

## **SECTION 6 GOALS AND RECOMMENDATIONS**

### **6.1 INTRODUCTION**

As identified in the inventory portion of this plan (*Section 4: Existing Park Facilities*), there are three separate, existing recreational facilities owned and operated by Catawba County, Riverbend Park, Bakers Mountain Park and St. Stephens Community Park. Each of these parks is unique and offer many opportunities for park users. This Comprehensive Parks Master Plan serves as a map for the future of recreation facilities for the Catawba County Parks Division, incorporating recommendations to accomplish the objectives set forth in the Master Plan. These recommendations are divided into the following categories:

- Roles of the Catawba County Parks;
- Roles of other Recreation Providers;
- Economic and Societal Benefits of Parks; and
- Park Proposals and Recommendations.

### **6.2 ROLES OF CATAWBA COUNTY PROVIDERS**

Catawba County offers a variety of passive and special-facility recreation. It is the mission of Catawba County Parks to preserve Catawba County's unique and diverse natural heritage through education and conservation while providing quality passive recreation and wellness opportunities.

Meeting the recreational needs of all users requires cooperation between various agencies and the private sector. From a practical standpoint, no one group can provide all the proposed improvements/facilities for the future. As mentioned in Section 5, Recreation Needs Assessment, the local municipalities and private sector provide a wealth of active recreation such as athletic programming, and facilities within the County. Therefore, Catawba County Parks continues to focus on providing passive recreation for wellness, the outdoor experience, education, and conservation opportunities.

Catawba County Parks should maintain existing relationships with the Catawba County Historical Association, Catawba Valley Heritage Alliance, Cooperative Extension, area educational institutions, and other public/private sectors, as well as create new partnerships to achieve future objectives. Communication with these organizations is important to provide more recreational choices while avoiding activity duplication or event scheduling conflicts. Local municipalities, school institutions, and the County may share many of these programs and facilities. In addition to partnering with other agencies, Catawba County should

continue to seek additional organizations that have common interests in recreational programs and facilities.

Parks should also continue to work with the Carolina Thread Trail to develop pedestrian corridors to connect existing park facilities, public schools, and other destination points where feasible. In addition to being important to the success of the County's Parks program, these corridors foster safety and preservation of the environment while improving quality of life and wellness for all participants. Planning and Recreation Departments of Catawba County and its municipalities should meet periodically to communicate existing and planned projects to promote regional continuity.



## **6.3 ROLES OF OTHER RECREATION PROVIDERS**

### **Municipalities**

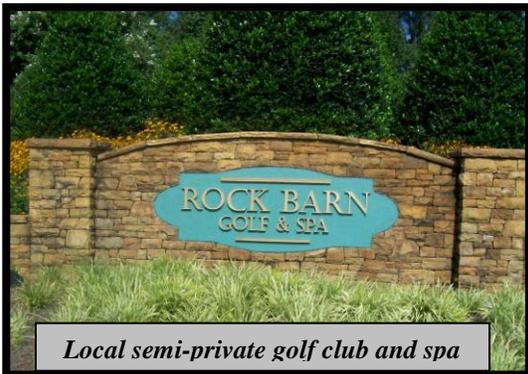
Municipalities are invested in active recreation and athletic programming, while Catawba County Parks is the primary provider of passive recreation and educational programming for this area. The Parks and the municipalities have been coordinating with each other to develop partnerships. They should continue to work together through the Unifour Recreation and Open Space Task Force to provide recreational opportunities. Each agency can, and should, play a role in the all-inclusive arrangement of services that make up the area's park system. The key to an ongoing relationship between the municipalities and Catawba County is to maintain communication among staff and elected officials – thus assuring that the common goals are achieved.

### **School Systems and Educational Institutions**

The school systems within Catawba County provide recreation facilities. However, there are no joint-use agreements established between the County Parks Division or other active recreation providers. The school systems recognize the educational opportunities parks offer to the system. School field trips to the Parks are beneficial as they provide enrichment for environmental education through hands-on learning experiences. The partnership between the school systems and Parks should continue to be nurtured to provide diverse

education opportunities. Increasing park operating hours will help accommodate school field trip schedules. This will result in the least possible expenditure(s) of public funds by providing hands-on educational opportunities within the County rather than traveling outside the County. Lenoir-Rhyne University and Catawba Valley Community College are currently partnering with Catawba County Parks to provide advanced environmental interpretative education. More detail is provided below.

## **Private Sector**



*Local semi-private golf club and spa*

The private sector provides recreational amenities and programs such as golf courses, tennis clubs, and outdoor adventure companies. The Parks Division should develop partnerships and be active in generating opportunities to promote and share wellness, educational recreational activities. Potential partnership opportunities could be developed in the future with local medical and health providers, and other private organizations.

## **Private Residential Developers**



*Pedestrian sidewalk*

The private sector is an important component for the Parks in providing resources and opportunities for the parks. Developers can assist Catawba County by the dedication, construction, reservation of future park sites, open spaces and greenway corridors during the development process. The Unified Development Ordinance (UDO) also provides a mechanism for Developers to fund land for parks, sidewalks, trails, greenways, recreation and open space purposes. All major residential conventional subdivisions must either dedicate on-site open space for use by the property owners within the development or pay a fee in-lieu of on-site open space dedication. The County applies fee in-lieu funds to future park sites, open space, or park improvements for the region.



*Area development*

Currently, the Catawba County Unified Development Ordinance (UDO) requires any subdivision of 25 lots or more - which are ½ acre or less in size - to construct sidewalks on one side of the street. Although the County should be flexible with development opportunities, it should require the developer to provide right-of-ways or easements for pedestrian facilities. All development approved by the County should include the accommodation of pedestrians by the developer(s). The Catawba County Comprehensive Parks Master Plan delineates future greenway corridors in the County. As development occurs along these future greenway corridors, it is recommended that the County require the developer/property owner to dedicate a public easement for the greenway facility along the subject property.

## **Partnership Opportunities**

A good partnership results in greater productivity, better services and reaches a much larger audience than would benefit without the partnership. Partnerships also foster efficiency while reducing redundancy in services. The result is more quality services available and reduced costs. Catawba County Parks has a potential to engage in mutually beneficial partnerships with a number of civic and public organizations in the area that share a similar mission.



Groups such as the Boy Scouts and Girl Scouts continue to assist the Parks in developing new amenities and improvements at the parks as well as providing these organizations opportunities for youth programming. The Parks should continue to develop these partnerships and actively generate more opportunities to share recreational activities. Potential partnership opportunities could be developed in the future with local non-profits, and other private organizations such as outdoor clubs, garden clubs and environmental preservation groups including the Catawba Valley Heritage Alliance, Foothills Land Conservancy, Catawba Lands Conservancy, Catawba Valley Paddle Trails Association, Foothills Bird Club, NC Birding Trail, and others.

The following is a list of prospective and existing partners along with a brief description of Catawba County's current relationship and future opportunities for partnership growth.

## Catawba County Schools

### Currently:

Catawba County Parks offers environmental and interpretive educational programs by appointment. This allows staff to create presentations that are directly related to each individual's course of study. Several staff members also volunteer their time to visit schools as guest speakers. School systems in the County also use the Parks for Cross Country training.

### Future Opportunities:



Depending on staffing, more environmental and interpretive educational programs could be offered at the schools and parks. Studying in the parks has the side-effect of providing students the wellness benefits of the outdoors and associated activity. Staff could also be trained to provide onsite educational historical interpretation since the County assists in the

operation of Murray's Mill and Bunker Hill Covered Bridge. Focus on educating students about the natural and historic heritage of Catawba County should be a priority and geared toward the general course of study. Cross-country events could be hosted by the parks. Future school sites should be planned in order to maximize opportunities for both passive and active recreation activities in partnership with non-profit organizations such as the Optimists and YMCA.

## YMCA of Catawba Valley

### Currently:

The branches of the YMCA of Catawba Valley use park facilities for summer camp programs.

### Future Opportunities:

The YMCA and Parks should engage in joint marketing since each share a common theme of providing supervised family oriented recreation opportunities. Catawba County Parks offers passive recreation opportunities that the YMCA does not provide, while the YMCA offers active recreation which the County does not provide. The YMCA and County Parks Divisions can work together to make patrons aware of the opportunities offered by each organization.



## Cooperative Extension

### **Currently:**

The Parks have partnered with Cooperative Extension through the Youth Council and 4-H groups for educational programming.

### **Future Opportunities:**

Additional events could be developed that would not only benefit the group members, but also get the public involved for their educational benefit.

## Duke Energy

### **Currently:**

Catawba County recently participated in the Federal Energy Regulatory Commission (FERC) relicensing process for Duke Energy, where Duke Energy agreed to develop several sites for recreational use on the lakes. In addition, Duke Energy currently owns several boat access points on the Catawba River. (See *Map 9: Duke Energy FERC Relicensing Recreation Improvements*)

### **Future Opportunities:**

At such time that the license is renewed and any offers are submitted by Duke Energy, the County will study the feasibility of a partnership in operating passive, environmentally friendly parks at some of the locations. The County will contact Duke Energy to coordinate any amenities associated with its FERC relicensing, with recommendations associated with the plan. This could include the gameland properties or connectivity facilities.

## Optimist/Recreation Organizations

### **Currently:**

There is no current partnership.

### **Future Opportunities:**

When future park sites are identified or land has been donated to the County it should be surveyed first for the natural heritage, preservation, and passive park aspects of the site. If a site is deemed impracticable for preservation and/or use as a County park, possible active recreation use by the Optimists or other active recreation providers should be explored. When there is a need and the site can support the activities, partnership opportunities should be explored.

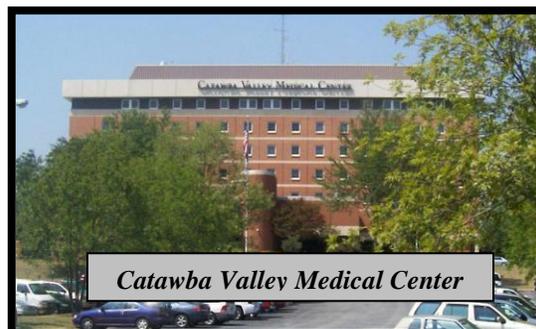
## Healthcare – Catawba Valley Medical Center, Frye Regional

### Currently:

There is no current partnership.

### Future Opportunities:

Efforts should be made to make healthcare providers aware of the recreational opportunities provided by Catawba County Parks. Certain patients may benefit from the therapeutic and physical attributes provided by natural settings.



## Catawba County Public Health

### Currently:

The Planning and Parks Department has been involved in the Eat Smart Move More (ESMM) initiative to inform leaders on the potential of the parks in getting people to move more.

### Future Opportunities:

Continue to educate leaders and also ESMM participants through marketing on the availability of the parks and the enjoyment of moving more in an outdoor park setting.

## Lenoir- Rhyne University

### Currently:

Lenoir-Rhyne's Biology and Science Environmental Programs have both used Riverbend Park and Bakers Mountain Park for educational purposes. Classes, labs, internships and research projects have been conducted at the Parks.

### Future Opportunities:

Due to the natural heritage and environmental significance of Catawba County Parks, these sites should be fully utilized as outdoor laboratories and classrooms that are conveniently located and available for educational enrichment of the students. Efforts should be made to partner with Lenoir-Rhyne to determine how to create the most accessible and beneficial partnership. Park/Planning and college staff should meet and prepare a proposed plan of action.

## Catawba Valley Community College (CVCC)

### Currently:

CVCC's Biology Department conducts classes, labs, and environmental projects at the Parks. They also engage in civic and environmental projects such as the statewide Litter Sweep.



### Future Opportunities:

Efforts should be made to partner with CVCC to determine how to create the most accessible and beneficial partnership. Park/Planning and college staff should meet and prepare a proposed plan of action.

## Catawba Science Center

### Currently:

A limited number of events have been conducted in which staff and facilities are shared.

### Future Opportunities:



The Science Center is located in Hickory's SALT (Sciences, Art, Literature - Together) Block in the Arts & Science Center of Catawba Valley and offers exhibits and educational opportunities that relate to nature and the environment. Efforts should be made to partner with Catawba Science Center to determine how to create the most accessible and beneficial partnership. Park and Science Center staff should meet and prepare a proposed plan of action.

## Local Municipalities

### Currently:

Catawba County joined with other counties and municipalities in the Unifour region to form the Unifour Recreation and Open Space Task Force. This Task Force is charged with implementing goals of the Greater Hickory Recreation/Tourism Plan and is facilitated by Western Piedmont Council of Governments. A second committee, the Greenway Trails Advisory Committee (GTAC), was formed to implement the Carolina Thread Trail Plan within Catawba County.

**Future Opportunities:**

The planning and recreation departments of the municipalities within the County should continue to meet periodically to discuss development and recreation projects that are planned or underway. The County will work with local municipalities to develop detailed plans which connect the recreational



opportunities shown in the Greater Hickory Recreation/Tourism Plan and the Carolina Thread Trail Plan. Discussing upcoming project opportunities will help ensure that redundancy in services is prevented and that all opportunities for partnerships and connectivity are being utilized.

**North Carolina Department of Transportation (NCDOT)**

**Currently:**

The Western Piedmont Bicycle Plan is currently being created for the Unifour by the Western Piedmont Council of Governments (WPCOG) to identify needed bicycle/pedestrian improvements to existing roadways. Input sessions were held in each of the Unifour counties. The final plan is expected to be complete mid 2015.

**Future Opportunities:**

In addition to implementing the WPCOG Bicycle plan after its completion, a partnership should be created with NCDOT for development of the I-40 rest areas. Aspects of this partnership will include the development of informational kiosks that highlight the high quality of life in Catawba County. Information would include recreation opportunities, history, and tourism elements. Potentially the I-40 rest areas would be incorporated into a proposed greenway that links to the Bunker Hill Covered Bridge Historical Site. There is a high potential for marketing and economic possibilities in promoting Catawba County at the rest areas since over 700,000 visitors stop at these sites annually. The County should communicate with NCDOT on the possibility of including bicycle plan requests in the budgeting process – prior to road construction or resurfacing.

## Catawba Valley Visitors Bureau

### Currently:

Catawba County Parks has worked with the Visitors Bureau by providing them with photographs of natural heritage and historical site subjects. Brochures about the parks have been distributed to them as well.

### Future Opportunities:

Work with the Visitors Bureau's staff to develop a marketing strategy that highlights recreation opportunities and quality of life attributes that relate to the natural heritage of Catawba County. Partnering with the Visitors Bureau will be essential in developing a diverse presence at the Interstate 40 rest areas.

## Catawba County Historical Association

### Currently:

Catawba County is working with Catawba County Historical Association on grant opportunities to expand/improve Bunker Hill Covered Bridge Park. The Historical Association, County, and Carolina Thread Trail (CTT) volunteers have been improving the Murray's Mill trail network to connect into the CTT system.



### Future Opportunities:

Bunker Hill Covered Bridge and Murray's Mill historical sites offer opportunities for passive recreation. Since both sites contain significant natural heritage areas, and education and preservation are also key components of the missions of the Catawba County Historical

Association and Catawba County Parks Division, partnering is appropriate. Both of these sites are located in areas that have very limited recreation opportunities. By adding passive recreation components and staffing to these sites, the public will have access to a far greater venue. Security, education, and preservation efforts, both environmentally and historically, can be facilitated by a strong partnership.

## **Civic Non-Profits**

### **Currently:**

Catawba County Parks works with civic non-profits in a variety of ways that include providing educational and volunteerism opportunities.

### **Future Opportunities:**

Efforts should be made to meet with the following Civic Non-Profits and others to discuss the potential of mutually beneficial associations.

- Boy Scouts of America and Girl Scouts of America;
- Hickory Metro Convention and Visitors Bureau;
- Chamber of Commerce Visitor's Center;
- Foothills Bird Club;
- Catawba Valley Heritage Alliance;
- Catawba Valley Outing Club;
- NC Garden Club, Local Affiliates;
- Foothills Conservancy of North Carolina;
- Catawba Valley Paddle Trails Association;
- NC Birding Trail, Inc.;
- Unifour Recreation and Open Space Task Force;
- Catawba Land Conservancy;
- Optimist Club; and
- Rotary Clubs.

## **6.4 ECONOMIC AND SOCIETAL BENEFITS OF PARKS**

Catawba County has traditionally relied upon an agricultural and manufacturing based economy. Within the past few years, the County has recognized the need to expand and diversify this economic base. Like many communities in America, Catawba County is at a crossroads, balancing the need of economic growth with the need to provide a good quality of life for its residents. Fortunately, the two do not have to be mutually exclusive. The same amenities that attract residents can benefit a wide variety of concerns, including economic growth.

### **Society**

A strong economy, a heightened sense of community, educational opportunities, better health and a healthy environment are all attributes of a well planned and executed system of parks, trails and greenways. Open spaces offer many opportunities for people to meet and interact, strengthening the sense of

community, provide for a variety of passive recreation activities that can be shared by all members of a family, and provide a community with an ‘identity’ that can be used to promote business growth and tourism

The subsections below will look at studies which have explored parks, open space, and trails in terms of benefits relating to:

- Economic Growth;
- Health;
- Environment;
- Education; and
- Tourism.

## **Economic Benefits**

### **Economic Growth**

Research has substantiated a direct relationship between economic growth and the existence of parks and open space in communities and municipalities. Their natural beauty and recreation opportunities make a community more attractive to those looking to relocate their families or their companies.

A 2006 report for the National Parks Conservation Association showed that for every \$1 appropriated in the annual national parks budget, the national park system generates at least \$4 for state and local economies” ([Hardner, McKenney](#)).

In his 2002 book *The Rise of the Creative Class*, Richard Florida reports how the conventional wisdom in business has shifted. “People used to believe that a decrease in environmental quality was one trade-off for economic growth, but in the new economy, business leaders recognize that a good environment is ranked as the most important amenity in attracting high-technology workers—more than housing, cost of living, and good schools.” He terms this desirable trait “quality of place”. ([Florida](#))

In the July 2005 issue of *Parks for People*, a vice president at computer giant Dell Corporation in Austin, Texas observed, “People working in high-tech companies are used to there being a high quality of life in the metropolitan areas in which they live. When we at Dell go and recruit in those areas, we have to be able to demonstrate to them that the quality of life in Austin is at least comparable or they won’t come.” ([Crompton](#))

“A 2006 survey by the U.S. Fish & Wildlife Service reported on the spending habits of hunter, fishers, and wildlife watchers. More than 87 million Americans participated in the activities in 2006, and their spending totaled \$122.3 billion. Of that, \$64.1 billion was spent on sporting equipment, \$27.4 billion was trip related,

and \$20.7 billion went to other items.” ([U.S. Department of the Interior and Fish & Wildlife Service, U.S. Department of Commerce, and U.S. Census Bureau](#))

The Trust for Public Land stated, “Quality of life is a determining factor in real estate values and economic vitality. A real estate industry report calls livability “a litmus test” for determining the strength of the real estate investment market...If people want to live in a place, companies and jobs will follow.” ([The Trust for Public Land, 2006](#))

The National Park Service found, “Businesses which move to an area because of tax incentives tend to leave as soon as the incentives expired. However, businesses that move to the area because of its quality of life remain to become long term residents and tax payers.” (Economic Impacts of Trails, 2005)

According to the Triangle Greenways Council, “Business leaders are selecting sites for the relocation and expansion of industries and corporations where the quality of life is high and recreation opportunities are abundant. Increasingly, corporations are recognizing the benefits to their employees of convenient fitness and recreation facilities and are seeking greenway amenities in potential business sites.” (Triangle Greenways Council, 2005)

National Center for Bicycling and Walking announced, “Studies show that where bicycle and pedestrian tourism is fostered and promoted, and where investments are made in bicycle and pedestrian facilities, the economic impact may be even greater than only impacting the tourism industry. A thriving tourist industry, in turn, can attract and revitalize businesses, create jobs and increase public revenue.” (The National Center for Bicycling & Walking, 9/28/07)

### **Increased property values.**

Houses located near greenways and trails have been shown to sell for higher prices than houses farther away. A developer in Apex, North Carolina, was able to sell houses adjacent to a regional greenway for \$5,000 more than for houses not adjacent to the greenway. The more expensive houses on the greenway also sold more quickly than the others. The National Park Service has noted that homes adjacent to trails and greenways sell from 5% to 32% higher than comparable homes located farther away. (Triangle Greenways Council)

A property near a park is going to command a premium value—the premium greater with closer proximity to the park being a key attribute. “In 2001, as an MIT researcher, Andrew Miller investigated land values in suburban communities in north Texas. He found that homes immediately adjacent to parks were worth 22 percent more than homes 2,600 feet away from a park” ([Economics Research Associates](#)).

A 2002 study compared the value of properties bordering permanently protected forests with those near unpreserved forests in three residential subdivisions in

Grand Rapid, Michigan. Studying property sales from the late 1970s through 2000, the researcher Paul Thorsnes concluded that lots bordering permanently conserved forests sold for 19% to 35% more than lots more distant from the preserves. ([Thorsnes, Paul](#))

## **Health**

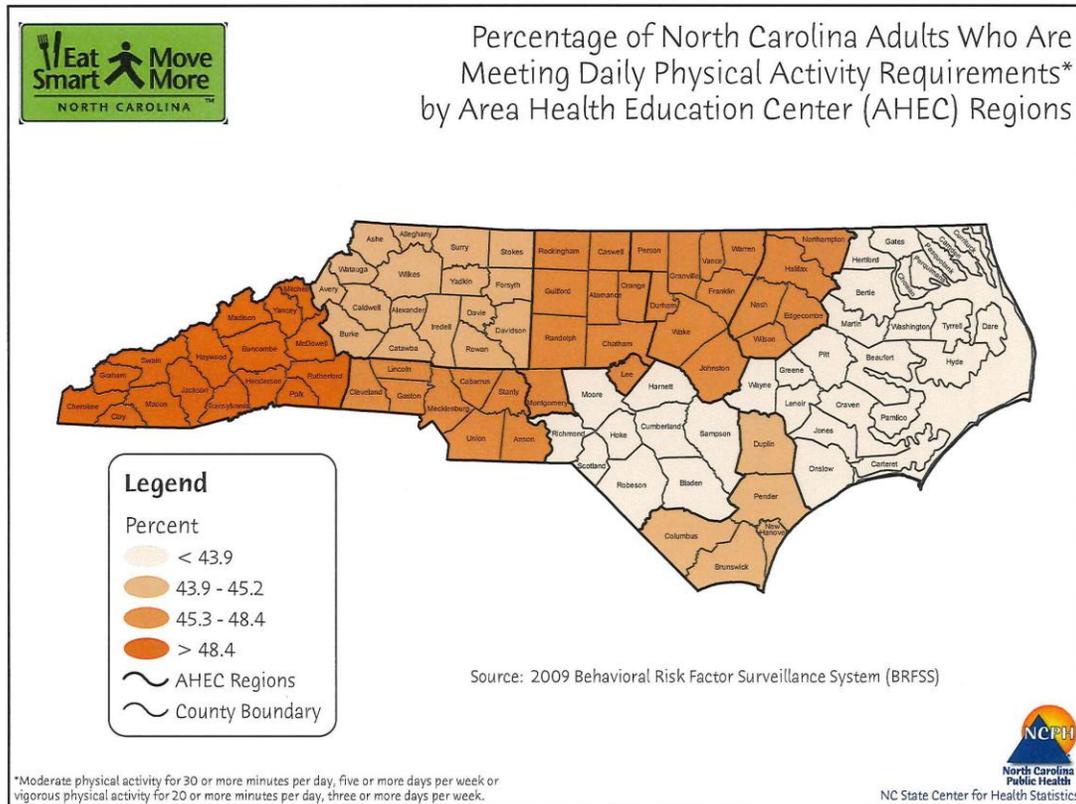
Parks, open spaces and trails provide opportunities for healthy activity. Exercise has been shown to reduce stress, improve cardiovascular health, and promote weight loss - all of which help to prevent or reduce a variety of related health problems. Improved health of a community's residents helps to decrease health care costs.

Parks are appealing venues for physical activity. Obesity and sedentary lifestyles are linked to a host of chronic diseases, including diabetes, heart disease, cancer, hypertension, arthritis, stroke, depression, and sleep disorders, which account for more than 20% of total US health care costs ([Washington DC: Institute of Medicine](#)). Projections indicate that millions of Americans will be newly diagnosed with a preventable chronic disease over the next 20 years at an estimated cost ranging from \$48 billion to \$66 billion per year ([Wang YC, McPherson K, Marsh T, Gortmaker SL, Brown M](#)). Physical activity is a proven strategy to prevent, manage, and reduce this burden, but only an estimated 50% of the US population gets enough exercise ([Haskell WL, Blair SN, Hill JO](#)). Access to outdoor space is associated with initiating and maintaining physical activity and reducing obesity, especially when that space is well maintained, safe, and accessible and offers attractive facilities and programs.

In addition to physical activity benefits, parks may promote mental health, social cohesion, and general well-being ([Annual Review Public Health](#)). As far back as the mid-19th century, Fredrick Law Olmsted, widely considered one of the founders of landscape architecture and the American Parks Movement, believed that naturalistically designed parks could counter the stress of urban living by offering a transformative environmental experience that enabled people to regain both mental and physical health ([Olmsted FL](#)). Olmsted believed intuitively that polluted city air could be "disinfected by sunlight and foliage". He also designed parks with societal inclusion in mind as a place for members of all socioeconomic strata to enjoy and build community through shared aesthetic experience. Mounting scientific evidence corroborates Olmsted's intuition. Physical activity in natural park settings may confer benefits above and beyond equivalent activity in built settings ([Thompson Coon J, Boddy K, Stein K, Whear R, Barton J, Depledge MH](#)). Proximity to parks and green space has been associated with reductions in self-reported stress, depressive symptoms, and interpersonal violence and with improved attention, self-discipline, social ties, and quality of life. ([Hartig T, Mitchell R, de Vries S, Frumkin H](#)).

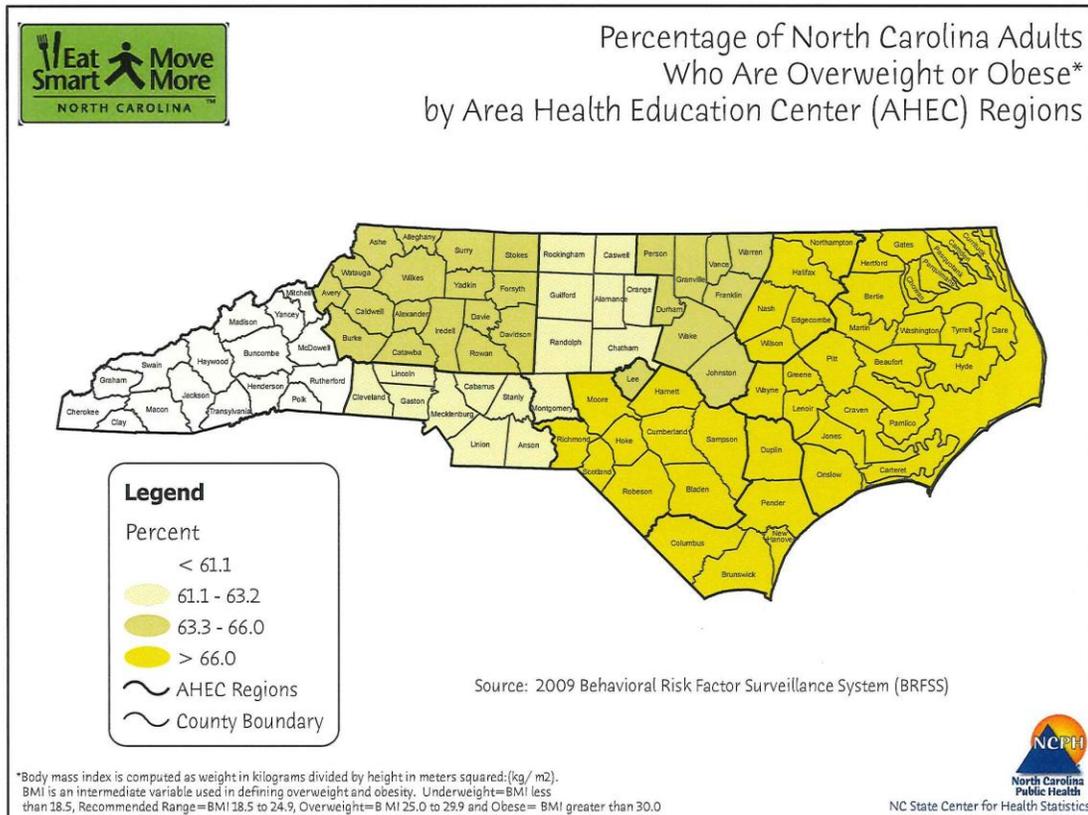
The map below shows percentages of people in NC Counties who are meeting daily physical activity requirements according to the NC State Center for Health Statistics. Catawba County has 43.9% to 45.2% people meeting the activity requirements.

**Map 6.4.1 NC Adults Meeting Daily Physical Activity Requirements**



The map below shows percentages of people who are overweight or obese in NC Counties according to the NC State Center for Health Statistics. Catawba County shows 63.3% to 66.0% of people fit into the overweight or obese categories.

**Map 6.4.2 Percentage of NC Adults Overweight or Obese**



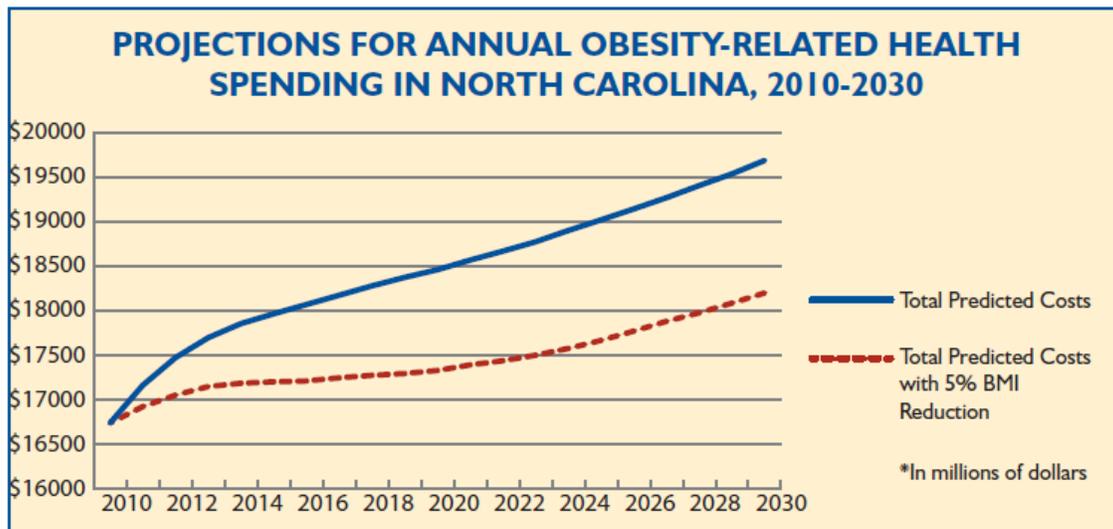
These numbers serve as a warning to all North Carolinians, because regardless of one’s individual health status, ultimately we all suffer through increased healthcare costs and lost productivity in the workplace. In fact, based on research from a January 2004 study from the Research Triangle Institute, North Carolina taxpayers pay an estimated \$2.1 billion annually for obesity related medical expenses.” (Fit Together, Retrieved 11/8/07)

**Bending the Obesity Cost Curve in North Carolina.**

The number of obese adults has grown dramatically in North Carolina over the past 15 years, and is expected to grow significantly in the next 20 years. However, by using evidence-based strategies to improve nutrition and increase physical activity in our schools, neighborhoods and work places, North Carolina could significantly reduce obesity-related diseases and health spending. (Wang YC, McPherson K, Marsh T, Gortmaker SL, Brown M)

An analysis commissioned by the Trust for America’s Health (TFAH) and the Robert Wood Johnson Foundation (RWJF) and conducted by the National Heart Forum (NHF) found that if North Carolina could reduce the average body mass index (BMI) of its residents by only 5 percent, the state could help prevent thousands of cases of type 2 diabetes, coronary heart disease and stroke, hypertension, cancer and arthritis, while saving millions of dollars. For a six-foot-tall person weighing 200 pounds, a 5 percent reduction in BMI would be the equivalent of losing roughly 10 pounds.

Chart 6.4.1 Annual Obesity-Related Health Costs



([Lancet 2011](#))

In 2011, the American Heart Association (AHA) published a review of more than 200 studies and concluded that most cardiovascular disease can be prevented or at least delayed until old age through a combination of direct medical care and community-based prevention programs and policies. ([Weintrub WS](#)) Some of the key findings included:

- Every \$1 spent on building biking trails and walking paths could offset approximately \$3 in medical expenses.
- For every \$1 spent in wellness programs, companies could save \$3.27 in medical costs and \$2.73 in absenteeism costs.
- Some interventions have been shown to help improve nutrition and activity habits in just one year and had a return of \$1.17 for every \$1 spent.
- Participants in community-based programs who focused on improving nutrition and increasing physical activity had a 58 percent reduction in incidence of type 2 diabetes compared with drug therapy, which had a 31% reduction. ([Busko, M](#))

### **Nature Heals:**

Being in nature, or even viewing scenes of nature, reduces anger, fear, and stress and increases pleasant feelings. Exposure to nature not only makes you feel better emotionally, it contributes to your physical wellbeing, reducing blood pressure, heart rate, muscle tension, and the production of stress hormones. ([Stamatakis and Mitchell](#))

### **Nature Restores:**

One of the most intriguing areas of current research is the impact of nature on general wellbeing. In one study in *Mind*, 95% of those interviewed said their mood improved after spending time outside, changing from depressed, stressed, and anxious to more calm and balanced. Other studies by Ulrich, Kim, and Cervinka show that time in nature or scenes of nature are associated with a positive mood, and psychological wellbeing, meaningfulness, and vitality.

Furthermore, time in nature or viewing nature scenes increases our ability to pay attention. Because humans find nature inherently interesting, we can naturally focus on what we are experiencing out in nature. This also provides a respite for our overactive minds, refreshing us for new tasks. In another interesting area, Andrea Taylor's research on children with ADHD shows that time spent in nature increases their attention span later. ([Andrea Taylor](#))

### **Viewing Natural Scenes:**

The healing effects of a natural view are increasingly being understood in stressful environments such as hospitals, nursing homes, remote military sites, space ships and space stations ([Lewis, 1996](#)). In these environments particularly, as well as for people who work in windowless offices, studies show that seeing nature is important to people and is an effective means of relieving stress and improving well-being ([Kaplan, 1992a](#); [Lewis, 1996](#); [Leather et al., 1998](#)).

### **Being in Natural Environments:**

Early research found that in the act of contemplating nature, the brain is relieved of 'excess' circulation (or activity) and nervous system activity is reduced ([Yogendra, 1958](#)). Furnass found an experience of nature can help strengthen the activities of the right hemisphere of the brain, and restore harmony to the functions of the brain as a whole ([Furnass, 1979](#)). This is a technical explanation of the process that occurs when people 'clear their head' by going for a walk in a natural setting.

Civic volunteering in natural environments, such as through 'Friends of Parks' groups, is another example of enhanced health and well-being made possible not only through contact with nature, but through the social connection that arises from working on a common community task in a local natural area ([Lewis, 1992](#)).

As Suzuki states, the ecosystem is the fundamental capital on which all life is dependent ([Suzuki, 1990](#)). It is clear that nature and natural environments relate to human health and well-being. To seek human health and sustainability without considering the importance of environmental sustainability is to invite potentially devastating consequences for the health and well-being of whole populations.

***View through a Window May Influence Recovery from Surgery:***

“One important study reviewed the recoveries of surgical patients in a Pennsylvania hospital. The rooms of some patients overlooked a stand of trees, while others faced a brown brick wall. A review of ten years of medical records showed that patients with tree views had shorter hospitalizations, less need for painkillers, and fewer negative comments in the nurses’ notes, compared with patients with brick-wall views” ([Ulrich, Frumkin 237](#)).

**Attention Restoration Theory (A.R.T.):**

Attention Restoration Theory asserts that exposure to nature instantly and unconsciously produces significant improvements in cognitive functioning. Experiments conducted at the University of Michigan by psychologists Stephan and Rachel Kaplan and their colleagues are part of a rapidly growing body of evidence for A.R.T., showing myriad ways in which exposure to nature can contribute to brain health. ([Kaplan R., Kaplan S](#))

At the University of Illinois, Frances Kuo and William Sullivan performed experiments which not only validated A.R.T, but also extended it by demonstrating that *viewing* nature, in addition to improving health and brain function, actually lowered levels of irritability, aggression, and violence ([Kuo, Frances, Sullivan, William](#)).

**Nature-deficit Disorder**

Richard Louv gives us an explanation in his book, [Last Child in the Woods](#), of what he refers to as nature-deficit disorder.

“I am not suggesting that this term represents an existing medical diagnosis. But when I talk about nature-deficit disorder with groups of parents and educators, the meaning of the phrase is clear. Nature-deficit disorder describes the human costs of alienation from nature, among them: diminished use of the senses, attention difficulties, and higher rates of physical and emotional illnesses. The disorder can be detected in individuals, families, and communities. Nature deficit can even change human behavior in cities, which could ultimately affect their design, since long-standing studies show a relationship between the absence, or inaccessibility, of parks and open space with high crime rates, depression, and other urban maladies.”

## **Environment:**

### **Conservation Techniques**

“Watershed conservation has proved to be a cost-effective alternative to expensive water-treatment technology in keeping drinking water clean. Water sources can become polluted when sediment, pesticides, oil, and other chemicals wash into them from streets, parking lots, and lawn. Conserving land along the sides of streams and other drinking water sources prevents this pollution.” (Nowak, Wang, Endreny)

Greenways, as vegetated buffers located adjacent to waterways, act as “filters” to clean the water, trapping nonpoint source pollutants. These pollutants, which include sediments, pesticides, fertilizers, oil, gas, and other chemicals, are transported into streams, rivers, and/or lakes by stormwater when rain or snow events occur. Greenways can reduce the need for expensive pre-treatment of the water supply by cleaning it before it reaches municipal water sources.

### **Protection of Waterways**

Open spaces provide natural buffers that protect rivers, streams and lakes by filtering pollutants and eroded soil from run-off before it reaches the waterways. Clean waterways increase the quality of life for residents, attract new residents and businesses and provide increased opportunities for tourism. Paddle trails are a growing source of recreation and economic opportunity for the communities of North Carolina.

### **Wildlife Habitat**

Increased open space provides habitats for a wide variety of species. Increased wildlife habitats also allow for educational opportunities and are perceived as increasing the quality of life for residents. Birding trails are a fast growing segment of eco-tourism and there is a statewide effort in North Carolina to develop and promote them. Both Riverbend and Bakers Mountain Parks are listed as destinations on the [NC Birding Trail](#).

### **Reduced Pollution**

The majority of trips taken by Americans in their cars are of fewer than five miles. Trails provide alternate avenues for walking and biking to neighborhood destinations, reducing both air pollution and water pollution (run-off from roads and parking lots). Less automobile traffic also results in smaller parking lots, reducing the heat island effect and increasing opportunities for ground water penetration.

According to the U.S. Department of Agriculture, Forest Service, “Green space in urban areas provides substantial environmental benefits. The U.S. Forest service has calculated that over a 50-year lifetime, one tree generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution control, recycles \$37,500

worth of water and controls \$31,250 worth of soil erosion.” ([Economic Impacts of Trails, 2005](#))

## **Education**

### **Preservation of historic, natural, and cultural sites**

Trails and greenways have been shown to draw people to adjacent historic and cultural sites, providing additional funds for preservation.

### **Educational opportunities**

Open spaces have been used successfully as outdoor classrooms through the use of interpretive signage and instructor led classes. Educational programming allows the student to fully experience the subject at hand.

### **Increased accessibility**

Greenways and trails do not only provide access to individual sites, but can serve to link several sites together. This linkage does not merely increase attendance but provides for the integration of educational programming between several linked sites.

## **Tourism**

### **Bicycle and Pedestrian-Based Tourism:**

Economies are impacted *very positively* where bicycle and pedestrian tourism is fostered and promoted and where investments are made in bicycle and pedestrian facilities. The number of people who feel comfortable walking or riding bicycles is a measure of the quality of life in that area.

According to the National Center for Bicycling and Walking, “Trails and greenways are very popular among vacationing bicyclists and pedestrians. Visitors appreciate and often return to communities that provide places for bicycling and walking, safely removed from busy roads and streets. Trails offer scenic recreation opportunities suitable for a wide range of ages and abilities. Where popular trails exist, lodging providers can encourage extended stays among their guests, thereby increasing occupancy. For residents, investments in trails and greenways can increase property values and improve the overall livability of a community.” (National Center for Bicycling & Walking, 2003)

Investing dollars in greenways yields substantial community-wide returns. These returns are in the form of increased property values, attraction of new businesses, recreation revenue and reduced water treatment and flooding costs. Not only are tourists attracted to these areas, but business leaders are selecting sites for the relocation and expansion of industries and corporations where the quality of life is high and recreation opportunities are abundant. Increasingly,

corporations are recognizing the benefits of convenient fitness and recreation sites for their employees and are seeking these greenway amenities for potential locations.

## Trail Development

The ongoing construction of bicycle and pedestrian facilities is proving to be a very wise economic investment for the communities through which they pass. Trails and pathways have a positive effect on nearby property values with homebuyers and business owners realizing the effect that such facilities bring to a community. According to research by the *Rails to Trails Conservancy*, there are large numbers of people, who are using 'rail' trails. It is easy to understand how communities can profit economically by meeting the needs of trail users – restaurants, convenience stores, bicycle and other merchandise shops, campgrounds, and alternate lodging. All of these types of entrepreneurs attribute the location of a nearby trail to at least a portion of their success. Realtors and homebuyers alike are recognizing the benefits of properties located near trails. Both locally and nationally, the construction of trails has proven to be a cost effective use of public funds. In particular, multi-use trails allow more visitors and residents to replace automobile trips with non-motorized trips, thereby moving the citizenry closer to achieving public health objectives, including increased opportunities for physical exercise.

Hiking is one of the fastest growing recreation activities in America. Several studies have shown that trails attract a variety of retail businesses to their location, including restaurants, sporting equipment shops, lodging and guide services. It has been estimated that a visitor to a trail will spend from \$10 to \$75 per day at local businesses. TIA Travelscope and Global Insight, Inc. found that when visitors came to North Carolina, 35% of their expenditures were spent on food, 22% on accommodations, 17% on entertainment, 12% on retail, and 14% on transportation.

According to the 2006 *Economic Impact of Travel on North Carolina Counties* prepared for the North Carolina Division of Tourism, Film and Sports Development by the Travel Industry Association of America, tourists spent \$207,790,000 in Catawba County last year. This was an 8.8% increase in spending over the previous year. Tourism accounted for \$40,800,000 in payroll and directly employed 2,370 people. Local tax receipts from tourism were \$4,710,000.

The Charlotte Regional Economic Development Partnership, of which Catawba County is a member, saw tourists spend over 4 billion dollars in 2006. A good system of parks, trails and greenways would be instrumental in attracting more of these visitors to Catawba County.

A park often becomes the signature attraction for a community or municipality. It is often used as a marketing tool to attract residents, tourists, conventions, and businesses. Parks often shape the identity of the area and give residents a sense of pride. For example, the Virginia Creeper Trail – a 34-mile rail trail – was named for the train that climbed Iron Mountain, with a native plant (bearing the same name) growing alongside the route; likewise, the Outer Banks of North Carolina lures cyclists from all areas, due to its reputation for expansive bicycle trails as well as wide, paved shoulders along its roads.

Organized events held in public parks – arts festivals, athletic events, food festivals, concerts, plays, etc. – often bring substantial positive economic impacts to their communities by filling hotel rooms and restaurants, and bringing customers to other local business enterprises.

Local events held with the Catawba County Parks include:

- Regional JROTC Warrior Orienteering Meets: 350 cadets plus commanders and chaperones from 16 area high schools;
- Spring/ fall Littersweep: (50 – 75 participants);
- 4-H Discovery Days: Summer event for 4-H'ers from Catawba, Alexander, Iredell, and Caldwell counties. Usually about 100 participants;
- Moth Night for Catawba Science Center: Annual event. Participation varies—usually between 10 and 20 participants;
- Cross Country Events for area high schools: Participation varies from year to year, usually two events per year, attracting 400 to 500 participants per event;
- Carolina Butterfly Symposium: Around 55 participants for the weekend event which also included field trips to Murray's Mill and Bunker Hill Covered Bridge;
- Catawba County Youth Council: Healthy Living Walk along the River Trail. 35 participants; and
- Run For Congo Women: 91 participants in the race.

Local events held with the Historical Association include:

- Primary programming: Bunker Hill Covered Bridge.
- Secondary programming: Western NC Transportation Route – History – Time and Place:
  - Island Ford Trail – north south trail; and
  - Stage Coach Road Trail – east west trail.
- Complementary Programs:
  - Natural History and Heritage;
  - Lyle Creek Greenway; and
  - Carolina Thread Trail.
- Future Programming: James' Mill Historic Site.
- Special events:

- Catawba/Cherokee Hunting Party trading trail encampment;
- Revolutionary War Encampment – (October) 1780 Post Cowpens/Kings Mt. Prisoner transport;
- Murray’s Mill Bike Ride (October);
- Revolutionary War Encampment – (February) 1781 Cornwallis crossing of Catawba River – scouting parties;
- Revolutionary War Encampment – (June) Pre-Ramsuer’s Mill battle assembly travel toward Mountain Creek at General McKorkle’s;
- Civil War Encampment – Home guard – Island Ford Trail – Iron transport;
- Wildflower Walk – Spring; and
- Birding– Seasonal.
- Client bases:
  - I-40 traveling public;
  - Secondary school students;
  - History enthusiasts; and
  - Nature enthusiasts.

## 6.5 PARK PROPOSALS AND RECOMMENDATIONS

Catawba County Parks Division should focus on providing regional parks, linear parks and special facilities as needed. *Section 5 - Recreation Needs Assessment*, indicates recommendations for providing parks which offer passive recreational opportunities for County residents. The Catawba County Park system has continued to be enhanced over the years by adding facilities and amenities. There are still facilities in the park system that need attention.

In addition, the Parks Division should focus on developing and operating the existing parks and special use facilities, along with pedestrian corridors. *Section 4 - Existing Park Facilities* identified the additional acreage and park facilities needed in the County. The park proposals described below have been formulated to address the existing and future park needs for Catawba County through the year 2019.

### **RECOMMENDATIONS – AS FUNDING BECOMES AVAILABLE**

*Section 6 Goals and Recommendations* of the Plan includes a detailed listing of citizen and staff recommendations. Recommendations are categorized as General Recommendations, Recommendations for Existing Parks, Recommendations for Future Parks, and Existing Special Use Facility Parks. Recommendations in each category are listed in the order of priority to the extent practical; however, many of these recommendations would be occurring simultaneously due to their nature. A summary of recommendations can be seen below.

## **General Recommendations**

### **Recommendation #1: Operating Hours and Staffing**

#### Staff/Citizen Recommendation Summary:

- Catawba County Parks should be operated and staffed on a schedule that includes at least six days a week with seasonal hours and holidays.

This schedule would be more in line with the State park's hours and consistent with the State's guidelines for park systems funded through its grants. Currently, Catawba County Parks operate only 4 days a week. Based on conversations with Parks and Recreation Trust Fund (PARTF) representatives, the Catawba County Parks Division appears to be the only park system in the state that operates on such a limited schedule.

Catawba County Parks began in 1999 with the opening of Riverbend, operated on a six-day schedule. The four-day a week operating schedule was adopted in fiscal year 2001/2002 in response to the State's budget crisis. Bakers Mountain Park was opened in 2002 and also operated on a four-day a week schedule. St. Stephens Park was added to the park system in 2008. For two years, during fiscal years 2007/08 through 2008/09, both Riverbend and Bakers Mountain were open on a six-day a week schedule; St. Stephens was operated on a four-day schedule. Since July 2009 all parks have been using the four-day schedule.

Attendance has steadily increased since the parks were formed. Demand for additional open days is apparent when considering the increased attendance and public input. Operation of the parks on a 6-day a week schedule will require additional staffing.

The survey, which was required as part of this Master Plan Update, asked respondents the two main reasons they visited the parks. Patrons listed the outdoor experience and physical and emotional wellness as their two top choices. By operating on a limited schedule, the true health benefits cannot be met, schools have difficulty utilizing the sites and programs, marketing the parks as a tourism destination cannot be achieved, and the public is being underserved in passive recreation opportunities.

Staffing is an essential aspect of being open for additional days. The public hearings prior to the opening of Riverbend and Bakers Mountain Parks emphasized the facilities being staffed as the top priority of the public, for reasons of security, public safety, and programming.

Dog park patrons indicate their appreciation of staffing at St. Stephens, and also the user fee which is in place to allow for verification of proper vaccinations. The common sentiment is that the fee is affordable for those dog owners who are aware of their pet's health needs. The fee is also high enough to discourage those who do not address their pet's physical wellbeing. Since the Parks began operation in 1999, there has not been a single reported incidence of vice-related or violent crime in the Catawba County Park system.

## **Recommendation #2: Facility and Program Accessibility**

### Staff/Citizen Recommendation Summary:

Assess all facilities to ensure compliance with current Americans with Disabilities Act (ADA) requirements.

Every park and recreation facility the Catawba County Parks Division operates must respect and meet accessibility needs of the disabled through design and programming. Mountain View was not included in the ADA Countywide review in the 1990's. All new facilities must be designed to meet current Americans with Disabilities Act (ADA) requirements.

## **Recommendation #3: Design and Daily Maintenance**

### Staff/Citizen Recommendation Summary:

- Park facilities should be maintained and improved so they are inviting places which are desirable to visit.

Priority should be given to maintaining existing facilities as the parks continue to age. Any design improvements of facilities should be architecturally and functionally progressive, environmentally-friendly and operated utilizing green initiatives where practical. Daily maintenance practices should be continued to maintain a high level of cleanliness and longevity of all facilities. A master plan should always be completed and followed for park improvements or new facilities prior to final budgeting and design, making the phasing/development more transitional and of higher quality.

## **Recommendation #4: Contiguous Property Acquisition**

### Staff/Citizen Recommendation Summary:

- When property that is contiguous to existing and future parks becomes available, efforts should be made to evaluate, and acquire the property if deemed beneficial.

Large acreage parks such as Riverbend and Bakers Mountain are unique and beneficial because of the large acreage. Large acreage habitats are more beneficial to wildlife and preservation efforts. Contiguous property enlarges existing habitat and provides additional buffering from development. Large acreage parks offer recreation amenities that can only be achieved on sites of over 100 acres. (See Appendix *Map 6 - Bakers Mountain Park*) for adjacent parcels that meet the requirements for the Parks Division. Due to the rapid growth and development of the County over the past years, the need for preservation of large acreage sites is apparent. While smaller in size, St. Stephens is unique due to its proximity to a highly developed area, Clyde Campbell School with its accompanying wooded acreage, and Snow Creek which runs along the park boundary.

In addition to seeking purchase options, other possibilities should be presented to the property owner as well, such as conservation easements and related tax advantages. The Voluntary Agricultural Board continues to educate farmers on agricultural conservation easements. Both Catawba Land Conservancy and Foothills Land Conservancy have been beneficial in negotiating parkland purchase/dedications for the County. Care should be taken to choose the correct process and timing for acquisition to meet the full potential of some grants.

## **Recommendation #5: Acceptance of Fee Simple Land Donation**

### Staff/Citizen Recommendation Summary:

- Land donations should be accepted for use as a park, or accepted and sold with funds going in the Parks Trust Fund for other park improvements or land purchase.

If land is offered to the County as donation by fee simple title with no restrictions, the property should be surveyed for natural heritage significance and relationship to existing plans and parks. If the land contains no environmental hazards, restrictive covenants or restrictive easements, it can be useful and beneficial for the County to assume ownership.

Not all donated land has to be developed into a park in order to be useful. Retired agricultural land and property that has no natural heritage significance offers beneficial open space and environmental protection of watershed and

viewshed. Some property may have the potential of generating revenue for future park expansion and development by the passive presence of forestry management and timber production. Any land donation to the County serves a public need even if it is banked for the future, since the development and public needs of the distant future (over 50 years) are unknown. If donated property were properly managed, the revenue and future significance of the property would far exceed its current contribution to the tax base.

If the County chooses not to accept land donation of a particular property, efforts should be made to assist the property owner with contacting an agency that accepts land donations or conservation easements. Land donations in which the County has no interest in owning could be sold with proceeds going into park expansion or improvements.

## **Recommendation #6: Educational Programming**

### Staff/Citizen Recommendation Summary:

- Expand the frequency of scheduled guided environmental education programs.

Design programs and events for individuals, students and families to learn more about individual trees, plants, birds, and other natural outdoor happenings. Provide interpretative facilities for the parks and along greenway corridors. Communicate with the schools to encourage using the parks as an outdoor lab for science and history classes. Encourage park staff to pursue and obtain Environmental Education (EE) Certification. This will serve to foster professional development and constructive interaction with the EE's and the visiting public.

## **Recommendation #7: Stewardship/Volunteerism Programs**

### Staff/Citizen Recommendation Summary:

- Develop stewardship and community volunteer programs for the Parks.

Designate a volunteer coordinator to help organize projects.

## **Recommendation #8: Parks Advisory Committee**

### Staff/Citizen Recommendation Summary:

- Continue to gain insight from the Parks Advisory Committee to expand ways that the Parks can continue to help provide health, educational, and economic benefits to Catawba County citizens.

## **Recommendation #9: Signage**

### Staff/Citizen Recommendation Summary:

- Expand the signage system for parks and greenways.

Identify the difficulty of park trails as severe, moderate, or easy to help the user determine the route that best matches his/her objective. Increase interpretative signage to identify environmental, natural, or historic features.

## **Recommendation #10: Intergovernmental Cooperation**

### Staff/Citizen Recommendation Summary:

- Continue to meet periodically with the Western Piedmont Council of Governments (WPCOG), municipalities and school systems within Catawba County to discuss development and recreation projects that are planned or are underway within the County.

The purpose of these meetings is to discuss upcoming projects, trends in growth, newly identified needs, and municipality and the County plan updates. Communication will help avoid redundancy in services and help ensure opportunities for partnerships and connectivity are being used. In addition, the County will continue to work with other local municipalities to encourage economic development, help implement greenway plans, which connect the recreational opportunities within the County and those shown in the Greater Hickory Recreation/Tourism Plan (prepared for Unifour counties and municipalities).

## **Recommendation #11: Connectivity and Greenway Funding**

### Staff/Citizen Recommendation Summary:

- Connect greenways and public facilities through trails. Protect natural habitat corridors through connected preservation buffers.

Strongly encourage developers to provide connectivity between public facilities such as parks, schools and other pedestrian/bicycle facilities. Continue to require developers to dedicate land/easements located along the Carolina Thread Trail routes as part of the development process. Consider having developers provide right-of-ways or easements for preservation of riparian buffers (land that is traversed or bounded by a natural watercourse). Work with non-profit groups, such as the Foothills Lands Conservancy, Catawba Land Conservancy and the Carolina Thread Trail to develop regional trail connectivity. Consider using the subdivision fee in-lieu and grants to fund greenway

construction where the need for pedestrian connections cannot rely on the timing of private property development.

## **Recommendation #12: Park Donations.**

### Staff/Citizen Recommendation Summary:

- Allow for monetary park donations which can be designated for specific purposes.

Create a mechanism to collect monetary park donations designated for specific purposes through County accounting procedures or encourage the formation of a non-profit “Friends of the Parks” group. Either would promote and advance aspects of park operations and development while aiding in budgetary considerations.

## **Recommendation #13: Walkable Communities**

### Staff/Citizen Recommendation Summary:

- Promote land uses and site designs that make walking/bicycling convenient and enjoyable.

Encourage the inclusion of public greenways or trails in private non-residential developments. Continue to require developers to donate land for greenways located along the CTT route.

## **Recommendation #14: Partnership Agreements**

### Staff/Citizen Recommendation Summary:

- County staff should meet with existing and potential partners to determine needs and explore opportunities.

Partnerships should be mutually beneficial, provide additional or upgrades to existing park amenities, or provide educational or training opportunities for participants. A listing of potential partners is shown earlier in this Section. The process will require periodic progress meetings with each partner to facilitate the partnerships goals and objectives. This may entail presentations to the partner’s board or committee.

## **Recommendation #15: Green Building**

### Staff/Citizen Recommendation Summary:

- It is recommended that the Parks Division implement green building components into existing and future park facilities to conserve energy and help educate the public on beneficial conservation techniques.

Green building practices will strengthen the Catawba County Parks Division's mission of education and preservation of the environment of Catawba County. Green facilities should also be used as a tool to educate the public on sound sustainable practices. Green building techniques consist of building materials and construction practices that reduce environmental impacts, such as greenhouse gases, water pollution, air pollution, and inefficient energy use.

## **Recommendation #16: Update/Complete Beneficial Planning Documents.**

### Staff/Citizen Recommendation Summary:

- Update/complete the *Inventory of Significant Natural Areas of Catawba County*.

To be aware of our resources, help with community planning and market our area, the County needs to update and/or complete the *Inventory of Significant Natural Areas of Catawba County, North Carolina*, including the significant geological sites, and how all these sites relate in location to greenways and blueways. (A blueway is an established trail route on a waterway, used for canoeing or kayaking.)

The NC State Historical Society, in conjunction with local Catawba County Historical Association, and Catawba County Planning and Parks Division is continuing to update the inventory of historic sites in the County. An interactive map of locations throughout the state can be found at: <http://www.hpo.ncdcr.gov/nrhome.htm>

These documents are used to determine the specific location of parks and greenways and determine the feasibility of connectivity. The data would also help in marketing Catawba County as a destination (place) for visitors, aid in economic development through the adaptive reuse of historic buildings, and increase the possibility of obtaining grants from educational sources.

## **Recommendation #17: Recreation Marketing Plan and Communications**

### Staff/Citizen Recommendation Summary:

- Develop a countywide marketing plan for the parks.

Both the community survey and meetings indicated a general “lack of knowledge” by the residents of Catawba County as to the availability of facilities and programs across the County. The County Planning Department should work with the Chamber of Commerce to develop a countywide marketing plan and brochure that contains maps, tables, and descriptions of the available park facilities and programs in the County. Marketing partnerships should continue within the Unifour region (Alexander, Burke, Caldwell and Catawba Counties, along with their municipalities). Funding should be appropriated or grants should continue to be sought for brochures, marketing and program costs.

A professional quality presentation promoting Catawba County recreation opportunities, should be created and presented to civic groups, such as, Rotary Clubs, Lions Clubs, Optimist Club, Garden Clubs, Pilot Club, etc., to increase park awareness. Educational and awareness presentations should be continued and increased in the school systems.

## **Recommendations for Existing Parks**

### **Recommendation #18: Bakers Mountain Park**

#### Staff Recommendation Summary for Added Amenities:

- Renovate existing facilities and infrastructure to include painting, floor covering, welcome sign renovation, building sign replacement, map stand replacement, border fence replacement, and pressure washing/resealing shelters.
- Increase parking since often there are not enough spaces during weekend peak times or for educational events. Due to a lack of space with suitable topography for parking, additional land would need to be purchased;
- Purchase additional land suitable for expanded parking. See Appendix *Map 6 - Bakers Mountain Park* for adjacent parcels that meet the requirements for the Parks Division;
- Renovate and improve existing trails, if additional land is acquired;
- Design and build additional trails;
- Install additional park benches along trails;
- Construct an indoor meeting building;
- Expand educational programming; and
- Consider primitive camping, if additional land is acquired.

Citizen Input Summary:

- Trail related requests ranked as the top three choices for existing or desired amenities, with 33 choosing paved greenways, 22 requesting improvement of existing trails, and 29 choosing natural surface trails;
- Primitive Camping ranked as the next most popular at 22 picks; and
- Splash pad, native mature forest, community meeting/education center, playgrounds, and educational programming also ranked very high.

Bakers Mountain has approximately six miles of natural surface hiking trails, and a ¼ mile pedestrian paved trail. Additional parking is needed to provide space for weekend or educational visitors. Primitive camping is desired, particularly by scouting groups, as this amenity is currently not offered in Catawba County. A community meeting room is wanted so school programs could be offered that include an indoor presentation followed by an outdoor nature walk.

## **Recommendation #19: Riverbend Park**

Staff Recommendation Summary for Added Amenities:

- Renovate existing facilities and infrastructure to include the river overlook deck; parking/asphalt repair; entrance sign maintenance; informational sign replacement for consistency; painting, floor covering, fixture, and roof replacement for office and restroom building; pressure washing building exteriors; pressure washing and resealing picnic shelters; and table/chair replacement in the educational building;
- Renovate and improve existing trails;
- Design and build additional trails;
- Install additional park benches along trails;
- Add a natural or conventional playground designed to be compatible with the environment. There are no other playground facilities in the general area;
- Improve/enlarge water access; and
- Consider primitive camping. It is recommended that the County add approximately 20 camp sites at Riverbend Park. A 24-hour park staff presence would be needed when facilities are in use.

Citizen Input Summary:

- The three most popular existing or desired amenities were trail related, with 35 choosing natural surface trails, 19 choosing paved trails, and 18 choosing natural surface mountain bike trails;
- Boat, canoe, kayak access was the next most popular at 17 picks; and
- Horseback trails, playgrounds, splash pads, primitive camping, and dog parks also ranked very high.

Riverbend has approximately 12 miles of natural hiking trails, but does not have any paved trails. The mountain bike trail system is in the process of being expanded. Horseback riding was permitted in the past, but was discontinued due to a lack of people using the amenity, and high maintenance associated with this use. Primitive camping is desired, particularly by scouting groups, as this amenity is currently not offered in Catawba County.

## **Recommendation #20: St. Stephens Community Park**

Staff Recommendation Summary for Added Amenities:

- Renovate existing facilities and infrastructure as needed in three to five years;
- Expand the dog park to include a separate section for small dogs;
- Add more amenities to the dog parks;
- Renovate, improve and pave existing trails;
- Design and build additional trails;
- Install additional park benches along trails; and
- Obtain land and expand the park into the unused land behind Clyde Campbell Elementary School which abuts St. Stephens.

Citizen Input Summary:

- Sand volleyball was a “write-in” request, and the most desired existing or future amenity with 36 picks.
- The dog park was the next most popular amenity with 12 picks.
- Trails were also ranked as very popular, with 11 choosing natural surface trails, and 10 wanting paved trails.

This existing 9.1 acre park facility had traditionally been operated by the City of Hickory as an active recreation facility. However, Catawba County assumed operation in 2008 and staffs it as a passive facility with a dog park. Due to the dog park and being a community park in a highly populated area, most patrons use the park every day that it is open. It is recommended that the unused land behind Clyde Campbell Elementary School which abuts St. Stephens become part of the park. Discussions should be held with school personnel to consider the possibility of forming an educational partnership. Proximity of the two establishments would facilitate using the park as an outdoor lab for science classes while doing nature hikes which could help fulfill the physical activity requirements for students. Sand volleyball was a desired amenity; however, Catawba County Parks mission is to provide passive recreation so a sand volleyball court is most likely not possible. Space and topography restraints would make installing a court difficult.

## **Recommendation #21: Mountain View Recreation Center**

### Staff Recommendation Summary for Added Amenities:

- Meet with the Recreation Resources Services (RRS) representative to review grant obligations and render an opinion on priorities, accessibility requirements, and possible functionally obsolete amenities; and
- Periodically review contractual agreement for maintenance and operations with Mountain View Recreation Association.

Catawba County owns 5.05 acres of Mountain View Recreation Center, but the daily operation of the park is handled by the Mountain View Recreation Association. The facility should be updated to comply with recommendations offered by the RRS representative.

## **Recommendation #22: Birding Affiliations**

### Staff/Citizen Recommendation Summary:

- Continue to participate in the NC Birding Trail program.

The Birding Trail program helps to promote nature based tourism and increase conservation education opportunities for residents and visitors. The NC Birding Trail is not a physical trail in the traditional sense. Instead, it is a published guide which links existing bird watching sites across the state into a cohesive and marketable unit, while connecting birders with local communities, business, sleeping and eating establishments, and other local attractions. According to the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, NC attracted 2.4 million wildlife watchers in 2011. Of these, 703 million were from outside the area. Whether from within or outside the area, each participant spent an average of \$362. (U.S. Fish and Wildlife Service and U.S. Census Bureau)

Riverbend and Bakers Mountain Parks are listed on the NC Birding Trail as two of the top 327 birding destinations in North Carolina. Park staff contributes valuable research data by actively banding hummingbirds and passerines (songbirds). A Catawba County Parks Ranger is one of only two people licensed in the State of NC to band hummingbirds. Monthly bird walks and other environmental education programs are hosted by the Parks Division. More information can be found on the NC Birding Trail by visiting: [NCBirdingTrail.org](http://NCBirdingTrail.org).

## **Recommendations for Future Parks**

Catawba County Parks Division includes two regional parks – Bakers Mountain Park and Riverbend Park. Currently there are no County Parks in the southeastern portion of the County. *Section 4 – Existing Park Facilities*, reflected a need for a regional park facility to be located in this area. (See Appendix *Map 4 – Service Area Proposals and Recommendations*). This need was not only determined by the park service areas from the State and National Standards, but more importantly, this need was reflected by the responses to the community survey and community workshops.

Understanding this need, negotiations have resulted in obtaining a 598-acre parcel of land located adjacent to Lake Norman which will be used by the County for a park. (See Appendix *Map 8 – Proposed Conceptual Mountain Creek Park*). In addition, Duke Energy has listed lands along the Catawba River for Recreation improvements through though FERC (Federal Energy Regulatory Commission) Relicensing.

To the extent possible, water access sites should be linked with other preserved open spaces. Water-based recreation facilities should be developed to provide appropriate public use and enjoyment of carefully selected portions of the shoreline. Recreation improvements may include beach areas, waterfront overlooks, fishing piers, docks and canoe/kayak launch sites.

Where appropriate, water access sites should also be improved with a variety of outdoor facilities including picnic facilities, trails, interpretive signage and open lawn areas. Supporting services should also be developed including parking lots, restrooms and utilities. Where provided, these amenities should create a balance between the need for public access and the protection of shoreline environments. A boat house may be considered for boat storage by boating organizations and to provide a facility for boat rentals, lessons, and/or tours for canoes, kayaks, and other small hand-carry boats.

### **Recommendation #23: Mountain Creek Park (Future)**

#### Staff Recommendation Summary:

- Water amenities including swimming, boat, canoe and kayak access, and fishing areas;
- Trails: natural surface, mountain biking trails and paved trails;
- Park benches along trails;
- Picnic facilities;
- Multi-purpose building;
- Primitive camping; and

- Playground equipment: natural or conventional facilities which fit into the environment.

Citizen Input Summary:

- Water related amenities were the most desired choices with swimming at 32 picks, boat canoe, kayak access at 28 picks, and fishing areas at 12 picks;
- Trail amenities were the second most popular with natural surface trails at 24 picks, mountain biking natural surface trails at 23 picks, and paved trails at 19 picks;
- Picnic facilities were very popular with shelters at 17 picks, picnic tables at 11 picks; and
- Dog park, equestrian trails, and primitive camping were also desired amenities.

As shown on Map 4 *Service Area Proposals and Recommendations*, a park is needed to service the southeastern area of the County. Understanding this need, the County has obtained 598 acres to create Mountain Creek Park through a combination of negotiations with Duke Energy through the FERC relicensing process and through the Key Harbor Crescent Development Agreement. The park has not been developed to date. This is the first Catawba County Park that could offer swimming access to the Catawba River. Primitive camping was listed as a need by community survey respondents and desired particularly by scouting groups, as this amenity is currently not offered in Catawba County. It is recommended that 20 primitive camping sites be included in the proposed park. A 24-hour park staff presence would be needed when facilities are in use. (See Appendix Map 8 – *Proposed Conceptual Mountain Creek Park*)

A natural resource inventory will be conducted prior to park development as there are numerous habitats and natural features that are deemed significant for preservation. One of the main features of the site is lake shore frontage which allows multiple opportunities for park users.

As recommended for all park facilities, a meeting/educational facility is also proposed for this park. It would offer multiple opportunities for schools, environmental groups, and other organizations. Restrooms and the park office need to be strategically located to allow for smooth operation of the park while minimizing and preserving the existing resources.

## **Recommendation #24: Trails: Greenways, Blueways, and Bike Paths**

### Staff/Citizen Recommendation Summary:

- Continue to implement the recommendations of the Carolina Thread Trail and the Western Piedmont Council of Government Bike Plan.

Walking and biking are two highly sought after activities based on the community input from both the public forums and the survey. The hiking trails should be designed to primarily serve walkers and joggers and in many cases bicyclists. The trail surface can be either natural or paved and normally is 10 feet in width.

Trails and bike paths serve a number of important functions. There is a need to increase the health and fitness of the population, a high cost of fuel for vehicular transportation, and air quality concerns. They link parks together to create a cohesive park system, allowing for safe pedestrian/bike access within a community, emphasizing how nature can interact with the built environment, and enhancing property values. In many respects protected open spaces or natural resource areas have much in common with greenways. They preserve natural resources, provide corridors for wildlife habitats and provide buffers against developed areas. Therefore, a planned network of bike trails, bike lanes, and shared roadways is currently being developed to support alternative transportation to recreation facilities and travel within Catawba County. Future roadway construction within the County should include provisions to accommodate pedestrian and bicycle travel as delineated on the Catawba County Small Area Plans. This network will connect both existing and future park facilities and greenways as outlined in the Unifour Bicycle Plan and Carolina Thread Trail routes. The location of a greenway within a particular urban area could easily make it a light traffic corridor. Important aspects of developing greenway corridors are to link parks, neighborhoods, schools, downtowns and other destinations areas together. These corridors provide access to natural areas and to a safe, affordable alternative mode of transportation. Please refer to the *Carolina Thread Trail Plan*, and *Map 5 Carolina Thread Trail / Duke Relicensing / Agri-Tourism* shown in the appendix for more detail.

Link the park system with greenways and tie them into the major floodplain/open space system where applicable through fee simple donation or conservation easements where possible.

Encourage the coordination and planning for future utility easements with greenway facilities. All easements should be established to allow for the inclusion of recreation facilities.

## **Existing Special Use Facility Parks**

Catawba County Parks Division has developed a working relationship with the Catawba County Historical Association (CCHA) over the past several years. The two entities share similar goals in the preservation and educational aspects of resources within the County. Murray's Mill and Bunker Hill Covered Bridge are two valuable resources within the County. The Parks and CCHA are looking to work together to enhance and manage these special facilities to meet the goals for each agency. The following recommendations are for the existing sites and a description of proposed recommendations.

### **Recommendation #25: Bunker Hill Covered Bridge Park and Greenway (Future)**

#### **Staff Recommendation Summary for Added Amenities:**

- Multi-use building providing educational and community meeting space for a minimum of 50 occupants, restrooms, and office facility;
- Paved trails meeting ADA requirements and natural surface walking trails designed to be compatible with topographical constraints;
- Additional park benches along trails;
- More picnic facilities; and
- An outdoor amphitheater.

Facilities must be designed to ADA standards with sensitivity to the environmental and historic nature of the site.

#### **Citizen Input Summary:**

- Paved trails were the most desired amenity with 43 requests, and natural surface trails at 29 picks;
- Educational programs/guided tours/historical interpretation was the next most popular at 40 picks;
- Educational requests were very popular, wanting a community meeting/education center with 18 picks for educational programming, and interpretative signage with 14 picks; and
- Restrooms, picnic facilities, and an outdoor amphitheater were also requested.

Catawba County Parks is working with the Catawba County Historical Association to continue developing and improving a passive park to provide an expanded park with historical and environmental opportunities. The historic covered bridge, historic roadbeds, and rare plant species are attractions of the park. The County and Historical Association have been working together in promoting and enhancing the historic bridge, through the provision of improved access and the development

of facilities for the park. In addition, the master plan proposes a one-mile, multi-use trail from the park to connect to the I-40 rest area along Lyle Creek. This connection would allow visitors from across the nation (who stop at the rest area) the opportunity to visit one of North Carolina's significant historical attractions. Support facilities consist of an access road, parking areas, pedestrian bridges, and a multi-use building for restrooms, an office, and a meeting room. (See Appendix Map 7 - Bunker Hill Covered Bridge Park Concept Plan)

To develop this vision, there is collaboration between Catawba County Parks, Catawba County Historical Association and the State of North Carolina. In addition to potential funding possibilities, this partnership allows the Parks to assist with the maintenance, development of park amenities, and environmental education, therefore permitting the historical association to dedicate their efforts to educational programming and maintaining the historical structures.

## **Recommendation #26: Murray's Mill (Future)**

### Staff Recommendation Summary for Added Amenities:

- Facilities for educational and community meetings, restrooms, and office;
- Paved trails meeting ADA requirements and natural surface walking trails designed to be compatible with topographical constraints;
- Additional park benches along trails; and
- Picnic facilities.

Facilities must be designed to ADA standards with sensitivity to the environmental and historic nature of the site.

### Citizen Input Summary:

- Guided tours/historical interpretation were the most desired amenity with 28 picks;
- Trails paved greenways with 20 picks, and natural surface trails with 16 picks, were the next most popular options; and
- A community garden and picnic shelters were also very popular options.

The Parks will work with the Catawba County Historical Association to provide an expanded park with historical and environmental opportunities at Murray's Mill. Some natural surface trails are being constructed by the County, Historical Association and Carolina Thread Trail. Currently, there are no paved trails, garden, or picnic facilities. Trail development has already begun with the help of CTT volunteers. This partnership would also allow the Parks to assist with maintenance, development of park amenities, and environmental education, permitting the association to dedicate its efforts to historical educational programming and preservation of the historic structures.

## **Priorities for Development**

Park facility prioritization is an essential tool that provides the Parks with a breakdown of the priority for each capital improvement. Improvements to the Parks network of facilities will be implemented incrementally due to involved costs. Development will occur in a coordinated effort between Catawba County, non-profit entities, surrounding communities and other local and state government bodies that are affected. Given the magnitude of the budgets for improvements prioritization of these needs is important. The following is a list of propriety projects requested through citizen input and staff recommendation.

### **Top Priority Projects**

- Maintenance/improvements to existing parks;
- Land Acquisition for contiguous property as needed and land becomes available;
- Bunker Hill Covered Bridge development;
- Mountain Creek Park development; and
- Murray's Mill development.

**- End of Section -**