike Routes



Greenway Transit Bus



CATS Transit Bus

lished in 2008; whereby, the community transportation network provided by the Piedmont Wagon Transit System was combined with the other Unifour systems to become the Western Piedmont Regional Transit Authority. The new system now operates under the Greenway Public Transportation program providing limited transit services to the Plan area. Vans are available five days per week to transport senior citizens and disabled residents; however, no fixed Greenway routes currently exist in the Plan area. The Charlotte Area Transit System (CATS) also has a vanpool that extends into southeastern Catawba County providing transportation to several different locations in Charlotte.

GUIDING PRINCIPLES

The following principals were carried forward from the adopted/accepted Sherrills Ford and Balls Creek Small Area Plans and serve as a foundation for the goals and Plan Action Strategies (PASs).

ROADS & HIGHWAYS

- TP-1 Anticipate and plan for growth that will result from road improvements and widening.
- TP-2 Preserve good roads, areas of low traffic and scenic highways.
- TP-3 Provide for the interconnection of new developments and, where practical, connections to existing neighborhoods.
- TP-4 Encourage alternate modes of transportation, including increased use of existing means such as public buses, school buses, railroads, bicycles and pedestrian.
- TP-5 Future road corridors should be protected from new development in order to preserve the right-of-way for new roads or widening of existing roads.



Pedestrian—Sidewalk System

PEDESTRIAN SYSTEM

- TP-7 Provide safe alternatives for pedestrians and include traffic calming techniques in developments.

BICYCLE SYSTEM

TP-8 Provide safe options for bicyclists as higher density development takes place.

TRANSIT SYSTEM

TP-9 Increase opportunities to link with existing transit routes and explore the long-term feasibility of transit service linkages to Mooresville and Mecklenburg County.

PLAN GOALS

Catawba County does not maintain roads and therefore the following recommendations will be forwarded to NCDOT or used in area-wide transportation planning. The transportation goals are depicted on *Map 7: Transportation Recommendations*. Note: A Transportation Goal (TG) reference number is depicted on the map representing specific project sites.

ROADS & HIGHWAYS

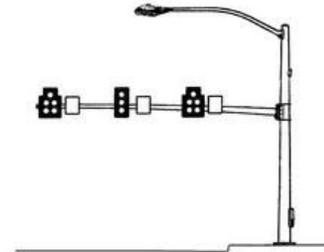
TG-1 Continue working through the Rural Planning Organization to encourage NCDOT to “fast track” NC 16 (4-lane) between Tower Road and Claremont Road.

TG-2 Create a service road system which will serve proposed and future developments within the Plan area more specifically around NC 16 Bypass, NC 150, and NC 16. This process will be undertaken by the developer in coordination with NCDOT based upon a site specific development plan (not depicted on *Map 7*).

TG-3 Provide a “gateway” into the County possibly using signage and/or landscaping in the vicinity of the NC 16 Bypass and NC 150 intersection. This “gateway” feature could be a standardized design for similar entryways into the County.

TG-4 Explore having East Maiden Road (SR 1855) designated by NCDOT as a Scenic Byway.

TG-5 Replace existing signalization systems with “mast arm” design along NC 150 intersections.



“Mast Arm” Traffic Signal





Bike Lane

TG-6 Realignment of the intersection of East Maiden Road and NC 150.

PEDESTRIAN AND BICYCLE SYSTEM

TG-7 Promote the Carolina Thread Trail project to prospective businesses that are looking to locate in the Plan area.

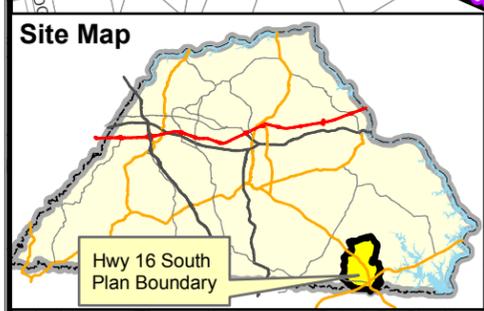
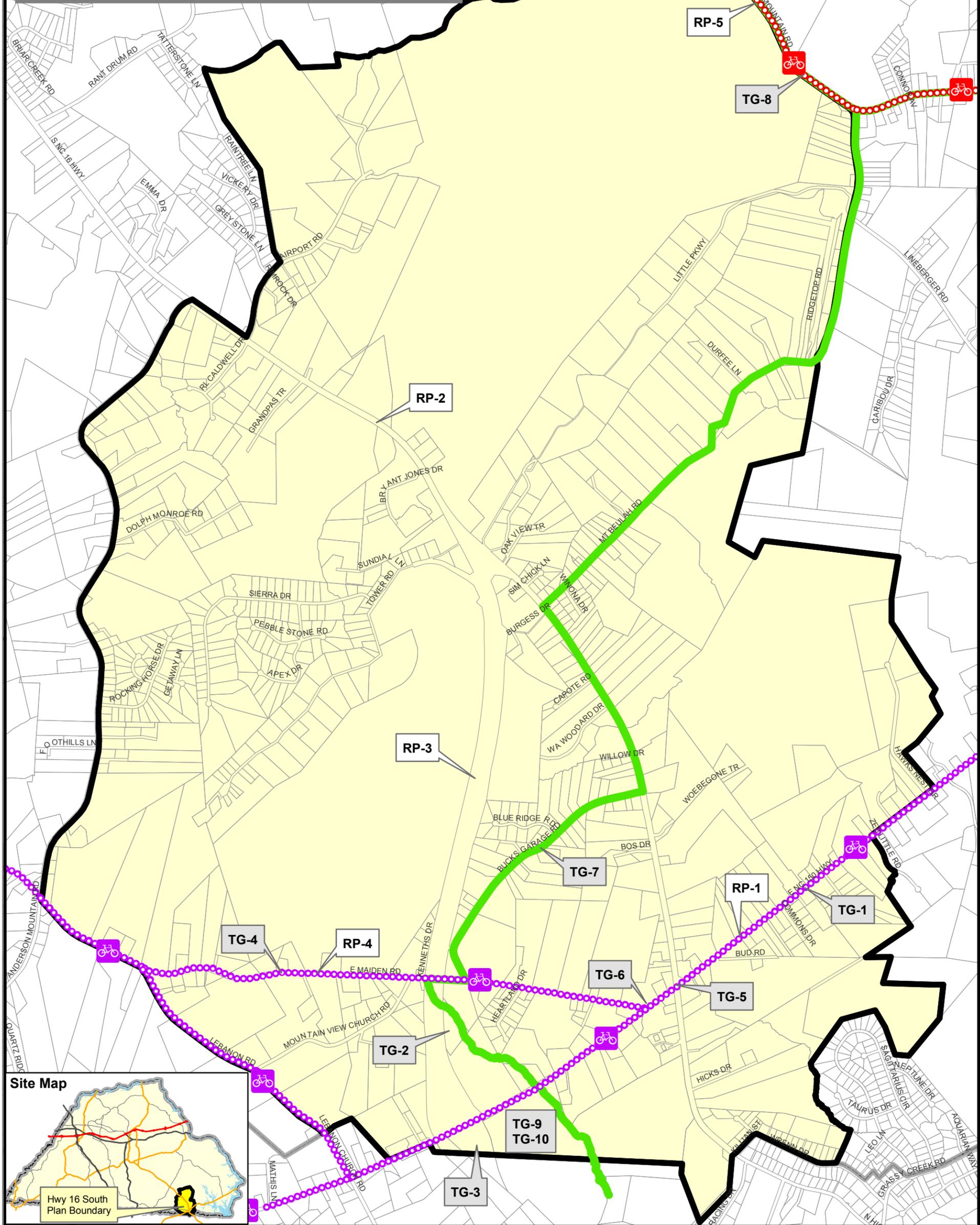
TG-8 Encourage NCDOT to complete the Countywide Bicycle Mapping and Signage project.

TRANSIT SYSTEM

TG-9 Develop a “Park and Ride” lot on the Bridgewater site at NC 150/NC 16 Bypass interchange.

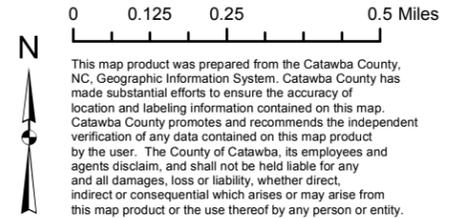
TG-10 Promote the expansion of the Greenway Public Transportation and Charlotte Area Transit systems to service the area (not depicted on *Map 7*).

Map 7: Hwy 16 South Development Plan Transportation/Multi-modal Recommendations



- Plan Boundary
- County Boundary
- Parcels

- Historic Bike Route
- Other Bike Routes
- Carolina Thread Trail - Greenway System



**Plan Action Strategies (PASs)
Transportation**

PASs #	CATEGORY	GOAL	LEAD AGENCY	ACTION STEPS	CHAPTER #	PRINCIPAL #	GOAL #	TIMEFRAME	PRIORITY
5	Transportation	"Fast Track" the widening (4-lane) of NC 16 between Tower Road and Claremont Road.	Planning, NCDOT, Chamber of Commerce	Continue working through the Rural Planning Organization (RPO), community partners, and the legislature to secure funding in order to "fast track" NC 16 widening (4-lane) between Tower Road and Claremont Road.	4	TP-1	TG-1	3-5 Years	H
6	Transportation	Create a service road system which will serve proposed and future developments within the Plan area more specifically around NC 16 Bypass, NC 150, and NC 16.	Planning, NCDOT, Developers	Evaluate the feasibility of constructing a service road system which will serve proposed and future developments within the Plan area more specifically around NC 16 Bypass, NC 150, and NC 16.	4	TP-1	TG-2	Ongoing	L
7	Transportation	Provide a "gateway" into the County possibly using signage and/or landscaping in the vicinity of the NC 16 Bypass and NC 150 intersection.	Planning and NCDOT	Work with NCDOT to install landscaping and locate signage if appropriate, indentifying the entrance to Catawba County.	4	TP-3	TG-3	6 - 18 Months	M
8	Transportation	Designate East Maiden Road (SR 1855) as a Scenic Byway.	Planning and NCDOT	Work with NCDOT to establish East Maiden Road as a North Carolina Scenic Byway.	4	TP-2	TG-4	3-5 Years	L
9	Transportation	Replace existing signalization systems with "mast arm" design along NC 150 intersections.	Planning and NCDOT	Work with NCDOT to replace existing signalization systems and propose new systems with "mast arm" design structures.	4	TP-2	TG-5	6 - 18 Months	H
10	Transportation	Realignment of the intersection of East Maiden Road and NC 150.	Planning and NCDOT	Work with NCDOT to redesign and construct a new intersection for East Maiden Road and NC 150.	4	TP-1	TG-6	3-5 Years	M
11	Transportation	Promote the Carolina Thread Trail project to prospective businesses that are looking to locate in the Plan area.	Planning	Meet with property owners along the alternate Thread Trail from NC 150 to the intersection of Little Mountain Road and Mathis Church Road for the purpose of signing conservation easement agreements.	4	TP-4	TG-7	6 - 18 Months	L
12	Transportation	Encourage NCDOT to complete the Countywide Bicycle Mapping and Signage project.	Planning, WPCOG, NCDOT	Work with NCDOT and WPCOG to prepare and adopt the Countywide Bicycle Mapping and Signage project.	4	TP-4	TG-8	3-5 Years	M
13	Transportation	Promote the expansion of the Greenway Public Transportation and Charlotte Area Transit system to service the area.	Planning, Greenway Transit and Charlotte Area Transit	Meet with Transit Authority to discuss route planning to the NC 150/NC 16 Bypass area. Amend the UDO to require the construction of transit stops as a part of the approval process of large-scale developments in the NC 150/NC 16 Bypass area.	4	TP-4	TG-10	3-5 Years	M

PUBLIC SERVICES AND COMMUNITY FACILITIES

Public Services and Community Facilities

Schools	1
Libraries	3
Public Safety	3
Water Service	4
Sewer Service	4
Electric Service	5
Natural Gas	5
Guiding Principles	5
Plan Goals	5

SCHOOLS

The Plan study area includes portions of the Balls Creek and Tuttle Elementary School districts. Students in the area west of NC 16 which is the western portion of the study area are currently assigned to Tuttle Elementary, and later attend Maiden Middle School and Maiden High School. Elementary students in the remaining Plan area are currently assigned to Balls Creek Elementary, and later attend Mill Creek Middle School and Bandys High School.

In 1999, the Catawba County, Hickory, and Newton-Conover Schools systems commissioned the Western Piedmont Council of Governments to develop the *Catawba County Growth Estimation Model*. This model identified and examined various factors and trends that impact student population and helps plan for future school facilities. This model was updated in 2010.



BALLS CREEK ELEMENTARY

Data for the *Catawba County Growth Estimation Model* (2010) shows that the student population at Balls Creek Elementary School remains under building capacity (715 students) since 2009 and will become over capacity by 2016.

TUTTLE ELEMENTARY

Data for the *Catawba County Growth Estimation Model* (2010) shows that the student population at Tuttle Elementary School is under building capacity (554students) since 2009 and will become over capacity by 2016.

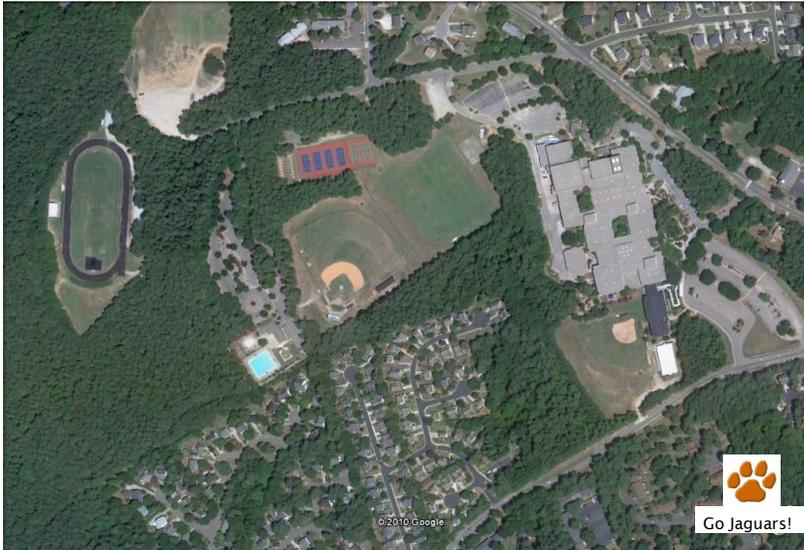
In order to accomplish certain principles and recommendations identified in the Balls Creek and Sherrills Ford Small Area Plans, the Catawba County School System should consider the Community Oriented Schools concept, explained below, if a new elementary school becomes necessary.

COMMUNITY ORIENTED SCHOOLS

In the early part of the twentieth century urban centers were rapidly developing. Schools were often the center of communities where a variety of services and amenities were in close proximity to high-density residential neighborhoods. As the country developed, suburban sprawl became a trend that helped to undermine traditional neighborhood design. The introduction of the automobile led to a more mobile society and was a major factor contributing to the development of rural communities. This concept of neighborhood schools being the center of activity played less of a role as a catalyst for growth and activity.

The Community Oriented Schools concept helps to recapture the traditional neighborhood design. It encourages educational facilities to be established using smart growth principals. This model calls for smaller schools that fit into the neighborhoods they serve, encourages community involvement at the planning stage, enables schools to act as a neighborhood anchor, and provides after hours community facilities and activities. This approach also provides opportunities for multi-use campuses with public/private services such as, a daycare, library, public safety, parks and recreation facilities, located on the same tract of land or in close proximity to the school. While traditional neighborhood schools were historically developed in urban areas, many of the principles can work around the fringes of urban centers where public infrastructure, higher density, and mixed-

use development are planned.



Community Oriented School Design

LIBRARIES

Catawba County operates a well-established library system. The Catawba County Library System operates one central library, a law library and six branch libraries. The Maiden Branch is the closest to the Plan area with the Main Branch in Newton and the Sherrills Ford branch can also be accessed by residents in the area. The Library Master Plan (2001) does not call for any additional library branches to be located within the Plan boundary.

PUBLIC SAFETY

EMERGENCY MEDICAL SERVICES

Although an EMS base is not located within the Plan area, the Sherrills Ford base responds to calls within the Plan area. The Sherrills Ford Base is located at the on Mt. Pleasant Road near the intersection with NC Highway 150.

LAW ENFORCEMENT

The Catawba County Sheriff's Department serves the plan area. The patrol division is made up of thirty-six officers among four shifts. The Sheriff's Department also operates a jail and maintains security for the court system in Catawba County. Crime prevention, investigations and civil enforcement are other functions conducted by the Sheriff's Department.

FIRE PROTECTION

Fire protection in Plan area is provided two fire stations. The northern portion of the study area is served by the Bandys fire department. The southern portion of the Plan area is served by the Sherrills Ford Fire Department located on Slanting Bridge Road north of the NC highway 150 intersection.

The Bandys fire department is currently in the process of constructing their third station in their service district. The new station will be located within the Plan area immediately south of the intersection NC Highway 16 and Anderson Mountain Road. *See Map 8: Existing Public Use Facilities.*

WATER SERVICE

Catawba County/City of Hickory and Lincoln County provide water service to the Plan area. In some cases, the County pays for construction of the water lines while the municipalities maintain the lines. In such cases, revenues are shared between the County and the respective municipality. The major water lines in the Plan area extend along East Maiden Road, NC Highway 150 and NC Highway 16. In addition to the existing waterlines, the County in the process of extending water along NC Highway 150 from East Maiden Road west to the County line. *See Map 9: Existing/Proposed Utilities.*

SEWER SERVICE

Sewer service is not available in the Plan area; however, the County is planning to extend sewer along NC Highway 150 from Slanting Bridge Road west to the County line. *See Map 9: Existing/Proposed Utilities.*

ELECTRIC SERVICE

Electrical services in the Plan area are provided by Duke Energy.

NATURAL GAS

Piedmont Natural Gas provides natural gas utilities in the area.

GUIDING PRINCIPLES

The following principals were carried forward from the adopted/accepted Sherrills Ford and Balls Creek Small Area Plans and serve as a foundation for the goals and Plan Action Strategies (PASs).

SCHOOLS

PP- 1 Balls Creek Elementary and Tuttle Elementary Schools should continue their standing as “centers of the community.”

WATER/SEWER SERVICES

PP-2 Public water service should be expanded into additional areas of the community through public/private partnerships.

EMERGENCY SERVICES

PP-3 The volunteer fire departments’ role in protecting citizens and their property and its status as essential to the fabric of the community should be maintained.

PLAN GOALS

SCHOOLS

PG-1 Base the development of any new school facilities upon the Community Oriented Schools approach using a collaborative process involving the community, key stakeholders, and officials.

PG- 2 Consider alternative school financing and ownership models.

WATER/SEWER SERVICES

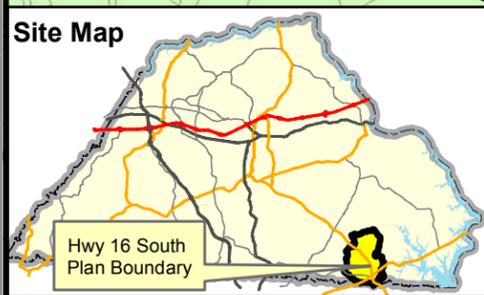
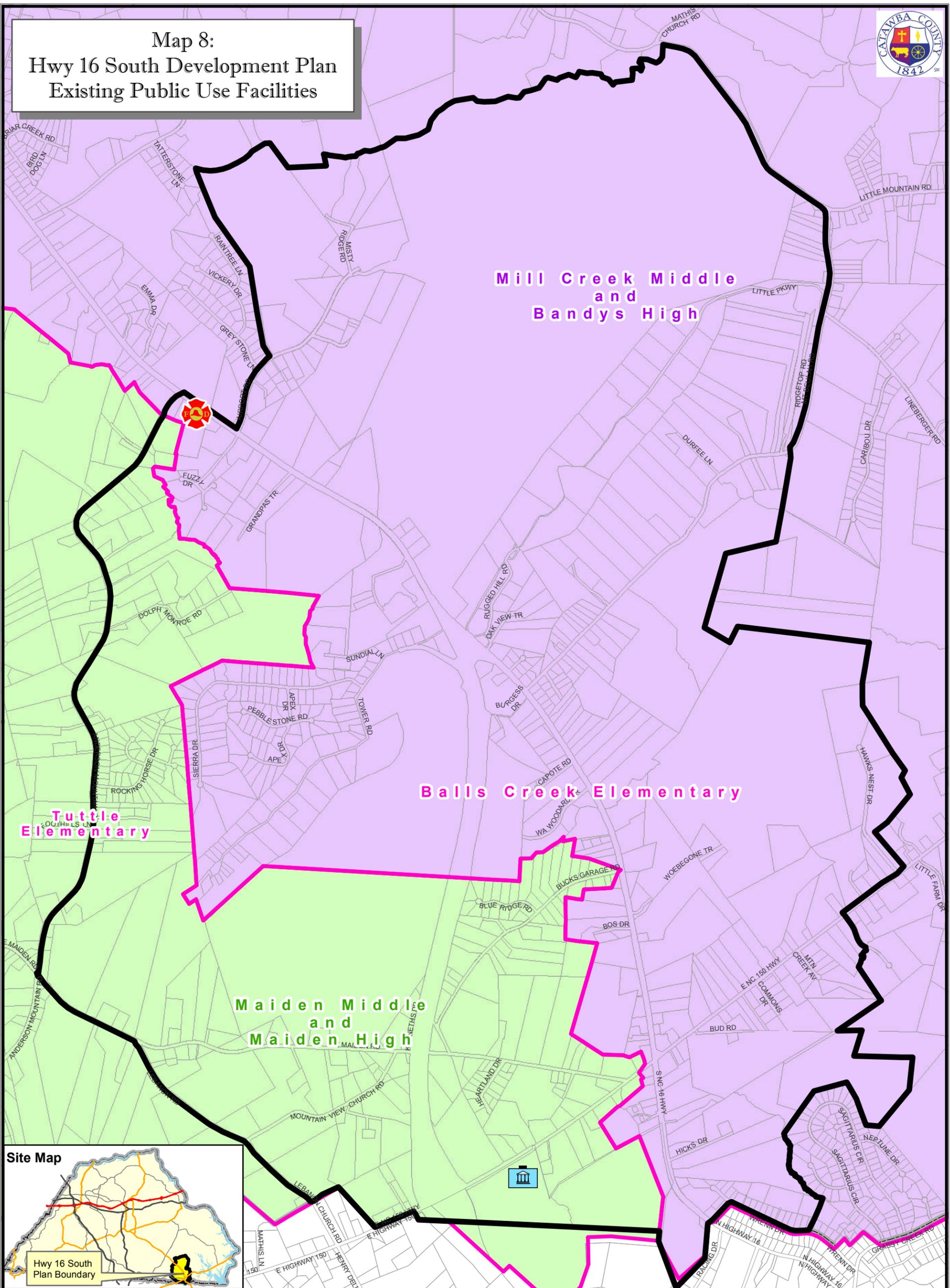
- PG-3 Explore the feasibility of extending water services to Anderson Mountain for the purpose of serving future proposed industrial and/or mixed-use development. As new large-scale development occurs, developers are required to extend utility lines based upon the County’s Water and Sewer Availability Ordinance.
- PG-4 Explore the feasibility of extending sewer services to Anderson Mountain for the purpose of serving future proposed industrial and/or mixed-use development. As new large-scale development occurs, developers are required to extend utility lines based upon the County’s Water and Sewer Availability Ordinance.

ELECTRICAL SERVICES

- PG-5 Remove overhead powerline clutter by installing underground electric utilities at intersections within the Plan area.



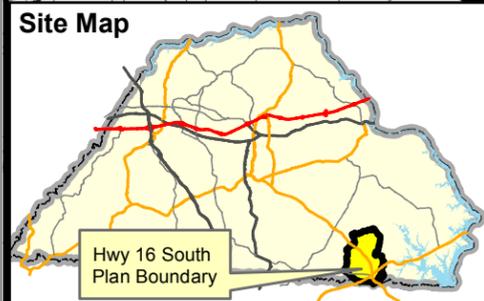
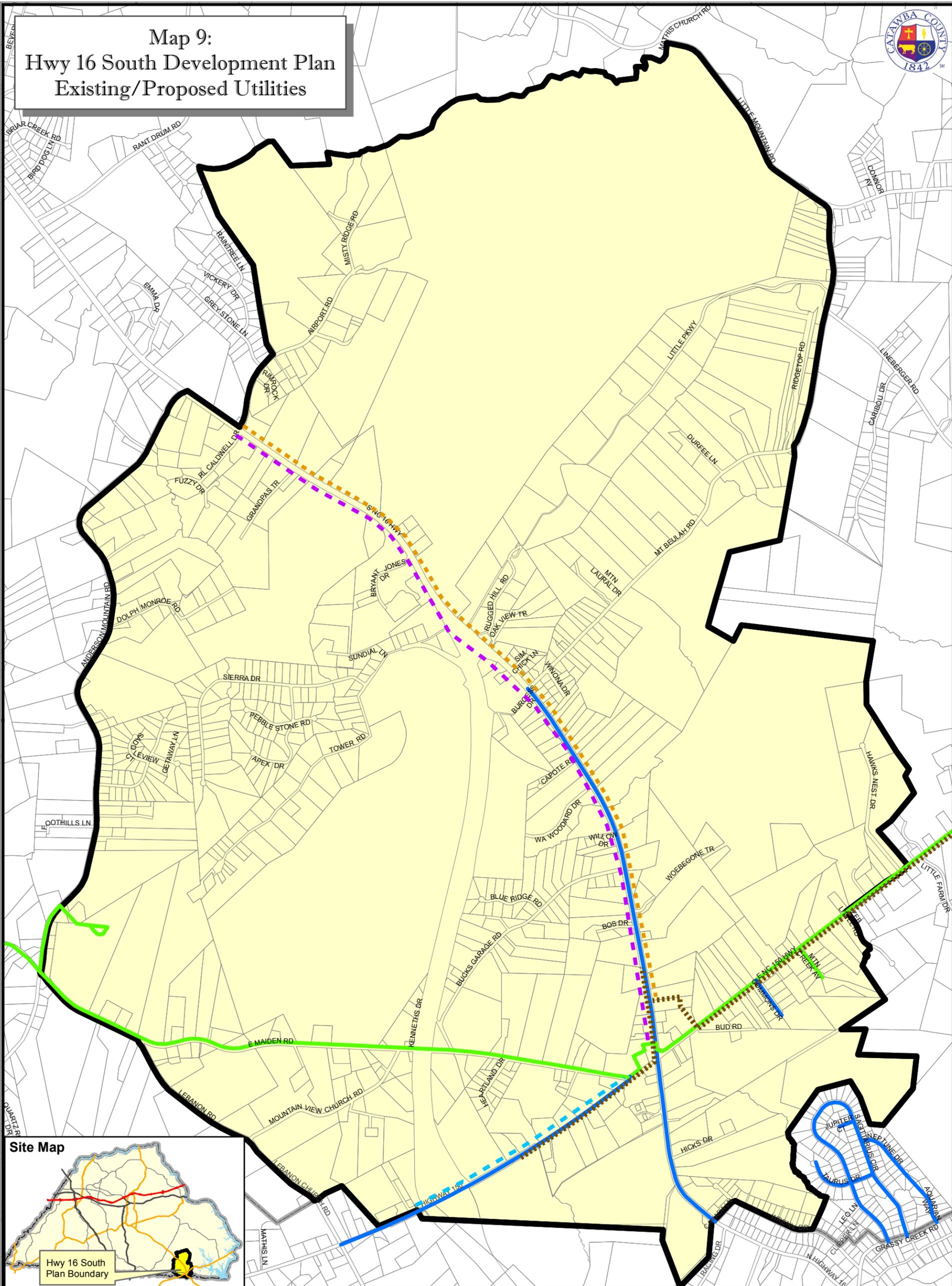
**Map 8:
Hwy 16 South Development Plan
Existing Public Use Facilities**



Plan Boundary	Future Bandys Fire Station 3 Location	 <small>This map product was prepared from the Catawba County, NC, Geographic Information System. Catawba County has made substantial efforts to ensure the accuracy of location and labeling information contained on this map product by the user. The County of Catawba, its employees and agents disclaim, and shall not be held liable for any and all damages, loss or liability, whether direct, indirect or consequential which arises or may arise from this map product or the use thereof by any person or entity.</small>
County Boundary	Future Public Use Facility	
Parcels	Mill Creek Middle and Bandys High School Boundaries	
Elementary School Districts	Maiden Middle and High School Boundaries	



Map 9: Hwy 16 South Development Plan Existing/Proposed Utilities



Boundaries

- Plan Boundary
- Parcels
- County Boundary

Public Utility Lines

- County Designed Sewer Lines
- County Plan Goal Sewer Lines
- Existing County/Hickory Waterlines
- Lincoln County Waterlines
- County Designed Waterlines
- County Plan Goal Waterlines

0 0.125 0.25 0.5 Miles



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**Plan Action Strategies (PASs)
Public Services and Community Facilities**

PASs #	CATEGORY	GOAL	LEAD AGENCY	ACTION STEPS	CHAPTER #	PRINCIPAL #	GOAL #	TIMEFRAME	PRIORITY
14	Public Services	Explore the feasibility of extending water services to Anderson Mountain for the purpose of serving future proposed industrial and/or mixed-use development. As new large-scale development occurs, developers are required to extend utility lines based upon the County's Water and Sewer Availability Ordinance.	Planning and Utilities and Engineering	Work with developers to extend water lines to future mixed-use high-density development.	5	PP-2	PG-3	3-5 Years	M
15	Public Services	Explore the feasibility of extending sewer services to Anderson Mountain for the purpose of serving future proposed industrial and/or mixed-use development. As new large-scale development occurs, developers are required to extend utility lines based upon the County's Water and Sewer Availability Ordinance.	Planning and Utilities and Engineering	Work with developers to extend sewer lines to future mixed-use high-density development.	5	PP-2	PG-4	3-5 Years	M
16	Public Services	Remove overhead powerline clutter by installing underground electric utilities at intersections within the Plan area.	Planning and Duke Energy	Work with Duke Energy and property owners to replace overhead power lines with underground utilities.	5	LP-5	PG-5	Ongoing	H

Natural/Cultural Resources and Open Space

HISTORICAL CONTEXT

Pioneers began settling the land that was to become Catawba County within decades after Adam Sherrill crossed the Catawba River in the 1740s. According to reports Governor William Tryon sent back to London, between 400 and 500 families had settled west of the river by the 1770s. Settlement continued throughout the 18th and 19th centuries, with rural living and farming predominating into the first decades of the 20th century.

Today, the Hwy. 16 South Corridor study area reflects the largely agricultural heritage of the community. Residents still strive to protect open space, and identify the natural wooded beauty of Anderson Mountain as a valued community landmark.



Anderson Mountain

Natural/Cultural Resources and Open Space

Historical Context	1
Natural Resources	1
Open Space	3
Recreational Opportunities	3
Cultural Resources	4
Guiding Principles	4
Plan Goals	4

NATURAL RESOURCES

Several minor creeks and small ponds traverse the study area. The major land feature within the study area is Anderson Mountain, the second highest ridge in Catawba County at 1,562 feet (behind Bakers Mountain at 1,780 feet). Development on Anderson Mountain consisted of communication towers and manufactured homes, and later, a new single-family residential development which began encroaching at the base of the mountain. Citizen's desire to protect the visual aesthetics of the landmark, resulted in the formation of the Mountain Protection Overlay District (MP-O) and the adoption of a Wireless Communication Ordinance.

The boundaries of the MP-O are defined as the land area above the 1,100-foot contour on Anderson Mountain, as

identified on the United States Geological Survey (USGS) Topographic maps. To minimize impacts to environmentally sensitive areas, the average density allowed in the MP-O is one unit per two acres. Building height is limited to 30 feet, with structures designed to conform to and be built into the natural terrain, and not be located at the crest of a ridge. Natural building materials and colors should be used which blend into the wooded environment. Disturbance of natural vegetation around building footprints is generally limited to 30 feet.

The Wireless Communications Ordinance was created to encourage the construction of communication towers necessary to supply wireless coverage, but to construct and locate them in a manner that minimize adverse aesthetic effects. Along with addressing safety concerns, the Ordinance requires new towers have the structural integrity to support at least six provider collocation arrays, thereby reducing the number of towers that are needed. Providers must also locate on existing towers, if proper coverage can be obtained. Towers over 120 feet in height or placement at the top of the ridge, is prohibited if locating lower will provide necessary coverage. Towers with no active telecommunications service providers for a period of five years are considered abandoned, and must be removed. New guyed towers are prohibited as birds tend to fatally fly into the guy wires during migration.

To protect water quality, the State of North Carolina enacted the Water Supply Watershed Protection Program in 1989. The program requires all local governments with land use planning jurisdiction in designated watersheds to administer a Water Supply Watershed Protection Ordinance to protect surface drinking water.

The majority of the study area is located in the WS-IV Protected Watershed Area (4,287 acres) which allows for 15,000 square-foot lots when curb and gutter is not used, and public water or sewer service are provided. When no public utilities (water and sewer) or curb and gutter are installed, lots cannot be smaller than one-half acre. Multi-family and non-residential uses, where permitted, are limited to 24% impervious coverage of the lot with curb and gutter and 36% without curb and gutter. Within the Protected Area, planned developments may use the high-density option of 70% impervious coverage with stormwater controls. *See Map 10: Natural Resources.*

OPEN SPACE

Besides protected watersheds and scenic wooded areas of Anderson Mountain, another significant natural feature is the rural, undeveloped land that still remains throughout the corridor. Considerable acreage simply remains as undeveloped woodland and open fields. In order to help preserve these agricultural and forest lands, the County developed a Voluntary Agricultural District (VAD) program in 2008. The program allows landowners to voluntarily enter their property into an agricultural district which recognizes the property as farmland and commits the landowner to retain the property as active agricultural land. In exchange, signs are located on the farmland which identifies the property as an agricultural district and notice is provided through the County's land records system (GIS) which identifies the approved districts and land in proximity to the districts. At the present time, there are not any parcels enlisted in the VAD program; however, 1,526 acres in the corridor could qualify for the agricultural district program since they are in the County's present use tax value program (one of the qualifications for the VAD program).

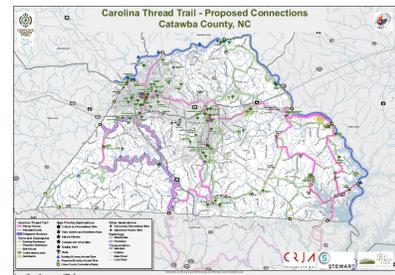


Farm in Voluntary Agricultural District

RECREATIONAL OPPORTUNITIES

The County is currently in the process of obtaining and developing Mountain Creek Regional Park which is located within proximity to the study area. The park site is the last undeveloped large tract on Lake Norman, covering approximately 600 acres. This regional passive park will serve all Catawba County residents, but particularly those in the southeastern area of the County and people in this study area. When developed, the park will offer educational programming to people of all ages, promote wellness through hiking, biking, and fishing opportunities and preserve the natural habitat of the area.

Linking to Mt. Creek park is the proposed Carolina Thread Trail (CTT) greenway network. The proposed trail generally runs north/south through the study area (See the Transportation - Pedestrian and Bicycle System section).



Carolina Thread Trail Map

CULTURAL RESOURCES

There are no properties in the study area which are listed on the National Register of Historic Places.

GUIDING PRINCIPLES

The following principals were carried forward from the adopted/accepted Sherrills Ford and Balls Creek Small Area Plans and serve as a foundation for the goals and Plan Action Strategies (PASs).

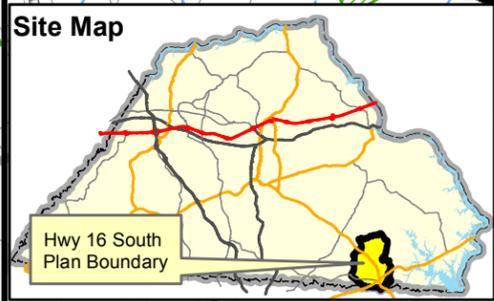
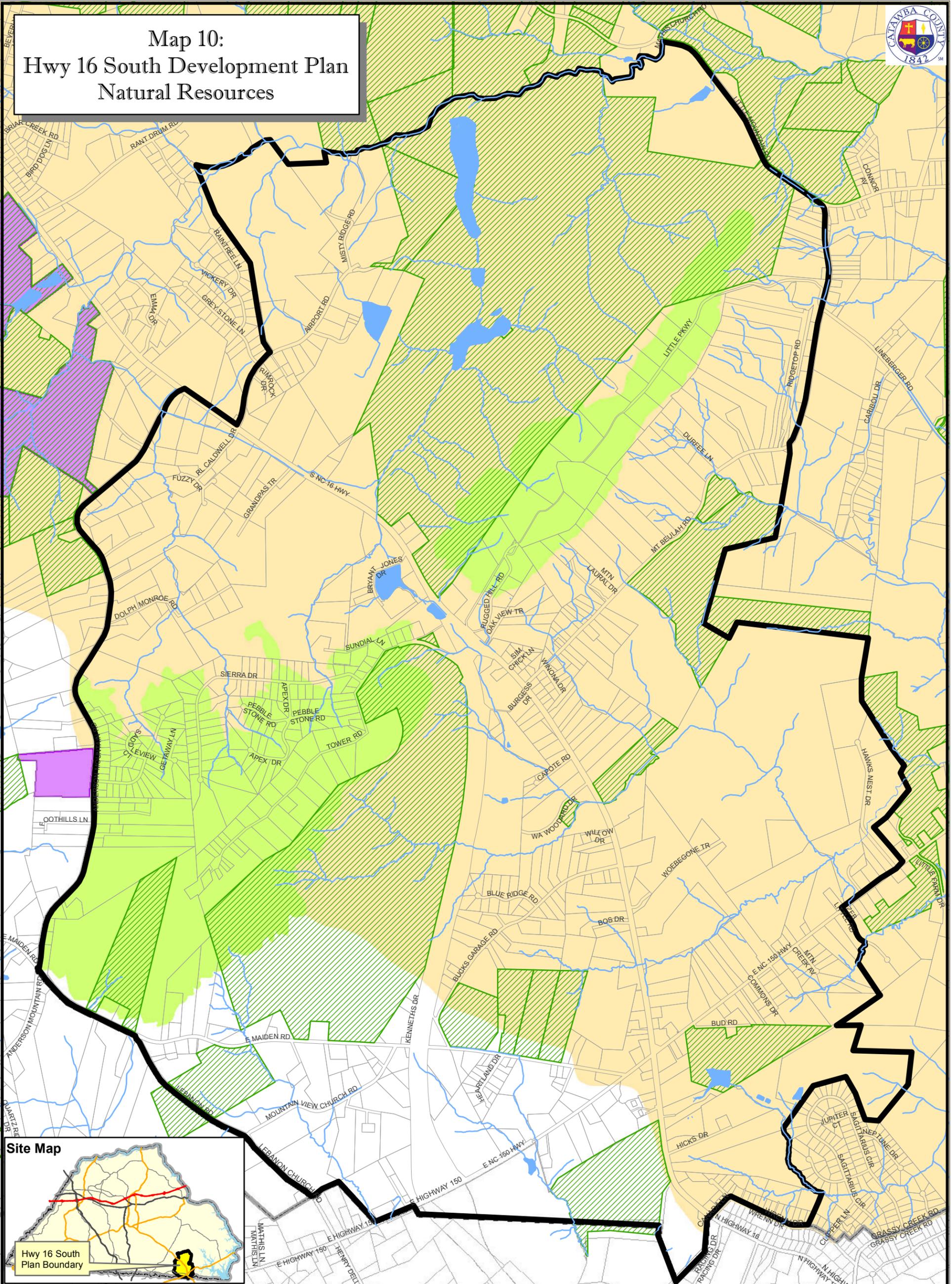
- NP-1 Preserve ample open space for future generations.
- NP-2 Maintain the rural character of the region and protect scenic views and wildlife corridors.
- NP-3 Assist farmers/property owners desiring to maintain the agricultural or open space use of their property.
- NP-4 Provide adequate recreational opportunities for all segments of the population.
- NP-5 Encourage innovative ideas to create new recreational opportunities.

PLAN GOALS

- NG-1 Expand the Voluntary Agricultural District program within the Plan area.
- NG-2 Promote the attributes of the Carolina Thread Trail through outreach and education to residents concerning the development of the Carolina Thread Trail.
- NG-3 Encourage conservation easements on Anderson Mountain.
- NG-4 Promote the benefits of including qualified properties in the National Historic Register.
- NG-5 Conduct an assessment to determine the viability of consolidating wireless communication facilities and removing unnecessary tower structures on Anderson Mountain.



Map 10: Hwy 16 South Development Plan Natural Resources



- Plan Boundary
- County Boundary
- Parcels
- Water Bodies
- Present Use Tax Value (Farmland, Forestland & Horticultural Land)
- Mountain Protection Overlay
- VAD - General
- Watershed - WS-IV

0 0.125 0.25 0.5 Miles

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**Plan Action Strategies (PASs)
Natural/Cultural Resources and Open Space**

PASs #	CATEGORY	GOAL	LEAD AGENCY	ACTION STEPS	CHAPTER #	PRINCIPAL #	GOAL #	TIMEFRAME	PRIORITY
18	Natural/Cultural Resources and Open Space	Expand the Voluntary Agricultural District program within the Plan area.	Planning and Cooperative Extension	Work through the Agricultural Advisory Board to identify farmers located in the study area and contact them personally to educate and encourage them to participate in the Voluntary Agricultural District program.	6	NP-1 NP-3	NG-1	Ongoing	M
19	Natural/Cultural Resources and Open Space	Promote the attributes of the Carolina Thread Trail through outreach and education to residents concerning the development of the Carolina Thread Trail.	Planning	Identify key conservation properties along the alternative Thread Trail route in the Plan area and meet with Catawba Lands Conservancy staff to provide outreach and education to the property owners. Pursue grants to develop the Carolina Thread Trail.	6	NP-1 NP- 2	NG-2	Ongoing	L
20	Natural/Cultural Resources and Open Space	Encourage conservation easements on Anderson Mountain.	Planning	Work with property owners on a one-on-one basis explaining the benefits of dedicating conservation easements.	6	NP-1	NG-3	Ongoing	M
21	Natural/Cultural Resources and Open Space	Promote the benefits of including qualified properties in the National Historic Register.	Planning and Historical Association	Work in concert with the Historical Association in conducting an inventory to evaluate structures that could qualify for the National Historic Register.	6	NP-2	NG-4	Ongoing	M
22	Natural/Cultural Resources and Open Space	Promote the restoration of Anderson Mountain's natural scenic character through the reduction of wireless communication facilities.	Planning	Conduct an assessment to determine the viability of consolidating wireless communication facilities and removing unnecessary tower structures on Anderson Mountain.	6	NP-1 NP-2	NG-5	Ongoing	M