



Protection Priorities and Recommendations

The following are summarized recommendations from the Summary of Significant Natural Areas of Catawba County, North Carolina 2002, which are guiding factors in the Catawba County Comprehensive Parks Master Plan. Bakers Mountain, Catawba River Corridor, Jacob Fork West Corridor, and Lyle Creek Corridor are the highest priorities for protection. Future park development should focus on the findings of this inventory in order to preserve the natural heritage qualities of the County since preservation is a part of the primary mission of Catawba County Parks.

Bakers Mountain

This site is the largest expanse of undisturbed forest in Catawba County. It contains a diversity of high quality natural communities, provides habitat for populations of all rare plant species in the County, and provides a unique breeding habitat for many flora and fauna species that are uncommon in the County and the Piedmont.

Management techniques should include trail maintenance to reduce erosion and motorized vehicles should be prohibited from the forests. Development of this site should be minimized and additional private property should be purchased or protected with conservation easements by the State or County. This site would make an excellent expanded County park. Efforts should be made to obtain easements to connect the Bakers Mountain site to the Jacob Fork River.



Attraction at Bakers Mountain

Catawba River Corridor

This site in Catawba County is the most extensive riparian corridor along the Catawba River. It provides important habitat for many species of wildlife that are



uncommon in the County and the Piedmont. It also includes Riverbend Park, which contains a small pond and wetland, adding to the diversity of habitats along the river. Strategic, contiguous property to Riverbend Park should be purchased or protected with conservation easements by the State or County.



Canoeing/Kayaking on Catawba River Corridor

Management techniques should include the prohibition of livestock from entering the river and the restoration of the disturbed banks with their native vegetation. Adequate vegetation buffers should be established along agricultural fields and forests should be allowed to mature. The preservation of the riparian corridor with adjacent slopes and upland forests along the river is the highest priority.

Jacob Fork West Corridor

This site is nationally significant because of the incorporation of the Catawba County Wildlife Club Heartleaf Site. The riparian corridor is probably the least disturbed in the County. The area contains a diversity of aquatic and terrestrial habitats.

Adequate vegetation buffers should be established along agricultural fields and forests should be allowed to mature. The preservation of the riparian corridor with adjacent slopes and upland forests along the river is the highest priority. Initially, protection should be in the form of conservation easements and private land donations to the County.

Jacob Fork East Corridor

Adequate vegetation buffers should be established along agricultural fields and forests should be allowed to mature. The preservation of the riparian corridor with adjacent slopes and upland forests along the river is the highest priority. Initially, protection should be in the form of conservation easements and private land donations to the County.

Lyle Creek Corridor

All forests adjacent to the creek should be protected from development and allowed to mature. Adequate vegetation buffers should be established along agricultural fields. The preservation of the riparian corridor with adjacent slopes



and upland forests along the creek is the highest priority. Preservation of the Lyle Creek Corridor would be enhanced by a passive park presence at strategic locations, such as the Bunker Hill Covered Bridge site and the confluence of the creek with the Catawba River.

Lyle Creek Wetland

It is important to monitor water levels and limit human activity within wetland areas. The use of chemicals in maintaining power line right-of-ways should be discouraged. Initially, protection should be in the form of conservation easements and private land donations to the County.

Murrays Mill

This site should establish adequate vegetation buffers. All forests adjacent to the creek should be protected from development and allowed to mature. The dredging and clearing of riparian vegetation on Balls Creek above the lake needs to be prohibited. The preservation of the riparian corridor with adjacent slopes and upland forests along the river is the highest priority. Initially, protection should be in the form of conservation easements and private land donations to the County. Currently, some areas are being preserved by the Catawba County Historical Association.

Lake Norman Slopes and Shoreline

Where possible, all forests adjacent to the shoreline should be protected from development and allowed to mature. The gamelands, other large-acreage, and undisturbed sites with native vegetation should be preserved. Having realized increased development over the past 20 years, this area is attractive for residential development, thus limiting the opportunity for preservation and public recreation sites. Conservation easements or land donations should be sought from Duke Energy to protect shoreline and adjacent forests.





3.3 SIDEWALK, BIKEWAY, GREENWAY, AND TRAIL MASTER PLAN – CITY OF HICKORY

The document includes a comprehensive plan for analyzing the existing facilities and future recommendations for the multi-modal trails. Although most of the recommendations proposed in this Master Plan relate more specifically within the Hickory City Limits, there are some proposed improvements that do need to be mentioned. The following is a list of recommendations from the Plan that relate specifically toward the Catawba County Parks Master Plan.

Henry River Greenway

Located along the southeastern limits of Hickory’s extra territorial jurisdiction (ETJ), the Master Plan proposes a linear greenway traveling adjacent to the Henry River originating near Sunrise Drive, traveling southwest and connecting to the City’s Henry River Wastewater Treatment Facility. This greenway would be approximately 11 miles in length.

Clark Creek Greenway

A linear greenway/trail originating at the westernmost extent of Amity Lane in Hickory, moving westward to junction with Clark Creek and continue southward to the southernmost boundary of the City’s planning jurisdiction and also continuing northward to US 70 to connect with the Ridgecrest Park Greenway.

3.4 GREATER HICKORY RECREATION/TOURISM PLAN 2006 – FOUR COUNTY AREA

This recently completed plan was intended to develop a strategy to shift the region’s economy by utilizing the area’s natural, cultural, and recreational resources for sustainable economic growth and prosperity. The study area includes four counties consisting of Catawba, Caldwell, Burke, and Alexander. The document recommends regional efforts in order to achieve exceptional resources that will create additional tourism dollars to help supplement the local economy.

This study is a strategic document that is region-wide in scope and in many cases does not examine park-specific issues for Catawba County Parks. It gives direction to achieve the highest standards in providing opportunities for outdoor recreation activities and protection of the natural environment from a regional perspective. In creating the Catawba County Comprehensive Parks Master Plan,



this regional plan was studied and evaluated in developing proposals and recommendations. The Catawba County Comprehensive Parks Master Plan proposes park facilities and improvements that are not included in the regional master plan. It will be essential that further analysis and studies be conducted for the proposed recommendations in the regional master plan, which relate to Catawba County.

These proposals and recommendations for the regional plan list specific and regional recommendations that incorporate all the counties entailed. The following is a list of recommendations from the Recreation/Tourism Plan that relate specifically toward the Catawba County Parks Master Plan.

Recommended Regional Initiatives

Recreation and Linkage Recommendations

Trails, Greenways, and Paddle Trail/Blueways

A greenway is a linear open space of land containing a bicycle and/or pedestrian trail. A blueway is an established trail route on a waterway, used for canoeing or kayaking.

- **Catawba River Blueway** – The existing trail runs along the length of the Catawba River. The canoe and boating trail was dedicated in May of 2004 and runs approximately 82 miles, from McDowell County to Lake Norman. The trail currently has 24 designated access points and 4 portages around dams.
- **Lyle Creek Blueway** – The paddle trail is planned to begin where Rock Barn Road (SR 1709) crosses Lyle Creek then flows approximately 6 miles under the Historic Bunker Hill Bridge to the northern reach of Lake Norman.
- **Henry River Blueway** – The paddle trail is planned to begin where NC 18 crosses over the Henry River and flows nearly 20 miles to Newton's new Jacobs Fork Park.
- **Jacobs Fork Blueway** – Also beginning where NC 18 crosses over Jacobs Fork, this trail is planned to be almost 25 miles ending at the confluence with the Henry River at Newton's Jacobs Fork Park.
- **Lyle Creek Greenway** – Independent and combined greenway trail which is planned to tie into the Hickory Urban trail network then travel through Conover, traverse around Rock Barn Golf and Spa



along NC 16, St. John's Church Road, and to Rock Barn Road, where it joins the Lyle Creek Paddle Trail and follows Lyle Creek once again past the Bunker Hill Bridge and Hunsucker Park in the Town of Catawba to the Catawba River.

- **Newton Greenway/Maiden Link** – Independent greenway linking the Hickory Urban Trail network then following Clarks Creek through Newton past Jaycee and Southside Parks to Shady Branch in Maiden, then traveling upstream past Rosenwald Park and connecting to the Lincoln County Rails-to-Trails project.

Environmental Recommendations

- **Establish a Conservation Easement for the Jacobs Fork West Corridor** – Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for these lands along the Jacob Fork, as delineated by the NC Natural Heritage Program. This area includes riparian (land that is traversed or bounded by a natural watercourse) and upland areas and includes the nationally significant Catawba County Wildlife Club Heartleaf Site. This site is currently registered with the NC Natural Heritage Program as a Natural Heritage Area.
- **Establish a Conservation Easement for the Jacobs Fork East Corridor** – Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for these lands along the Jacobs Fork, as delineated by the NC Natural Heritage Program. This area is approximately two miles further downstream from the Jacobs Fork West Corridor.
- **Establish a Conservation Easement for the Catawba River Corridor** – Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for the riparian corridor of Catawba River, east of Riverbend Park in Catawba County. This area is delineated by the NC Natural Heritage Program. This riparian corridor is noted for containing a rich collection of avian fauna. Riverbend Park is known regionally as an outstanding area for birding. This plan recommends acquiring parcels to expand Riverbend Park. In addition to park expansion, a conservation easement for this area would significantly benefit ecological habitat and the outdoor recreation importance of Riverbend Park.
- **Establish a Conservation Easement for the Lyle Creek Corridor** – Coordinate with a land conservation organization and the NC Natural Heritage Program to establish a conservation easement for



the riparian corridor along Lyle Creek. The NC Natural Heritage Program has delineated a corridor extending from Rock Barn Road south to the Old Highway 70 overpass. This area includes the Bunker Hill Covered Bridge and Roadside Park, which is covered in the Land Acquisition recommendations. The corridor should extend to the confluence with the Catawba River to enhance ecological functioning of the corridor, water quality, and the experience for paddlers. The wetland at the confluence of Lyle Creek and Catawba River should be part of the conservation easement. This wetland has also been delineated by the NC Natural Heritage Program.

Resource Accessibility & Land Acquisition Recommendations

- **Parcels at NC 127 Overpass at Jacobs Fork** – The NC 127 overpass at Jacobs Fork would provide access for canoe/kayak paddlers. The plan for access includes construction of a gravel parking lot that would accommodate approximately five motor vehicles, a canoe/kayak launch site, and a gate to provide some security to the site.
- **Acquire Land for a Mountain Creek Park** – Through Duke Energy’s relicensing agreement with the Federal Energy Regulatory Commission (FERC), the acquisition of a 600-acre tract for public recreation. The tract is located at the mouth of Mountain Creek on Lake Norman for a large passive recreation park to be part of the Catawba County Park System. Facility development is slated to include restrooms, canoe launch, trails, campgrounds, swimming area, and other water-based activities to be maintained by the County. This is the last remaining large acreage tract in the Mountain Creek/Lake Norman area. It is significant in protecting both water quality and wetland habitat, and in providing public access to the cove.
- **Acquire State Gamelands in Catawba County** – Originally a part of the FERC agreement (but not approved) are the state designated gamelands located on private property north of Hudson Chapel Road in eastern Catawba County. This backwater habitat for wildlife and waterfowl offers large acreage recreation potential and public access to upper Lake Norman. This is an important tract of land with water access and environmentally sensitive lands suitable for extensive conservation, trail development, and passive recreation.



- **Mid-Point Parcels on Lookout Shoals** – Public boating access is limited on Lake Lookout Shoals from Riverbend Park to the access area near Lookout Shoals Dam. Therefore non-motorized boats (primarily canoes and kayaks) must either travel the entire lake or stay within close proximity to those access points. A mid-point access area is designated in the Federal Energy Regulatory Commission (FERC) relicensing, which includes approximately five acres downstream of “the bend” to be developed with a trailer access and boating area - including associated parking, restrooms, and primitive camping.
- **Lyle Creek/Bunker Hill Bridge** – Bunker Hill Covered Bridge is the last remaining “Haupt Improved Lattice Truss” bridge and one of the two remaining covered bridges in the state. Presently it is accessible by a path from US 70 and only a small amount of land at the bridge is available for public use. Acquisition of an approximate 280-acre parcel is important to develop a park featuring the Bunker Hill Covered Bridge and the Lyle Creek Greenway and Paddle Trail, which bisects the property and provides better access. This amount of acreage will also garner adequate space to incorporate additional facilities such as a canoe launch, picnic shelter, and potentially other recreational activities and hiking/biking trails.
- **Expand Riverbend Park** – As noted above, Riverbend Park is already known as a significant location for birders in the region. The park is contiguous with a segment of land along the Catawba River that has been identified by the NC Natural Heritage Program as an important riparian corridor due to the richness of avian fauna. Acquisition of additional parcels to expand Riverbend Park would significantly enhance outdoor recreation opportunities. Incorporating additional land into the park could provide more low-impact access to natural areas for residents and birders from throughout the region. An expanded park would coexist nicely with riparian lands under a conservation easement.
- **Murrays Mill** – This historic site is an important cultural asset and many steps have been taken to preserve the former mill and general store. Balls Creek traverses through three noteworthy tracts of land that should be acquired to continue to preserve the historical character of the site. The most significant is the 133-acre tract to the south of the mill, which allows for the expansion of the facilities at the site (including an amphitheatre and exhibits) along with a recreated historic home site and barn. These plans are in accordance with both the proposed overall site plan and recommendations of the Catawba County Historical Association.



3.5 CATAWBA COUNTY – UNIFIED DEVELOPMENT ORDINANCE

The Unified Development Ordinance (UDO) provides for a capital expenditure source for parks in Section 44-543. Major subdivisions are required to provide land for public or private parks, sidewalks, trails, greenway, recreation, and open space purposes. Specific requirements are based on the density and size of the overall subdivision. The developer, with the approval of the County, can either donate land, or pay a fee-in-lieu-of land dedication. The fee will be used for new parkland acquisition or capital improvements in the County’s existing or expanding parks.

3.6 SMALL AREA PLANS

The concept of conducting Small Area Plans (SAPs) for Catawba County was one of sixteen growth strategies resulting from the County’s long-range Strategic Growth Plan in 1999. The Growth Plan stated that the SAPs would “explore general development patterns and trends and evaluate public service/facility deficiencies needing attention”. This section outlines the process by which the SAPs were accepted and examines each individual SAP as an additional guide in the formation of the Catawba County Comprehensive Parks Master Plan.

Overview

As part of the County’s long-range Strategic Growth Plan, seven Small Area Plans (SAPs) were identified for the evaluation and assessment of growth patterns, public facilities, utilities, and other factors that affect Catawba County. The SAPs, which are now adopted, include Balls Creek, Sherrills Ford, Catawba, St. Stephens/Oxford, Mountain View, Plateau, and Startown. (See Appendix Map 1 – Catawba County Small Area Plans)

Development of the SAPs began as local planning committees in each area assessed their quality and sustainability of life with respect to the following issues:

- Economic Development;
- Natural Resources;
- Cultural Resources;
- Community Facilities and Public Services;
- Housing;
- Land Use and Community Design; and
- Transportation.



As each committee discussed these issues, they developed goals and action statements. They completed their plans by including implementation strategies for their objectives – whether it be through ordinance or policy amendments, modified capital improvement plans, or coordination with other agencies to complete specific tasks.

After each committee's SAP was complete, their final documents were individually presented to the Catawba County Planning Board and the Catawba County Board of Commissioners for review and acceptance. Through a series of public work sessions and hearings with both boards, all of the final SAP documents were eventually accepted by the Catawba County Board of Commissioners.

The Guiding Principles in these plans are statements of what the Small Area Plans hope to accomplish in a broad context, based on the analysis of opportunities and constraints for future development of each area.

The remainder of this section identifies the following criteria in each individual SAP and extracts those portions of the plan(s), which relate specifically to parks and recreation needs:

- Study Area;
- Demographics/Projections;
- Key Issues;
- Guiding Principles;
- Specific Needs Assessment (as related to Parks & Recreation); and
- Recommendations

Balls Creek Small Area Plan (SAP)

Study Area (*Balls Creek SAP*)



McKenzie's Grove Campground



The Balls Creek Small Area Plan (BCSAP) study boundary follows the Maiden and Newton Extraterritorial Jurisdiction (ETJ) boundaries to the west; NC Highway 10 on the north; Murrays Mill Road/Buffalo Shoals Road to the east; NC Highway 16 south of Buffalo Shoals Road to the Catawba/Lincoln County line on the east, and then follows the County line west to the Maiden ETJ boundary. The Balls Creek SAP study area encompasses 30,802 acres, including land in dedicated rights-of-way.

Demographics/Projections (*Balls Creek SAP*)

The Balls Creek area experienced a significant population growth from 1990 to 2000. The number of people residing in the area grew at a rate of 26.5%. The population in 1990 for the area was 7,920 while the 2000 Census indicated a population of 10,778, an increase of 2,858 persons. The growth rate for the entire county was 19.7%, somewhat less than the growth rate of the study area. The study area’s net gain of 2,858 persons represented 12% of the total County population increase of 23,273.

If the long-term trend of increasing job demand continues in Catawba County, the population in the Balls Creek area is projected to continue increasing at a substantial rate. By 2015 the population of the Balls Creek area could exceed 14,000 persons. The trend of fewer people per household is expected to continue. This significant population growth for the Balls Creek area is predicated on growth rates that are more than 31% for the area.

Table 3.6.1 - Balls Creek Small Area Plan: Study Area Growth 1990-2015

| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|-------|--------|-------------------------|-------------------------|--------|--------|--------|-------------------------|-------------------------|
| Persons | 7,920 | 10,778 | 2,858 | 26.5 | 11,964 | 12,958 | 14,115 | 3,337 | 31.0 |
| Households | 2,913 | 4,103 | 1,190 | 40.9 | 4,577 | 5,003 | 5,492 | 1,389 | 33.9 |

Key Issues (*Balls Creek SAP*)

Area residents of the Balls Creek SAP met in July of 2001 and identified their likes, dislikes, and future visions of the community. Their concerns follow:



Balls Creek’s community has a rural setting with most of the land in open space and farmland. Balls Creek is centrally located to cities and towns and traffic congestion is a concern of the community. Controlling residential growth/density and balancing growth with rural character is also a challenge.

Balls Creek has many good schools for students to attend. One concern is that it will be difficult to maintain their high quality of education in the face of overcrowding.

Balls Creek has a strong cultural heritage. There is a concern about public policy and land use.

Guiding Principles (*Balls Creek SAP*)

1. **Open Space Protection.** Preserve open space in new subdivisions.
2. **Preservation of Natural Features.** Where practical, the community’s natural terrain, pastures, scenic views, existing vegetation, natural drainage, and bodies of water should be protected and preserved.
3. **Pedestrian Oriented Development.** Ensure that all new development is designed to accommodate and encourage the pedestrian and bicyclist as equally as the automobile driver.
4. **Pedestrian/Bicycle.** An “alternative transportation” system of sidewalks and bikeways should be implemented over the course of several years as higher density development takes place.
5. **Park Space.** Provide adequate recreational opportunities for all segments of the population.
7. **Linear Park System.** Put into action the long-term construction of a linear park system (with bicycle and/or pedestrian facilities) linking together parks, recreation facilities, residential development, shopping areas, and employment centers.
8. **Schools in the community.** Balls Creek Elementary and Tuttle Middle School should continue their standing as “centers of the community.”
9. **Volunteerism.** The spirit of volunteerism in existing civic organizations should be encouraged as sources of community pride and as providers of recreation options for the community.



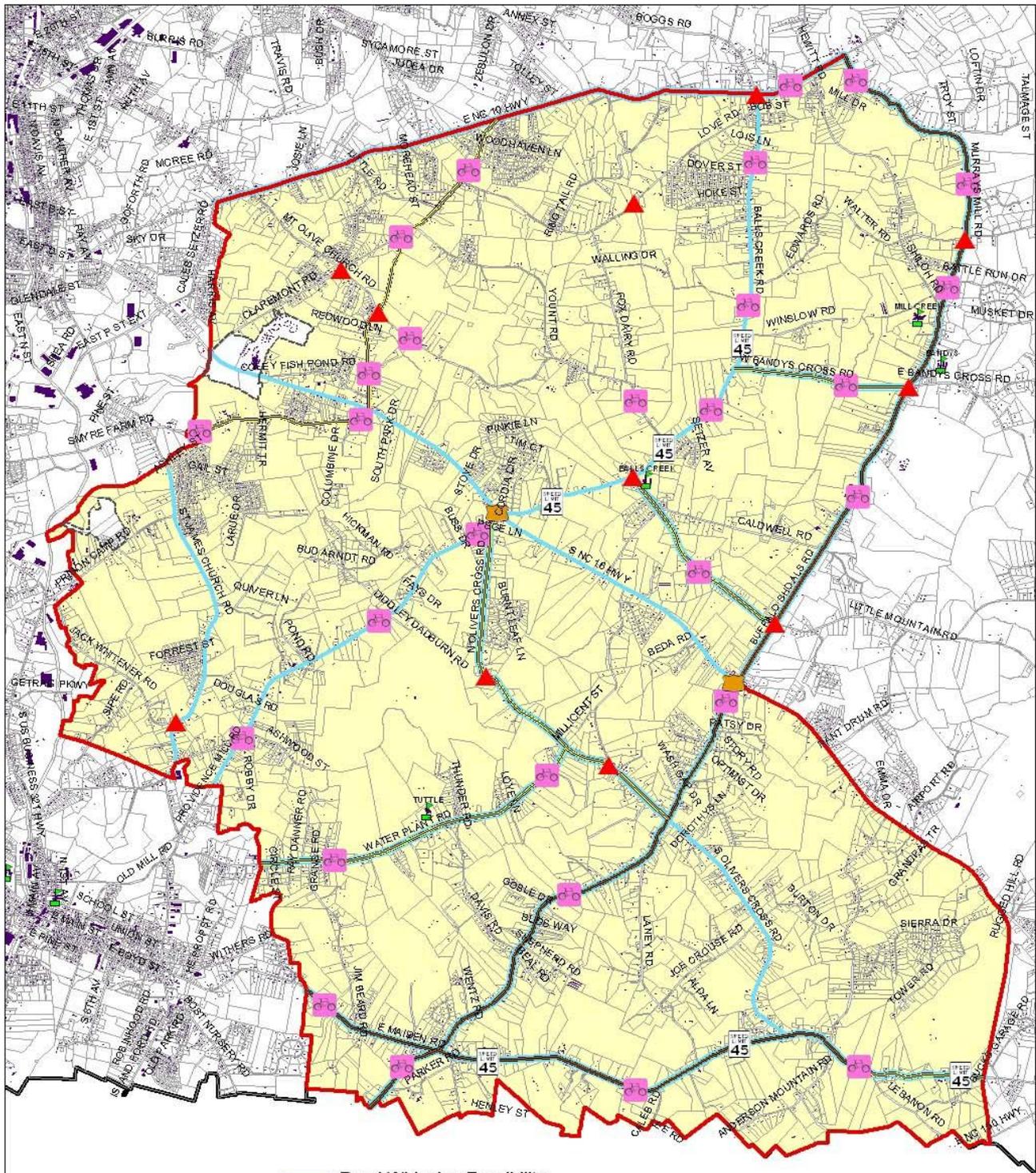
Specific Needs Assessments as related to Parks & Recreation (Balls Creek SAP)

1. Pedestrian and Bicycle System

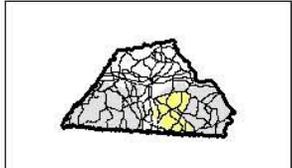
Balls Creek has virtually no bicycle or pedestrian routes. However, it is now policy of the MPO and NCDOT to evaluate any new road construction project for potential pedestrian needs (i.e. sidewalks and crossover) and bicycle accommodations. The plan calls for the creation of a walking trail from Bandys High School to Mill Creek Middle School.

There are many potential destinations in the Balls Creek district that would benefit from a bike/pedestrian system. Some possible roads where increasing the pavement width to the maximum extent feasible for bicycle routes are as follows:

- Mount Olive Church Road;
- Murrays Mill Road;
- Balls Creek Road;
- NC Highway 10 from the intersection of Murrays Mill Road east to Balls Creek Road;
- West Bandys Cross Road;
- Providence Mill Road;
- Smyre Farm Road;
- Bethany Church Road;
- Little Mountain Road;
- East Maiden Road;
- Water Plant Road; and
- Buffalo Shoals Road.



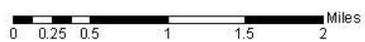
This map product was prepared from the Catawba County, NC, Geographic Information System. Catawba County has made a reasonable effort to ensure the accuracy of content and take legal responsibility for the map. Catawba County promotes and recommends the independent verification of any data contained on this map product by the user. The County of Catawba, its employees and agents disclaim, and will not be held liable for any and all damages, loss or liability, whether direct or indirect or consequences that may arise from the use of this map product or the use thereof by any person or entity.



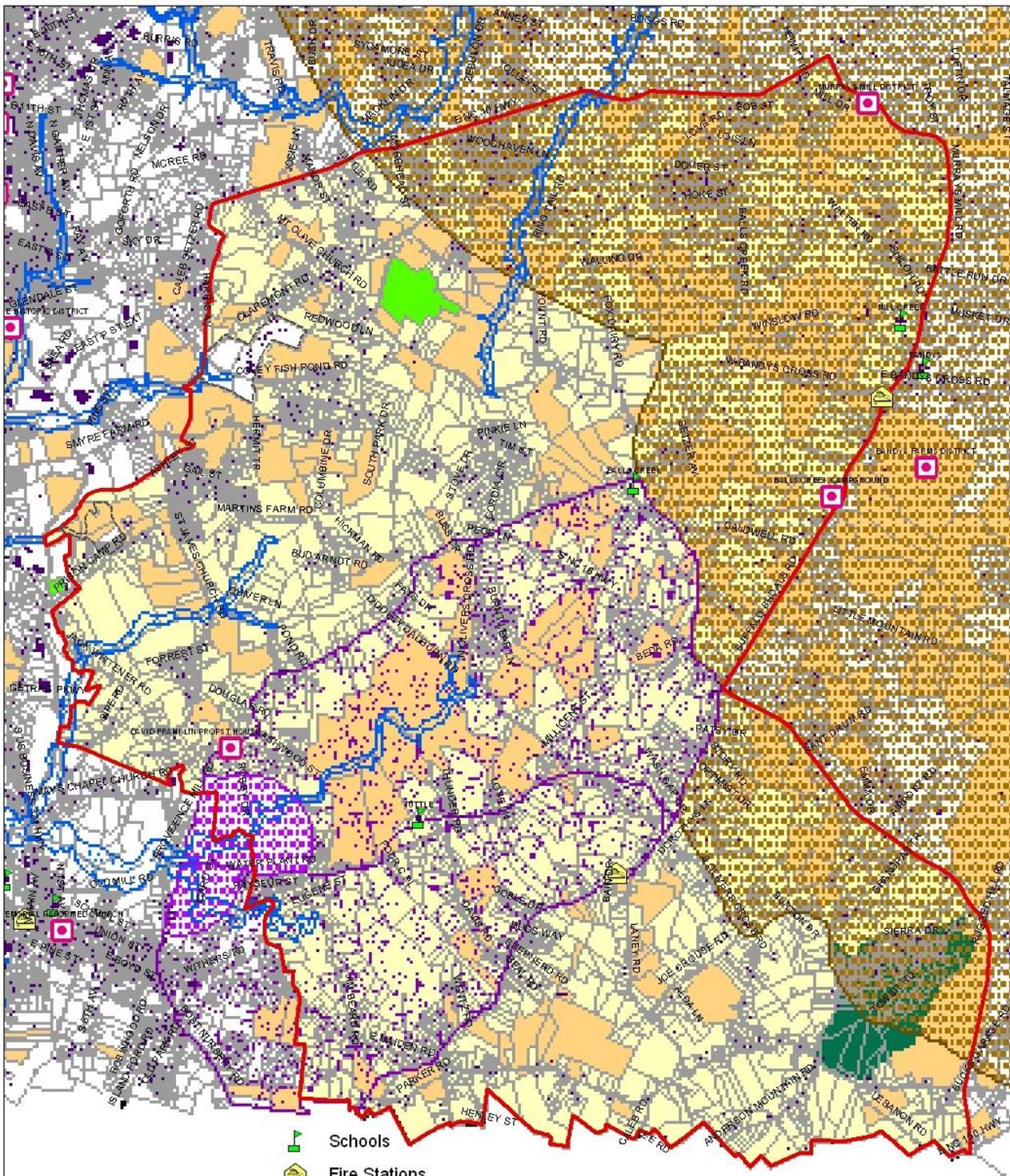
SOURCE: S:\PROJECTS\SMALL AREA\BALLS_SCREENING_TRANSPORT

- Road Widening Feasibility
- Scenic Highway
- Driveway Requirements
- Add Asphalt for Bike Trail
- Schools
- Intersection/Safety Improvements
- Gateway Improvements
- Reduce Speed Limit
- Balls Creek SAP Boundary
- Municipal Boundary
- Structures

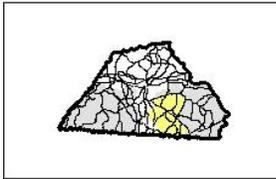
MAP NO. 6 BALLS CREEK SMALL AREA PLAN FUTURE TRANSPORTATION RECOMMENDATIONS



Revised April 25, 2023



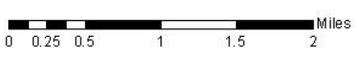
This map product was prepared from the Catbush County, NC Geographic Information System. Catbush County has made certain alterations to ensure the accuracy of location and the legibility of the map. Catbush County provides and assumes no liability for any errors or omissions, and shall not be held liable for any damages, loss of profits, or any other direct, indirect, or consequential damages or may arise from the map product or the use thereof by any person or entity.



SOURCE: PROJECTS/PLANS/ASAP/BALLS-CREEK/SM-AREA-CULTURAL.RXD

- Schools
 - Fire Stations
 - Historic Property
 - Mountain Protection District
 - Farm Lands (1999 Tax Records)
 - County Owned Property
 - Floodway
 - Balls Creek SAP Boundary
 - Municipal Boundary
- WATERSHEDS**
- WS-II Critical Area
 - WS-II Protected Area
 - WS-IV Protected Area

**MAP NO. 8
BALLS CREEK SMALL AREA PLAN
NATURAL AND CULTURAL
RESOURCES**



Revised March 4, 2002



2. Parks and Greenways

At the present time, no parks or greenways are located within the Balls Creek Small Area. The County's largest park, Riverbend Park, is located at NC Highway 16 and the Catawba River, with over 450 acres of hiking, biking, and equestrian trails. Bakers Mountain Park contains nearly 200 acres and is located in the western portion of the County, south of Hickory and Interstate 40.

However, the elementary school, churches, and civic organizations, operate some passive and active recreation programs and facilities.

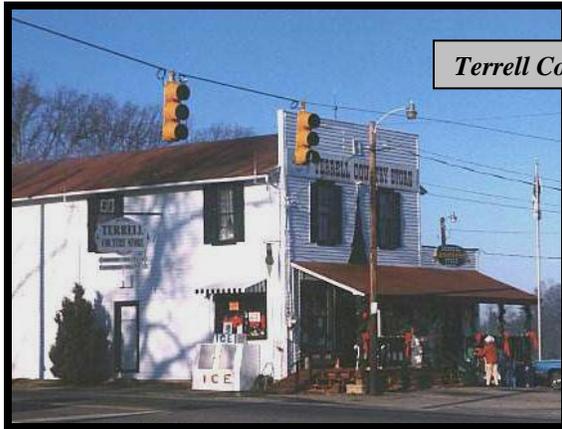
Recommendations (*Balls Creek SAP*)

1. Assist property owners of rural farms in preserving those uses by providing information on conservation easements and tax credit measures.
2. Within high and medium residential density areas, new construction should implement the following:
 - Open space/cluster subdivision design
 - Minimum open space requirement
 - Density bonuses for providing additional open space beyond minimum requirements
3. When roads and highways are resurfaced, add additional pavement to accommodate the construction of bicycle lanes, when appropriate.
4. Begin to design and construct a pedestrian and bicycle system that links the currently segregated residential developments together.
5. Balls Creek Elementary School should continue to build on its role as an essential resource for the community. It should also be provided with adequate facilities and resources as population increases.
6. Encourage the Catawba County Historical Association (CCHA) to increase public educational efforts for those sites of County and state-wide significance in Balls Creek.



Sherrills Ford Small Area Plan (SAP)

Study Area (*Sherrills Ford SAP*)



Terrell Country Store/Bait Shop

The Sherrills Ford District encompasses an approximate 71 square mile area (45,412 acres) in southeastern Catawba County. The district is bounded by Lake Norman and the Catawba River on the east; the Catawba and Lincoln County lines to the south; NC Highway 16, Buffalo Shoals Road, and Murray's Mill Road on the west; and US Highway 10, the Town of Catawba's Extraterritorial Jurisdiction, and the Catawba River to the north.

Demographics/Projections (*Sherrills Ford SAP*)

The Sherrills Ford area has experienced the highest growth rate of any area in Catawba County during the last decade. In the beginning of 1990, the population of this area was 7,600+ people. By the year 2000, over 10,500 persons were enumerated in the area. This represents a growth rate of over 37%. Most of the growth is attributed to large, single-family developments along Lake Norman.

It is projected that the Sherrills Ford area will remain a high growth area in the next 10 to 15 years. This projection is based on the demand for lake lots, the close proximity to the Charlotte urban area, and the relatively low property costs. The growth could be even more explosive should public utilities become available for serving multi-family housing regions.



Table 3.6.2 - Sherrills Ford Small Area Plan: Study Area Growth 1990-2015

| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|-------|--------|-------------------------|-------------------------|--------|--------|--------|-------------------------|-------------------------|
| Persons | 7,656 | 10,519 | 2,863 | 37.4 | 11,877 | 13,258 | 14,535 | 4,016 | 38.2 |
| Households | 2,961 | 4,221 | 1,260 | 42.6 | 4,806 | 5,411 | 5,981 | 1,760 | 41.7 |

Key Issues (*Sherrills Ford SAP*)

In August of 2000, area residents of the Sherrills Ford SAP met and discussed their likes, dislikes, and their vision for the community. Their concerns are reflected in the following paragraphs.

Sherrills Ford/Lake Norman is the fastest growing of the small areas identified by Catawba County and it is also the largest (in acreage) of the seven. However, it is the least connected to the rest of Catawba County of any of the small areas. The *lack of connectivity* in this large, diversely populated, fast-growing tract makes this small area the one most likely to have growth-related issues within the next ten years.

The Sherrills Ford small area district also has the largest number of cultural resources of any small area district within the County. Of concern is that these resources are being threatened by the vast amount of new development in the area.

Trends for the area for the next 20 to 30 years will be somewhat contradictory in nature. More people will continue to want to locate here for its rural, open quality; yet the demand for more upscale development and proximity to services will increase, which will reduce availability of rural open space.

Guiding Principles (*Sherrills Ford SAP*)

- 1. Open Space Protection.** Ensure that new development is sensitive to the preservation and protection of open spaces.
- 2. Preservation of Natural Features.** Where practical, the community's natural terrain, existing vegetation, natural drainage, and bodies of water should be protected and preserved.



3. **Pedestrian Oriented Development.** Ensure that all new development is designed to accommodate and encourage the pedestrian and bicyclist as equally as the automobile driver.
4. **“Main Street”.** Efforts should be made to promote the creation of a pedestrian oriented village center to serve as a focal point of the Sherrills Ford community in Terrell.
5. **Pedestrian/Bicycle.** An “alternative transportation” system of sidewalks and bikeways should be implemented over the course of several years as higher density development takes place.
6. **Park Space.** Increase the amount of parkland and recreation facilities to meet the needs of the changing Sherrills Ford population.
7. **Linear Park System.** Put into action the long-term construction of a linear park system (with bicycle and/or pedestrian facilities) linking together parks, recreation facilities, residential development, shopping areas, and employment centers.
8. **Joint Use Facilities.** Create an environment where public, private, and non-profit organizations work toward the common good through cooperative facility sharing.
9. **Environmental Recreation and Education.** Develop a broad range of recreational and educational opportunities within a park and open space system, which preserves and enhances the area’s landforms, natural features, wildlife habitats, and cultural and historic sites.

Specific Needs Assessments as related to Parks & Recreation (Sherrills Ford SAP)

1. **Pedestrian and Bicycle System**
Sherrills Ford has virtually no bicycle or pedestrian routes. Some scattered subdivisions do have sidewalks; but, they are primarily internal in nature and do not provide connectivity to, or serve, the surrounding areas.

There are many potential destinations in the Sherrills Ford district that would benefit from a bike/pedestrian system; however, the system would have to be quite substantial – due to the generally scattered nature of development. Some possible origins/destinations are as follows:



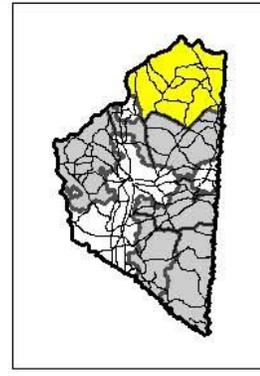
- Sherrills Ford Elementary School
- Mill Creek Middle School
- Bandys High School
- Sherrills Ford Library
- Molly's Backbone, Sandpits, and Corpening Public Game Lands
- Sherrills Ford Optimist Park
- Possible Park on Island Point Road
- Terrell Historic District
- Local Marinas
- Local Churches
- Balls Creek and Motts Grove Campgrounds

There are currently no plans for bicycle or pedestrian improvements in Sherrills Ford.

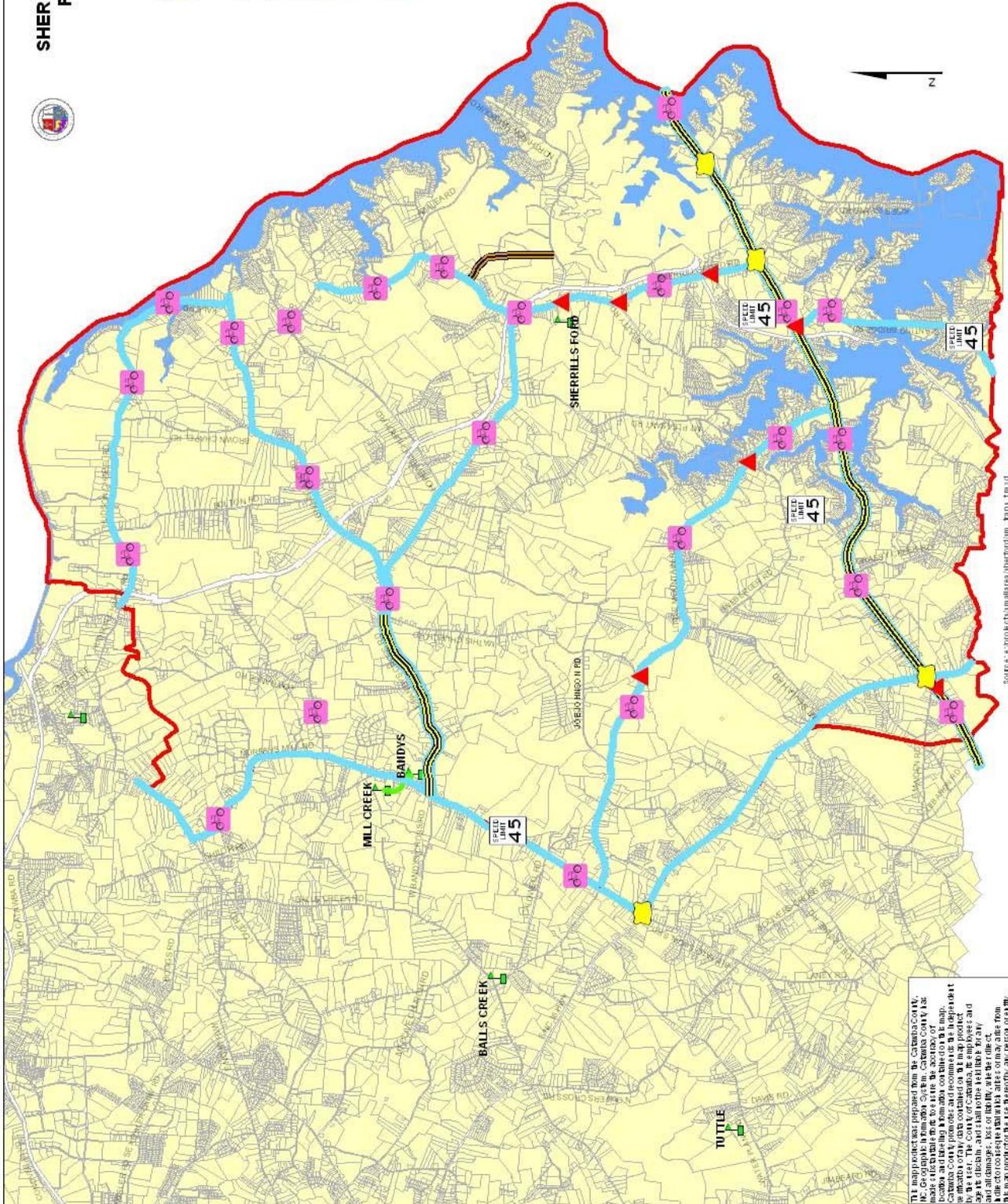
MAP NO. 6
SHERRILLS FORD SMALL AREA PLAN
FUTURE TRANSPORTATION
RECOMMENDATIONS



- Sherrills Ford Small Area Boundary
- Lake
- Schools
- Pedestrian/Bike Trail
- Connector Road
- Driveway Requirements
- Road Widening Feasibility
- Add Asphalt for Bike Trail
- Road/Intersection Improvement
- Gateway Improvements
- Reduce Speed Limit



June 6, 2002



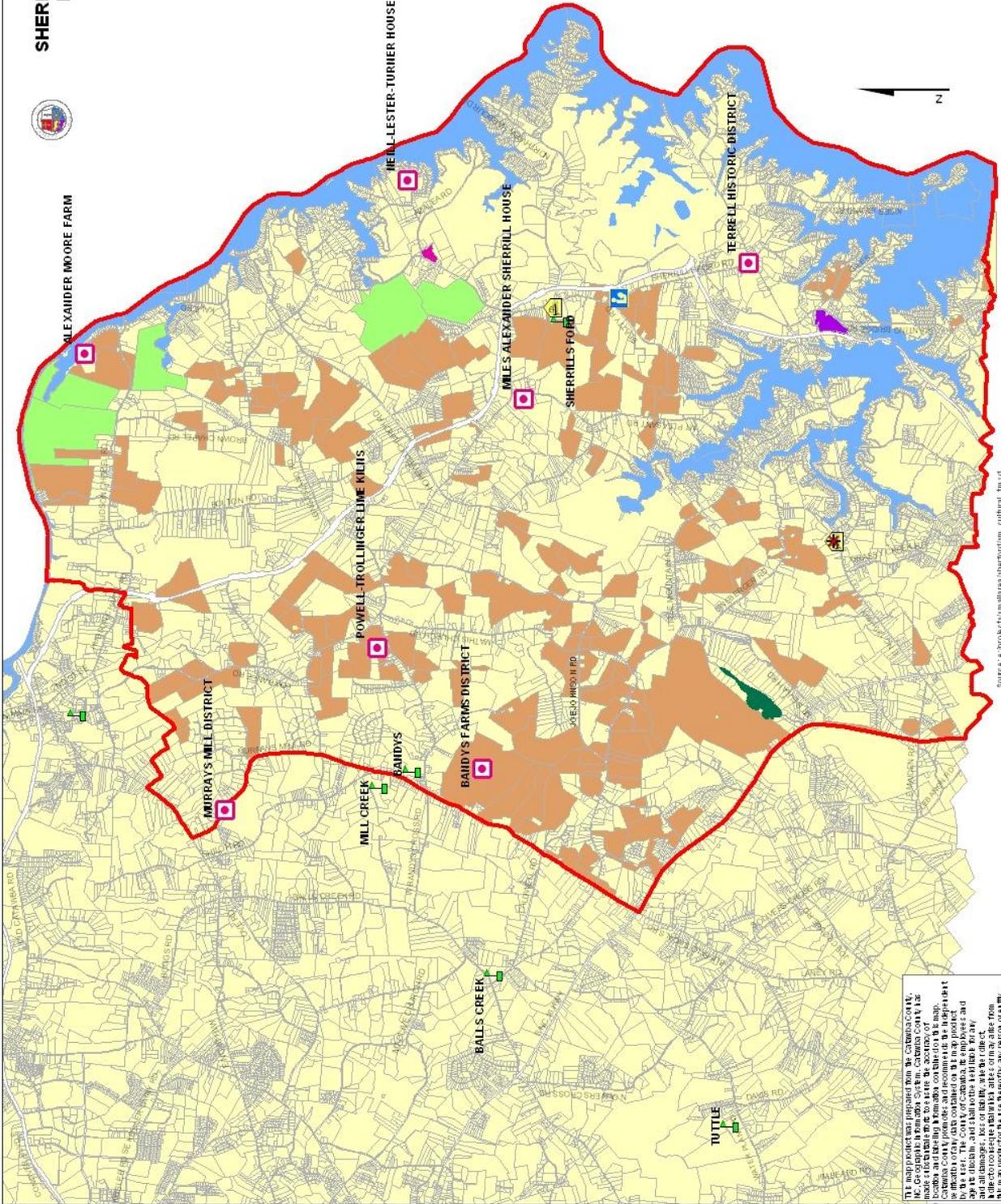
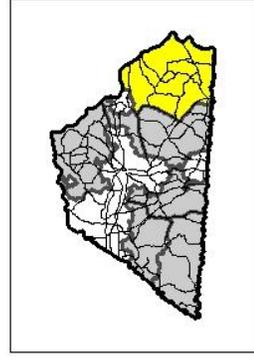
This map product was prepared for the City of Columbia, South Carolina, by the City of Columbia, South Carolina, and is not intended to be used for any other purpose. The City of Columbia, South Carolina, and its employees and contractors assume no liability for any damage, loss, or injury, or any other consequences, arising from the use of this map product. The City of Columbia, South Carolina, and its employees and contractors assume no liability for any damage, loss, or injury, or any other consequences, arising from the use of this map product.

source: s:\projects\smallarea\sherrillsford\map_data.mxd

MAP NO. 7 SHERRILLS FORD SMALL AREA PLAN NATURAL AND CULTURAL RESOURCES



- * EMS Bases
- Fire Stations
- Schools
- Libraries
- Historic Property
- Mountain Protection District
- Gamelands
- Farmland
- County Owned Property
- Recreational Properties
- Lake
- Sherrills Ford Small Area Boundary



source: e:\projects\municipal\sherrillsford\sherrills_fm_cultural_ba.d

THIS MAP AND ITS CONTENTS ARE THE PROPERTY OF THE COUNTY OF COLUMBIA, NC. NO PART OF THIS MAP OR ITS CONTENTS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE COUNTY OF COLUMBIA, NC. THE COUNTY OF COLUMBIA, NC, AND ITS EMPLOYEES AND AGENTS MAKE NO WARRANTY, REPRESENTATION, OR GUARANTEE AS TO THE ACCURACY, COMPLETENESS, OR TIMELINESS OF THE INFORMATION CONTAINED HEREIN. THE COUNTY OF COLUMBIA, NC, AND ITS EMPLOYEES AND AGENTS SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES, ARISING OUT OF OR FROM THE USE OF THIS MAP, AND ITS CONTENTS.



2. Parks and Greenways

There are no public parks or greenways in the Sherrills Ford District. Without traveling out of the area, citizens rely primarily on open space, public game lands, the lake, and private facilities for most recreational pursuits.

Sherrills Ford Elementary School has some playground equipment and ball fields; however, these facilities are limited for use during school hours or functions. Most youth organized sports are held at the Sherrills Ford Optimist Park and indoor activities/sports are generally held in the school gymnasium.

Hunting and passive recreation are limited to three public game land tracts and private properties – all located on Molly's Backbone Road and Hudson Chapel Road.

Recommendations (*Sherrills Ford SAP*)

1. Within *rural* residential density areas, new construction should implement the following:
 - Open space/cluster subdivision design
 - Minimum open space requirement
 - Density bonuses for providing additional open space beyond minimum requirements
 - Buffering along the road frontage
2. Within *medium* residential density areas, a minimum percentage of open space should be required for new developments in order to preserve the natural features and protect water quality.
3. Within *high* residential density areas, minimum open space should be required.
4. 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.
5. Explore with Duke Energy the possibility of making various game land areas and other holdings available for passive recreation use.
6. When roads and highways are resurfaced, add additional pavement to accommodate the construction of bicycle lanes, when appropriate.



7. Begin to design and construct a lake-oriented pedestrian and bicycle system that links the currently segregated lake-area neighborhoods together.
8. The County should evaluate funding options, such as the state's Wetlands Restoration Fund and the Parks & Recreation Trust Fund (PARTF).
9. Encourage partnerships between local organizations/corporations to increase recreation opportunities.

Catawba Small Area Plan

Study Area (*Catawba SAP*)

The Catawba study area encompasses an approximate 45,412 acres in the mid portion of eastern Catawba County. The district is bounded by Interstate 40 on the north; and the Town of Catawba and the Catawba River on the east; NC Highway 10 on the south; and the cities of Newton and Claremont on the west. A significant natural feature bordering the study area is the Catawba River.

Demographics/Projections (*Catawba SAP*)

The Catawba SAP experienced a significant population growth from 1990 to 2000. The number of people residing in the area grew at a rate of 26.4%. The population in 1990 for the area was 2,052 and 2,593 people were enumerated in 2000 – an increase of 541 persons. The growth rate for the entire County was 19.7%, which is somewhat less than the growth rate of the study area.

The number of households grew significantly faster than the number of persons in the study area, resulting in a lower average of persons per household. This trend is consistent with county, state, and national trends – all indicating a lower number of persons per household.

If the long-term trend of increasing job demand continues in Catawba County, the population in the Catawba SAP is projected to continue increasing at a significant rate. By 2015, the population of the study area could exceed 3,200 persons. Future population growth within the study area will be largely affected by the availability of public water and sewer.



Table 3.6.3 - Catawba Small Area Plan: Study Area Growth 1990-2015

| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|-------|-------|-------------------------|-------------------------|-------|-------|-------|-------------------------|-------------------------|
| Persons | 2,052 | 2,593 | 541 | 26.4 | 2,819 | 3,030 | 3,240 | 647 | 25.0 |
| Households | 750 | 1,028 | 278 | 37.1 | 1,146 | 1,252 | 1,356 | 328 | 31.9 |

Key Issues (*Catawba SAP*)

Area residents of the Catawba SAP met in May of 2003 and identified their likes, dislikes, and future visions of the community. As a result of their discussion, the following broad issues were identified:

- Traffic;
- Lack of water and sewer utilities;
- Need for community recreation;
- Loss of farmland and open space; and
- Over-development.

Guiding Principles (*Catawba SAP*)

1. Reserve open space in new subdivisions.
2. Preserve open space, pastures, and scenic views.
3. Provide safe alternatives for pedestrians.
4. Provide safe options for bicyclists.
5. Provide adequate recreational activities for all segments of the population.
6. Provide adequate open space and recreational facilities on a neighborhood basis.



Specific Needs Assessments as related to Parks & Recreation (Catawba SAP)

1. Pedestrian System

Presently, Catawba County does not require sidewalk construction in new developments. In general, the Catawba SAP area lacks a pedestrian system with sidewalk connections between residential areas. However, it is now policy of the Metropolitan Planning Organization (MPO) – formed by Hickory, Newton, and Conover – and the North Carolina Department of Transportation (NCDOT) to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossovers) and bicycle accommodations.

2. Bicycle System

The Catawba SAP study area does not currently have an integrated system of bicycle trails. NCDOT has funded a Bicycle Route Map and signing project that has been underway since the summer of 2001. In compliance with NCDOT's policy, future road widening projects should be evaluated for their potential to provide bicycle lanes.

3. Parks and Greenways

Currently, there are no municipal or county-owned parks within the study area. However, the Catawba County Historical Association (CCHA) *does* own and operate Connor's Park, located in the study area along Highway 70. This park includes a creekside trail to the last original covered bridge in North Carolina. Recently, the County and the Historical Association were awarded a transportation grant to pave the parking area and make other improvements to the site. The City of Claremont operates Francis Sigmon Park – located on Highway 70 west of the study area. It contains ball fields, a walking trail, tennis courts, and picnic shelters. In addition, the Town of Catawba recently was awarded a grant to purchase property from the local Optimists to develop its first municipal park, adjacent to Lyle Creek. Since that time, Hunsucker Park has been completed.

Murrays Mill, the historic site of the grindstone, mill pond, and general store, is located just south of the Catawba planning area in the Balls Creek community.

Riverbend Park, located within the St. Stephens/Oxford Small Area along the Catawba River, offers a variety of passive recreational activities. This was the first county-owned and operated park. Riverbend Park includes over 450 acres of land with hiking, bicycle trails, a dog park, fishing, and



canoeing. Riverbend Park also provides picnic facilities and an observation deck on the Catawba River. In June 2002, the County opened a second park atop Baker's Mountain in the Mountain View SAP. Both parks are an easy drive from the Catawba study area.

Map 7.
Catawba Small Area Plan
Transportation Recommendations

Thoroughfares

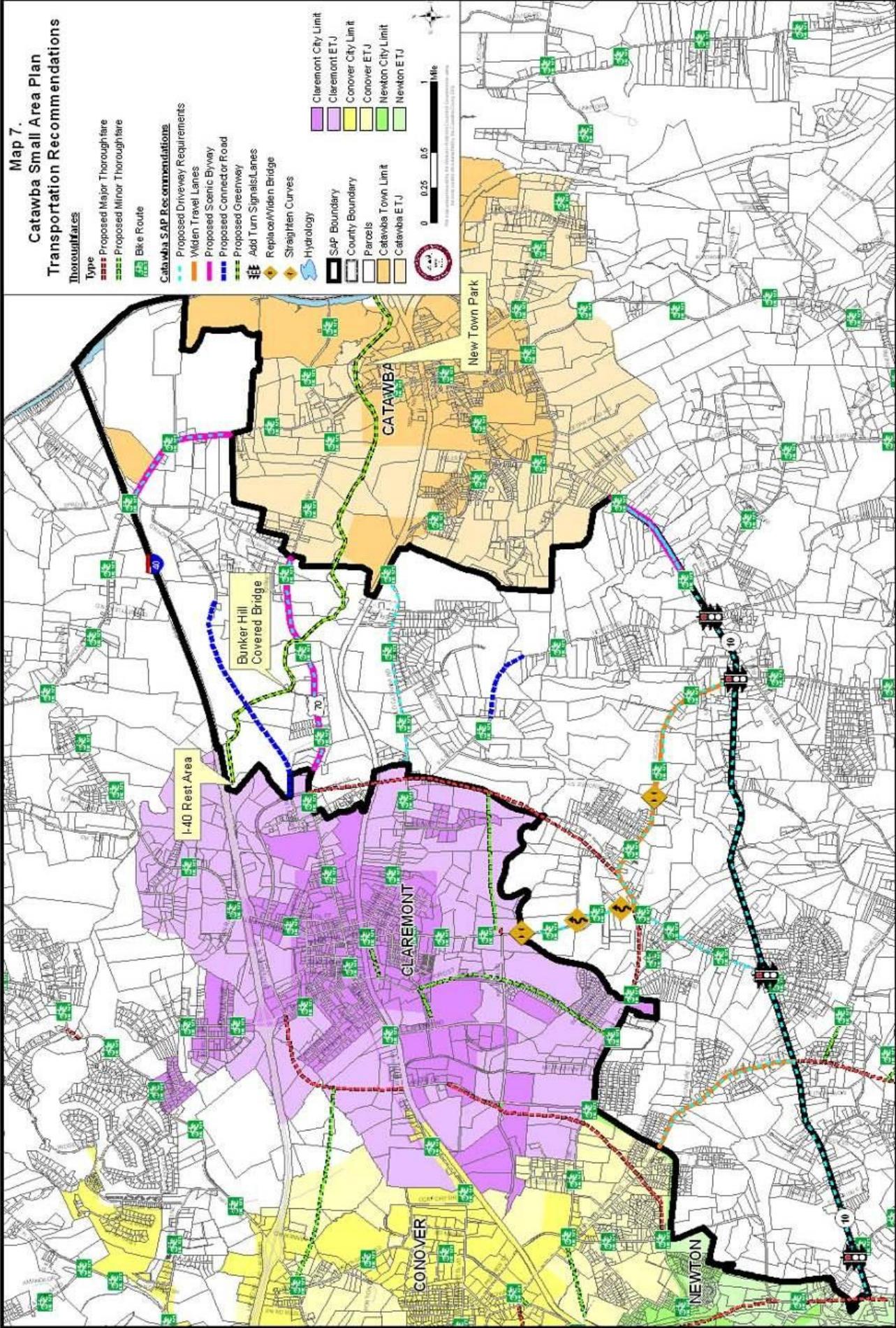
- Type
- Proposed Major Thoroughfare
 - Proposed Minor Thoroughfare
 - Bike Route

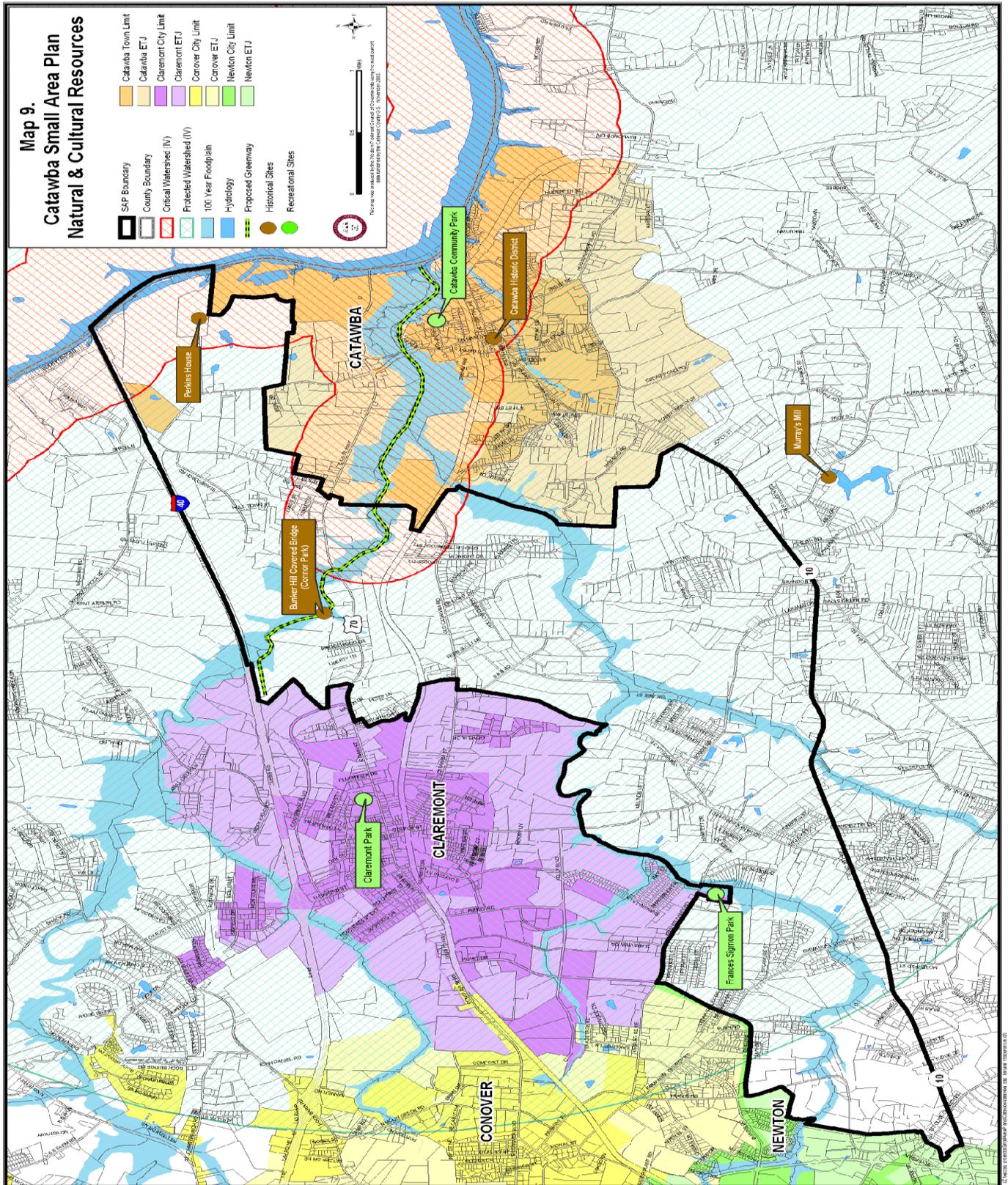
Catawba SAP Recommendations

- Proposed Driveway Requirements
- Widen Travel Lanes
- Proposed Scenic Byway
- Proposed Connector Road
- Proposed Greenway
- Add Turn Signals/Lanes
- Replace/Widen Bridge
- Straighten Curves
- Hydrology

- Claremont City Limit
- Claremont ETJ
- Conover City Limit
- Conover ETJ
- Newton City Limit
- Newton ETJ

- SAP Boundary
- County Boundary
- Parcels
- Catawba Town Limit
- Catawba ETJ



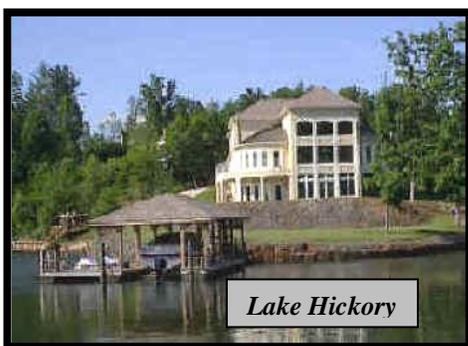




Recommendations (*Catawba SAP*)

1. New residential subdivisions should incorporate the cluster design, which preserves open space and rural character.
2. All major subdivisions should provide open space that is easily accessible and is usable for recreation.
3. Determine the feasibility of a greenway from the Bunker Hill Covered Bridge to the rest area on Interstate 40.
4. Determine the feasibility of a greenway from the Bunker Hill Covered Bridge along Lyle Creek to the Town of Catawba Park, continuing through the Town of Catawba to the Catawba River.
5. The Catawba SAP supports the bicycle routes that have been submitted to NCDOT for approval. However, due to safety concerns, the bicycle route along Boggs Road should not be designated until the travel lanes are widened. The bicycle route for B & B Road/Hewitt Road would not be designated until the connector road is constructed.
6. Encourage and possibly create public-private partnerships to develop parks and recreation facilities that meet the needs of all population segments.

St. Stephens/Oxford Small Area Plan



Study Area (*St. Stephens SAP*)

The St. Stephens/Oxford Small Area Plan (SAP) study area boundary follows the Catawba River to the north and east; the municipal limits of Catawba, Claremont, and Conover to the south; and the municipal limits of Hickory to the west. The study area encompasses approximately 30,846 acres.

Demographics/Projections (*St. Stephens SAP*)

The St. Stephens/Oxford area experienced a substantial population growth from 1990 to 2000. The number of people residing in the area grew at a rate of 33.8%. The population in 1990 for the area was 14,669 while the 2000 Census



indicated a population of 19,625, an increase of 4,956 persons. The growth rate for the entire county was 19.7%, considerably less than the growth rate of the study area. The study area’s net gain of 4,956 persons represented 21% of the total County population increase of 23,273. The population growth rate for the study area is among the highest in the Unifour.

If the long-term trend of increasing job demand continues in Catawba County, the population in the St. Stephens/Oxford area is projected to continue increasing at a substantial rate. By 2015 the population of the St. Stephens/Oxford area could approach 27,000 persons. The trend of fewer people per household is expected to continue. This significant population growth for the St. Stephens/Oxford area is predicated on growth rates that are more than 31% for the area.

Table 3.6.4 - St. Stephens/Oxford Small Area Plan: Study Area Growth 1990-2015

| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|--------|--------|-------------------------|-------------------------|--------|--------|--------|-------------------------|-------------------------|
| Persons | 14,669 | 19,625 | 4,956 | 33.8 | 22,431 | 24,685 | 26,677 | 7,052 | 35.9 |
| Households | 5,465 | 7,481 | 2,016 | 36.9 | 8,627 | 9,568 | 10,421 | 2,940 | 39.3 |

Key Issues (St. Stephens SAP)

As a result of area residents meeting together in October of 2000, the following concerns were expressed with regard to the future of the St. Stephens community:

St. Stephens/Oxford’s community has a rural setting. Most of the land is open space and farmland. There is a concern that this farmland and open space will be lost, and the area will become congested.

There is a need for public water in the St. Stephens/Oxford area.

Guiding Principles (St. Stephens SAP)

1. **Open Space Protection.** Maintain a rural, un-congested setting.
2. **Preservation of Natural Features.** Protect natural features (i.e. trees, lakes, fields) that contribute to the rural atmosphere.



3. **Farmland protection.** Encourage farmland preservation.
4. **Pedestrian Oriented Development.** Ensure that all new development is designed to accommodate and encourage the pedestrian and bicyclist as much as the automobile driver. Also, provide a safe environment for pedestrians en route to schools, churches, etc.
5. **Safer Roads.** Establish safer roads for drivers, pedestrians, and bicyclists. Also, reduce traffic congestion.
6. **Pedestrian/Bicycle.** An “alternative transportation” system of sidewalks and bikeways should be implemented over the course of several years as higher density development takes place.
7. **Park Space.** Provide adequate recreational opportunities for all segments of the population.
8. **Environmental Recreation and Education.** Develop a broad range of recreational and educational opportunities within a park and open space system, which preserves and enhances the area’s landforms, natural features, and wildlife habitats.
9. **Rivers.** Protect water quality for future generations. Preserve the scenic quality of the river corridor. Utilize rivers for environmentally sound recreational activities.
10. **Cultural Resources.** Recognize and protect cultural resources.

Specific Needs Assessments as related to Parks & Recreation (St. Stephens SAP)

1. Pedestrian and Bicycle System

In general, St. Stephens/Oxford lacks a pedestrian system offering options for connectivity between residential areas and commercial developments. However, it is now the policy of the MPO and NCDOT to evaluate any new road construction project for potential facilities (i.e. sidewalks and crossovers) and bicycle accommodations.



Sidewalks should be requested on state roads when they are widened. Sidewalks on the following roads could tie in with existing or planned sidewalks in Conover, Claremont, and Hickory:

- County Home Road
- Rock Barn Road
- C & B Farm Road
- Lee Cline Road
- St. Johns Church Road
- NC Highway 16
- Sipe Road

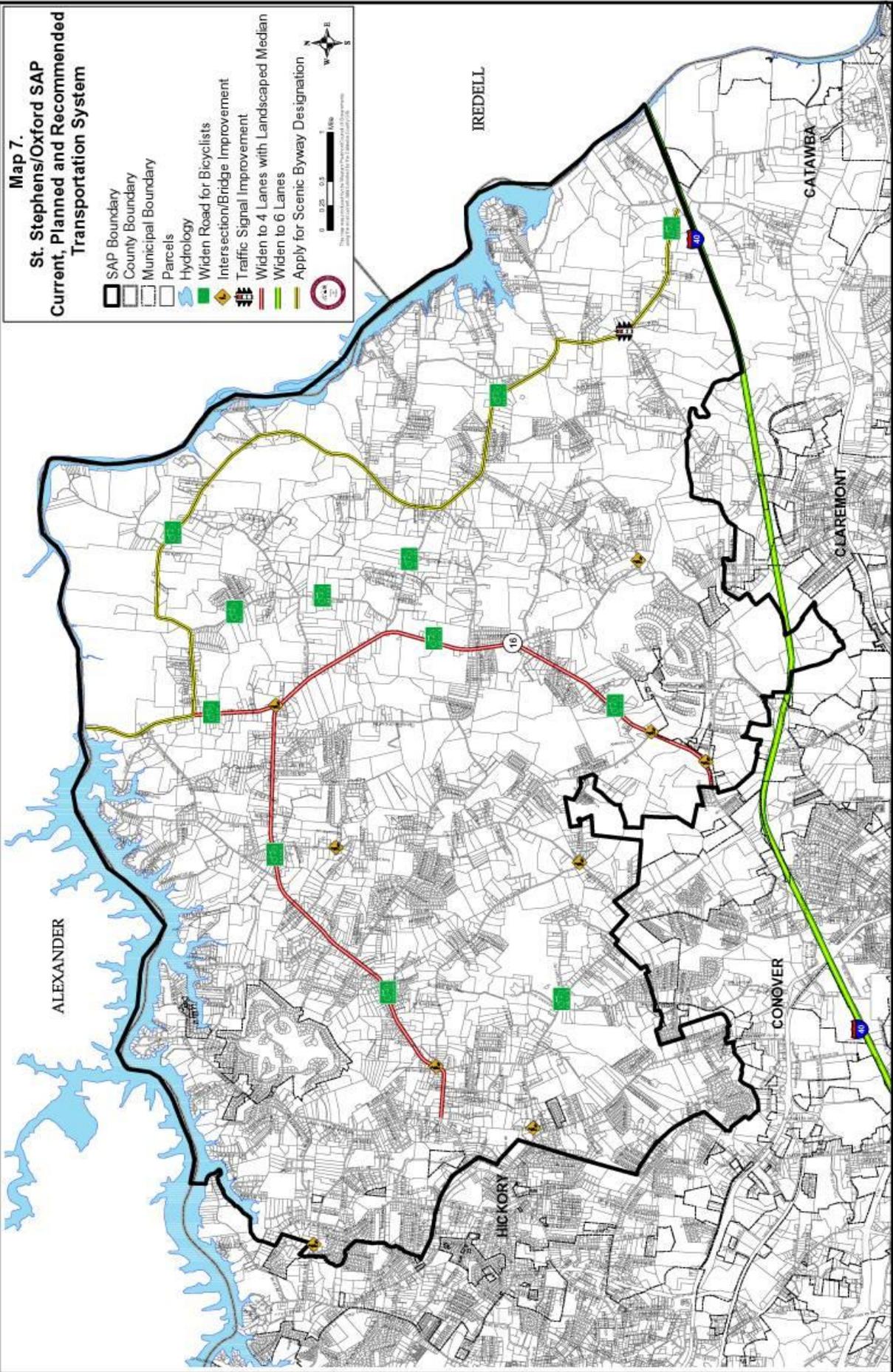
The St. Stephens/Oxford study area also does not currently have an integrated system of bicycle trails. Riverbend Park offers a system of off-road bicycle trails. In compliance with NCDOT's policy, the Springs Road and NC Highway 16 road widening projects should be evaluated for their potential to provide bicycle lanes connecting with Riverbend Park.

Increase the pavement width to the maximum extent feasible along the following roads for bicycle routes:

- Oxford School Road
- Riverbend Road
- Rest Home Road
- County Home Road

Map 7.
St. Stephens/Oxford SAP
Current, Planned and Recommended
Transportation System

-  SAP Boundary
-  County Boundary
-  Municipal Boundary
-  Parcels
-  Hydrology
-  Widen Road for Bicyclists
-  Intersection/Bridge Improvement
-  Traffic Signal Improvement
-  Widen to 4 Lanes with Landscaped Median
-  Widen to 6 Lanes
-  Apply for Scenic Byway Designation



Map 7. St. Stephens/Oxford SAP Current, Planned and Recommended Transportation System. Prepared by the author for the St. Stephens/Oxford SAP. © 2018.

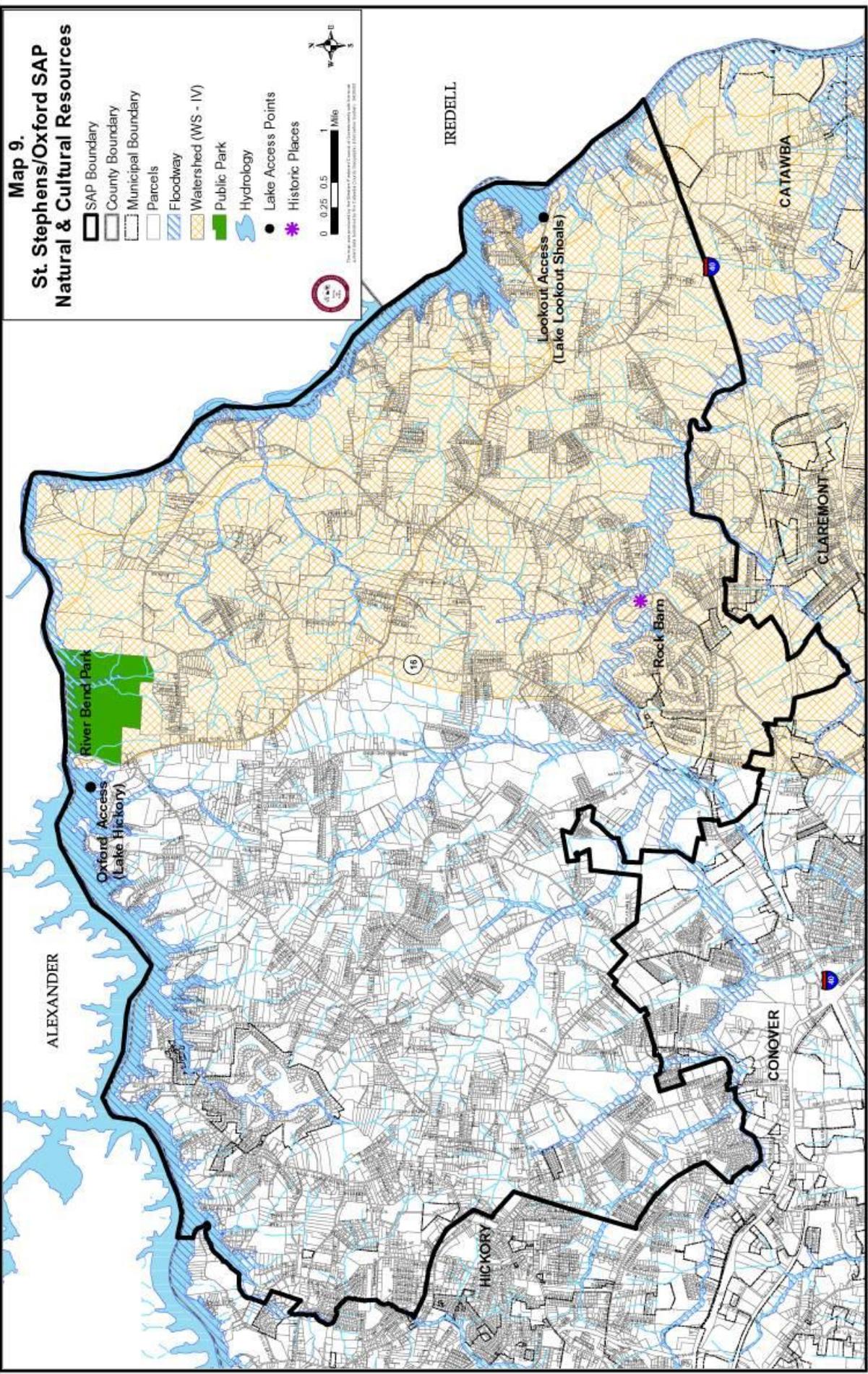
Map 9.
St. Stephens/Oxford SAP
Natural & Cultural Resources

-  SAP Boundary
-  County Boundary
-  Municipal Boundary
-  Parcels
-  Floodway
-  Watershed (WS - IV)
-  Public Park
-  Hydrology
-  Lake Access Points
-  Historic Places

0 0.25 0.5 1 Mile



Source: St. Stephens University and the University of Georgia. Digitized by the University of Georgia Libraries. Digitized by the University of Georgia Libraries. Digitized by the University of Georgia Libraries.





2. Parks and Greenways

Riverbend Park is located within the study area along the Catawba River and offers a variety of passive recreational activities. This is the first County-owned and operated park with the second park on Bakers Mountain, which opened June 2002. Riverbend Park includes over 450 acres of land with hiking, bicycle trails, dog park, fishing, and canoeing. Riverbend Park also provides picnic facilities and an observation deck on the Catawba River. The schools, churches, and some private organizations operate other passive and active recreational facilities. Currently there are no greenways within the St. Stephens/Oxford study area.

Recommendations (*St. Stephens SAP*)

1. Protect rural character and open space by requiring dedication of open space within subdivisions.
2. Evaluate where roads need to be widened and traffic signals placed.
3. Continue to use school facilities for public recreation activities.
4. When roads and highways are resurfaced, add additional pavement to accommodate the construction of bicycle lanes, when appropriate.
5. Begin to design and construct a pedestrian and bicycle system that links the currently segregated residential developments together.
6. A trail connection should be made from the Oxford access on Lake Hickory to Riverbend Park. The possibility of a midway access point, for canoeing, between Riverbend Park and the Lookout Access should also be examined.
7. Create scenic corridors by utilizing rivers, creeks, and floodways for open space planning. Create and implement design standards for recreational facilities located on the lakes and rivers to protect water quality and scenic beauty.



Mountain View Small Area Plan

Study Area (*Mountain View SAP*)



The Mountain View Small Area Plan study area boundary follows the Burke/Catawba County border to the west; the unincorporated area outside of Long View, Brookford, and Hickory to the north; Robinwood Road and Zion Church Road to the east; Sandy Ford Road between Robinwood and Zion Church Roads to the south; Highway 10 between Zion Church Road and Highway 127 to the south; and Greedy Highway between Highway 127 and the Burke/Catawba Count line to the south. The study area encompasses 20,035 acres.

Demographics/Projections (*Mountain View SAP*)

The Mountain View area experienced steady growth in the decade of the 1990s. Beginning in 1990, the area had an estimated population of just over 8,000 persons. By the year 2000, the area grew to more than 10,000 persons, primarily driven by single-family subdivision growth. The 23.5% population growth rate during the 1990s is one of the highest for any area in Catawba County. Job growth in Hickory and elsewhere in Catawba County contributed to the rapid population increase in the 1990s. Though both population and the number of households increased, the number of people per household reflected a slight decline following the national trend.

In comparison with county growth during the 1990s, the Mountain View area growth rate of 23.5% was higher than the 19.7% rate recorded for the total County. Mountain View's net gain of 1,954 persons represented over 8% of the total County population increase of 23,273. Both Mountain View and Catawba



County experienced a decline in persons per household from 1990 to 2000 though the decline in Mountain View was more significant.

Table 3.6.5 - Mountain View Small Area Plan: Study Area Growth 1990-2015

| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|-------|--------|-------------------------|-------------------------|--------|--------|--------|-------------------------|-------------------------|
| Persons | 8,302 | 10,256 | 1,954 | 23.5 | 10,934 | 11,577 | 12,089 | 1,833 | 16.8 |
| Households | 3,020 | 3,945 | 925 | 30.6 | 4,238 | 4,522 | 4,759 | 814 | 19.2 |

Key Issues (*Mountain View SAP*)

Area residents of the Mountain View SAP met in June of 2000 and discussed likes, dislikes, and their visions for the future of their community, as follows:

Rapid commercialization along NC Highway 127 is resulting in traffic congestion and unattractive development.

Housing developments are replacing farms with the consequent loss of open space, scenic topography, and rural character.

Schools are overcrowded.

Additional recreational opportunities are needed.

Encroaching development is threatening the scenic location of Bakers Mountain.

Guiding Principles

1. Preserve rural character
2. Protect Bakers Mountain from undesired development
3. Preserve the remaining farms and/or explore opportunities for conversion to preserved open space
4. Protect scenic vistas



5. Provide greenways and trails that link with sidewalks
6. Promote road-sharing with bicyclists
7. Increase pavement width on designated roads to accommodate bicyclists
8. Offer off-road bicycling options
9. Provide additional recreation opportunities for all age groups
10. Promote cultural events and facilities
11. Combine passive recreation and open space preservation interests
12. Link recreational facilities with residential developments
13. Preserve the scenic quality of river corridors
14. Utilize river for environmentally sound recreation activities
15. Provide recreation opportunities
16. Preserve open space

Specific Needs Assessments as related to Parks & Recreation (Mountain View SAP)

1. Pedestrian System

The City of Hickory requires sidewalks in all new developments. Hickory has jurisdiction over several parcels along Highway 127 in the Mountain View area. New developments within Hickory's jurisdiction are required to install sidewalks though they will not necessarily connect to other sidewalks at this time. Hickory also adopted a sidewalk plan that encourages linking sidewalks and greenways. In general, Mountain View lacks a pedestrian system offering options for connectivity between residential areas and commercial developments.

2. Bicycle System

Due to the rural nature of the outlying areas, Mountain View is a popular area for bicyclists. To date, the MPO has installed "Share the Road" signs on Robinson Road, Sandy Ford Road and Zion Church Road. The NCDOT has also funded a Bicycle Route Map and signing project that will



begin in late 2001 with expected completion in one year. A system of off-road bicycle trails does not exist in Mountain View.

3. Parks and Greenways

School and church facilities as well as Huffman Park comprise the recreational facilities in the Mountain View study area. The Mountain View Recreation Association operates Huffman Park, located on Highway 127, and organizes leagues for team sports.

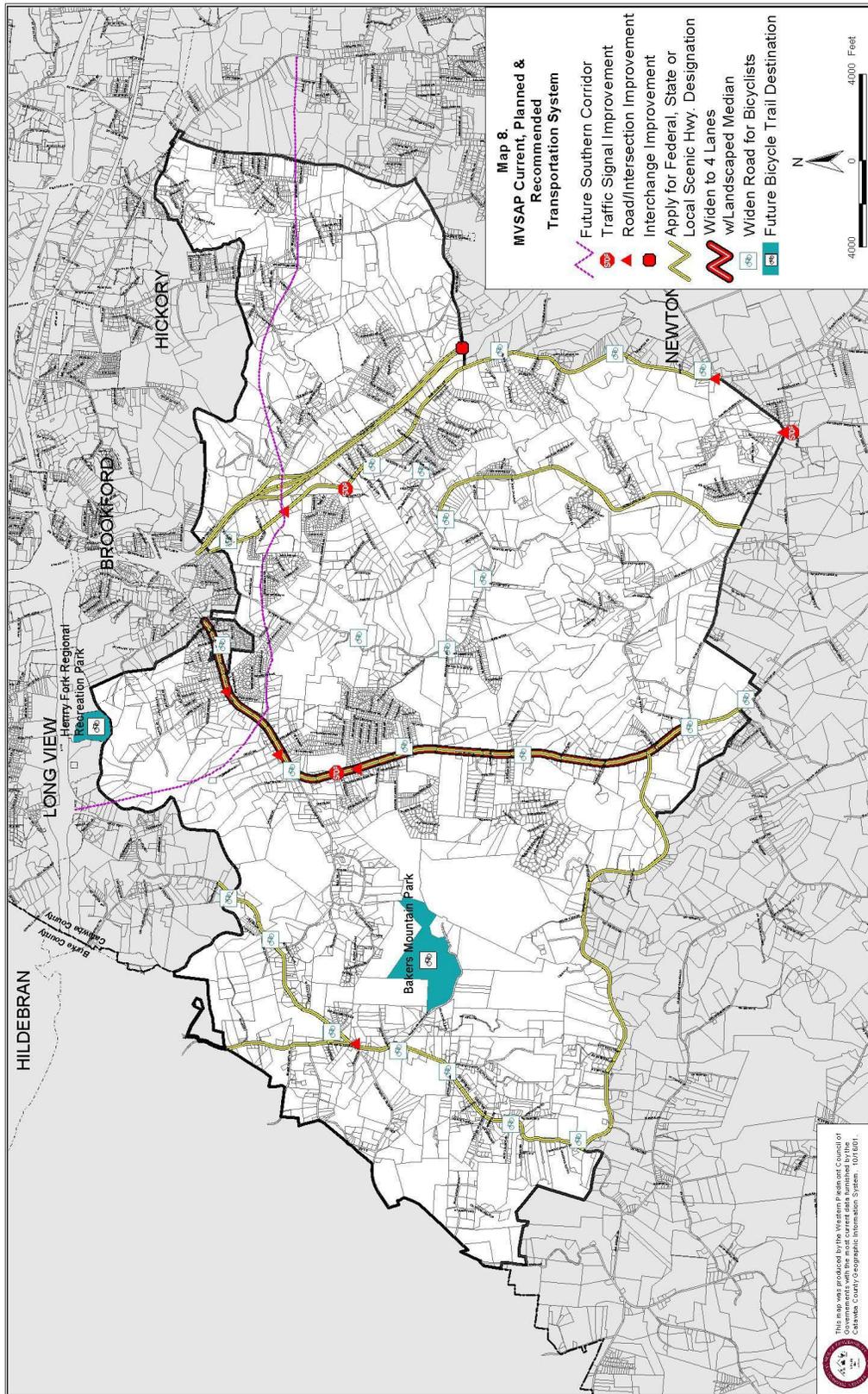
In June 2002, Catawba County opened a passive recreation park on Bakers Mountain. The Bakers Mountain Park includes 196 acres of passive recreation opportunities for residents of Catawba County and surrounding areas. Of the 196 acres, only 8.8 acres are disturbed to provide 25 parking spaces, picnic areas, and scrub growth removal from meadow areas. Six miles of trail with one-quarter mile paved handicap accessible trail are provided.

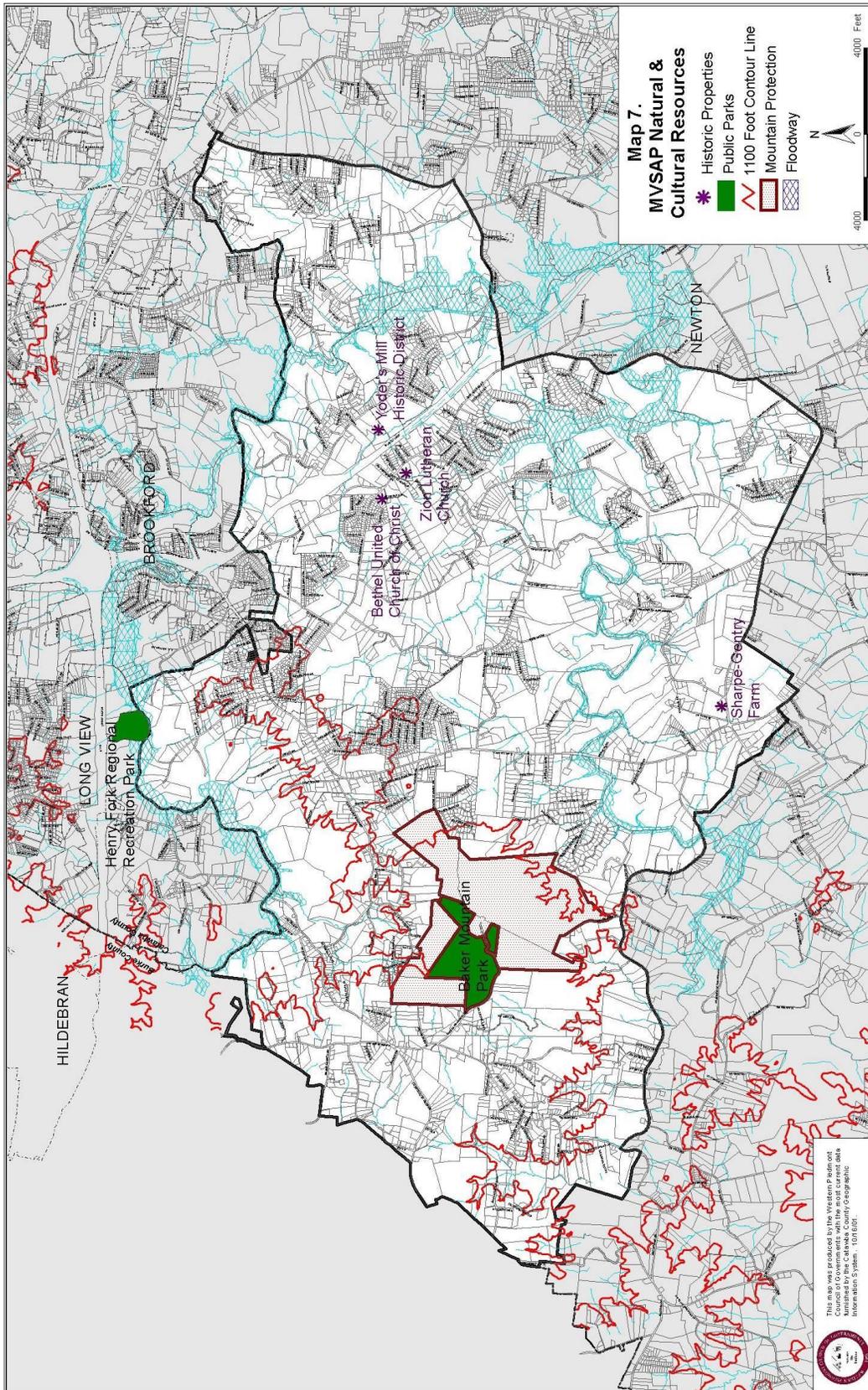
Recommendations (*Mountain View SAP*)

1. Implement a sidewalk ordinance. Areas with the greatest need should be a priority, including urbanized areas, major roads, schools, and parks. The sidewalk ordinance should require new developments on major thoroughfares, which provide sidewalks and bicycle lanes on the thoroughfare frontage to connect with existing or proposed sidewalks and bicycle lanes.
2. Develop a plan to create a greenway for pedestrians and bicyclists. The preferred routes for the greenways would be along the Henry and Jacob Forks Duke Energy rights-of-way and Bakers Mountain.
3. Implement a greenway plan.
4. Create linkages between residential, commercial and industrial developments. Ideally, commercial and residential development would be connected to public institutions (i.e. Mountain View Elementary School) and recreation facilities.
5. New residential subdivisions should include, where appropriate, the dedication of land(s) for schools, parks and passive recreation uses needed to serve the development's new residents.
6. Preserve areas in floodplains and land around such known resources as the Jacobs Fork River, the Henry Fork River, Hop Creek and Bakers Mountain.



7. Educate property owners of rural farms on ways of preserving those uses by providing information on conservation easement and tax credit measures.
8. Continue to support the development of County park facilities on Bakers Mountain.
9. Acquire land or increase pavement on existing roads to construct bicycle lanes connecting Bakers Mountain Park and the Henry Fork Regional Recreation Park
10. Provide canoe and raft portage port on the Henry Fork and Jacobs Fork.
11. Create trails along the Henry and Jacobs Forks to accommodate the needs of hikers, bicyclists and equestrians.
12. Require new developments on major thoroughfares (i.e. NC Highway 127, Zion Church Road, Bethel Church Road, Wallace Dairy Road) to provide sidewalks and bicycle lanes on the thoroughfare frontage to connect with existing or proposed sidewalks and bicycle lanes.
13. A sidewalk ordinance should be implemented to require new developments on major thoroughfares to provide sidewalks and bicycle lanes on the thoroughfare frontage to connect with existing or proposed sidewalks and bicycle lanes.
14. Set as a priority the purchase of additional land on Bakers Mountain for future expansion of the park.
15. Design and implement a recreation/open space plan to link Bakers Mountain Park with Henry Fork Regional Recreation Park.







Plateau Small Area Plan

Study Area (*Plateau SAP*)

The Plateau study area encompasses an approximate 32,854 acres (including right-of-ways) in southwestern Catawba County, west of the Startown area and south of the Mountain View area. Bisected by NC Highway 10, which traverses the planning area from east to southwest, the Plateau area is bound by Burke County on the west; Greedy Highway to the north; the NC Highway 321 Bypass on the east; and Lincoln County to the south. The most significant natural feature in the area is the Jacobs Fork River, which joins with the Henry Fork River just east of the planning area to flow south into Lincoln County as the South Fork of the Catawba River.

Demographics/Projections (*Plateau SAP*)

The Plateau study area experienced a significant population growth from 1990 to 2000. The number of people residing in the area grew at a rate of 20.8%. The population in 1990 for the area was 3,967, while the 2000 Census indicated a population of 5,008, an increase of 1,041 persons. This growth rate is nearly the same as for Catawba County, which grew 19.7% from 1990 to 2000. The study area's net gain of 1,041 persons represented 4.5% of the County's total population increase of 23,273.

The number of households grew significantly faster than the number of persons in the study area, resulting in a lower average number of persons per household. This trend is consistent with county, state, and national trends – all indicating a smaller number of persons per household.

If the long-term trend of increasing job demand continues in Catawba County, the population in the Plateau study area is projected to continue increasing at a significant rate. By 2015, the population study area could grow by 34.6% and exceed 6,700 persons. The trend of fewer people per household is expected to continue.

Future growth of the study area will be largely affected by the availability of public water and sewer. Residential, commercial, and industrial developments are most likely to occur where water and sewer lines exist or are extended. Since many large, vacant tracts still exist in the area, Plateau's growth also depends on the willingness of property owners to develop their land for more intensive uses.



Table 3.6.6 - Plateau Small Area Plan: Study Area Growth 1990-2015

| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|-------|-------|-------------------------|-------------------------|-------|-------|-------|-------------------------|-------------------------|
| Persons | 3,967 | 5,008 | 1,041 | 20.8 | 5,611 | 6,164 | 6,739 | 1,731 | 34.6 |
| Households | 1,546 | 2,043 | 497 | 32.1 | 2,348 | 2,645 | 2,956 | 913 | 44.7 |

Key Issues (*Plateau SAP*)

Plateau is rural in nature, with vast amounts of open space and very little congestion. Traditionally a farming community, it remains very family-oriented, with good schools and protective services.

Area residents of the Plateau SAP met in August of 2004 and participated in small group discussions to identify their likes, dislikes, and future visions of the community. As a result of their interaction, the following broad, categorical issues emerged:

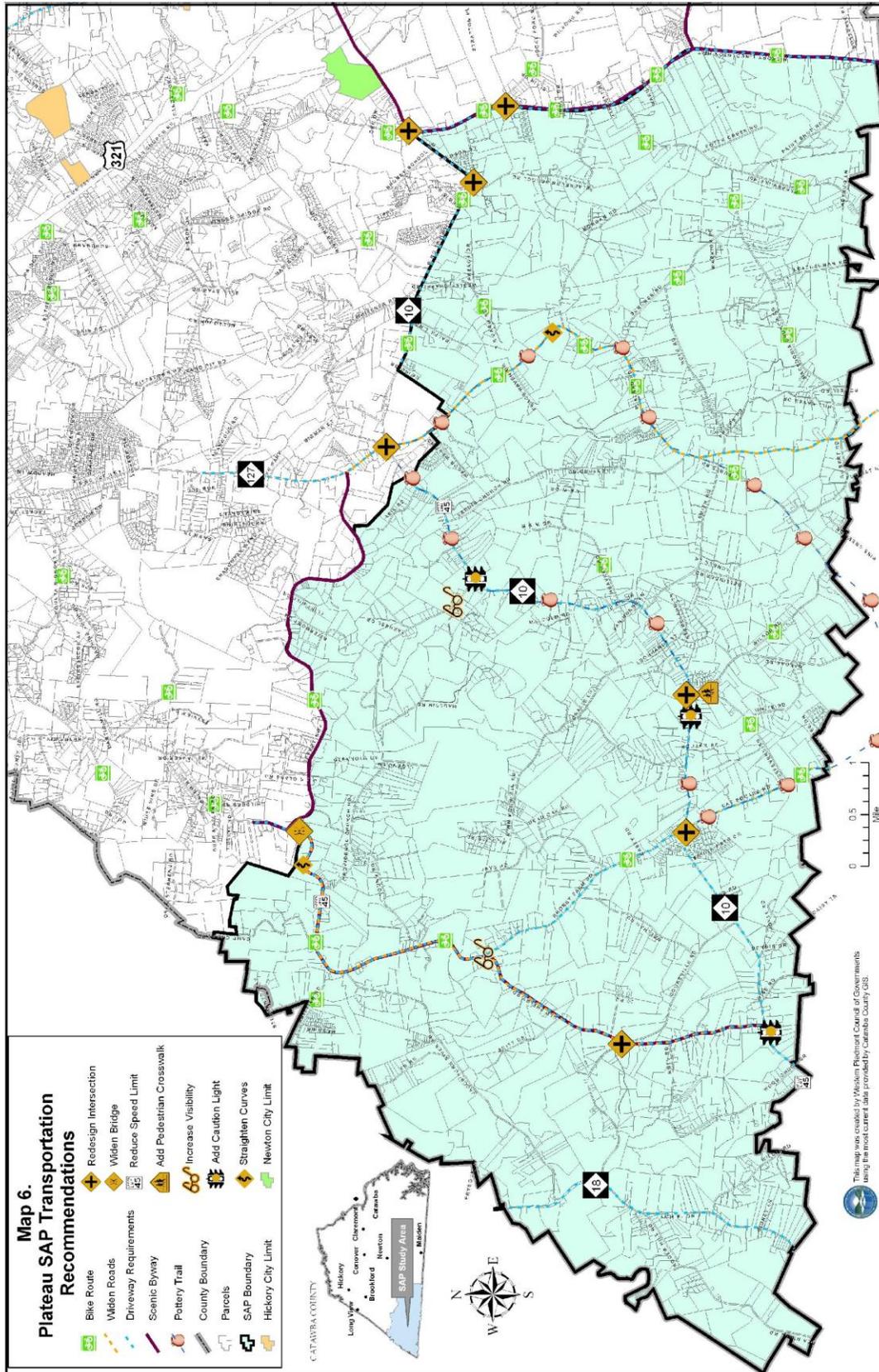
- Traffic, especially near NC Highway 10 and near all four schools
- Overcrowded schools
- Loss of farmland and open space to residential development
- Lack of recreation programs, especially for children
- Balancing the “pressure for growth” with the “existing rural quality of life”
- Lack of commercial development
- Inadequate code enforcement

Guiding Principles (*Plateau SAP*)

1. **Land Use and Community Design.** When planning development, balance growth with the community’s rural character. Encourage aesthetically pleasing designs, without negatively impacting air quality. Include pedestrian options such as sidewalks, walking trails, and bike paths. Limit commercial/industrial sites to appropriate, specific areas with the use of mixed-use development and buffers. Preserve open space, agriculture and natural resources, while developing passive recreation.



2. **Transportation.** Improve communication with NCDOT. Address safety, congestion, growth, policies, stormwater drainage, and connectivity. Increase pedestrian, bicycle, and transit opportunities.
3. **Community Facilities and Public Services.** Provide greater accommodation for school students in community-based areas – sharing facilities for recreation, etc. Maintain existing library and emergency services and plan for expansion. Create additional opportunities for passive recreation in parks and greenways, including conservation easements or greenways along the Jacobs Fork River. Take a cooperative, regional approach in planning future water and sewer infrastructure.
4. **Natural and Cultural Resources.** Preserve water quality, open space, wildlife habitat, and rural characteristics. Encourage conservation easements or greenways along the Jacobs Fork River. Create additional active/passive recreational opportunities with the use of school facilities. Maintain the existing cultural resources – local/national historic sites, pottery traditions, and craft shops.





Specific Needs Assessments as related to Parks & Recreation (Plateau SAP)

1. Pedestrian System

In general, the Plateau SAP area lacks a pedestrian system with sidewalk connections between residential areas. However, it is now policy of the Metropolitan Planning Organization (MPO) – formed by Hickory, Newton, and Conover – and the North Carolina Department of Transportation (NCDOT) to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossovers) and bicycle accommodations.

2. Bicycle System

The Plateau SAP study area does not currently have an integrated system of bicycle trails. NCDOT has funded a Bicycle Route Map and signing project that has been underway for several years. In compliance with NCDOT's policy, future road widening projects should be evaluated for their potential to provide bicycle routes.

3. Parks and Greenways

Organized recreational activities are very limited in the Plateau area at this time. A youth sports program is run locally at the Banoak Community Center, behind Banoak Elementary School. Other youth sports activities take place at the various schools in the area.

Recommendations

1. Acreage in single-family subdivisions should be required to be dedicated as common open space. Existing vegetation should be allowed to serve as a buffer.
2. Preserve green space specifically for passive recreational uses, including hiking trails, primitive camping areas, canoe access, etc.
3. All cluster subdivisions should require a 30 (thirty)-foot buffer around the perimeter.
4. The Plateau SAP supports the bicycle routes that have been submitted to NCDOT for approval. Increase pavement width to the maximum extent feasible along the designated bicycle routes for increased safety.



5. Establish partnership opportunities between the schools and other community groups to enhance the use of local facilities, such as the Banoak Community Center, for community and recreational activities.
6. Work with landowners and local conservancies to establish recreational uses on the Jacobs Fork River. Explore the possibility of developing formal public canoe access, which would alleviate landowners' concerns about trespassing, boater safety, and parking access.
7. Explore the adaptive reuse of the southern portion of the Blackburn landfill site for recreational activities, such as a golf course or putt-putt course, hiking, biking and walking trails, picnic areas, a ropes course, and an educational forest.

Startown Small Area Plan

Study Area (*Startown SAP*)

The Startown study area encompasses an approximate 20,118 acres of land (including dedicated right-of-ways). It is located south of Hickory, west of Newton and north of Maiden – between US Highway 321-Business and Zion Church Road (and its continuation, called the Hickory-Lincolnton Highway). The US Highway 321-Bypass freeway bisects the SAP, providing easy access to Interstate 85 to the south, and the Blue Ridge Mountains to the north. Significant natural features in the area include the Henry Fork and Jacobs Fork Rivers, which join near the US Highway 321-Bypass at NC Highway 10 and flow south as the South Fork of the Catawba River into Lincoln County.

Demographics/Projections (*Startown SAP*)

The Startown study area experienced moderate population growth from 1990 to 2000. The number of people residing in the area grew at a rate of 8.5%. The population in 1990 for the area was 3,755, while the 2000 Census indicated a population of 4,076, an increase of 321 persons. The growth rate for the entire County was 19.7% - more than double the rate for the Startown study area. The study area's net gain of 321 persons represented 1.37% of the County's total population increase.

The number of households grew significantly faster than the number of persons in the study area, resulting in a lower average number of persons per household.



This trend is consistent with county, state, and national trends – all indicating a smaller number of persons per household.

If job demand increases over the next ten to twenty years, as predicted in Catawba County, the population in the Startown area is projected to increase at a substantial rate. By 2015, the population of Startown could exceed 5,371 persons, which represents a 31.8% increase. The trend of fewer people per household is expected to continue here, as county-wide. Future population growth within the Startown planning area will be largely affected by the availability of public water and sewer.

Table 3.6.7 - Startown Small Area Plan: Study Area Growth 1990-2015

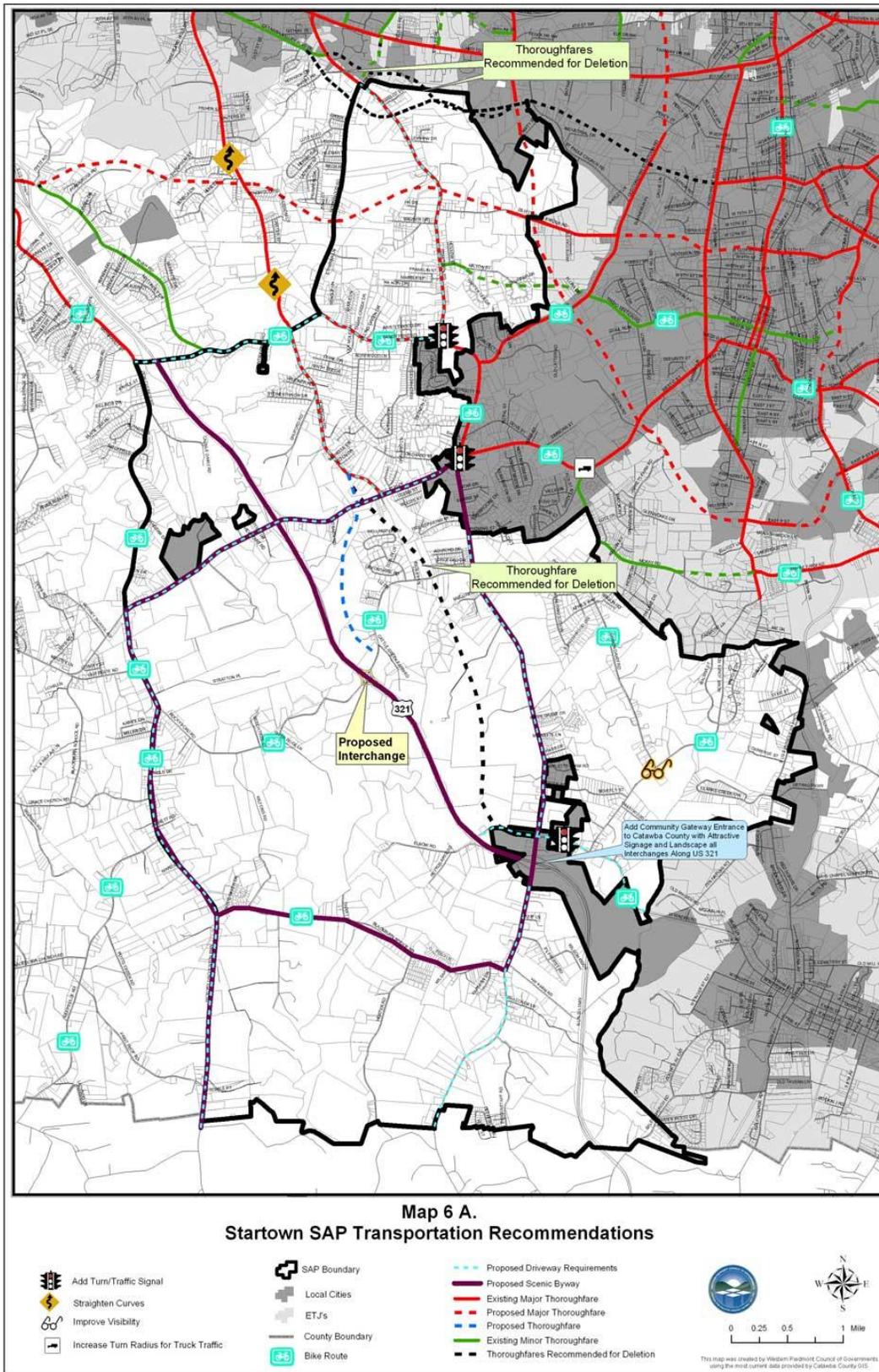
| ENTITY | 1990 | 2000 | Net Change 1990-2000 | % Increase 1990-2000 | 2005 | 2010 | 2015 | Net Change 2000-2015 | % Increase 2000-2015 |
|------------|-------|-------|-------------------------|-------------------------|-------|-------|-------|-------------------------|-------------------------|
| Persons | 3,775 | 4,076 | 321 | 8.5 | 4,529 | 4,973 | 5,371 | 1,295 | 31.8 |
| Households | 1,442 | 1,608 | 166 | 11.5 | 1,804 | 1,997 | 2,174 | 566 | 35.2 |

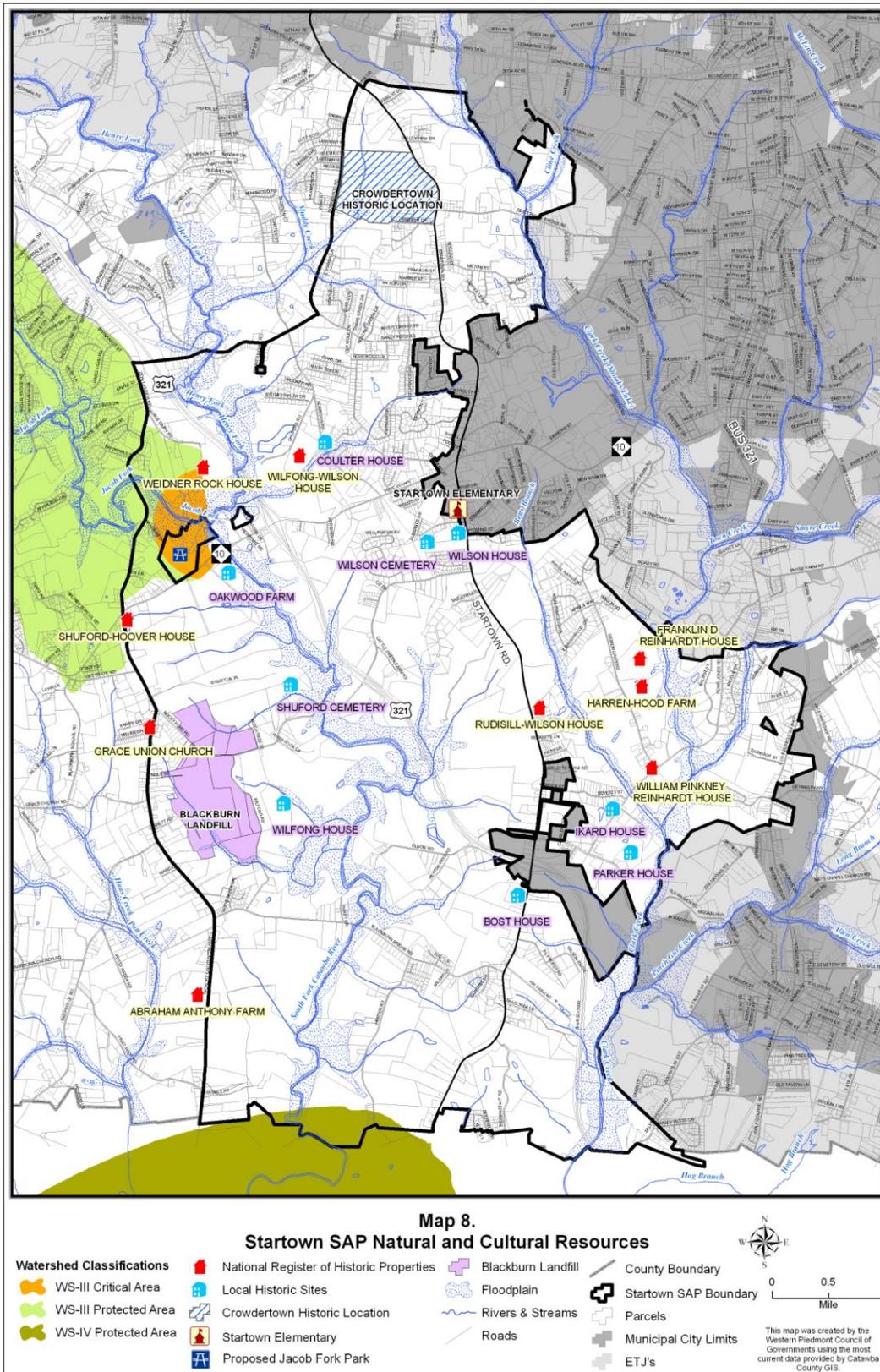
Key Issues (*Startown SAP*)

Startown is rural in nature, with vast amounts of open space and very little congestion. It continues to reflect the largely agricultural heritage of the family/neighborhood-oriented community. Traditionally a farming community, it remains very family-oriented, with good schools and protective services. Startown residents enjoy good transportation routes and public services.

Area residents of the Startown SAP met in May of 2004 and participated in small group discussions to identify their likes, dislikes, and future visions of the community. As a result of their discussions, the following broad, categorical issues emerged and later comprised their guiding principles:

- Traffic, especially on Startown Road
- Fear of annexation
- Overcrowded schools
- Unnecessary expansion/extension of highways
- Loss of farmland and open space
- Balancing “growth” with rural qualities
- Commercial development







Guiding Principles (*Startown SAP*)

- 1. Land Use and Community Design.** Realizing that some portions of the Startown study area may be annexed by surrounding municipalities, residential and commercial growth should be balanced with the rural character of the community – encouraging aesthetically pleasing, affordable housing with the preservation of air quality, sidewalks, trails, and bike paths. Open space, farmlands, and natural resources should be protected and more passive recreation should be developed.
- 2. Transportation.** Improve communication with NCDOT. Address safety, congestion, growth, policies, stormwater drainage, and connectivity. Increase pedestrian, bicycle, and transit opportunities and investigate a passenger rail connection.
- 3. Community Facilities and Public Services.** Provide greater accommodation for school students in community-based, neighborhood areas – sharing facilities for recreation, etc. Maintain existing library and emergency services and plan for expansion. Create additional opportunities for active and passive recreation for all population segments in parks and greenways, including conservation easements or greenways along the Henry and Jacobs Fork Rivers and South Fork of the Catawba River.
- 4. Natural and Cultural Resources.** Preserve water quality, open space, wildlife habitat, and rural characteristics. Encourage conservation easements or greenways along the Henry and Jacobs Fork Rivers and the South Fork of the Catawba River. Create additional passive recreational opportunities, supplemented by the use of school facilities. Preserve local and national historic properties.

Specific Needs Assessments as related to Parks & Recreation (*Startown SAP*)

- 1. Pedestrian System**

Presently, Catawba County does not require sidewalk construction in new developments. In general, the Startown SAP area lacks a pedestrian system with sidewalk connections between residential areas. However, it is now the policy of the Metropolitan Planning Organization (MPO) – formed by Hickory, Newton, and Conover – and the North Carolina Department of Transportation (NCDOT) to evaluate any new road construction project for potential pedestrian needs (i.e., sidewalks and crossovers) and bicycle accommodations.



2. Bicycle System

The Startown SAP study area does not currently have an integrated system of bicycle trails. NCDOT has funded a Bicycle Route Map and signing project that has been underway since the summer of 2001 and was expected to be completed in 2006.

Recommendations (*Startown SAP*)

1. Provide common open space in residential subdivisions that is easily accessible and usable for recreation.
2. Preserve green space specifically for passive recreational uses, including hiking trails, primitive camping areas, canoe access, etc.
3. Work with landowners and local conservancies to establish passive recreational uses and/or boating options on the South Fork River.
4. The Startown SAP supports the bicycle routes recommended by the Catawba County Bicycle Mapping Committee, which has been submitted to NCDOT for approval. Increase pavement width to the maximum extent feasible along bicycle routes.
5. Establish partnership opportunities between the schools and other community groups to enhance the use of local facilities for community and recreational activities.
6. Explore the adaptive reuse of the southern portion of the Blackburn landfill site for recreational activities, such as a golf course or putt-putt course, hiking, biking and walking trails, picnic areas, a ropes course, and an educational forest.

3.7 LAKE NORMAN BIKE ROUTE (LNBR)

The Lake Norman Bike route is a regional bicycle system encompassing Lake Norman in the Southern Piedmont area of North Carolina. In addition to providing a continuous spine around Lake Norman, the LNBR also comprises a network of bicycling excursion routes throughout the Lake area. The four-county Lake Norman Bike Route is similar to other regional routes already designated by the North Carolina Department of Transportation (NCDOT) Division of Bicycle and Pedestrian Transportation. These regional and cross-state routes generally parallel the major highways, but offer a safer, less traveled alternative than the busy, major roads. The Unifour Planning Organization, of which Catawba



County is a member, endorsed the LNBR in September 2006. (See Appendix: Attachment 3 – Lake Norman RPO Bike Map)

3.8 DEVELOPMENT AGREEMENT FOR KEY HARBOR AND CRESCENT RESOURCES PROJECTS

As part of a development agreement executed in April 2007 between Catawba County, Key Harbor, LLC and Crescent Resources, LLC for the rezoning of properties in the Sherrills Ford community, specific recreational amenities were negotiated. Following is a listing of the recreation opportunities being made available through the development agreement:

- A paved bicycle path will be constructed along the northern side of Island Point Road extending from the intersection of Island Point Road and Sherrill's Ford Road to the Key Harbor development
- A 22-acre site is being acquired by the developer of Key Harbor and will be conveyed to the Sherrills Ford Optimist Club to expand their existing park facility
- Conveyance of approximately 600 acres to the County for the development of a passive park at Mountain Creek on Lake Norman, subject to successfully obtaining a Clean Water Management Trust Fund grant. If this grant or other grants are not secured, a minimum of 300 acres will be conveyed to the County for a future park site.
- Public sidewalks will be constructed in the Key Harbor development on at least one side of the streets and will connect to the Island Point Road bicycle path.
- A pedestrian and bicycle network will be constructed in the Crescent village project with linkages to connect the buildings and various uses. An emphasis will be placed upon pedestrian accommodations to maximize the utilization of the lakefront by including such amenities as public art display, water features and public assembly. Bicycle parking is to be provided at the business locations, library and public service facilities.
- Public open space areas will be provided in the Crescent village project with a combination of active and passive recreation areas, trails, pathways, and other amenities. Trails are to be constructed behind the



proposed school site to connect to the residential development and provide connection from the waterfront area to the retail on the north side of Hwy. 150.

3.9 DUKE ENERGY COMPREHENSIVE RELICENSING AGREEMENT

Catawba County participated in Duke Energy's stakeholder process for the FERC relicensing of its hydropower dam facilities on the Catawba River. As part of this process, a comprehensive relicensing agreement was negotiated which included recreational amenities for water-related access and activities. Following is a list of the public amenities included in the relicensing agreement:

- Swim areas on Lake Hickory
- Canoe/kayak access with picnic sites and trails at a new access site on Lake Hickory
- Picnic facilities, bank fishing and trails at the existing Oxford access site
- Public fishing area at the Oxford tailrace
- Mid-point canoe/kayak access point on Lookout Shoals Lake
- Financial support for a 1.5 mile walking/hiking trail along the Catawba River extending eastward from Riverbend Park
- Public fishing area at Lookout Shoals tailrace
- Trails along Lyle Creek from Hunsucker Park to Lake Norman
- Financial support for the acquisition of the Mountain Creek tract for a new passive recreation park
- Picnic facilities, bank fishing and trails at a new access site on Lake Norman

See Appendix: Map 13 – Duke Energy Comprehensive Relicensing Agreement Recreation Offerings



3.10 CATAWBA COUNTY PARKS ENERGY AND RESOURCE CONSERVATION GUIDELINES

Catawba County Parks Division will begin implementing an Energy and Resource Conservation Plan to coincide with the County's efforts to become more environmentally friendly and responsible. Their efforts will include goals and actions that promote saving energy, preserving natural resources, and reducing pollution and waste. The purpose and goals of this plan will be to reduce waste output, conserve natural resources, and reduce or eliminate pollutants from the environment either directly or indirectly, by utilizing sound conservation and recycling practices and proactive land and habitat management. Preservation of Catawba County's natural heritage through education and conservation while providing quality passive recreation is the primary mission of Catawba County Parks.

Plan Recommendations

1. Eliminate the use of compressed sodium floodlights in our parking areas. Currently six floodlights illuminate the upper parking area at Riverbend Park. They come on at dusk and shut off at dawn. Because the park is closed during the time that the lights are on, they are of no beneficial use to patrons or park staff. In addition, because they are compressed sodium lights, they adversely affect the photoperiodic life cycles of all plant life in the areas. Security lighting should be replaced with motion sensing lights located on all structures and building entranceways for security purposes.
Implementation – Disconnect existing lights under contract with Duke Energy and replace with motion sensing floodlights on all park building entrances. Replacement of these fixtures and lighting will save energy and maintain security.
2. Utilize indoor fluorescent lighting whenever possible to save energy.
Implementation – The parks have already converted all existing indoor lighting to fluorescent and will continue to do so in the future facilities. Series of lighting fixtures have been separated so that only fixtures that are needed can be used rather than operating all fixtures automatically. Ambient light has been utilized in most all work areas by the use of strategically placed windows and blinds. Restrooms utilize architectural glass block for ambient light sources.
3. Utilize solar powered spotlighting to enhance roadside signage for patrons. The use of solar powered lights would eliminate the need to run electrical power lines to the site and increase awareness of the park's entrance.



- Implementation* – Have Catawba County Maintenance install solar lighting fixtures at all facility entrance signs.
4. Utilize motion-censored lighting and exhaust fan controls in restroom facilities.
Implementation - Utilize motion-sensored lighting and exhaust fan controls in restrooms. Catawba County Maintenance would install motion-censored lighting in all current and future restroom facilities. This would eliminate having to depend on patrons to make sure that the lights and exhaust fans are turned off as they exit the restrooms.
 5. Utilize programmable thermostats in all buildings. Programmable thermostats would enable park staff to maintain a comfortable and energy efficient air temperature during operational hours. This would also maximize energy efficiency while the structures are not in use.
Implementation - Catawba County Maintenance would install programmable thermostats in all current and future facilities.
 6. Request a mobile Recycling Center to be available at each park for the community to have a depository for cardboard, magazines, newspapers, glass, plastic, and aluminum. This will allow the parks to become a model for the community to raise awareness of the importance of recycling and to have convenient access to participate in the process. Most patrons of our parks are very environmentally conscious and this will be a convenience for them. This will greatly improve our existing efforts. Educational kiosks will be placed in this area and will enhance our educational programming.
Implementation - Catawba County Parks Manager has contacted Amanda Kain with the Utilities and Engineering Department about having a mobile unit placed at each facility. Amanda has stated that grants are available and she will seek these opportunities out.
 7. Utilize recycled paper products in our restrooms and for cleaning purposes. Toilet paper is the most used commodity in our facilities and it would be a great benefit to the environment to use paper products made exclusively from recycled materials.
Implementation: The parks already use 100% recycled paper products in our facilities. Efforts will be made to evaluate all bulk materials that we use for post consumer recycled material content.
 8. Utilize picnic tables and benches made of recycled materials instead of wood. These products last longer and are not as susceptible to vandalism as their wooden counterparts. It also helps patrons to have tangible evidence of the benefits of recycling. These benches and tables are made by the NC Department of Corrections and are now the standard by the NC



Park System. Products manufactured by Corrections Enterprises are available to local government agencies with out sales tax or freight charges. Products also include office furniture and miscellaneous supplies.

Implementation: Utilize picnic tables and benches made of recycled material instead of wood at all future facilities. The parks currently have 14 picnic tables, 8 benches, 5 dog waste stations, and 15 trash can frames made from recycled plastic materials and all future benches and tables will be made of recycled materials and existing wooden items will be replaced as needed. We will also use recycled plastic material for trail marker posts instead of wooden posts in future facilities.

9. Limit use of asphalt parking areas when feasible and define parking spaces with recycled plastic bumper stops. Asphalt parking areas are huge islands of non-porous earth that increase erosion and pollution in the immediate areas; by limiting its use, the parks can limit runoff and better control drainage. Using bumper stops would define spaces where patrons would park avoiding confusion and allowing for maximum use of space.

Implementation: Limit use of asphalt when feasible and define parking spaces with recycled plastic bumper stops, prefabricated speed bumps, and bollards. All future park facilities will be evaluated as to the feasibility of using gravel-parking areas instead of asphalt. Gravel parking surfaces can be easily utilized in overflow and bus parking areas. Grade and compaction must continue to meet ADA standards. Concrete and asphalt will be used in turn out traffic patterns and areas subject to erosion. Gravel surface parking is utilized at Riverbend Park for overflow parking and areas that are prone to surface runoff near the river with over 65 spaces in use.

10. Provide recycling bins beside our regular trash bins throughout the parks major picnic areas to encourage the recycling of cans and plastic bottles.

Implementation: The parks will purchase individual recycling containers for each of the parks picnic shelters and heavily used picnic areas.

11. Recover rainwater to irrigate educational gardens, hanging baskets and landscaping around the primary park structures. By using gutter collection barrels to catch the rain and installing 2 to 3 acre ponds and lakes, we can decrease our dependence on using water from our wells and treated water sources. It will also be used as an educational model for patrons to utilize at their own homes.

Implementation: The parks will purchase and install the rainwater recovery systems at each park. Educational kiosks will also be installed at each site.



12. Plant deciduous trees on the south side of buildings. This allows the building to have cool shade in summer and warming sunlight in winter. The Parks already employ this practice and will continue to do so in future facilities.
13. Minimize the clearing of trees for new construction. The fewer trees that are removed, the less impact the building will have on the surrounding environment and its wildlife habitats. Trees and native vegetation also improve water quality and minimize the effects of erosion. The Parks already employ this practice and will continue to do so in future facilities. When habitats have been impacted, efforts will be made to improve the remaining habitat areas.
14. Utilize steel framework and metal roofing in future construction and remodeling. Using steel eliminates dependence on wood and provides for a much stronger structure. Metal roofing replaces asphalt shingles that are petroleum based and wind up in our landfills when removed. Metal construction products can be recycled as scrap metal. Properly installed metal roofing has a very long effective life and when properly installed can offer much higher insulation value with heat reflective properties.
Implementation: Future facilities will be constructed in this manner as well as other accepted LEED (Leadership in Energy and Environmental Design) certified practices.
15. Create our own compost and educational composting facility. Currently, we use grass clippings, shredded leaves, shredded paper, and fruit/vegetable scraps to fertilize landscaping plants, reducing the need to use chemical fertilizers that can harm the environment. Shredded office documents that have been printed utilizing vegetable oil inks are easily and beneficially added to compost mixtures. Traditional organic yard waste should be composted on site and this practice encouraged throughout the community to help minimize the handling and transportation of these materials. Transportation to recycling or composting facilities consumes fuel and creates air pollution and in some cases when improperly disposed, it can occupy valuable landfill space.
Implementation: Create educational composting facilities at each park to demonstrate the recycling of yard waste and other compostable organic products. Educational kiosk and material will be available at each site.
16. Plant gardens to reduce soil erosion and reduce air pollution. Native and non-invasive exotic flower gardens not only attract birds and butterflies, their root systems act as a stronghold on slopes to prevent the soil from being washed away in heavy rain. The parks already employ this practice on hillsides and will do so in future facilities. Sustainable landscaping



- practices are utilized to eliminate the need for synthetic fertilizers and pesticides.
17. Limit use and existence of invasive plants. By not planting invasive plants, the parks allow the native flora and fauna to flourish. Existing invasive species should either be controlled or removed if possible.
Implementation: Currently we partner with CVCC, and Lenoir-Rhyne's biology programs to provide educational experiences that involve projects that help us to remove invasive species from our managed habitat areas. Invasive plant species are able to out compete native vegetation and destroy native natural habitats and communities. At Riverbend Park, we are removing the non-native monoculture stands of Loblolly Pine. There are a total of 200 acres in pine plantation. Every five years approximately 40 acres will be timbered leaving all native trees and vegetation in place. Two years ago, the first 40 acres were timbered and this generated over \$125,000 of revenue for future park development and preservation efforts.
 18. Provide water, seed, and housing for birds. Attracting more insect consuming birds to the parks, decreases the need for pesticide use, which is a major pollutant to the water and soil. These amenities are educational tools and provide patrons with an opportunity for positive environmental interaction. These practices are in place.
 19. Hold semi-annual Litter-sweeps to keep parks and adjoining lands and waterways clean. Currently we have over 40 volunteers in each event and collaborate with Duke Energy and CVCC. Catawba County Parks currently participates in these events and will continue to participate in the future. Over 70 bags of trash and 15 bags of recyclables are recovered at each event on adjoining properties and along the Catawba River.
 20. Offer events to increase community participation, education, and awareness about nature, recycling, sustainability, and energy conservation. By holding educational events, the parks staff increases the patron's awareness of our natural heritage and the importance of doing everything we can to protect it.
 21. Study the feasibility and implement all practical LEED (Leadership in Energy and Environmental Design) certification practices on existing park facilities and all new construction. LEED design or "Green Construction" is a logical and practical approach to site design and construction. Many elements are obvious and include materials and design focusing on energy efficiency. Other elements are more complex and address details such as drainage, runoff and open space. *Implementation:* We will acquire LEED certification and design manuals for evaluation. From these manuals, we will create a practical plan to implement all practical and



reasonable practices for renovation of existing facilities and new construction.

The Catawba County Parks Energy and Resource Conservation Plan will be used and reviewed on a regular basis. The Parks Division has been utilizing a number of these practices for years and manages all property with accepted conservation and preservation practices. With additional staffing and resources, our methods will become more effective. Through educational opportunities for our patrons and leading by example, we will encourage citizens to become more proactive in positive environmental practices. Catawba County Parks is an effective and appropriate platform for this initiative.

- End of Section -