



Cabarrus County Government

Cabarrus County Planning and Zoning Commission Meeting
July 16, 2009
7:00 P.M.

Board of Commissioners Chamber
Cabarrus County Governmental Center

Agenda

1. Roll Call
2. Approval of Minutes
3. New Business – Planning Board Function:
 - A. Presentation by Travis Morehead, Carolina Thread Trail (CTT)
(Joint meeting with the Cabarrus County Planning and Zoning Commission and the Cabarrus County Parks and Recreation Department - Discussion and Q & A)
 - B. Appeal Application – APPI2009-0003 - Appeal of Interpretation of the Cabarrus County Zoning and Subdivision Ordinances.

Appellant: Mr. Chris Hunter

Request: The applicant is appealing an interpretation of the Cabarrus County Zoning Ordinance.
 - C. Information for County Parcels Located Adjacent to Concord Regional Airport
(Landscape)
4. Directors Report
5. Adjournment



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July 16, 2009
Hand Delivered

Cabarrus County Board of Adjustments
Attn: Susie Morris

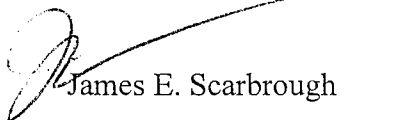
Re: Chris Hunter Matter

Dear Susie:

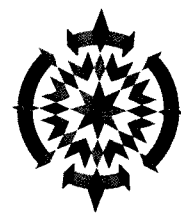
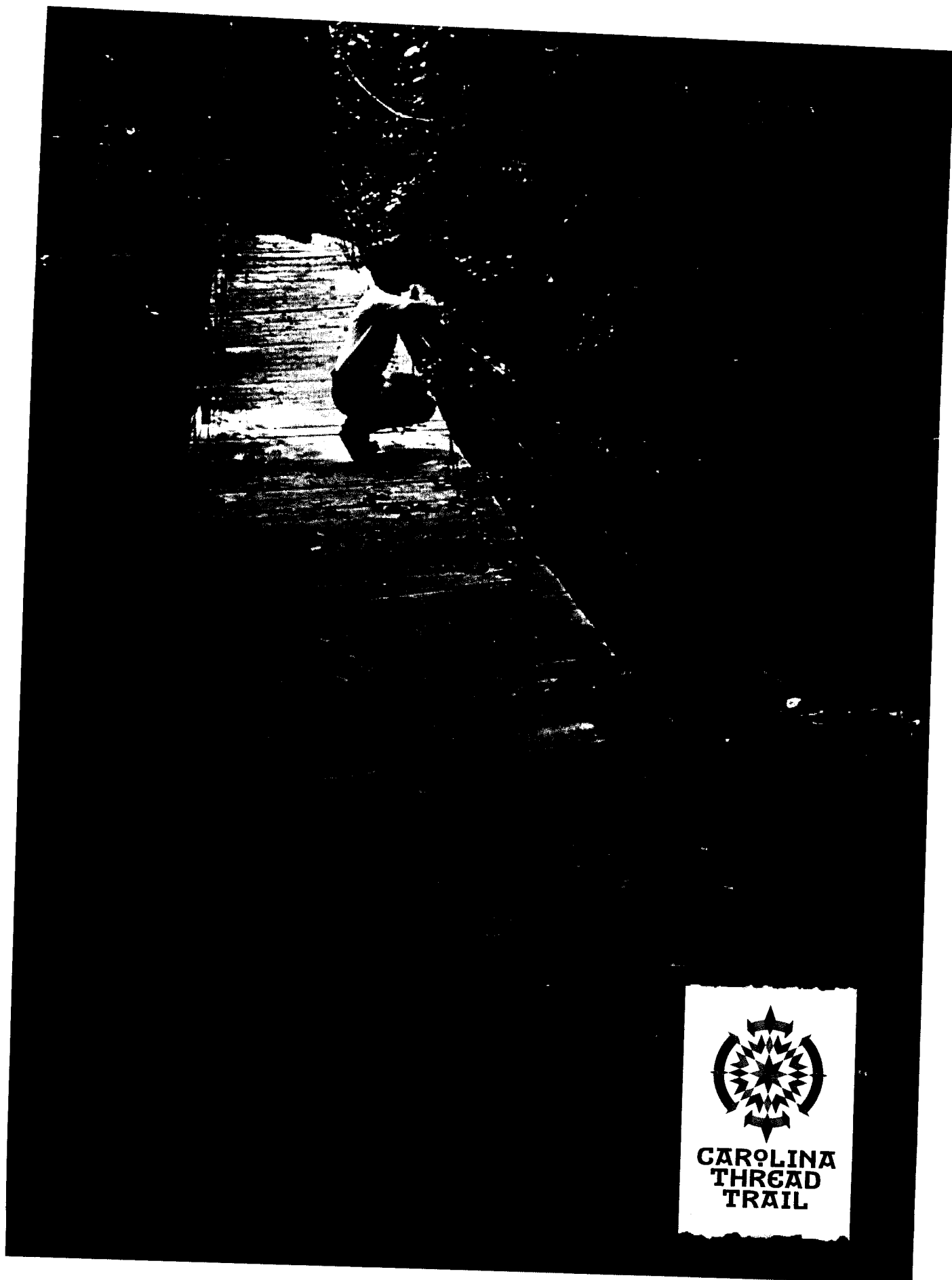
I have talked to Rich Koch and told him I would ask to table the Chris Hunter matter tonight so that it could be heard next month when both Rich and I can attend the meeting.

Therefore, as attorney for Chris Hunter, I request that the Board table his appeal tonight. Thank you.

Very truly yours,



James E. Scarbrough



CAROLINA
THREAD
TRAIL

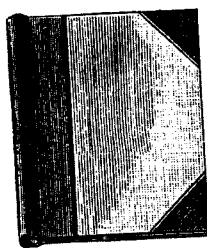


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ACKNOWLEDGEMENTS

The following organizations signed resolutions of support at the outset of this effort to work with neighboring communities and with the Carolina Thread Trail to plan, design, and build trails that will connect our communities:

Cabarrus County
Cabarrus County Tourism Authority
Cabarrus Regional Chamber
Board of Directors
City of Concord
City of Kannapolis
Town of Harrisburg
Town of Midland
Town of Mount Pleasant
Healthy Cabarrus

Cabarrus County Communities
Carolina Thread Trail
Steering Committee Members:

Jeff Ashbaugh
Site Solutions

Troy Barnhardt
Town of Mount Pleasant

Ellen Boyd
Kannapolis City Schools

John Benbow
Individual

Sharon Campbell
Cabarrus CVB

Andy Christy
City of Concord Business and Neighborhood Services

Phil Conrad
Cabarrus-Rowan MPO

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City of Concord Parks and Recreation

Adrian Cox
Town of Mount Pleasant

Brett Crosby
Cannon Memorial YMCA

Bennie Darden
Philip Morris USA- Manager of Community Affairs

Bob Dowless
City of Concord Parks and Recreation

Mike Downs
Cabarrus County

Gina Goff
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Acknowledgements. continued

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City of Concord

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WSACC

Mark Kincaid
City of Concord

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Rick Price
Town of Midland Midland Planning and Zoning Commission

Jonathan Marshall
Cabarrus County Commerce

Gary Mills
City of Kannapolis

Daniel McClellan
Cabarrus Soil and Water Conservation

Alex Rankin
Carolina Thread Trail- Governing Board

Irene Sacks
City of Kannapolis

Eddie Smith
City of Kannapolis

Phil Stephens
CMC-Northeast Medical Center

Londa Strong
Cabarrus County Parks

Dennis Testerman
Cabarrus Soil and Water Conservation District

Ben Warren
City of Kannapolis

Josh Watkins
Town of Harrisburg

David Whitley
City of Concord

Joe Wilson
City of Concord Transportation

Jeff Young
City of Concord

Thanks also to the members of the Technical Advisory Team who assisted in collecting and analyzing data, and proposing alternative scenarios for consideration by the public and the steering committee: Jeff Ashbaugh (Site Solutions), Phil Conrad (Cabarrus-Rowan MPO), Adrian Cox (Town of Mount Pleasant), Colleen Nelson (Cabarrus County), Rick Price (Town of Midland), Londa Strong (Cabarrus County), Josh Watkins (Town of Harrisburg), and David Whitley (City of Concord).



EXECUTIVE SUMMARY

This section will be developed & finalized after draft plan review. The main sub-headings are below:

ADOPT THE PLAN

BUILD PUBLIC SUPPORT FOR
TRAIL IMPLEMENTATION

COMPLETE TOP PRIORITY SEGMENTS

KNIT TOGETHER FUNDING FROM A
VARIETY OF PUBLIC AND PRIVATE SOURCES

EVALUATE LAND OR RIGHT-OF-WAY
ACQUISITION OPTIONS

DESIGN, CONSTRUCT AND MAINTAIN TRAILS

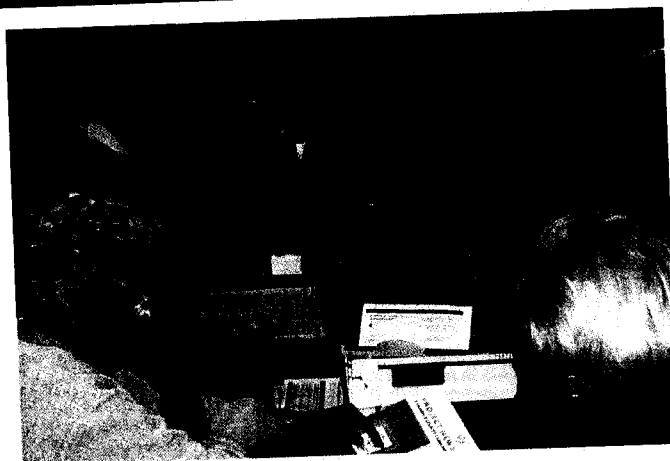
CONCLUSION



JULY 09 DRAFT

Executive Summary, continued

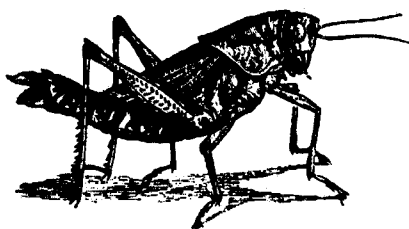
COMMUNITY INPUT



COMMUNITY INPUT



With a key guiding principle of the Carolina Thread Trail being Community Self-Determination, the master planning process was infused with citizen input from all over the county.



CHAPTER 1. INTRODUCTION

The Cabarrus County Greenway Master Plan defines a 100-year vision, 20-year master plan and 5-year action plan for developing an interconnected system of lands and waters that will conserve important natural resources and, over time, provide public access to some of the most scenic and important cultural areas of the County. Implementation of this plan will take place during the course of the next several decades, and it is important for all county residents to understand that participation in this greenway program will occur through a partnership with willing landowners. Most importantly, this Plan defines Cabarrus County's desire to be linked with an a part of the 15-county regional Carolina Thread Trail (CTT). Careful thought and consideration has been given to select routes and corridors that will become designated as elements of the Thread Trail.

With oversight provided b a steering committee of municipal, county and interested non-governmental organizations, residents in Cabarrus County, North Carolina, participated in a locally-driven process to create this countywoide Greenway Master Plan. This plan is meant to serve as a guiding document for the greenway and trail development throughout the county.

This master plan includes an introduction to the benefits of greenways and trails, a description of current conditions in Cabarrus County, summary of the planning process, a concept map for a network of greenways and trails throughout the county, introduction to the Carolina Thread Trail (CTT) and proposed route, and a description of recommended implementation steps. These action steps are intended to provide ideas for local governments to fund segments and expeditiously put them on the ground.

The Carolina Thread Trail initiative, which has helped to spur the development of this plan, is an effort to encourage

15 counties in the south-central piedmont of North Carolina and the north-central portion of South Carolina to create a large, interconnected trail system that will preserve and increase the quality of life within the local communities. This plan presents a conceptual route for trails throughout the county, some of which will receive the CTT designation. Lands to be incorporatd can include prime farmland, wildlife habitat, environmentally fragile lands, open fields and forests.

In general, a greenway is a linear corridor of undeveloped land preserved for recreational use, transportation or environmental protection. A trail is a linear route on land or water with protected status and public access typically for recreation or transportation purposes. For the sake of brvity, the word "trail" will be used throughout the plan to encompass both types of amenities.

CAROLINA THREAD TRAIL

The Carolina Thread Trail is a regional network of greenways, trails and conserved land that will reach approximately 2.3 million citizens. It will link people, places, cities, towns and attractions. The Thread Trail will help preserve our natural areas and will be a place for the exploration of nature, culture, science and history, for family adventure and celebrations of friendship. It will be for young, old, and people of all abilities. This is a landmark project, and creates a legacy that will give so much, to so many, for so long.

The scale of the Thread Trail's connectivity is unparalleled and is based on certain guiding principles and core values: collaboration, community self determination, connectivity, inclusivity, leverage and respect for the land, and respect for landowners.



COLLABORATION AND SELF-DETERMINATION

Collaboration and communication among the communities of Cabarrus County is as important as connectivity. This master plan has been produced through a collaborative process in which greenway corridors have been conceived and located in cooperation with adjoining communities in such a way that regional asset is created from a series of interrelated local decisions and actions.

CONNECTIVITY AND INCLUSIVITY

Creating connections between communities and historical, cultural and recreational attractions is important. The Carolina Thread Trail seeks to create a region known for its "ribbons of green" connecting people to each other and to their heritage. In offering the vision of greater community interaction, the program seeks to build bonds among diverse neighborhoods, as well as afford all residents greater access to our natural surroundings. Through this master plan, these goals are established.

LEVERAGE

The success of this master plan depends on generating additional investment of outside capital in the county's natural resources. Funding sources at the local, state and federal level are included in Chapter 5.

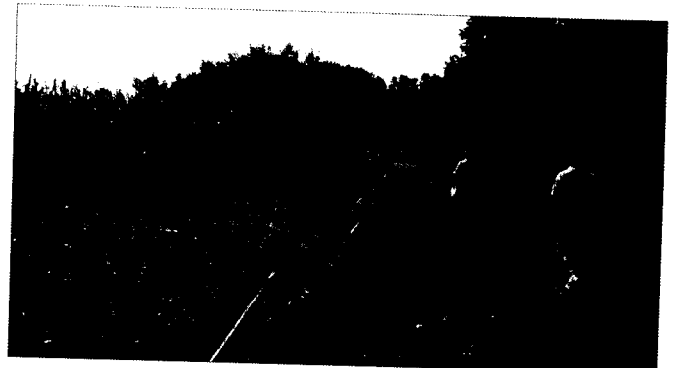
RESPECT FOR THE LAND AND LANDOWNERS

During the planning process, Cabarrus County and its partners determined the locations for countywide greenways and segments of the Thread Trail by considering alternative routes and alignments that took into account public lands, property owned by landowners willing to participate in future greenway development and land developers that view greenways as an amenity to neighborhoods. The broadly defined greenway corridors present multiple opportunities

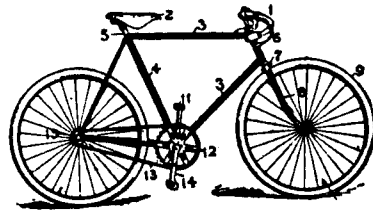
and adjustments for a defined route, so that landowners can continue to be involved in fine tuning and defining the location of trails and amenities. Expert trail builders indicate that trails are built by assimilating land parcels over time in this manner and that eminent domain is very rarely used.

Through an inclusive, collaborative process, Cabarrus County and its partner municipalities have determined where the countywide greenway system will be developed and how this system links to the Carolina Thread Trail. Not all local trails and greenways are destined to be part of the Thread Trail. Analogous to our highway systems, the Thread Trail will be developed as a "green interstate" focused on linking local trails and regionally significant attractions. Other trails will continue to exist or be planned but may not receive the Thread Trail designation. Local trails will retain their own identities, whether or not they are designated as part of the Thread Trail.

The look and feel of the Carolina Thread Trail may vary from community to community, county to county. Designation as the Thread Trail will signify that a particular trail is part of a plan to create an interconnected system, a plan created by local communities working together with their neighbors to identify connection points and to build trails that will grow together over time.



Respect for landowners is a guiding principle of the Thread Trail.



CHAPTER 2. PUBLIC BENEFITS OF TRAILS AND GREENWAYS

When considering the dedication in time and resources that it will take to fulfill the goals of this plan, it is also important to measure the immense value of trails and greenways. Trails help to improve people's health and fitness, enhance environmental conditions, generate economic activity, and will contribute to a greater sense of community. Scores of studies from experts in the fields of public health, urban planning, urban ecology, real estate, transportation, sociology, and economics have supported such claims and have acknowledged the substantial value in supporting trails and greenways.

Communities across the United States and throughout the world are implementing strategies for greenway and trail development, and have been doing so for many years. They do this because of their obligations to promote health, safety and welfare, and also because of the growing awareness of the many public benefits outlined below.

TRAILS ENHANCE VALUE OF REAL ESTATE

There are many examples, both nationally and locally, that affirm the positive connection between greenspace and property values.¹ Residential properties will realize a greater gain in value the closer they are located to trails and greenspace. In the 2007 *Economic Impact Study: The Potential Economic Impacts of the Proposed Carolina Thread Trail*, homes in the affected area of the Carolina Thread Trail are estimated to increase approximately 4% in value after trail construction.

According to a 2002 survey of homebuyers by the National Association of Home Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices.² Additionally, the study found that 'trail availability' outranked 16 other options including security, ball fields, golf courses, parks, and access to shopping or business centers.

Examples of where this is true in the region are as follows:

Testimonial from Bill Gartland, VP, Crosland:

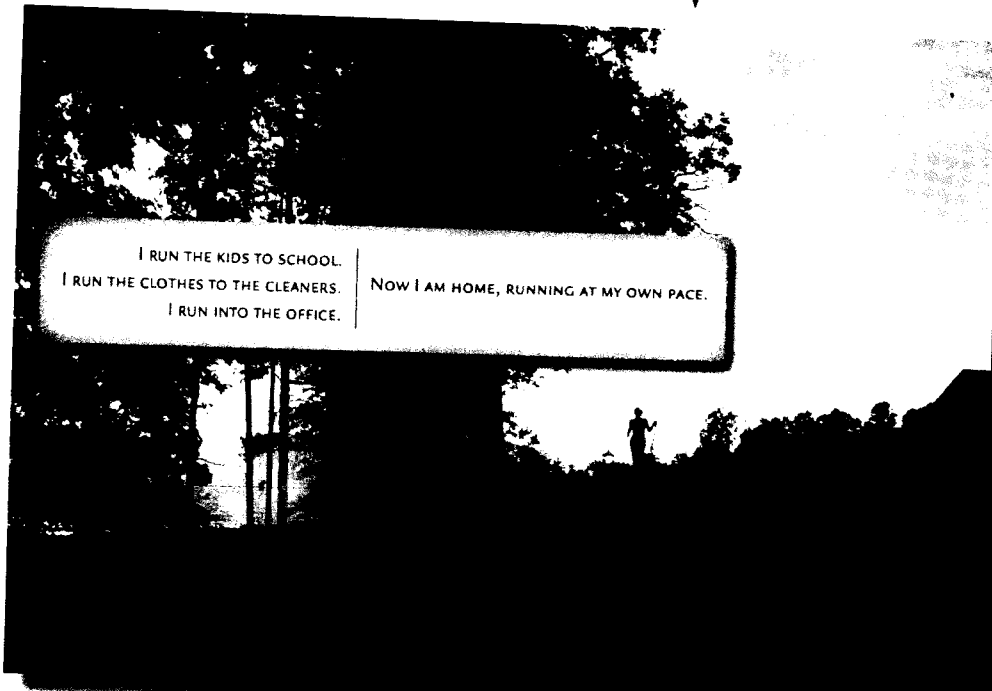
"We feel that greenway trails are a great amenity for residential & mixed use developments as walking trails and open space are critical elements for making great places. It is difficult to quantify the impact of incorporating greenways on property values as they are only one component of the amenity package which include parks, pools ect. in our communities. However, homes that front on significant greenway space are easier to sell and do often generate premiums of 5% or more than comparable homes internal to the neighborhood." (Bill Gartland, Vice President, Crosland, 2006)

Testimonial from Ivan Jecklin, VP, Weinstein

Properties: "We market the (Bexley) greenway as great amenity for our residents. If we are looking at two equal properties and one had a greenway and the other did not, we would definitely go for the one with the greenway!" (Jecklin, 2006)

Findings from the Trust for Public Land's *Economic Benefits of Parks and Open Space*, and the Rails-to-Trails Conservancy's *Economic Benefits of Trails and Greenways* (listed below) illustrate how the value of trails is realized in property value across the country:

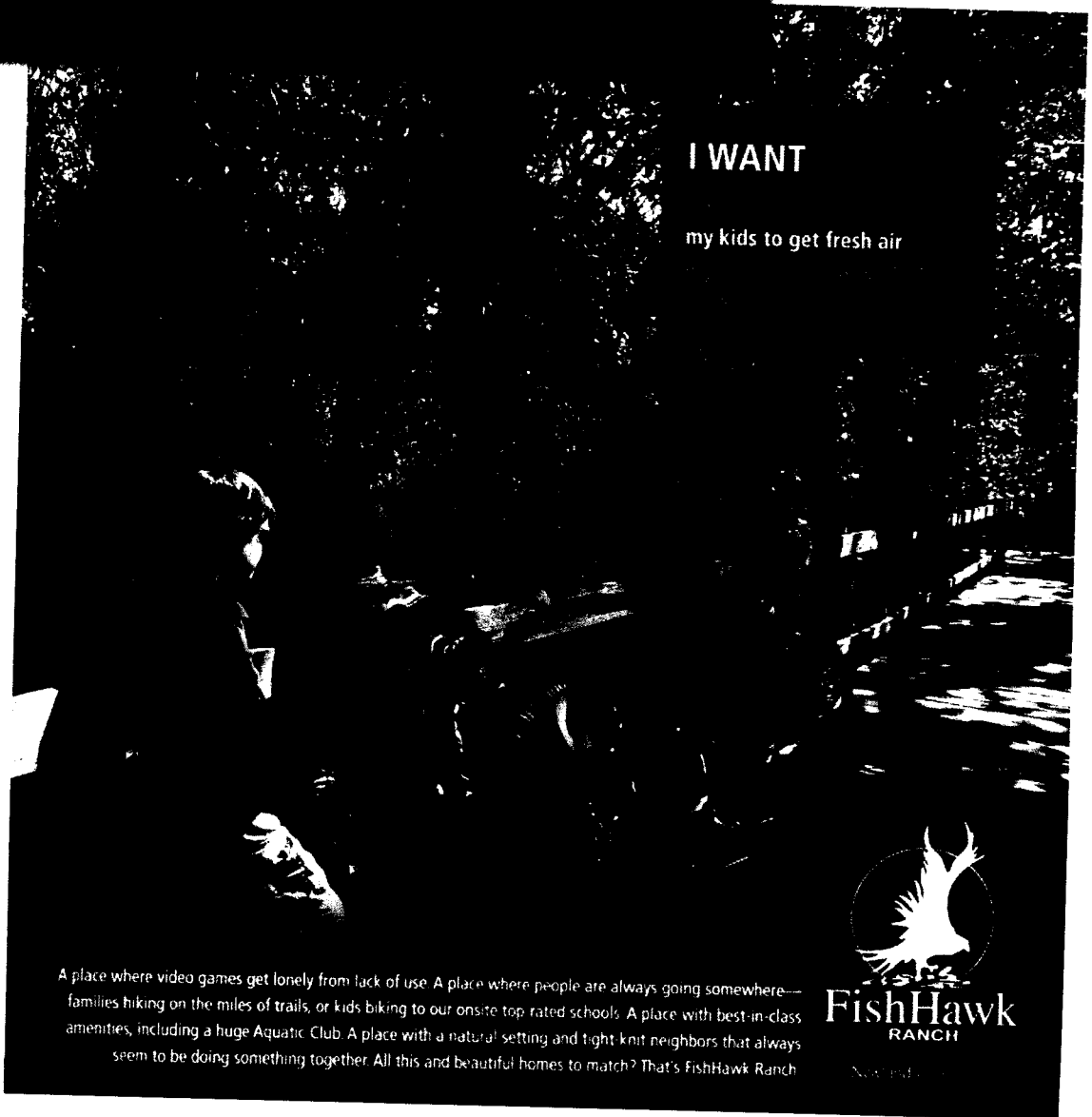
- Apex, NC: The Shepard's Vineyard housing development added \$5,000 to the price of 40 homes adjacent to the regional greenway – and those homes were still the first to sell.³



I RUN THE KIDS TO SCHOOL.
I RUN THE CLOTHES TO THE CLEANERS.
I RUN INTO THE OFFICE.

NOW I AM HOME, RUNNING AT MY OWN PACE.

Developers are taking advantage of the positive impact of trails on property values by marketing their greenways; left and below are examples of two magazine advertisements from North Carolina developers that focus their marketing on greenways.



I WANT

my kids to get fresh air

A place where video games get lonely from lack of use. A place where people are always going somewhere—families hiking on the miles of trails, or kids biking to our onsite top rated schools. A place with best-in-class amenities, including a huge Aquatic Club. A place with a natural setting and tight knit neighbors that always seem to be doing something together. All this and beautiful homes to match? That's FishHawk Ranch.



FishHawk
RANCH

North Carolina



- Front Royal, VA: A developer who donated a 50-foot-wide, seven-mile-long easement along a popular trail sold all 50 parcels bordering the trail in only four months.
- Salem, OR: land adjacent to a greenbelt was found to be worth about \$1,200 an acre more than land only 1000 feet away.
- Oakland, CA: A three-mile greenbelt around Lake Merritt, near the city center, was found to add \$4.1 million to surrounding property values.
- Seattle, WA: Homes bordering the 12-mile Burke-Gilman trail sold for six percent more than other houses of comparable size.
- Brown County, WI: Lots adjacent to the Mountain Bay Trail sold faster for an average of nine percent more than similar property not located next to the trail.
- Dayton, OH: Five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that open space.

TRAIL TOURISM CREATES ECONOMIC IMPACTS
 Tourism and recreation-related revenues from trails and greenways come in several forms. Trails and greenways create opportunities in construction and maintenance, recreation rentals (such as bicycles, kayaks, and canoes), recreation services (such as shuttle buses and guided tours), historic preservation, restaurants and lodging.

In Cabarrus County, the tourism benefits of trails and greenways are becoming known and quantified, as described by the following:

Testimonial from John Cox, CEO, Cabarrus Regional Partnership: "Cox said he feels a pathway (along the Rocky River in Concord) connecting the golf club with the hotel would be a certain draw for tourists, adding that a walkway encompassing the entire Concord Mills and Lowe's Motor Speedway area would be ideal for the area." (Independent Tribune, 2006. In reference to Cabarrus Regional Partnership CEO, John Cox)

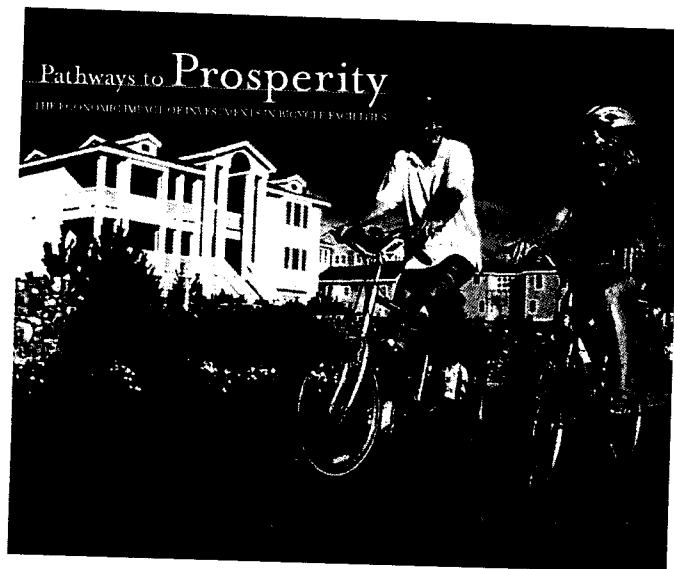
Expected tourism benefits from the fully built-out multi-county trail in the 2007 Potential Economic Impacts of the Proposed Carolina Thread Trail study are \$42-\$84 million in new tourism spending for the local economy and \$3-\$6 million in additional state and local tax revenues.

Other Tourism related benefits include:

- The Outer Banks, NC: Bicycling is estimated to have an annual economic impact of \$60 million and 1,407 jobs supported from the 40,800 visitors for whom bicycling was an important reason for choosing to vacation in the area. The annual return on bicycle facility development in the Outer Banks is approximately nine times higher than the initial investment.⁴
- Damascus, VA: At the Virginia Creeper Trail, a 34-mile trail in southwestern Virginia, locals and non-locals spend approximately \$2.5 million annually related to their recreation visits. Of this amount, non-



Download this full report, "Pathways to Prosperity" from:
http://ncdot.org/transit/bicycle/safety/safety_economicimpact.html



local visitors spend about \$1.2 million directly in the Washington and Grayson County economies.⁵

- Morgantown, WV: The 45-mile Mon River trail system is credited by the Convention and Visitors Bureau for revitalizing an entire district of the city, with a reported \$200 million in private investment as a direct result of the trail.⁶
- San Antonio, TX: Riverwalk Park, created for \$425,000, has surpassed the Alamo as the most popular attraction for the city's \$3.5-billion tourism industry.⁷
- Tallahassee, FL: The Florida Department of Environmental Protection Office of Greenways and Trails estimate an economic benefit of \$2.2 million annually from the 16-mile St. Marks Trail.⁸

- Pittsburgh, PA: Mayor Tom Murphy credits trail construction for contributing significantly to a dramatic downtown revitalization.
- Allegheny Passage, PA: The direct economic impact of the trail exceeded \$14 million a year, encouraging the development of several new businesses and a rise in property values in the first trailhead town.
- Leadville, CO: In the months following the opening of the Mineral Belt Trail, the city reported a 19 percent increase in sales tax revenues.
- Dallas, TX: The 20-mile Mineral Wells to Weatherford Trail attracts 300,000 people annually and generates local revenues of two million dollars.

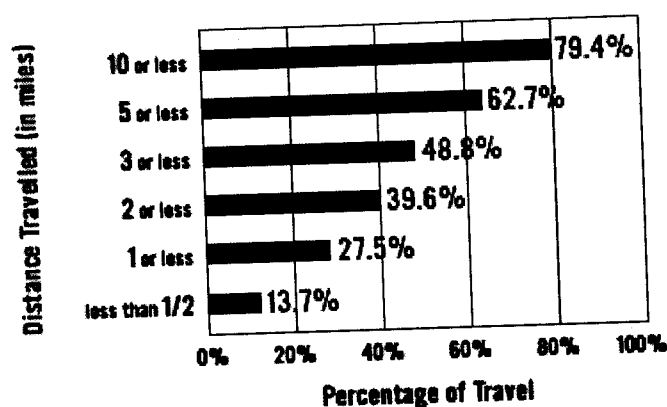
BICYCLE AND PEDESTRIAN TRANSPORTATION

The sprawling nature of many land development patterns often leaves residents and visitors with no choice but to drive, even for short trips. In fact, two-thirds of all trips we make are for a distance of five miles or less. Surveys by the Federal Highway Administration show that Americans are willing to walk as far as two miles to a destination and bicycle as far as five miles. A complete trail network, as part of the local transportation system, will offer effective transportation alternatives by connecting homes, workplaces, schools, parks, downtown, and cultural attractions.

Greenway networks can provide people with alternative transportation links that are currently unavailable. Residents who live in subdivisions outside of downtown areas are able to walk or bicycle downtown for work, or simply for recreation.



'Daily Trip Distances' chart from the Bicycle and Pedestrian Information Center website, www.pedbikeinfo.org



Also, regional connectivity through alternative transportation could be achieved once adjacent trail networks are completed and combined.

Additionally, many people do not have access to a vehicle or are not able to drive. According to the National Household Travel Survey (NHTS), one in 12 U.S. households does not own an automobile and approximately 12 percent of persons 15 or older do not drive.⁹ An improved greenway network provides greater and safer mobility for these residents.

IMPROVING HEALTH THROUGH ACTIVE LIVING

A region's trail network will contribute to the overall health of residents by offering people attractive, safe, accessible places to bike, walk, hike, jog, skate, and possibly places to enjoy water-based trails. In short, the trails network will create better opportunities for active lifestyles. The design of our communities—including towns, subdivisions, transportation systems, parks, trails and other public recreational facilities—affects people's ability to reach the recommended 30 minutes each day of moderately intense physical activity (60 minutes for youth). According to the Centers for Disease Control and

Prevention (CDC), "Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic".¹⁰

In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week.¹¹ This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits.¹² Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community.

Many public agencies are teaming up with foundations, universities, and private companies to launch a new kind of health campaign that focuses on improving people's options instead of reforming their behavior. A 2005 *Newsweek* Magazine feature, *Designing Heart-Healthy Communities*, cites the goals of such programs (*italics added*): "The goals range from updating restaurant menus to restoring mass transit, but the most visible efforts focus on making the built environment more conducive to walking and cycling."¹³ Clearly, the connection between health and trails is becoming common knowledge. The Rails-to-Trails Conservancy puts it simply: "Individuals must choose to exercise, but communities can make that choice easier."

CLEAR SKIES, CLEAN RIVERS, AND PROTECTED WILDLIFE

There are a multitude of environmental benefits from trails, greenways, and open spaces that help to protect the essential functions performed by natural ecosystems. Greenways protect and link fragmented habitat and provide opportunities for protecting plant and animal species. Trails and greenways



reduce air pollution by two significant means: first, they provide enjoyable and safe alternatives to the automobile, which reduces the burning of fossil fuels; second, they protect large areas of plants that create oxygen and filter air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metal. Greenways improve water quality by creating a natural buffer zone that protects streams, rivers and lakes, preventing soil erosion and filtering pollution caused by agricultural and road runoff. According to the 2007 *Economic Impact Study: The Potential Economic Impacts of the Proposed Carolina Thread Trail*, 130 tons of air particulate matter would be removed per year with the associated multi-county greenway tree cover.

As an educational tool, trail signage can be designed to inform trail-users about water quality issues particular to each watershed. Such signs could also include tips on how to improve water quality. Similarly, a greenway can serve as a hands-on environmental classroom for people of all ages to experience natural landscapes, furthering environmental awareness.

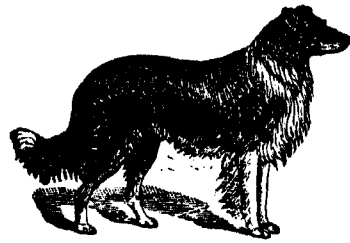
PROTECTING PEOPLE AND PROPERTY FROM FLOOD DAMAGE

The protection of open spaces associated with trail and greenway development often also protects natural floodplains along rivers and streams. According to the Federal Emergency Management Agency (FEMA), the implementation of floodplain ordinances is estimated to prevent \$1.1 billion in flood damages annually. By restoring developed floodplains to their natural state and protecting them as greenways, many riverside communities are preventing potential flood damages and related costs.¹⁴

ENHANCING CULTURAL AWARENESS AND COMMUNITY IDENTITY

Trails, greenways, and open space can serve as connections to local heritage by preserving historic places and by providing access to them. They provide a sense of place and an understanding of past events by drawing greater public attention to historic and cultural locations and events. Trails often provide access to historic sites such as battlegrounds, bridges, buildings, and canals that otherwise would be difficult to access or interpret. Each community and region has its own unique history, its own features and destinations, and its own landscapes. By recognizing, honoring, and connecting these features, the combined results serve to enhance cultural awareness and community identity, potentially attracting tourism. Being aware of the historical and cultural context when naming parks and trails and designing features will further enhance the overall trail- and park-user experience.

Finally, greenways provide opportunities for people to interact with one another outside of work and their immediate neighborhood. Positive interaction (such as through exercising, strolling, or even just saying 'hello') among people from a wider community helps to build trust and awareness of others, which strengthens the overall sense of community.



CHAPTER 3. EXISTING CONDITIONS

GEOGRAPHY OF THE STUDY AREA/LAND COVER

Cabarrus County is situated in the gently rolling countryside of the Carolina Piedmont nestled between Rowan County to the North, Stanly County to the East, Union County to the South, Mecklenburg County to the West, and Iredell County to the Northwest.

There are no significantly high peaks or points, although the eastern half of the county contains the westernmost foothills of the Uwharrie Mountains. Altitude ranges from approximately 500 to 800 feet above sea level. There are no large or navigable rivers flow through the county; the nearest navigable waterway is the Yadkin River in nearby Rowan County. The longest waterway within the county is Rocky River, which rises in Iredell County and empties into the Pee Dee below Norwood in Stanly County. The land slope is generally toward the southeast. According to the U.S. Census Bureau, the county has a total area of 365 square miles, of which, 364 square miles of it is land and 1 square miles of it (0.16%) is water.

Cabarrus County is divided into twelve townships; Central Cabarrus, Harrisburg, Concord, Poplar Tent, Odell, Kannapolis, New Gilead, Rimertown, Gold Hill, Mount Pleasant, Georgeville, and Midland. A few of the largest

cities and towns within Cabarrus County include Concord, Kannapolis, Harrisburg, Mt. Pleasant, and Midland.

Cabarrus County was formed in 1792 in honor of the popular Speaker of the House of Representatives, Stephen Cabarrus of Chowan County. Agriculture and gold mining were the primary trades within the county until it was discovered that the soil was ideal for growing cotton in the late 1800's. This discovery led to several large cotton mills throughout the region which flourished because of the rail road and the mills' nearby location to Charlotte and other large cities. Both Concord and Kannapolis had large textile mills which helped spark the population boom within the area.

POPULATION

As of the 2000 Census, there were 131,063 people and in 2006 the population had increased 19% to 156,395 (2006 American Community Survey). This population increase was among the highest in the region may be attributed, in part, to the economic boom from the I-85 corridor such as Lowes Motor Speedway and Concord Mills Mall as well as the completion of the western portion of I-485; decreasing availability of affordable land in Mecklenburg

Table 1:

A Demographic View of Cabarrus County and the Metropolitan Area

	North Carolina	Cabarrus	Gaston	Lincoln	Mecklenburg	Rowan	Union	York
Population	8,856,505	156,395	199,397	71,894	827,445	136,254	175,272	208,827
Population Growth Since 2000	10.0%	19.0%	5.0%	13.0%	19.0%	5.0%	42.0%	26.0%
Hispanic/Latino	4.7%	8.0%	5.0%	N/A	10.0%	6.1%	9.0%	3.0%
White	72.1%	81.0%	79.0%	N/A	60.0%	77.7%	82.0%	77.0%
Black or African American	21.6%	15.0%	14.0%	N/A	30.0%	15.0%	12.0%	19.0%

Source: US Census Bureau, 2006 American Community Survey



County; expansion of the Charlotte Douglas International Airport; and increasing commercial/industrial businesses in Cabarrus County. Quality of life draws some who want to live in small towns and gain employment and other opportunities of a nearby city.

As seen below, cities and towns within Cabarrus County also grew at rates greater than 19% from 2000 to 2007. The small towns of Harrisburg and Midland experienced the most growth of over 30% while the larger cities of Concord and Harrisburg had growth greater than 19%.

Table 2:
Population Change of Cabarrus County's
Largest Municipalities

	2000	2007	% Increase
Concord	55,977	71,071	26.96
Harrisburg	4,493	5,954	32.52
Kannapolis	27,890	33,448	19.93
Midland	2,375	3,121	31.41
Mount Pleasant	1,259	1,514	20.25

Source: The State Demographer's Office

From 2005-2007 there were 60,000 households in Cabarrus County. The average household size was 2.6 people. Families made up 71 percent of the households in Cabarrus County. The median age was 35.6 years. Twenty-seven percent of the population was under 18 years and 11 percent was 65 years and older.

Cabarrus County had a total of 65,000 housing units, eight percent of which were vacant. Of the total housing units, 76 percent was in single-unit structures, 15 percent was in multi-unit structures, and nine percent was mobile homes. Forty-three percent of the housing units were built since 1990.

Eighty-five percent of people 25 years and over had at least graduated from high school and 22 percent had a bachelor's degree or higher. Fifteen percent were dropouts; they were not enrolled in school and had not graduated from high school. The total school enrollment in Cabarrus County was 39,000.

Eighty-three percent of Cabarrus County workers drove to work alone, 11 percent carpooled, less than 0.5 percent took public transportation, and 2 percent used other means. The remaining four percent worked at home. Among those who commuted to work, it took them on average 26.5 minutes to get to work. (American Community Survey 2005-2007)

ECONOMY

Employment and industry today in Cabarrus County has diversified from relying on textile and agricultural to a more rounded economy. Today the economy relies on manufacturing 12%, trade transportation and utilities 22%, professional and business services 11%, educational and health services 22%, and leisure and hospitality 15%. The top ten largest employers in Cabarrus County are Cabarrus County Schools, Northeast Medical Center, Phillip Morris USA (manufacturing), Wal-Mart Assoc (trade transportation and utilities), Cabarrus County, City of Concord, Connexions Inc (professional and business services), Kannapolis City Schools, The Shoe Show of Rocky Mount Inc (trade transportation and utilities), and Food Lion LLC (trade transportation and utilities). (ES NC Labor Market Information—Workforce In Depth)

The Cabarrus County School System services the entire county with the exception of parts of Kannapolis, which operates its own school district. The system is generally regarded as one of the better school districts in the state with



high student achievement and low instances of violence and other problems.

The county is also home to Barber-Scotia College, the Cabarrus College of Health Sciences, and a branch of Rowan-Cabarrus Community College. UNC Charlotte, although in Mecklenburg County, is actually located near Harrisburg and is easily accessible to Cabarrus residents via Interstate 85.

As seen below, the unemployment rate as of 2006 was at 4.1%, which was lower than the North Carolina unemployment rate of 5.3%. The median household income was \$49,562 and the poverty rate was at 8.4%.

Table 3:

**An Economic View of Cabarrus County
and the Metropolitan Area**

	Poverty Rate	Median Household Income	Unemployment Rate
Cabarrus	8.4%	\$49,562	4.1%
Gaston	9.9%	\$42,410	5.5%
Lincoln	11.3%	\$38,433	4.9%
Mecklenburg	8.4%	\$51,945	4.5%
Rowan	11.1%	\$42,863	5%
Union	5%	\$59,125	4%
York	8.4%	\$45,739	6.4%

Source: US Census Bureau, 2006 American Community Survey and the S.C. Association of Counties and the N.C. Department of Commerce – 2006 Unemployment figures

DEVELOPMENT TRENDS

Currently, Cabarrus County population projections indicate a strong growth in the western portions of the county, as nearby metropolitan Charlotte grows northeastward. The Charlotte metropolitan area will continue to grow at a rapid rate, which will continue to impact Cabarrus County. The metropolitan area has been cited by publications such as

Fortune and Money magazines as some of the best places to live and do business and is seeing rapid business growth throughout the County. Due to this high growth, there will be shortages of undeveloped land and increasing traffic congestion. Road improvements will help mitigate these problems in the long term, but pose other problems such as creating physical barriers to citizens trying to access destinations by foot or bicycle.

The University of North Carolina Charlotte Urban Institute, a non-partisan applied research and community outreach center, found that the 15-county regions surrounding Charlotte and including Cabarrus County is losing open space at a rate of forty-one acres per day. As of 2006 there was 28% of the land developed within Cabarrus County and by 2025 this is expected to grow to 60%. This study shows that Cabarrus has lost over 60% of its undeveloped land since 1976. With this high amount of growth projected smart land use and transportation planning is critical to preserve open space and provide opportunities for pedestrians and bicyclists for transportation and recreation throughout the County. (<http://www.gis.uncc.edu/OSPC/summary/>)

Therefore, with the current and expected growth throughout the County, it will be important for the County and the various Cities and Towns to actively work together in pursuing planning and constructing parks, open space, greenways/trails, and alternative transportation facilities (pedestrian and bicycle).

EXISTING PARKS AND TRAILS

Cabarrus County Parks and Recreation operates four countywide parks and thirty-nine school park sites. These parks provide more than 400 acres of passive and active recreational space. Several of the towns and cities within Cabarrus County also operate parks. The cities of Concord,



Walkway at Phar Mill Road Park



Kannapolis, and Harrisburg each have city operated parks and the cities of Midland and Mt. Pleasant each have parks operated by the County.

The 2002 Livable Community Blueprint for Cabarrus County provided the County with recommendations for additional park and pedestrian and bicycle transportation facilities. Public input was used to help formulate the recommendations and a few of the major findings from surveys included:

- Residents are concerned about the rapid rate of growth in the county and feel that land acquisition for parkland is critical.
- Residents of Cabarrus County are very interested in visiting passive parks and participating in nature based activities.
- Access to safe Bicycle and Pedestrian Transportation Routes are a high priority for residents.
- There are currently few, safe routes for bicyclists and pedestrians on which to travel to schools, parks or work.
- Residents feel that the community should provide them access to recreation programs and parks.
- The primary reason people do not participate in public recreation is because they do not know what is available.
- A majority of residents would support a property tax increase to fund public recreation.

Additionally the survey also revealed that 48% of the survey respondents wanted more bike paths built and 49% wanted sidewalks on all new roads. This shows a support for the establishment of bicycle and pedestrian routes throughout the Cabarrus South Rowan MPO area. Twenty-two percent of the respondents commuted (one way) between 6-10 miles. It also shows that another 25% of the respondents commuted to work less than 5 miles. Both of these distances are reasonable for a bicycle commute.

The cities and towns current activities as related to parks and greenways are as follows:

The City of Concord has the most city operated parks, ten, and two completed greenways. The parks in Concord include; Lake Fisher, Dorton Park, Rocky River Golf Course, Academy Park, Gibson Field, W.W. Flowe Park, Caldwell Park, Hartsell Park, Les Myers Park, and Beverly Hills Park. The greenways include The Village Greenway and Harold B. McEachern Greenway. Additionally the Rocky River Greenway is being planned and Phase 1 will span from a commercial area along Weddington Road just east of Concord Mills Mall and the popular Lowe's Motor Speedway. This greenway has the potential to connect Concord residents and visitors to the scenic Rocky River, the popular Lowe's Motor Speedway, the Rocky River Golf Club, the Concord Convention Center and restaurants as well as destinations reachable with future greenway development such as the Concord greenway system, Concord Mills Mall and ultimately Charlotte and the Mecklenberg County greenway system. The City of Concord is also expanding the current greenway system by adding a new greenway trail in the downtown area. (City of Concord Online)



The City of Kannapolis operates six parks and two greenways. The parks include; Bakers Creek Park, Veterans Park, Village Park, Walter M Safrir Park, Kannapolis Middle School Athletic Fields, Dale Earnhardt Tribute Plaza, and the Kannapolis Cemetery. The two greenways within Kannapolis include the 8th Street Greenway and the Baker Creek Greenway. The City of Kannapolis is planning to have a 2-mile loop from Bakers Creek Park, along West A Street, up 8th Street to Loop Road and over to Village Park. (City of Kannapolis Online)

The Town of Harrisburg currently operates Harrisburg Park and Stallings Road Park within the city. (City of Harrisburg Online)

The Town of Midland has one park run by the County which is located behind the current Bethel Elementary. (Cabarrus County Online)

The Town of Mt. Pleasant is creating a Parks and Recreation Advisory Board to begin the initial steps of creating parks within the town. Mt. Pleasant is also planning the Mt. Pleasant Greenway which will encircle the southern portion of the town. (Town of Mt. Pleasant Online)

COMMUNITY PLANS

Many of the planning documents from the local municipalities and Cabarrus County share open space, greenway, and alternative transportation (pedestrian and bicycle) goals. Several of these plans mention the need for greenways and their importance to the community with health, economic viability, connectivity, and open space preservation.

Livable Community Blueprint for Cabarrus County (2002)

The Livable Community Blueprint for Cabarrus County provides recommendations to the county and municipalities on how to serve its citizens with convenient parks and recreational services. Providing pedestrian and bicycle networks and facilities is a large part of this plan and was in fact, one of the top needs identified through the public facilitation processes. This plan recommends several major "spines" for off-road facilities as well as eighteen bicycle and pedestrian connector corridors throughout the county. Support for greenways and trails is shown throughout this plan and a few excerpts to highlight this are below:

- Goal: Acquire parkland for future recreation use; Recommendation: Pursue avenues available to preserve designated bicycle and pedestrian corridors for public access. (Page 12 of the 2002 'Blueprint')
- Goal: Develop parks and facilities; Recommendation: Develop parks that are safely accessible by the public from alternative transportation routes (i.e. bike/pedestrian corridors). (Page 13 of the 2002 'Blueprint')
- Goal: Create a transportation plan that will provide for a diverse and safe environment for bicycles and pedestrians to access a variety of destinations and services.

Major recommendations from the 2002 'Blueprint':

- Link residences with major commercial and service centers, health care centers, public facilities, and



outdoor resources via alternative routes of access.

- Recognize that public utilities access virtually all destinations and sites. Develop priorities to include a public access component to all new and existing public utility rights of way.
- Develop routes for pedestrians and cyclists as part of a multi-modal transportation system for the Cabarrus South Rowan MPO area.
- Develop bike trail corridors which link existing and proposed recreation facilities to provide alternative access to parks and historic sites across the county.
- Acquire land and/or easements for public access.
- Promote recreation easements and open space corridors through existing and future development areas for use as linear parks. (Page 14 of the 2002 'Blueprint')

Kannapolis Walkable Community Plan (2006)

The Kannapolis Walkable Community Plan offers suggestions on improvements to the pedestrian network within Kannapolis by indentifying problems with the existing conditions and evaluating solutions. Most of the suggested solutions are street specific but there are several recommendations for off-street greenway connectors throughout the community to connect to the larger pedestrian network.

City of Concord Land Use Plan (2006)

The Concord Land Use Plan was developed to provide goals, guidance, and recommendations for the many various planning realms within the community. This plan set forth

and built upon several recommendations for greenways and bicycle and pedestrian facilities from Cabarrus County plans. Greenways and off-road pedestrian and bicycle facilities are mentioned throughout this plan which demonstrates their importance and community behind them. Below are some relevant excerpts from the plan:

- Goal 2 – Vehicular and Pedestrian Connectivity: Encourage and promote both vehicular and pedestrian connectivity between residential, employment, commercial, and recreational uses. (Chapter 3 page 6 of the Concord Land Use Plan)
- "Designate the routes identified in the Livable Community Blueprint as priority routes to pursue in the development of safe and user-friendly pedestrian and bicycle corridors." (Chapter 3 page 7 of the Concord Land Use Plan)
- "Encourage new developments to incorporate off-road facilities for bicycles and pedestrians." (Chapter 3 pg 7 of the Concord Land Use Plan)
- "On an on-going basis, seek partnerships and funding to develop an interconnected greenway system throughout the community and the region." (Chapter 3 page 7 of the Concord Land Use Plan)
- "Endorse recommendation of Envision Cabarrus to include sidewalk, bikeways, and greenways that connect neighborhoods and create walkable neighborhoods by revising the UDO as necessary to ensure such facilities are constructed." (Chapter 3 page 11 of the Concord Land Use Plan)



- "Revise the UDO to include language to facilitate the Develop "green buffers" along key corridors that would include the development of additional open space and landscaping requirements for new development, as well as pedestrian/biking amenities that will help to link up with the greenways." (Chapter 3 page 11 of the Concord Land Use Plan)
- "Support efforts to promote and establish greenways that can be used for bicycle and pedestrian corridors." (Chapter 3 page 17 of the Concord Land Use Plan)
- "... strong support should be given to the recommendations provided in the Livable Community Blueprint, which suggests developing a citywide greenway system and nature-based parks while there is still an abundant supply of undeveloped land. In addition, the preservation and enhancement of major corridors into the City can be accomplished through the development of landscaping and buffering incentives or regulations. These scenic "green" corridors can include pedestrian and bike pathways, which can provide linkages to the planned greenway network." (Chapter 4 page 16 of the Concord Land Use Plan)
- "The Livable Community Blueprint identifies extensive bicycle and pedestrian systems for the City of Concord. The major north-south connectors are designated routes that generally run along creeks and the river. Others connect east-west along roads or off-road through undeveloped land. In rural areas natural connections between larger undeveloped open space areas such as regional, state or national parks have been preserved and termed "greenways." In urban and suburban areas, narrower corridors connect natural or man-made features and provide alternative transportation routes and recreational sites accommodating such activities as picnicking, jogging, walking, biking or equestrian paths." (Chapter 4 pg 21)

Kannapolis Land Use Plan (2004)

The Kannapolis Land Use Plan was developed to provide recommendations for the many various planning realms within the city. This plan concentrated at eight areas of the community and each area has recommendations for greenways and pedestrian corridors within them. Greenways are mentioned throughout this plan which demonstrates their importance and community behind them.

Harrisburg Area Plan (2001)

The Harrisburg Area Plan, though dated, does realize the importance of pedestrian and bicycle facilities. It notes the inadequate facilities throughout the community and calls for more planning activities focused on these modes of transportation. The plan also mentions two greenway connections to Charlotte and recognizes the need for more greenways throughout the community and county.

Cabarrus County Central Area Plan (2008)

The Cabarrus County Central Area Plan was created to guide and recommend controlled growth and development patterns in this fast growing region of the county. As this area grows, prior planning will be more important. This plan supports greenways and in fact, one of the goals is to "provide greenways and other facilities for enhanced mobility for bicycles and pedestrians." Below are some relevant excerpts from the plan that show the overall support for greenways within the county:



- "By overlapping the pedestrian attractors, existing routes, and green infrastructure an alternative system of greenways, trails, and on-street bicycle routes were identified. Taken as a group, these non-motorized recommendations represent a strategy to connect people with places in a safe and inviting environment. The simultaneous consideration of existing routes and attractors revealed locations with little to no alternative access which quickly became priorities to seek connections. Where feasible, off street greenway connections were sought in order to be consistent with the rural character of the area." (Page 33 of the Cabarrus County Central Area Plan)
- "Bicycle and pedestrian amenities will be considered as part of the "green street" concept, with a sidewalk or greenway rather than sidewalks to be environmentally sensitive." (Page 35 of the Cabarrus County Central Area Plan)

Cabarrus County Trail Design Standards

This document summarizes the different corridor types suitable for trail and greenway development into a tier system. Each tier is then detailed for their various characteristics. The document then describes different situations and scenarios trail development may encounter such as flood plains, easements, rail road corridors, highway corridors, trail types, culverts, bridges, bollards, underpasses, and street and rail crossings.

Concord Parkway /Roberta Church Road Small Area Plan (2005)

This small area plan helped develop a vision for the area in Concord between the Coddle Creek floodplain and the

proposed George W. Liles Parkway extension to Roberta Church Road. Weddington Road and Concord Parkway served as the northern and southern boundaries of the plan area. The plan recommends the extension of a greenway along the Coddle Creek floodplain as well as the preservation of key open spaces throughout the area. The path of the Great Wagon Road is preserved as an active interpretive trail. Additionally, a multi-use path system is recommended along the north side of Concord Parkway.

NCDOT Countywide Bicycle Brochure/Map

This brochure shows a 200 mile system of bicycle routes with three signed routes totaling 155 miles and 45 miles of unsigned connectors within Cabarrus County. These routes link historic districts, shopping, restaurants, hotels, and many points of interest.

DESTINATIONS

Cabarrus County offers many destinations for residents and visitors to travel to. While, all of these destinations can be reached by an automobile few can be reached safely by a pedestrian or bicyclist. Therefore it is important to link these destinations together with county wide pedestrian and bicycle facilities such as greenways and trails. Through public input sessions that were held during this planning process, the following destinations were mentioned most frequently.

Specific Destinations:

- 8th Street Park & Greenway
- Bakers Creek Park
- Camp Spencer Park
- Clarke Creek Rookery
- Concord Mills Mall
- Cox Mill Elementary



Chapter 3. Existing Conditions, continued

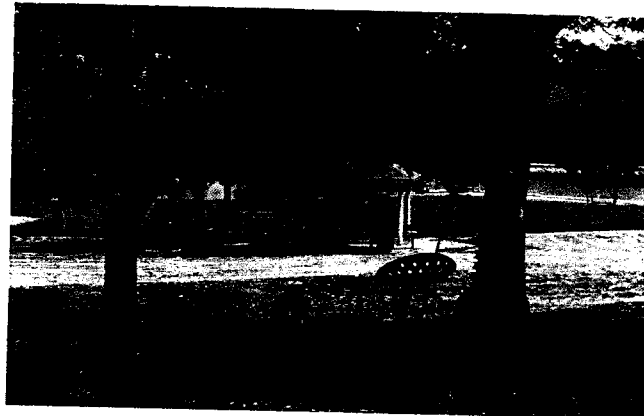
Dale Earnhardt Tribute
Downtown Concord
Downtown Harrisburg
Downtown Kannapolis
Downtown Midland
Downtown Mount Pleasant
Frank Liske Park
Great Philadelphia Wagon Road
Harrisburg Town Park
James L. Dorton Park
Kannapolis Recreation Park
Les Meyers Park
Lowe's Motor Speedway
Mount Pleasant Historical Museum
North Cabarrus Park
NC Research Campus
Reed Gold Mine
Safrit Park
Southeast Park
Village Park
W.W. Flowe Park

General Destinations:

Downtowns
Schools
Public parks, and existing trails and greenways
Historic areas
Retail centers/services
Neighborhoods
Museums
Libraries
Waterways
Natural areas
Public transportation connections



Downtown Concord



Frank Liske Park



NC Research Campus (David H. Murdock Core Laboratory)



CHAPTER 4. PROPOSED TRAIL NETWORKS

PLANNING PROCESS

What follows is a description of the planning process for Cabarrus County communities that resulted in the recommended conceptual trail routes.

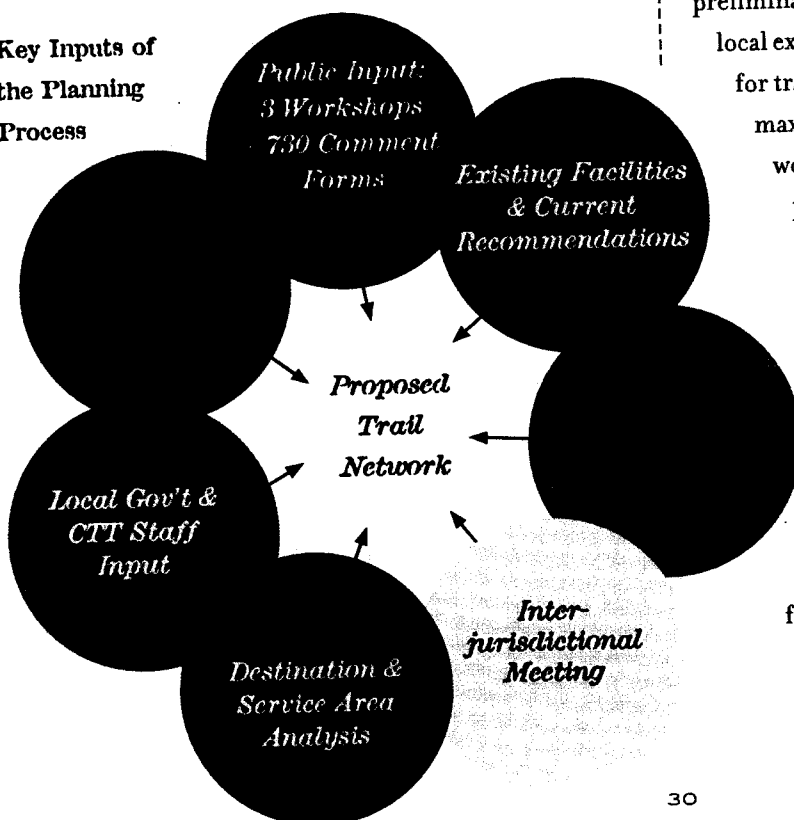
January 2009: This process started with a with a Kick-Off Meeting in January 2009. A steering committee with representation from the county, local communities, and local community organizations met to agree upon a process for developing the proposed trail network, while maximizing community input. The key inputs for the planning process are shown in the diagram below. The committee also established the vision statement, found on page 2 of this plan, during the Kick-Off Meeting.

February 2009: Before making any recommendations about potential trail corridors, local representatives and plan consultants introduced the project at the first of three public open house workshops in February 2009. Participants viewed recommendations from previous planning efforts, and shared their thoughts about trails in Cabarrus County through public input maps, comment forms, and through dialogue with project planners. An online version of the public comment form also began in February, which eventually yielded responses from over 730 area residents.

March 2009: The project committee and a technical sub-committee met several times with planners via teleconference and web-conference to review and develop preliminary draft recommendations. A technical team of local experts used GIS software to map alternative routes for trails. They sought to develop scenarios that would maximize connections to popular destinations, and would build off of existing facilities and current plans. Draft scenarios were based on public input to date, previous plans, gap analysis (making sure recommended trail are linked together), and an analysis of potential destinations and areas served by proposed trails.

April 2009: Representatives from the surrounding counties were invited to an interjurisdictional trails meeting to view alternative scenarios and advise on the best way for trails to cross into neighboring counties.

Key Inputs of the Planning Process





May-June 2009: The second and third public open house workshops featured the draft recommendations to date, building on the work completed in March and April. Also, after receiving input from more than 650 people through the online comment form, a second online public input effort was launched, aimed at introducing the draft plan, and gauging overall support.

July-August 2009: As of July 2009 over 100 people have participated in the second online comment form, bringing the grand total for public input from workshops, meetings, and comment forms to between 700 and 800 participants, depending on overlap in modes of input. Overall public support for the plan has been very high, from those who have participated in the planning process.

After concluding the majority of public input on the draft routes, this draft plan was assembled to present all of the information collected throughout the process, including recommendations for implementation.

Fall 2009: The official adoption process for this plan will include presentations to Cabarrus County and its municipalities. Presentations will cover the planning process, the recommendations, and the implementation strategy for this plan.

GREENWAY MASTER PLAN TRAIL ROUTES

Map 4.1 (See page 32) represents the entire proposed trail network. This map features 100 miles of newly proposed regionally significant trails (in purple), supplemented by local county and municipal trails (in green). The regionally significant purple trails qualify for the Carolina Thread Trail designation.

The trail routes in this plan are depicted with $\frac{1}{4}$ mile wide lines to show the general location of the intended route. The trail itself will be narrower, in recognition that communities will determine the exact location of their segments upon trail design and development.

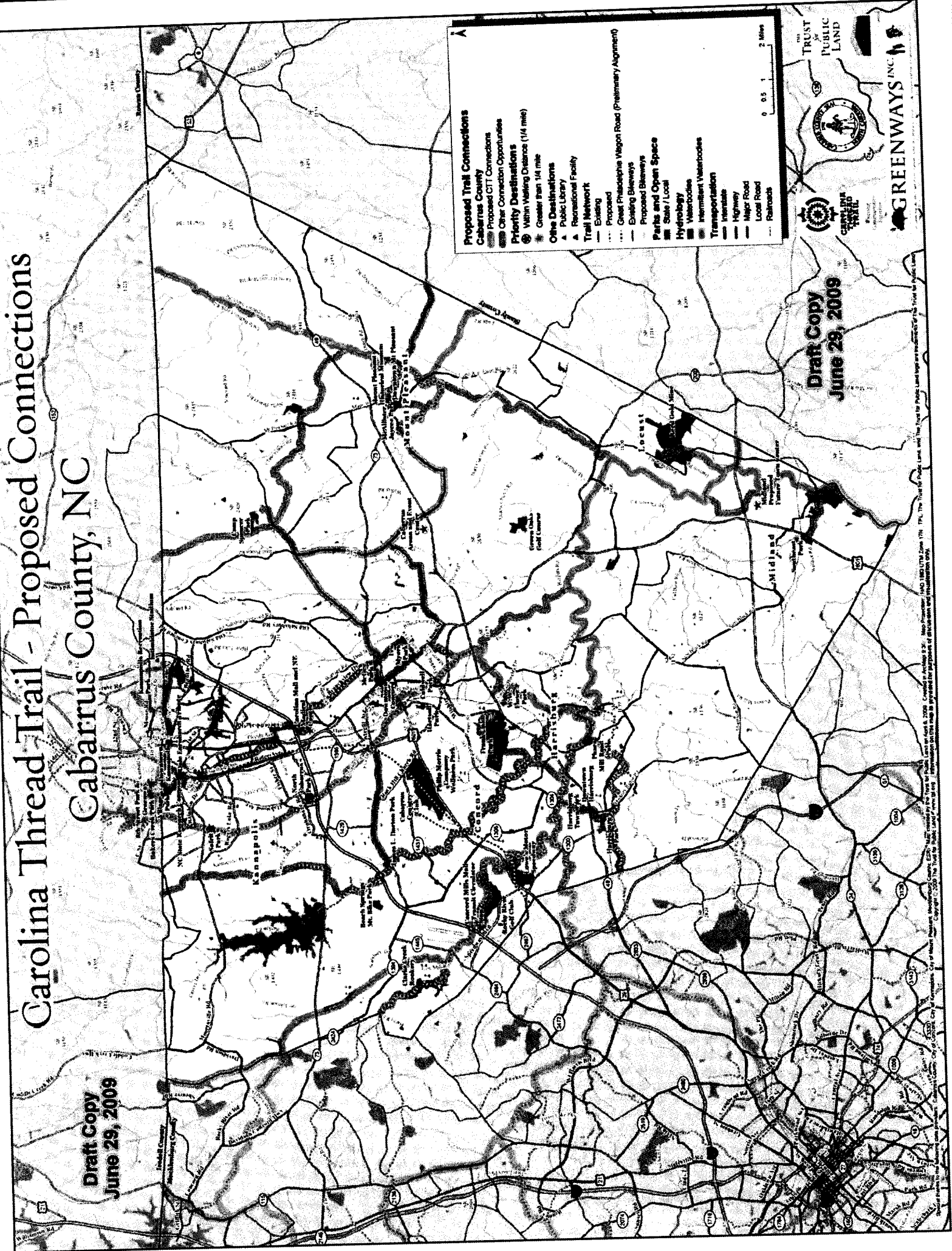
In sum, the 100-mile Thread Trail route includes about six miles of existing trails, and it incorporates 77 miles of trails that were already proposed by local governments in Cabarrus County, particularly from the Livable Community Blueprint. About 77% of the Thread in Cabarrus County would be along streams and river corridors, 13% along existing bike routes and sidewalks, and 4% along road rights-of-way.

Thirty-four percent of all county residents live within $\frac{1}{2}$ mile of the proposed trail route (53,428 residents). About 33% of seniors and children live within that service area, and about 38% of low income households (defined as households with combined income of less than \$35,000 per year, based on 2007 census projections).

The towns of Kannapolis, Harrisburg, Concord, Mt. Pleasant and Midland will be connected by the Thread. A zoom-in map is provided for each of these municipalities on pages 33-38.

Carolina Thread Trail - Proposed Connections Cabarrus County, NC

Draft Copy
June 29, 2009



Draft Copy
June 29, 2009

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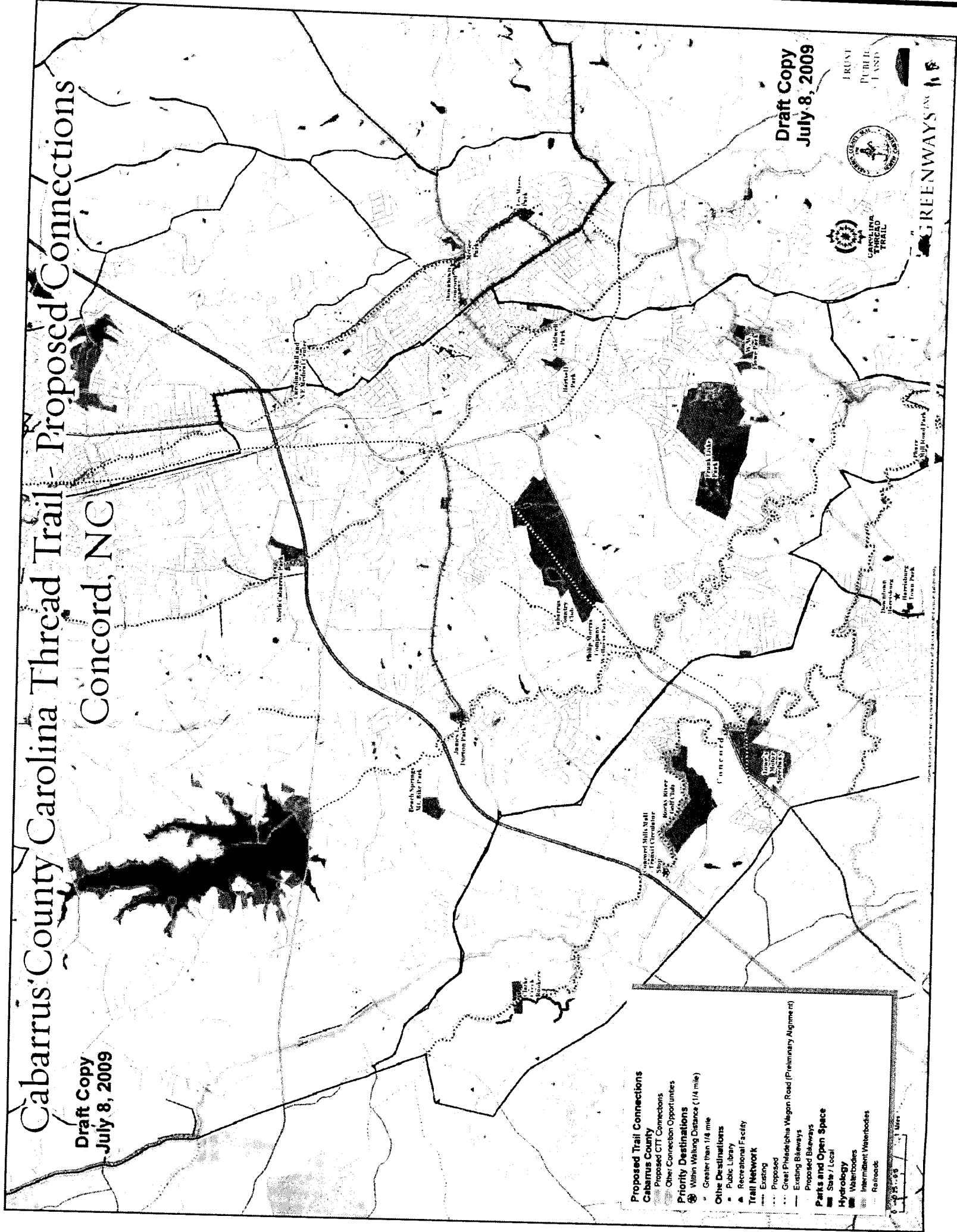
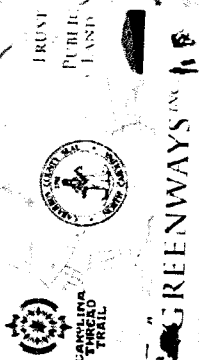
Cabarrus County Carolina Thread Trail - Proposed Connections

Concord, NC

Draft Copy
July 8, 2009

Draft Copy
July 8, 2009

- Proposed Trail Connections**
- Cabarrus County
 - Proposed CTT Connections
 - Other Connection Opportunities
 - Priority Destinations**
 - Within Walking Distance (1/4 mile)
 - Greater than 1/4 mile
 - Other Destinations**
 - Public Library
 - Recreational Facility
 - Trail Network**
 - Existing
 - Proposed
 - Great Philadelphia Wagon Road (Preliminary Alignment)
 - Existing Bikeways
 - Parks and Open Space**
 - State / Local
 - Hydrology**
 - Waterbodies
 - Intermittent Waterbodies
 - Railroads



Cabarrus County Carolina Thread Trail - Proposed Connections

Harrisburg, NC

Draft Copy
July 8, 2009

Proposed Trail Connections

Cabarrus County

- Proposed CTT Connections
- Other Connection Opportunities

Priority Destinations

- Within Walking Distance (1/4 mile)
- Greater than 1/4 mile

Other Destinations




- Public Library
- Recreational Facility

Trail Network

- Existing
- Proposed
- Great Philadelphia Wagon Road (Preliminary Alignment)
- Existing Bikeways
- Proposed Bikeways

Parks and Open Space

- State / Local
- Railroads

GREENWAYS INC.

Map Scale: 1 inch = 1 mile. North arrow pointing up. Map data provided by the Town of Harrisburg, NC. All rights reserved. No part of this map may be reproduced without written permission from the Town of Harrisburg, NC.

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Draft Copy
July 8, 2009



Cabarrus County Carolina Thread Trail - Proposed Connections

Mount Pleasant, NC

Draft Copy
July 8, 2009

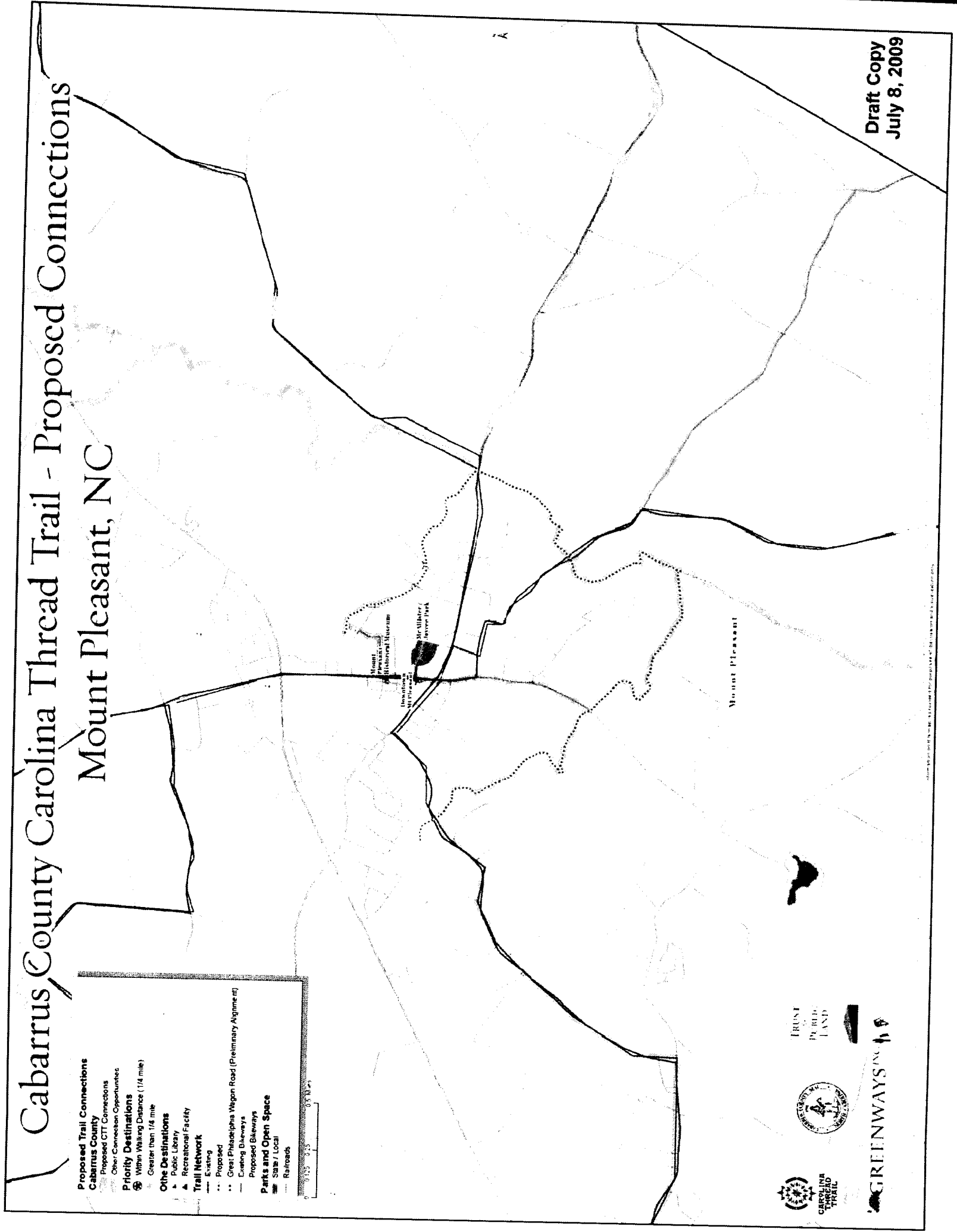
Proposed Trail Connections
Cabarrus County
 Proposed CTT Connections
 Other Connection Opportunities

Priority Destinations
 Within Walking Distance (1/4 mile)
 Greater than 1/4 mile

Other Destinations
 Public Library
 Recreational Facility

Trail Network
 Existing
 Proposed
 Great Philadelphia Wagon Road (Preliminary Alignment)
 Existing Bikeways
 Proposed Bikeways

Parks and Open Space
 State / Local
 Railroads





DESCRIPTION OF CTT ROUTE BY SEGMENT:

A. Rocky River Corridor:**Iredell County Line to Clarke Creek**

Route Profile:

- 9.7 miles in length
- 9.7 miles river corridor
- Includes 2 miles of existing greenway

Access Opportunities

- Adjacent to CLC easements to the west in Mecklenburg County
- Includes 2 miles of existing greenway

Population within 1/2 mile of proposed segment:

- 2,035 residents
- 210 residents / greenway mile

Cross-County Connections:

- Mecklenburg County - South Prong Rocky River Greenway
- Iredell County - Extend north along Rocky River Corridor

B. Rocky River Corridor:**Clarke Creek to Harrisburg**

Route Profile:

- 11.7 miles in length
- 11.7 miles river corridor

Access Opportunities

- Adjacent to Rocky River Golf Club
- Adjacent to County Park

Population within 1/2 mile of proposed segment:

- 7,068 residents
- 604 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Concord Mills Mall - Transit Circulator Stop

- Lowe's Motor Speedway

- Downtown Harrisburg

Issues and Challenges:

- I85 crossing near airport (already working with DOT)
- Sensitive wetlands along Rocky River
- High speed rail crossing
- Concerns about flooding and backyard traffic from local residents

C. Mallard Creek Corridor:**Rocky River to Mecklenburg County Line**

Route Profile:

- 2.4 miles in length
- 2.4 miles river corridor

Access Opportunities

- Adjacent to parkland owned by Town of Harrisburg

Population within 1/2 mile of proposed segment:

- 1,907 residents
- 795 residents / greenway mile

Cross-County Connections:

- Mecklenburg County - Mallard Creek Greenway

D. Rocky River Corridor:**Harrisburg to Dutch Buffalo Creek**

Route Profile:

- 14.7 miles in length
- 14.7 miles river corridor

Access Opportunities

- Adjacent to Phar Mill Road Park

Population within 1/2 mile of proposed segment:

- 5,366 residents
- 365 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Phar Mill Road Park

**Issues and Challenges:**

- High Speed Rail Crossing at Rocky River
- Hwy 601 Crossing at Rocky River

E. Irish Buffalo Creek Corridor:**Rowan County Line to Cabarrus Ave in Concord****Route Profile:**

- 9.9 miles in length
- 9.9 miles river corridor
- Includes 0.2 miles of existing greenway

Access Opportunities

- Adjoins to existing Kannapolis greenway segments
- Includes 0.2 miles of existing greenway
- Adjacent to Barkers Creek Park, Safrit Park, and North Cabarrus Park

Population within 1/2 mile of proposed segment:

- 11,237 residents
- 1135 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- 8th Street Park & Greenway
- Bakers Creek Park
- Downtown Kannapolis
- North Cabarrus Park
- Safrit Park

Cross-County Connections:

- Rowan County – connecting to envisioned Grant's Creek Greenway, providing links to Landis, China Grove, Salisbury, Spencer, and the Yadkin River

Issues and Challenges:

- I85 Crossing at Irish Buffalo Creek @ N Cab Park (already working with DOT)
- Mooresville Rd Crossing North of Safrit Park (already working with DOT)

F. Little Buffalo Creek Corridor:**Mt Pleasant to Rowan County and Gold Hill****Route Profile:**

- 7.0 miles in length
- 7.0 miles river corridor

Population within 1/2 mile of proposed segment:

- 534 residents
- 76 residents / greenway mile

Cross-County Connections:

- Rowan County – providing connections to Gold Hill, High Rock Lake, and the Gold Hill Rails to Trails project

G. 8th Street Greenway:**Village Park to Bakers Creek Park to 8th St Park****Route Profile:**

- 1.4 miles in length
- Includes 1.4 miles of existing greenway

Access Opportunities

- Adjoins to Village Park, Bakers Creek Park, and 8th Street Park
- Includes 1.4 miles of existing greenway

Population within 1/2 mile of proposed segment:

- 726 residents
- 519 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- 8th Street Park & Greenway
- Bakers Creek Park
- Downtown Kannapolis
- Village Park

Cross-County Connections:

- Rowan County – connecting to envisioned Grant's Creek Greenway, providing links to Landis, China Grove, Salisbury, Spencer, and the Yadkin River



H. Connector: 8th Street Greenway to Main St in Downtown Kannapolis

Route Profile:

- 1.6 miles in length
- Includes 1.6 miles of existing sidewalk

Access Opportunities

- Adjoins to several City of Kannapolis parks
- Includes 1.6 miles of existing sidewalk

Population within 1/2 mile of proposed segment:

- 2,415 residents
- 1,509 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- 8th Street Park & Greenway
- Dale Earnhardt Tribute
- Downtown Kannapolis
- NC Research Campus

I. Cabarrus Ave: Connector to Myers Park Greenway

Route Profile:

- 1.7 miles in length
- Includes 0.8 miles of existing greenway
- Includes 0.9 miles of existing sidewalk

Access Opportunities

- Adjacent to McGee Park
- Includes 0.8 miles of existing greenway
- Includes 0.9 miles of existing sidewalk
- Cabarrus Ave sidewalk improvements planned

Population within 1/2 mile of proposed segment:

- 4,649 residents
- 2,734 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Downtown Concord

J. Irish Buffalo and Coddle Creek Corridor: Cabarrus Ave in Concord to Rocky River

Route Profile:

- 9.4 miles in length
- 9.4 miles river corridor

Access Opportunities

- Adjacent to Caldwell Park and W.W. Flowe Park

Population within 1/2 mile of proposed segment:

- 11,498 residents
- 1,223 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- W.W. Flowe Park

Issues and Challenges:

- 601 Crossing at Irish Buffalo Creek

K. Mt Pleasant Greenway Loop:

Connecting bike route to Little Buffalo Creek

Route Profile:

- 6.4 miles in length

Population within 1/2 mile of proposed segment:

- 972 residents
- 152 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Downtown Mt Pleasant

L. Rocky River Corridor:

Dutch Buffalo Creek to Union County Line

Route Profile:

- 12.3 miles in length
- 12.3 miles river corridor

Access Opportunities

- Adjacent to J.B. Farm and Williams Farm conservancy properties



Population within 1/2 mile of proposed segment:

- 1,029 residents
- 84 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Midland Proposed Future Town Center

Cross-County Connections:

- Union County – A continuation along the Rocky River along the border between Stanly and Union Counties

M. Little Meadow Creek Corridor:

Rocky River to Reed Gold Mine

Route Profile:

- 2.3 miles river corridor

Access Opportunities

- Connects to Reed Gold Mine

Population within 1/2 mile of proposed segment:

- 165 residents
- 72 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Reed Gold Mine

N. Bike Route Connector: Mt Pleasant to Concord via Cold Springs, Irish Potato, Gold Hill Bike Route

Route Profile:

- 11.9 miles in length
- Includes 8.4 miles of designated bike routes

Access Opportunities

- Public road right-of-way
- Includes 8.4 miles of designated bike routes

Population within 1/2 mile of proposed segment:

- 3,304 residents
- 278 residents / greenway mile

Priority Destinations within walking distance (1/4 mi):

- Cabarrus Arena and Event Center

O. Rural Route Connector: Mt Pleasant to Stanly County Line via rural route SR 2610

Route Profile:

- 2.9 miles in length

Access Opportunities

- Public road right-of-way

Population within 1/2 mile of proposed segment:

- 466 residents
- 161 residents / greenway mile

Cross-County Connections:

- Stanly County – Providing connection to Albemarle

P. On-Road Connector:

Rocky River to Stanly County Line via NC 24-27

Route Profile:

- 0.8 miles in length

Access Opportunities

- Public road right-of-way

Population within 1/2 mile of proposed segment:

- 57 residents
- 71 residents / greenway mile

Cross-County Connections:

- Stanly County – Provides a connection for Stanly residents to reach Reed Gold Mine. Incorporates the area near Red Bridge Golf Course.



CHAPTER 5. RECOMMENDED ACTIONS FOR IMPLEMENTATION

Implementation of this Master Plan will require a commitment and leadership from Cabarrus County to engage its public and private sector partners and follow the recommendations that are provided in this chapter. The following provides key elements of implementation that need to be addressed and resolved.

ADOPT THIS PLAN

Upon completion of the Master Plan, the first order of business will be to have Cabarrus County and all of the partner municipalities in the County adopt this plan and make it an official element of the comprehensive plan. The adoption procedures will vary from community to community. In addition to adopting the Master Plan, some of the municipalities and the County may wish or need to make revisions to zoning ordinances, land development codes and other policies, plans and procedures that enable greenway development to take place. It will be incumbent upon each local government to properly assess the changes that are needed and to make these changes, amendments and policy decisions as soon as practically possible.

Phase I - Plan Adoption

	Priority
Review and take action: municipal advisory boards	High
Review and adopt Greenway Master Plan	High
Review and amend zoning and land development codes	Medium
Review and amend floodplain ordinances to limit construction in floodprone landscapes	Medium
Review and amend zoning and land development codes to protect riparian zones	Medium
Review and amend current open space and park land dedication requirements along with fee-in-lieu programs	Medium

High Priority- Within 1 Year

Medium Priority- Within 2-5 Years

Low Priority- Within 6-10 Years

BUILD PUBLIC SUPPORT

One of the most important implementation steps that will need to be taken by Cabarrus County is the continued involvement of residents in the future greenway development. It is recommended that the County constitute a Greenways and Trails Advisory Committee, either as a component of the County Parks and Recreation Department or as a stand along advisory group to the Board of County Commissioners. This advisory group can become the citizens champion for this master plan and provide valuable assistance, feedback, support and coordination on all aspects of implementation.

The advisory group should be encouraged to file an annual report regarding its activities and to also report on the progress made with the countywide greenway master plan. This group should work with county and municipal governments to promote, market and inform fellow residents about the greenway program. The group should also look into hosting an annual "Greenway Day" event on an existing greenway segment within the county, to showcase completed projects and further engage citizens in the implementation process.

The County should also form partnerships with other local non-profits and consider convening a partnership among local governments, in particular park and recreation providers, to coordinate future greenway implementation. One of the goals with non-profits would be to work together to secure land and/or rights-of-way for greenway corridors.



Phase II - Build Public Support	Priority
Establish a county citizens Greenways and Trails Advisory Committee to champion this plan	High
GTAC implements a marketing, promotion and information campaign to engage citizens	High
Host an annual Greenway Day Event	Medium
Form partnerships with regional non-profits to secure land for greenway corridors	Medium
Form partnership among local government parks and recreation providers to coordinate implementation	Medium
High Priority- Within 1 Year	
Medium Priority- Within 2-5 Years	
Low Priority- Within 6-10 Years	

COMPLETE PRIORITY GREENWAY SEGMENTS

This master plan has identified some top priority greenway corridors and projects that should be developed by the Cabarrus County and its partners. The Carolina Thread Trail (CTT) staff stands ready to assist the county and its partners with implementation, including providing catalytic grants that can jump start acquisition and trail development.

In order to develop the future greenway system in an orderly and systematic manner, the entire network needs to be further evaluated and prioritized for development. The following criteria will be used to select segments of the Cabarrus County Greenway system and Carolina Thread Trail for future phased development.

1) Near Population: Candidate segments of greenway need to be near or within populated areas. Greenways provide numerous benefits to the residents in the form of health and wellness activities, recreation and transportation. So the County should build trail segments where the majority of people live.

2) Available Land/Right-of-Way: An assessment should be made for segments of each greenway corridor to determine where land or right-of-way is contiguous and capable of supporting future trail development.

3) Functional Segment: Each greenway should have an "anchor" or destination landscape on each end, such as a park, neighborhood, school, shopping area, or other popular destination (such as a YMCA).

4) Ease of Development: Candidate segments should be studied to better understand obstacles to future facility development, such as environmental permits.

5) Available Funding: An assessment should be made as to how each individual segment will be funded. For example, if a project presents a strong case for transportation funding, NCDOT would be the logical choice for a matching grant.

This evaluation and prioritization of projects will need to be completed on an annual basis by the County, the Greenway and Trails Advisory Committee, its municipal partners and non-profit partners. With all of this in mind, a flexible and pragmatic approach is needed that focuses on opportunities throughout the county, occurring on an annual basis, where greenway development can most likely occur.

The following segments of the countywide Greenway system and Carolina Thread Trail segments are recommended for development as phase one.

**Phase III - Prioritization**

Priority

Review the phase one priority segments listed in this Plan and begin implementation steps	High
Identify future phases of greenway implementation using the criteria presented in this plan	Medium
Review current and future utility corridors and easements for greenway opportunity	Medium
Consider a multi-year, dedicated funding source for greenway acquisition, development & stewardship	Medium
Prepare an acquisition plan that is based on priority segments and work with local non-profits to implement	Medium
High Priority- Within 1 Year	
Medium Priority- Within 2-5 Years	
Low Priority- Within 6-10 Years	

DEFINE FUNDING AND FINANCING

It is recommended that a funding quilt be used by Cabarrus County to fund future acquisition, development and stewardship of greenway lands and facilities. A funding quilt combines local, state and federal funding to achieve implementation objectives. The following offers a summary of possible funding sources for use in developing the Cabarrus County Greenway System, and elements of the Carolina Thread Trail.

1. Private Funding

Private funding from citizens, philanthropic organizations, non-profits and businesses can and should be used to build segments of the Cabarrus County Greenway system and the Carolina Thread Trail. The Catawba Lands Conservancy (CLC) currently serves as home for the Carolina Thread Trail operations, and is spearheading a private fund raising effort to make available seed dollars to local governments and communities that plan for and adopt greenway master plans. These private dollars are available in the form of grants that can be used to fund trail planning, design, land acquisition, and construction. These grant funds

can be supplemented with other local, private sector monies to support future implementation of this master plan. Gaston County, NC and York County, SC are currently available for these matching grant funds having adopted countywide plans in 2009.

2. Public Funding

A variety of public funding dollars are available to support future development of the Cabarrus County Greenway system.

a. Federal Funding:

Federal funding programs are more thoroughly described in the Appendix of this plan. Trail related funding programs appear at the top of this list, while other programs that may not directly fund trail development, but could be used to fund greenway development follow. Federal funding is administered in different ways. Some federal funds are direct appropriations to States and are therefore distributed and managed by a state agency. Other funds are distributed directly from the federal program. The United States Congress also earmarks funds for project development. The descriptions in the Appendix are intended to provide a broad overview of funding potential.

b. State of North Carolina Funding:

A majority of state funding for greenway acquisition and development in North Carolina comes from four large trust funds and through NCDOT. These programs are covered in depth within the Appendix of this plan. Cabarrus County and municipal governments Kannapolis, Concord and Harrisburg have had success applying for and receiving funding from these trust funds and NCDOT. One of the keys to continue receiving state funding is for the local governments to have



matching funds, therefore consideration should be given to establishing a dedicated, recurring source of revenue for greenway acquisition and development.

a. Local Funding Options:

Generally, there are three types of revenue sources that local governments can use to fund parks and trail development in North Carolina: discretionary annual spending (General Fund); dedicated funding; and debt financing. Funding will vary by community dependent on taxing capacity, budgetary resources, voter preference, and political will. The ability to establish dedicated funding sources may also depend on enabling authority. North Carolina has given local governments a limited number of

options to fund land conservation and trail projects. Table 5 provides a summary of these options.

Cabarrus County and municipalities have supported park, recreation, open space and greenway project on a fairly consistent basis for the past decade. Kannapolis has utilized the "funding quilt" approach to developing several segments of greenway. Concord is looking to partner with public and private sector interests to expand its greenway system. So there is success to build upon. The majority of matching funds come from the general funds of local governments. Some consideration should be given to a countywide fund for greenway acquisition and development. Mecklenburg County, for example, recently passed a bond referendum to fund park and greenway development.

Table 4:

Local Conservation Financing Options in North Carolina

Method	Definition	Pros	Cons
General Obligation Bond	Loan taken out by a city against the value of the taxable property	<ul style="list-style-type: none"> • Allows for immediate purchase of open space, locking in land at current prices • Distributes the cost of acquisition 	<ul style="list-style-type: none"> • Extra interest costs of borrowing • Funds may be used only for capital projects and improvements • Voter approval required
Property Tax	Tax on real property paid for by commercial and residential property owners	<ul style="list-style-type: none"> • Steady source of revenue • Relatively easily administered • Tax burden fairly broadly distributed • Small increases create substantial funding 	<ul style="list-style-type: none"> • Competition for other public purposes • Overall concern among taxpayers about high rates • Cannot be permanently dedicated
Impact Fee	One-time fee paid by developer to off-set costs of infrastructure caused by new development	<ul style="list-style-type: none"> • Nexus between taxing new development and protecting remaining open spaces 	<ul style="list-style-type: none"> • Projects must be directly linked to new development
Real Estate Transfer Tax	Tax that may be imposed on the privilege of transferring real property	<ul style="list-style-type: none"> • Is a familiar tool for land conservation 	<ul style="list-style-type: none"> • Unpredictable source of revenue • May have opposition from Realtor community • Revenues may not be restricted
Local Sales Tax	Tax levied on the retail price of an item	<ul style="list-style-type: none"> • Distributes the cost of acquisitions 	<ul style="list-style-type: none"> • Unpredictable source of revenue • Relies on the strength of the local economy • Revenues may not be restricted

**Phase IV Funding Sources**

Priority

Identify and pursue public and private grants to fund greenway acquisition, development and stewardship	High
Consider local bonds to fund greenway acquisition, development and stewardship	Medium
Create a local, dedicated, recurring source of revenue to be used in support of federal and state grants	Medium
Consider a countywide funding source for greenways, such as a bond referendum	Medium

High Priority- Within 1 Year

Medium Priority- Within 2-5 Years

Low Priority- Within 6-10 Years

EVALUATE LAND OR RIGHT-OF-WAY**ACQUISITION OPTIONS**

Acquiring land and/or right of way for the countywide greenway system will be one of the most important objectives for the County and its partners. Methods of land acquisition can include the following, more detailed descriptions are provided in the Appendix of this plan:

Donations – land or easements (the right to use a portion of land for certain purposes, as defined in a contract, while fee simple ownership is retained) can be donated to a local government or a local land trust by private citizens or business owners, which in turn can generate a tax reduction for them. In North Carolina, landowners that dedicate land for greenways are eligible for a tax credit. Details of donations should be confirmed with a qualified tax advisor.

Purchase – this method is commonly used to acquire land for greenways, and land trusts can often help acquire land at less than fair market value by working with a landowner to offset the purchase price with other incentives beneficial to the landowner.

Zoning/Development Regulations – buffers along certain stream corridors in North Carolina are already protected in order to prevent building intrusion into sensitive areas which in turn may be used for some trail corridors. Additional development regulations can also be adopted that create building restrictions and dedication requirements. Examples of these requirements include, but are not limited to, setbacks from perennial streams, flood plain development restrictions and open space/trail dedication requirements.

Developer Contributions – Once a conceptual route is officially incorporated into community plans, it can be included in GIS layers for local governments. As discussed previously, if a developer applies for a permit for a development and it overlaps with any of the proposed trail connections, local governments can request, require and/or offer incentives for an open space set aside or for that portion of the trail corridor to be developed as part of the subdivision approval process. The trail will be a marketing benefit to the developer and will in turn allow them to charge a higher premium for the homes adjacent to the trail. This sets up a win – win situation for everyone involved.

Abandoned Rail Corridors – Discussions will need to be held with the rail corridor owners as well as NCDOT Rails Division. The cost of trail construction is typically lower along abandoned rail corridors because a graded corridor with gradual slopes is already established.

**Phase V Acquisition**

	Priority
Work with landowners and discuss the possibility of acquiring voluntary easements or property donations	High
Through the land development process, work with land owners and developers to have right-of-way and land donated or set aside for greenways	High
High Priority- Within 1 Year	
Medium Priority- Within 2-5 Years	
Low Priority- Within 6-10 Years	

DESIGN, CONSTRUCT AND MAINTAIN TRAILS

Once a segment of the Cabarrus County greenway system is selected and the land or public access right-of-way has been acquired, trail design and development will follow. It will be important for communities to determine the intended use(s) of a particular segment and design the trail facility with that in mind. Designing for safety and for affordable maintenance is also required. Intended uses of the trail will dictate the tread width and surface material to be used and have a direct bearing on the construction and maintenance costs. The Cabarrus County greenway planning process revealed that in general, people are most interested in walking, biking, hiking, seeing historic sites, and enjoying quiet time (in that order). A subset of folks who participated were also very interested in equestrian-friendly trails. So, if the trail segment were going to be a multi-purpose trail for walkers, bikers, and horseback riders, then a surface material of either crushed limestone or granite screening would be the preferred choice.

Trail construction costs will vary, and until a project is put out for competitive bid, there is no way to accurately determine local prices. The three most common trail construction surfaces are granite screening, asphalt, and concrete. The trail design process should accurately describe the intended final use in order to fully understand the costs and potential savings when making a decision between one

surface material over another.

Preliminary site plans should be reviewed by community or county staff, including emergency service personnel, so they can offer suggestions, guidance. Historically, there has been a disconnect, at times, between the design process and operations. Designs that are pleasing to the eye are not always conducive to good and inexpensive maintenance. Therefore, it is imperative that cost saving should be a part of any design with a thorough review of the plans while they are still in a preliminary stage.

Security starts in the design phase as well. There is much that can be done in designing a trail system that greatly reduces the risk of crime. All designs should utilize Crime Prevention through Environmental Design (CPTED). Security experts such as the local police chief or county sheriff should be consulted early on in order to seek their advice and to alert them that the trail will be built and that they need to plan for it as well. Well placed lights, wide-open spaces along the trail, removal of underbrush, and easily accessible trailheads all add to the security matrix. Routine patrols and staff members in uniform will alert people that the trail is being watched. Security tips and procedures can be conveyed on bulletin boards, on brochures and in informal gatherings by park staff along the trail.

Phase VI Design and Construction of Trails

	Priority
Prepare construction documents for trails and work with law enforcement and maintenance staff	High
Develop a maintenance and operations plan	High
Upon acquisition of corridor complete design checklist	Medium
Complete operations and management of new trails	Medium

High Priority- Within 1 Year

Medium Priority- Within 2-5 Years

Low Priority- Within 6-10 Years



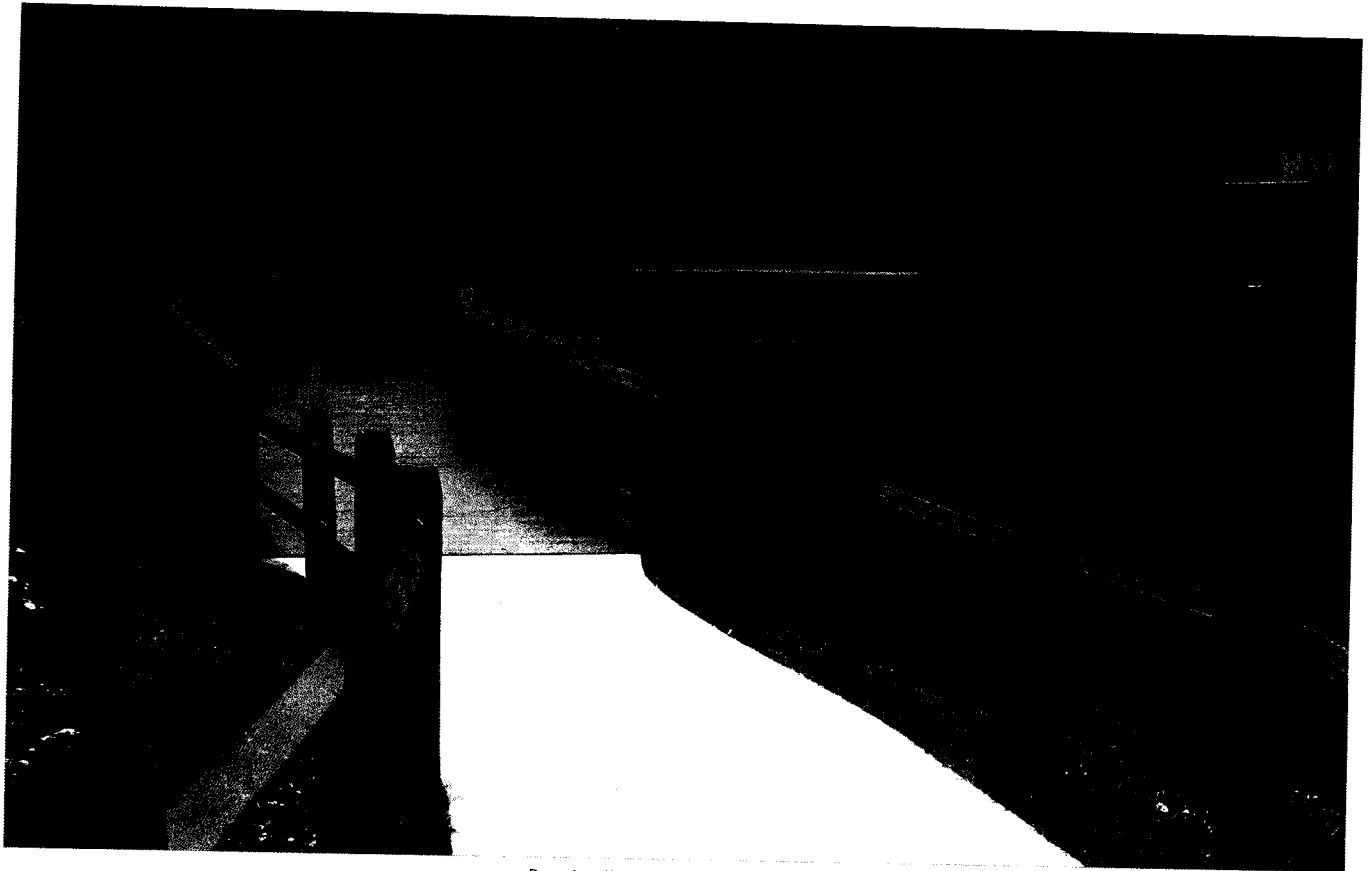
CHAPTER 6. CONCLUSION

Through a collaborative planning process community members in Cabarrus County articulated a vision for a community greenway system and put forth much time and effort developing thoughtful recommendations for how best to connect people and places with trails in throughout the county. This report outlines an ambitious plan for developing a comprehensive network of trails across Cabarrus County. The many community partners who have been involved in the planning process recognize the urgency of starting a

county-wide and region-wide linear park system now, while opportunities still exist for making connections and linking important places. They also recognize that this plan will not be implemented overnight, and that while segments should begin appearing soon, it will take years, if not decades, to link them all together. The time to start is now.



Hiking near Reed Gold Mine



Boardwalk at North Cabarrus Park



Dale Earnhardt statue in Kannapolis



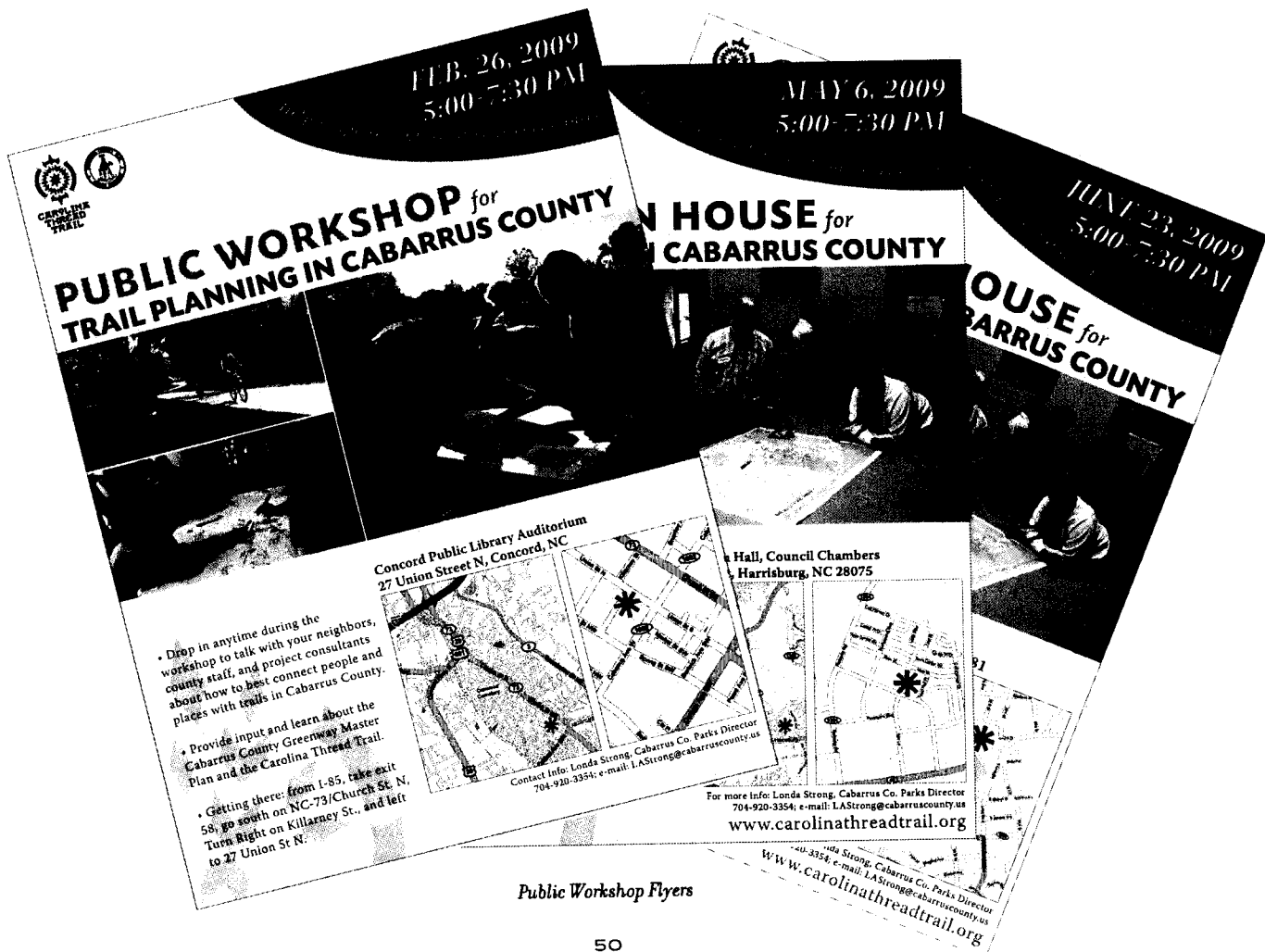
APPENDIX I: CAROLINA THREAD TRAIL PUBLIC MEETING SUMMARY

Cabarrus County public workshops for the Carolina Thread Trail were held at the Concord Public Library on February 26, 2009, the Harrisburg Town Hall on May 6, 2009, and at Village Park in Kannapolis on June 23, 2009.

These meetings served as an opportunity for the residents of Cabarrus County and the local municipalities to learn about the project and provide their input. All three workshops had the same basic set-up, including CTT display boards, a display map of the existing conditions/draft recommendations, a public input map, and comment

forms. Participants talked directly with project staff and were encouraged to share their ideas by writing and drawing their comment on the input maps.

Feedback from these meetings was overall very positive. Questions from the 50+ participants were focused mainly on the overall concept of the Thread Trail, the steps in the planning process, and the timeline for implementation. Public comments taken through paper comment forms were entered online, and the results start on page 52.

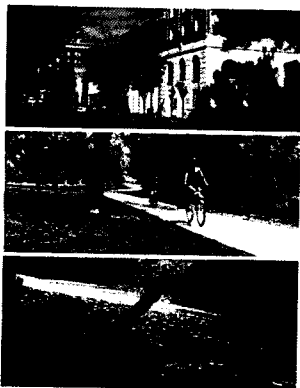


Public Workshop Flyers

PROJECT NEWSLETTER *for the* CABARRUS COUNTY CAROLINA THREAD TRAIL PROJECT

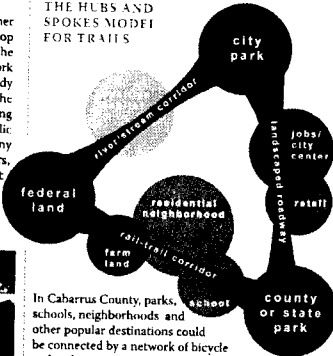
PROJECT DESCRIPTION

Cabarrus County, local communities, and other project stakeholders are working together to develop a greenway plan that will feature a core segment of the Carolina Thread Trail, a 15-county regional network of trails. Several counties in the region have already completed and are adopting similar trail plans. The project in Cabarrus County has just begun, starting with a Kick-off Meeting (January 2009) and a Public Workshop (February 2009). Before making any recommendations about potential trail corridors, the project partners are introducing the project at the Public Workshop, displaying proposed trails from separate planning efforts, and gathering input through an online comment form (see bottom right).



Above: Downtown Concord, an example bicycle and pedestrian trail, and the Rocky River

THE HUBS AND SPOKES MODEL FOR TRAILS



In Cabarrus County, parks, schools, neighborhoods and other popular destinations could be connected by a network of bicycle and pedestrian trails. In the 'Hubs and Spokes Model' such destinations serve as the 'hubs' of the network, while the 'spokes' consist of trails, sidewalks, and bicycle-friendly roadways.

A key part of this early stage in planning is to gather public input on what Cabarrus County residents feel are the most important destinations for their future trail network. Visit www.greenways.com/cabarrus to provide your input on key destinations and other important aspects of this project.



PROJECT CONTACT INFO:
Londa Strong, Cabarrus Co. Parks Director
704-920-3354; e-mail:
LAstrong@cabarruscounty.us

ONLINE COMMENT FORM:
WWW.GREENWAYS.COM/CABARRUS

DRAFT VISION STATEMENT

A network of bicycle and pedestrian trails will connect the communities, businesses, schools, parks and other attractions of Cabarrus County, offering valuable opportunities for recreation, transportation, and economic development. This network of trails will also contribute to the future viability of the County through the conservation of open space along trail corridors, protecting natural habitats, water resources, and cultural resources. The trails will be open to all, providing positive opportunities for active living among neighbors, coworkers, families, visitors, and friends. In addition, Cabarrus County will feature its own portion of the Carolina Thread Trail, linking the local trail network to people and places throughout the 15-county region.



GUIDING PRINCIPLES *for the* CAROLINA THREAD TRAIL - THE THREAD

There are a few guiding principles that are fundamental to the philosophy of the Carolina Thread Trail and guide the work of its Governing Board, volunteers, staff and partners:

Connectivity and collaboration

By getting municipalities working with their county, and counties working with each other in a collaborative way, we can achieve our goal of connectivity.

Inclusiveness and free accessibility to all

The Thread will be an asset available for the use of all of our citizens in urban, suburban and rural settings. The process by which it is built needs to include many different voices.

Leverage

Cabarrus County Thread Trail grants can provide catalytic funding for segments of The Thread. Private capital will only go so far, but it can help stimulate activity and attract state and federal sources that require match funds and value initiatives that are regional in scope.

Respect for the land and respect for the landowner

It is critical to inform landowners about the project and include them in the process. By doing so, opportunities to develop trails with willing landowners will be identified.



TASKS *for the* CABARRUS COUNTY THREAD PROJECT

As of February 2009, the project partners are completing the first three tasks. The project will continue through August 2009, when the CTT Kick Off Celebration is expected to take place.

Task 1: Background/Data Collection

Task 2: Base Mapping

Task 3: Community Engagement

Task 4: Identify CTT Segments

Task 5: Inter-jurisdictional Discussions

Task 6: Creating GIS-based Trail Maps

Task 7: Mapping

Task 8: Ground-Truthing Consultation

Task 9: Public Open House Review

Task 10: Staff Review

Task 11: Plan / Implementation Strategy

Task 12: Adoption of Plan

Task 13: Cabarrus Co. CTT Brochure

Task 14: Celebration of CTT Kick-Off

PROJECT NEWSLETTER *for the* CABARRUS COUNTY CAROLINA THREAD TRAIL PROJECT

PROJECT BACKGROUND

Cabarrus County, local communities, and other project stakeholders are working together to develop a greenway plan that will feature a core segment of the Carolina Thread Trail, a 15-county regional network of trails. Several counties in the region have already completed and are adopting similar trail plans. The project in Cabarrus County started with a Kick-off Meeting in January 2009 and a Public Workshop in February 2009.

PUBLIC INPUT

As of June 2009, over 635 people have participated in the planning process for Cabarrus County. Over 90% of the participants indicated that the goal of creating more trails is important. Local residents primarily want trails for fitness & recreation, and connectivity to parks & downtown areas. Please take part 2 of the comment form online (link at bottom right) to review the draft plan and let us know what you think.

Also, two public workshops have been held with a total of about 50 attendees from a variety of organizations and backgrounds (with the third workshop on June 23rd in Kannapolis). The workshops feature display maps and informational boards about the CTT, and offer opportunities for public comment on draft maps and comment forms.



Above: Participants provide input at the first public workshop.

THE DRAFT MAP (on reverse side)

The draft map was created through a combination of public input, existing conditions analysis, and existing plans analysis. Project stakeholders and staff from local communities also provided guidance. This is a draft only.

Below is a list of some, but not all, factors that influenced the development of draft routes:

Connections and Destinations

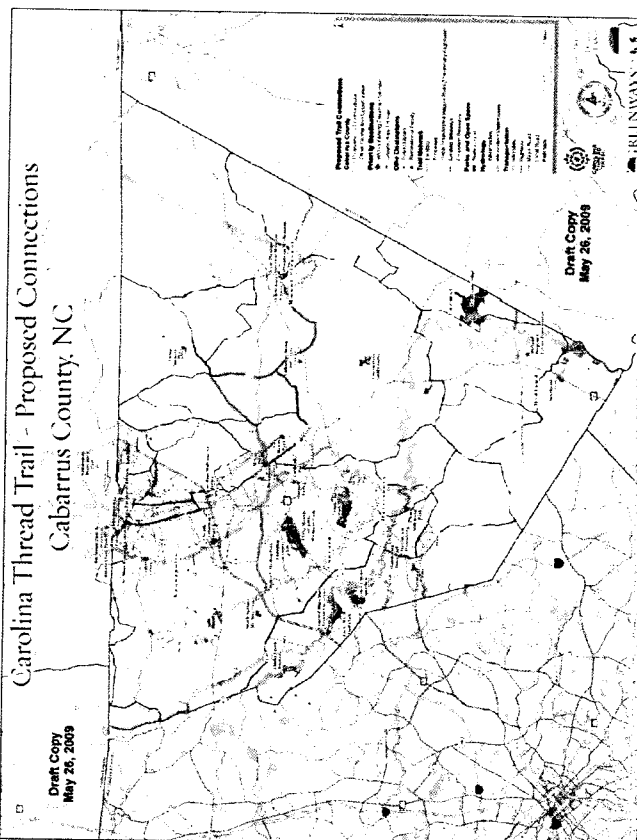
- Town Connections
- Cross-County Connections
- Primary Destinations¹ within Walking Distance²
- Schools within Walking Distance²
- Libraries within Walking Distance²
- Recreational Facilities within Walking Distance²
- Parks within Walking Distance²
- Historic Districts within Walking Distance²
- Cemeteries within Walking Distance²
- Transit Stops within Walking Distance²
- Major Shopping Venues within Walking Distance²
- Regional Services within Walking Distance²
- Through Natural Landcover (mi)
- Along Streams/River Corridors (mi)
- Access³
- Children within Service Area³
- Seniors within Service Area³
- Total Residents within Service Area³
- Low Income Households within Service Area³

¹ Primary destinations: places mentioned almost universally in the community meetings.
² Walking distance assumed as 1/4 mile.
³ Regional Services include airports, hospitals, & race tracks.
⁴ Service area assumed as 1/2 mile.
⁵ Based on 2007 census projections (Claritas data).



PROJECT CONTACT INFO:
Londa Strong, Cabarrus Co. Parks Director
704-920-3354; e-mail:
LAstrong@cabarruscounty.us

COMMENT FORM + WORKSHOP INFO:
WWW.GREENWAYS.COM/CABARRUS



Above: Project Newsletters #1 (top) and #2 (bottom)



APPENDIX II: PUBLIC COMMENT FORM SUMMARY

Two separate online public comment forms were developed for this plan. The first survey was utilized early in the process to gain an understanding of the trail needs and priorities of residents. The second asked people to respond to the draft proposed routes and the plan overall. 632 people responded to the first survey with nearly 100 responding to the second. This information helped project planners identify peoples' perceptions about trails, destinations to connect with trails, and obstacles to using trails today. The answers to most questions have been tabulated and are shown in the form of a graph or pie chart. However, some questions were open-ended and those responses have been tallied to show the most common answer subjects.

RESULTS FROM PUBLIC COMMENT FORM #1

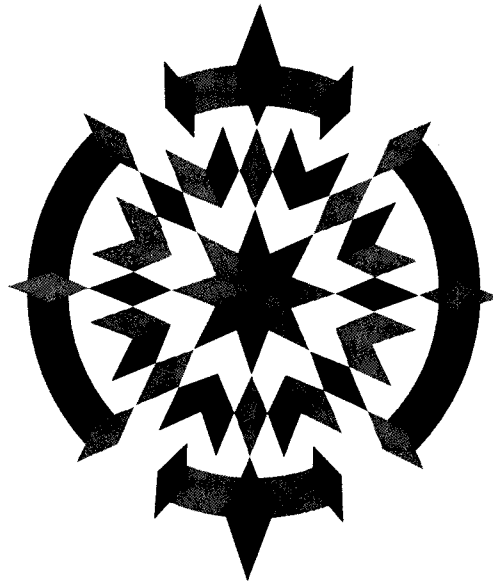
1. How important to you is the goal of creating more trails? (select one)

	Response Percent	Response Count
very important	63.1%	396
somewhat important	28.8%	181
not important	8.1%	51
answered question		628

2. How often do you use trails now? (select one)

	Response Percent	Response Count
never	17.9%	112
few times per year	43.1%	270
few times per month	26.3%	165
few times per week	12.8%	80
answered question		627

CAROLINA THREAD TRAIL
DRAFT MASTER PLAN
FOR CABARRUS COUNTY
COMMUNITIES



**CAROLINA
THREAD
TRAIL**

*Weaving
Communities
Together*

JULY 2009





VISION STATEMENT

A network of bicycle and pedestrian trails will connect the communities, businesses, schools, parks and other attractions of Cabarrus County, offering valuable opportunities for recreation, transportation, and economic development. This network of trails will also contribute to the future viability of the County through the conservation of open space along trail corridors, protecting natural habitats, water resources, and cultural resources. The trails will be open to all, providing positive opportunities for active living among neighbors, coworkers, families, visitors, and friends. In addition, Cabarrus County will feature its own portion of the Carolina Thread Trail, linking the local trail network to people and places throughout the 15-county region.











3. Would you use trails more often if you could easily bike or walk to one?

		Response Percent	Response Count
Yes		93.0%	582
No		7.0%	44
<i>answered question</i>			626

4. For what purposes do you walk or bike most often? (Or for what purposes would you use trails in the future?). (Rank Top 3).

	#1	#2	#3	Rating Average	Response Count
Fitness or recreation	84.8% (479)	10.1% (57)	5.1% (29)	1.20	565
Transportation to some destination	5.3% (10)	48.9% (93)	45.8% (87)	2.41	190
Social visits	5.0% (16)	39.6% (128)	55.4% (179)	2.50	323
Walking the dog	18.3% (54)	53.9% (159)	27.8% (82)	2.09	295
Walking with a baby/stroller	16.4% (26)	39.6% (63)	44.0% (70)	2.28	159
<i>answered question</i>					598

5. What are the most important benefits and uses of a trail system? Select all that apply.

		Response Percent	Response Count
Transportation		23.3%	139
Recreation		87.4%	522
Exercise		93.3%	557
Community-building and events		32.0%	191
Connectivity to surrounding area		53.4%	319
Environmental improvements		51.1%	305
Tourism		17.9%	107
Education and interpretation		27.5%	164
<i>answered question</i>			597


6. What destinations would you most like to get to by trail? (Rank Top 3)

	#1	#2	#3	Rating Average	Response Count
8th Street Park & Greenway	46.2% (12)	23.1% (6)	30.8% (8)	1.85	26
Bakers Creek Park	50.0% (26)	21.2% (11)	28.8% (15)	1.79	52
Camp Spencer Park	34.9% (15)	30.2% (13)	34.9% (15)	2.00	43
Clarke Creek Rookery	62.5% (5)	25.0% (2)	12.5% (1)	1.50	8
Concord Mills Mall	24.4% (21)	30.2% (26)	45.3% (39)	2.21	86
Cox Mill Elementary	33.3% (3)	22.2% (2)	44.4% (4)	2.11	9
Dale Earnhardt Tribute	15.4% (2)	38.5% (5)	46.2% (6)	2.31	13
Downtown Concord	46.2% (67)	28.3% (41)	25.5% (37)	1.79	145
Downtown Harrisburg	52.4% (86)	37.2% (61)	10.4% (17)	1.58	164
Downtown Kannapolis	40.7% (33)	37.0% (30)	22.2% (18)	1.81	81
Downtown Midland	42.1% (8)	26.3% (5)	31.6% (6)	1.89	19
Downtown Mount Pleasant	57.1% (28)	20.4% (10)	22.4% (11)	1.65	49
Frank Liske Park	25.7% (39)	36.2% (55)	38.2% (58)	2.13	152
Great Philadelphia Wagon Road	25.0% (4)	37.5% (6)	37.5% (6)	2.13	16
Harrisburg Town Park	44.9% (66)	36.1% (53)	19.0% (28)	1.74	147
James L. Dorton Park	51.2% (22)	32.6% (14)	16.3% (7)	1.65	43
Kannapolis Recreation Park	10.7% (3)	14.3% (4)	75.0% (21)	2.64	28
Les Meyers Park	19.2% (10)	48.1% (25)	32.7% (17)	2.13	52
Lowe's Motor Speedway	19.4% (13)	20.9% (14)	59.7% (40)	2.40	67
Mount Pleasant Historical Museum	16.7% (4)	62.5% (15)	20.8% (5)	2.04	24
North Cabarrus Park	35.8% (19)	37.7% (20)	26.4% (14)	1.91	53
NC Research Campus	30.4% (21)	39.1% (27)	30.4% (21)	2.00	69
Reed Gold Mine	20.5% (9)	31.8% (14)	47.7% (21)	2.27	44
Safrit Park	13.3% (2)	46.7% (7)	40.0% (6)	2.27	15



Southeast Park	20.0% (1)	20.0% (1)	60.0% (3)	2.40	5
Village Park	28.6% (12)	31.0% (13)	40.5% (17)	2.12	42
W.W. Flowe Park	23.1% (6)	30.8% (8)	46.2% (12)	2.23	26
answered question					542

7. What do you think are the biggest factors that discourage trail, sidewalk, or bicycle facility use? Rank Top 3.

	#1	#2	#3	Rating Average	Response Count
Lack of information about local trails	50.6% (164)	26.2% (85)	23.1% (75)	1.73	324
Unsafe street crossings	27.9% (43)	37.0% (57)	35.1% (54)	2.07	154
High traffic volume	31.3% (35)	42.0% (47)	26.8% (30)	1.96	112
Lack of interest	26.8% (15)	41.1% (23)	32.1% (18)	2.05	56
Lack of time	23.0% (23)	44.0% (44)	33.0% (33)	2.10	100
Personal safety concerns	40.1% (103)	32.3% (83)	27.6% (71)	1.88	257
Aggressive motorist behavior	30.1% (28)	31.2% (29)	38.7% (36)	2.09	93
Deficient sidewalks	34.7% (87)	35.5% (89)	29.9% (75)	1.95	251
Lack of nearby destinations	24.2% (57)	27.1% (64)	48.7% (115)	2.25	236
answered question					564

8. Are there other specific destinations in Cabarrus County that you believe should be connected by trails?

The most common tallied responses are:

Parks	32	Response Count
Schools	29	
Downtowns	22	
Rocky River	10	
Carolina Mall	7	
		154
answered question		154



9. What other trail-related improvements do you consider priorities?

Summary to be included in final draft.

**Response
Count**

146

answered question

146

10. Do you have any other comments?

Summary to be included in final draft.

**Response
Count**

136

answered question

136

11. What is your zip code?

Zip Code	Number
28075	160
28025	112
28027	86
28083	57

Zip Code	Number
28081	55
28124	21
28107	10
Other	33

**Response
Count**

539


answered question

539





RESULTS FROM PUBLIC COMMENT FORM #2

1. Do you support this plan for Cabarrus County and its communities?

		Response Percent	Response Count
Yes.		91.7%	88
No.		3.1%	3
Maybe with the following changes...		5.2%	5
<i>answered question</i>			96

2. Would you like to receive an e-mail announcement when this plan is up for official adoption? [your address will be held strictly confidential and you will receive one (1) announcement for each community you select]

		Response Percent	Response Count
No		36.2%	34
Yes, and here is my e-mail address...		63.8%	60
<i>answered question</i>			94



APPENDIX V: FUNDING AND FINANCING

The purpose of this appendix is to define and describe possible funding sources that could be used to support the planning, design and development of greenway improvements.

Implementing the recommendations of this plan will require a strong level of local support and commitment through a variety of local funding mechanisms. Perhaps most important is the addition of bicycle and greenway recommendations from this Plan into the Cabarrus County and its municipalities' annual budgets. These improvements should become a high priority and be supported through portions of the funding currently used for public safety, streets, parks and recreation, planning, Powell Bill funds, community development, travel and tourism, downtown, and local bonds.

Cabarrus County and its municipalities should also seek a combination of funding sources that include local, state, federal, and private money. Fortunately, the benefits of protected greenways are many and varied. This allows programs in Cabarrus County to access money earmarked for a variety of purposes including water quality, hazard mitigation, recreation, air quality, alternate transportation, wildlife protection, community health, and economic development. Competition is almost always stiff for state and federal funds, so it becomes imperative that local governments work together to create multi-jurisdictional partnerships and to develop their own local sources of funding. These sources can then be used to leverage outside assistance.

For the past two decades, a variety of funding has been used throughout North Carolina to support the planning, design and construction of urban and rural bicycle and greenway projects. The largest single source of funding for these projects has come from the Surface Transportation Act, first the Intermodal Surface Transportation Efficiency Act (ISTEA) in the early to mid 1990's; then its successor, Transportation Equity Act for the Twenty-First Century (TEA-21) through the early part of

2002; and now the Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The North Carolina Department of Transportation manages and distributes the majority of federal funds that are derived from the Act to support the development of bicycle/trail development.

The majority of federal funding is distributed to states in the form of block grants and is then distributed throughout a given state for specific projects. State funding programs in North Carolina also support the creation of greenways. North Carolina has developed a broad array of funding sources that address land acquisition, green infrastructure development, and trail facility development.

Additionally, there are many things Cabarrus County and its municipalities can do to establish their own funding for greenway initiatives. For the most part, it takes money to get money. For Cabarrus County and its municipalities, it will be necessary to create a local funding program through one of the methods that is defined within this report. Financing will be needed to administer the continued planning and implementation process, acquire parcels or easements, and manage and maintain facilities.

This appendix is organized by first addressing the state sources of funding, then addresses separate federal and local government funding sources. It is by no means an exhaustive list as there are many other funding sources available that should be researched and pursued as well. Creative planning and consistent monitoring of funding options will likely turn up new opportunities not listed here.

HIGH PRIORITY FUNDING OPTIONS

While there are a number of funding sources provided in the following pages, these sources should be the highest priority in order to achieve successful implementation. It is critical



for local government to step up given the competitiveness and finite availability associated with most funding sources. Details about the following sources are found later in this appendix.

- Local Capital Improvements Program (CIP)
- Local Bond
- Local Fees
- Cabarrus-Rowan Metropolitan Planning Organization
- NCDOT Division of Bicycle and Pedestrian Transportation
- State Transportation Improvements Program (STIP)
- State Powell Bill Funds
- State Safe Routes to School Program
- State Parks and Recreation Trust Fund (PARTF)
- State Health and Wellness Trust Fund (HWTF)
- Private Sources
- Stimulus funding (potential for second round of stimulus funding)

STATE FUNDING SOURCES

The most direct source of public-sector funding for Cabarrus County and its municipalities will come from state agencies in North Carolina. Generally, these funds are made available to local governments based on grant-in-aid formulas. The single most important key to obtaining state grant funding is for local governments to have adopted plans for greenway, open space, bicycle, pedestrian or trail systems in place prior to making an application for funding. Unfortunately, there is no direct correlation between any of the programs listed and a constant stream of funding for greenway or trail projects and all projects are funded on the basis of grant applications. There is no specific set aside amount that is allocated for greenway and trail development within a given program. Funding is based solely on need and the need has to be expressed and submitted in the form of a grant application. Finally, all of these programs

are geared to address needs across the entire state, so all of the programs are competitive and must allocate funding with the needs of the entire state in mind.

The Powell Bill Program is an annual state allocation to municipalities for use in street system maintenance and construction activities. There is considerable local control over Powell Bill Funds (it is not a grant application process). In the past, the State allocated a considerable portion of these revenues for construction purposes. However, budgetary constraints since 2001 have led to a shift of new Powell Bill funds to cover maintenance and operations activities. Both the Powell Bill reserves and the 2000 Transportation Bond funds are limited funding sources that will eventually be depleted.

In North Carolina, the Department of Transportation, Division of Bicycle and Pedestrian Transportation (DBPT) has been the single largest source of funding for bicycle and greenway projects, including non-construction projects such as brochures, maps, and public safety information for more than a decade. DBPT offers several programs in support of bicycle facility development. The following information is from NCDOT's interactive web site (www.ncdot.org). Contact the NCDOT, Division of Bicycle and Pedestrian Transportation at (919) 807-2804 for more information.

North Carolina programs are listed below. A good starting website with links to many of the following programs is www.enr.state.nc.us/html/tax_credits.html.

FUNDING OPPORTUNITIES THROUGH NCDOT

Bicycle and Pedestrian Independent Projects Funded Through the Transportation Improvement Program (TIP):

In North Carolina, the Department of Transportation, Division of Bicycle and Pedestrian Transportation (DBPT) manages the Transportation Improvement Program (TIP) selection process for bicycle, pedestrian, and greenway projects.



Projects programmed into the TIP by the DBPT are independent projects – those which are not related to a scheduled highway project. Incidental projects – those related to a scheduled highway project – are handled through other funding sources described in this section.

DBPT has an annual budget of \$6 million. Eighty percent of these funds are from STP-Enhancement funds, while the State Highway Trust provides the remaining 20 percent of the funding. Prospective applicants are encouraged to contact the DBPT regarding funding assistance for bicycle projects. For a detailed description of the TIP project selection process, visit www.ncdot.org/transit/bicycle/funding/funding_TIP.html. Another \$500,000 of the division's funding is available for miscellaneous projects.

Incidental Projects

Bicycle accommodations such as bike lanes, widened paved shoulders, and bicycle-safe bridge design are frequently included as incidental features of highway projects. In addition, bicycle-safe drainage grates are a standard feature of all highway construction. Most bicycle safety accommodations built by NCDOT are included as part of scheduled highway improvement projects funded with a combination of National Highway System funds and State Highway Trust Funds.

Governor's Highway Safety Program (GHSP)

The mission of the GHSP is to promote highway safety awareness and reduce the number of traffic crashes in the state of North Carolina through the planning and execution of safety programs. GHSP funding is provided through an annual program, upon approval of specific project requests. Amounts of GHSP funds vary from year to year, according to the specific amounts requested. Communities may apply for a GHSP grant to be used as seed money to start a program to enhance

highway safety. Once a grant is awarded, funding is provided on a reimbursement basis. Evidence of reductions in crashes, injuries, and fatalities is required. For information on applying for GHSP funding, visit www.ncdot.org/programs/ghsp/.

FUNDING AVAILABLE THROUGH NORTH CAROLINA METROPOLITAN PLANNING ORGANIZATIONS (MPOS)

The first step of Cabarrus County and its municipalities would be to contact the Cabarrus-Rowan MPO with priority greenway projects for the TIP list. Ensuring that greenway projects are on this TIP list will allow the possibility of being funded from the statewide TIP.

MPOs in North Carolina which are located in air quality nonattainment or maintenance areas also have the authority to program Congestion Mitigation Air Quality (CMAQ) funds. CMAQ funding is intended for projects that reduce transportation related emissions. Some NC MPOs have chosen to use the CMAQ funding for bicycle/pedestrian projects. Local governments in air quality nonattainment or maintenance area should contact their MPO for information on CMAQ funding opportunities for greenway facilities.

TRANSPORTATION ENHANCEMENT CALL FOR PROJECTS, EU, NCDOT

The Enhancement Unit administers a portion of the enhancement funding set-aside through the Call for Projects process. In North Carolina the Enhancement Program is a federally funded cost reimbursement program with a focus upon improving the transportation experience in and through local North Carolina communities either culturally, aesthetically, or environmentally. The program seeks to encourage diverse modes of travel, increase benefits to communities and to encourage citizen involvement. This is accomplished through



the following twelve qualifying activities:

- Bicycle and Pedestrian Facilities
- Bicycle and Pedestrian Safety
- Acquisition of Scenic Easements, Scenic or Historic Sites
- Scenic or Historic Highway Programs (including tourist or welcome centers)
- Landscaping and other Scenic Beautification
- Historic Preservation
- Rehabilitation of Historic Transportation Facilities
- Preservation of Abandoned Rail Corridors
- Control of Outdoor Advertising
- Archaeological Planning and Research
- Environmental Mitigation
- Transportation Museums

Funds are allocated based on an equity formula approved by the Board of Transportation. The formula is applied at the county level and aggregated to the regional level. Available fund amount varies. In previous Calls, the funds available ranged from \$10 million to \$22 million.

The Call process takes place on even numbered years or as specified by the Secretary of Transportation. For more information, visit www.ncdot.org/financial/fiscal/Enhancement/

BICYCLE AND PEDESTRIAN PLANNING GRANT INITIATIVE, MANAGED BY NCDOT, DBPT

To encourage the development of comprehensive local bicycle plans and pedestrian plans, the NCDOT Division of Bicycle and Pedestrian Transportation (DBPT) and the Transportation Planning Branch (TPB) have created a matching grant program to fund plan development. This program was initiated through a special allocation of funding approved

by the North Carolina General Assembly in 2003 along with federal funds earmarked specifically for bicycle and pedestrian planning by the TPB. The planning grant program was launched in January 2004, and it is currently administered through NCDOT-DBPT and the Institute for Transportation Research and Education (ITRE) at NC State University. Over the first six grant cycles, 92 municipal plans have been selected and funded. A total of \$ 2,270,168 has been allocated. Funding was secured in 2009 for \$315,850. Additional annual allocations will be sought for subsequent years. For more information, visit www.itre.ncsu.edu/ptg/bikeped/ncdot/index.html

SAFE ROUTES TO SCHOOL PROGRAM, MANAGED BY NCDOT, DBPT

The NCDOT Safe Routes to School Program is a federally funded program that was initiated by the passing of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005, which establishes a national SRTS program to distribute funding and institutional support to implement SRTS programs in states and communities across the country. SRTS programs facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. The Division of Bicycle and Pedestrian Transportation at NCDOT is charged with disseminating SRTS funding.

In its first funding cycle (2008), the state of North Carolina allocated \$1.46 million for six infrastructure projects, \$135,450 for non-infrastructure projects, and \$315,000 for action planning. All proposed projects must relate to increasing walking or biking to and from an elementary or middle school. An example of a non-infrastructure project is an education or encouragement program to improve rates of walking and biking to school. An example of an infrastructure project is



construction of sidewalks around a school. Infrastructure improvements under this program must be made within 2 miles of an elementary or middle school. The state requires the completion of a competitive application to apply for funding. For more information, visit www.ncdot.org/programs/safeRoutes/ or contact NCDOT's Division of Bicycle and Pedestrian Transportation at (919) 807-0774.

THE NORTH CAROLINA CONSERVATION TAX CREDIT, MANAGED BY NCDENR

This program, managed by the North Carolina Department of Environment and Natural Resources, provides an incentive (in the form of an income tax credit) for landowners that donate interests in real property for conservation purposes. Property donations can be fee simple or in the form of conservation easements or bargain sale. The goal of this program is to manage stormwater, protect water supply watersheds, retain working farms and forests, and set-aside greenways for ecological communities, public trails, and wildlife corridors. For more information, visit www.enr.state.nc.us/conservationtaxcredit/.

LAND AND WATER CONSERVATION FUND (LWCF)

The Land and Water Conservation Fund (LWCF) program is a reimbursable, 50/50 matching grants program to states for conservation and recreation purposes, and through the states to local governments to address "close to home" outdoor recreation needs. LWCF grants can be used by communities to build a trail within one park site, if the local government has fee-simple title to the park site. Grants for a maximum of \$250,000 in LWCF assistance are awarded yearly to county governments, incorporated municipalities, public authorities and federally recognized Indian tribes. The local match may be provided with in-kind services or cash. The program's funding comes primarily from offshore oil and gas drilling receipts, with

an authorized expenditure of \$900 million each year. However, Congress generally appropriates only a small fraction of this amount. The allotted money for the year 2007 is \$632,846.

The Land and Water Conservation Fund (LWCF) has historically been a primary funding source of the US Department of the Interior for outdoor recreation development and land acquisition by local governments and state agencies. In North Carolina, the program is administered by the Department of Environment and Natural Resources. Since 1965, the LWCF program has built a permanent park legacy for present and future generations. In North Carolina alone, the LWCF program has provided more than \$63 million in matching grants to protect land and support more than 800 state and local park projects. More than 37,000 acres have been acquired with LWCF assistance to establish a park legacy in our state. For more information, visit <http://ils.unc.edu/parkproject/lwcf/home1.html>

NC ADOPT-A-TRAIL GRANT PROGRAM

This program, operated by the Trails Section of the NC Division of State Parks, offers annual grants to local governments to build, renovate, maintain, sign and map and create brochures for pedestrian trails. Grants are generally capped at about \$5,000 per project and do not require a match. A total of \$108,000 in Adopt-A-Trail money is awarded annually to government agencies. Applications are due during the month of February. For more information, visit <http://ils.unc.edu/parkproject/trails/grant.html>.

RECREATIONAL TRAILS PROGRAM

The Recreational Trails Program (RTP) is a grant program funded by Congress with money from the federal gas taxes paid on fuel used by off-highway vehicles. This program's intent is to meet the trail and trail-related recreational needs identified by



the Statewide Comprehensive Outdoor Recreation Plan. Grant applicants must be able contribute 20% of the project cost with cash or in-kind contributions. The program is managed by the State Trails Program, which is a section of the N.C. Division of Parks and Recreation.

The grant application is available and instruction handbook is available through the State Trails Program website at <http://ils.unc.edu/parkproject/trails/home.html>. Applications are due during the month of February. For more information, call (919) 715-8699.

NORTH CAROLINA PARKS AND RECREATION TRUST FUND (PARTF)

The fund was established in 1994 by the North Carolina General Assembly and is administered by the Parks and Recreation Authority. Through this program, several million dollars each year are available to local governments to fund the acquisition, development and renovation of recreational areas. Applicable projects require a 50/50 match from the local government. Grants for a maximum of \$500,000 are awarded yearly to county governments or incorporated municipalities. The fund is fueled by money from the state's portion of the real estate deed transfer tax for property sold in North Carolina.

The trust fund is allocated three ways:

- 65 percent to the state parks through the N.C. Division of Parks and Recreation.
- 30 percent as dollar-for-dollar matching grants to local governments for park and recreation purposes.
- 5 percent for the Coastal and Estuarine Water Access Program.

For information on how to apply, visit www.partf.net/learn.html

POWELL BILL PROGRAM

Annually, State street-aid (Powell Bill) allocations are made to incorporated municipalities which establish their eligibility and qualify as provided by statute. This program is a state grant to municipalities for the purposes of maintaining, repairing, constructing, reconstructing or widening of local streets that are the responsibility of the municipalities or for planning, construction, and maintenance of bikeways or sidewalks along public streets and highways. Funding for this program is collected from fuel taxes. Amount of funds are based on population and mileage of town-maintained streets. For more information, visit www.ncdot.org/financial/fiscal/ExtAditBranch/Powell_Bill/powellbill.html.

CLEAN WATER MANAGEMENT TRUST FUND

This fund was established in 1996 and has become one of the largest sources of money in North Carolina for land and water protection. At the end of each fiscal year, 6.5 percent of the unreserved credit balance in North Carolina's General Fund, or a minimum of \$30 million, is placed in the CWMTF. The revenue of this fund is allocated as grants to local governments, state agencies and conservation non-profits to help finance projects that specifically address water pollution problems. CWMTF funds may be used to establish a network of riparian buffers and greenways for environmental, educational, and recreational benefits. The fund has provided funding for land acquisition of numerous greenway projects featuring trails, both paved and unpaved. For a history of awarded grants in North Carolina and more information about this fund and applications, visit www.cwmtf.net/.

NATURAL HERITAGE TRUST FUND

This trust fund, managed by the NC Natural Heritage Program, has contributed millions of dollars to support the



conservation of North Carolina's most significant natural areas and cultural heritage sites. The NHTF is used to acquire and protect land that has significant habitat value. Some large wetland areas may also qualify, depending on their biological integrity and characteristics. Only certain state agencies are eligible to apply for this fund, including the Department of Environment and Natural Resources, the Wildlife Resources Commission, the Department of Cultural Resources and the Department of Agriculture and Consumer Services. As such, municipalities must work with State level partners to access this fund. Additional information is available from the NC Natural Heritage Program. For more information and grant application information, visit www.ncnhtf.org/.

NORTH CAROLINA CONSERVATION TAX CREDIT PROGRAM

North Carolina has a unique incentive program to assist land-owners to protect the environment and the quality of life. A credit is allowed against individual and corporate income taxes when real property is donated for conservation purposes. Interests in property that promote specific public benefits may be donated to a qualified recipient. Such conservation donations qualify for a substantial tax credit. For more information, visit www.enr.state.nc.us/conservationtaxcredit/.

URBAN AND COMMUNITY FORESTRY ASSISTANCE PROGRAM

This program offers small grants that can be used to plant urban trees, establish a community arboretum, or other programs that promote tree canopy in urban areas. The program operates as a cooperative partnership between the NC Division of Forest Resources and the USDA Forest Service, Southern Region. To qualify for this program, a community must pledge to develop a street-tree inventory, a municipal tree ordinance,

a tree commission, and an urban forestry-management plan. All of these can be funded through the program. For more information, contact the NC Division of Forest Resources. For more information and a grant application, contact the NC Division of Forest Resources and/or visit www.dfr.state.nc.us/urban/urban_grantprogram.htm.

ECOSYSTEM ENHANCEMENT PROGRAM

Developed in 2003 as a new mechanism to facilitate improved mitigation projects for NC highways, this program offers funding for restoration projects and for protection projects that serve to enhance water quality and wildlife habitat in NC. Information on the program is available by contacting the Natural Heritage Program in the NC Department of Environment and Natural Resources (NCDENR). For more information, visit www.nceep.net/pages/partners.html or call 919-715-0476.

CONSERVATION RESERVE ENHANCEMENT PROGRAM (CREP)

This program is a joint effort of the North Carolina Division of Soil and Water Conservation, the NC Clean Water Management Trust Fund, the Ecosystem Enhancement Program (EEP), and the Farm Service Agency - United States Department of Agriculture (USDA) to address water quality problems of the Neuse, Tar-Pamlico and Chowan river basins as well as the Jordan Lake watershed area.

CREP is a voluntary program that seeks to protect land along watercourses that is currently in agricultural production. The objectives of the program include: installing 100,000 acres of forested riparian buffers, grassed filter strips and wetlands; reducing the impacts of sediment and nutrients within the targeted area; and providing substantial ecological benefits for many wildlife species that are declining in part



as a result of habitat loss. Program funding will combine the Federal Conservation Reserve Program (CRP) funding with State funding from the Clean Water Management Trust Fund, Agriculture Cost Share Program, and North Carolina Wetlands Restoration Program.

The program is managed by the NC Division of Soil and Water Conservation. For more information, visit www.enr.state.nc.us/dswc/pages/crep.html

AGRICULTURE COST SHARE PROGRAM

Established in 1984, this program assists farmers with the cost of installing best management practices (BMPs) that benefit water quality. The program covers as much as 75 percent of the costs to implement BMPs. The NC Division of Soil and Water Conservation within the NC Department of Environment and Natural Resources administers this program through local Soil and Water Conservation Districts (SWCD). For more information, visit www.enr.state.nc.us/DSWC/pages/agcostshareprogram.html or call 919-733-2302.

WATER RESOURCES DEVELOPMENT GRANT PROGRAM

The NC Division of Water Resources offers cost-sharing grants to local governments on projects related to water resources. Of the seven project application categories available, the category which relates to the establishment of greenways is "Land Acquisition and Facility Development for Water-Based Recreation Projects." Applicants may apply for funding for a greenway as long as the greenway is in close proximity to a water body. For more information, see www.ncwater.org/Financial_Assistance or call 919-733-4064.

SMALL CITIES COMMUNITY DEVELOPMENT BLOCK GRANTS

State level funds are allocated through the NC Department of Commerce, Division of Community Assistance to be used to promote economic development and to serve low-income and moderate-income neighborhoods. Greenways that are part of a community's economic development plans may qualify for assistance under this program. Recreational areas that serve to improve the quality of life in lower income areas may also qualify. Approximately \$50 million is available statewide to fund a variety of projects. For more information, visit

www.hud.gov/offices/cpd/communitydevelopment/programs/stateadmin/ or call 919-733-2853.

NORTH CAROLINA HEALTH AND WELLNESS TRUST FUND

The NC Health and Wellness Trust Fund was created by the General Assembly as one of 3 entities to invest North Carolina's portion of the Tobacco Master Settlement Agreement. HWTF receives one-fourth of the state's tobacco settlement funds, which are paid in annual installments over a 25-year period.

Fit Together, a partnership of the NC Health and Wellness Trust Fund (HWTF) and Blue Cross and Blue Shield of North Carolina (BCBSNC) announces the establishment of Fit Community, a designation and grant program that recognizes and rewards North Carolina communities' efforts to support physical activity and healthy eating initiatives, as well as tobacco-free school environments. Fit Community is one component of the jointly sponsored Fit Together initiative, a statewide prevention campaign designed to raise awareness about obesity and to equip individuals, families and communities with the tools they need to address this important issue.

All North Carolina municipalities and counties are eligible to apply for a Fit Community designation, which will be awarded



to those that have excelled in supporting the following:

- physical activity in the community, schools, and workplaces
- healthy eating in the community, schools, workplaces
- tobacco use prevention efforts in schools

Designations will be valid for two years, and designated communities may have the opportunity to reapply for subsequent two-year extensions. The benefits of being a Fit Community include:

- Heightened statewide attention that can help bolster local community development and/or economic investment initiatives (highway signage and a plaque for the Mayor's or County Commission Chair's office will be provided)
- Reinvigoration of a community's sense of civic pride (each Fit Community will serve as a model for other communities that are trying to achieve similar goals)
- Use of the Fit Community designation logo for promotional and communication purposes. The application for Fit Community designation is available on the Fit Together Web site: www.FitTogetherNC.org/FitCommunity.aspx.

Fit Community grants are designed to support innovative strategies that help a community meet its goal to becoming a Fit Community. Eight to nine, two-year grants of up to \$30,000 annually will be awarded to applicants that have a demonstrated need, proven capacity, and opportunity for positive change in addressing physical activity and/or healthy eating. For more information, visit www.healthwellnc.com/

EAT SMART, MOVE MORE NC COMMUNITY GRANTS

The Eat Smart, Move More (ESMM) NC Community Grants program provides funding to local communities to implement strategies that advance the goals and objectives of the ESMM NC Plan. These goals include increasing physical activity opportunities and increasing the number of citizens who get the recommended amount of physical activity. Administered by the Physical Activity and Nutrition branch of the Division of Public Health, the program awards \$10,000 - 20,000 to local communities each year. Interested applicants must submit a letter of intent in late June and an application in mid-July. For more information, visit www.eatsmartmovemorenc.com/funding/index.html.

THE NORTH CAROLINA DIVISION OF FOREST RESOURCES

Urban and Community Forestry Grant can provide funding for a variety of projects that will help toward planning and establishing street trees as well as trees for urban open space. See www.dfr.state.nc.us/urban/urban_ideas.htm

IV. FUNDING ALLOCATED BY FEDERAL AGENCIES

WETLANDS RESERVE PROGRAM

This federal funding source is a voluntary program offering technical and financial assistance to landowners who want to restore and protect wetland areas for water quality and wildlife habitat. The US Department of Agriculture's Natural Resource Conservation Service (USDA-NRCS) administers the program and provides direct payments to private landowners who agree to place sensitive wetlands under permanent easements. This program can be used to fund the protection of open space and



greenways within riparian corridors. For more information, visit <http://www.nrcs.usda.gov/PROGRAMS/wrp/>.

THE COMMUNITY DEVELOPMENT BLOCK GRANT (HUD-CDBG)

The U.S. Department of Housing and Urban Development (HUD) offers financial grants to communities for neighborhood revitalization, economic development, and improvements to community facilities and services, especially in low and moderate income areas. Several communities have used HUD funds to develop greenways, including the Boulding Branch Greenway in High Point, North Carolina. Grants from this program range from \$50,000 to \$200,000 and are either made to municipalities or non-profits. There is no formal application process. For more information, visit www.hud.gov/offices/cpd/communitydevelopment/programs/.

USDA RURAL BUSINESS ENTERPRISE GRANTS

Public and private nonprofit groups in communities with populations under 50,000 are eligible to apply for grant assistance to help their local small business environment. \$1 million is available for North Carolina on an annual basis and may be used for sidewalk and other community facilities. For more information from the local USDA Service Center, visit www.rurdev.usda.gov/rbs/buspr/rbeg.htm

RIVERS TRAILS AND CONSERVATION ASSISTANCE PROGRAM (RTCA)

The Rivers, Trails, and Conservation Assistance Program, also known as the Rivers & Trails Program or RTCA, is the community assistance arm of the National Park Service. RTCA staff provide technical assistance to community groups and local, State, and federal government agencies so they can conserve rivers, preserve open space, and develop trails

and greenways. The RTCA program implements the natural resource conservation and outdoor recreation mission of the National Park Service in communities across America.

PUBLIC LANDS HIGHWAYS DISCRETIONARY FUND

The Federal Highway Administration administers discretionary funding for projects that will reduce congestion and improve air quality. The FHWA issues a call for projects to disseminate this funding. The FHWA estimates that the PLHD funding for the 2007 call will be \$85 million. In the past, Congress has earmarked a portion of the total available funding for projects. For information on how to apply, visit <http://www.fhwa.dot.gov/discretionary/>

DEPARTMENT OF ENERGY

The Department of Energy's Energy Efficiency and Conservation Block Grants (EECBG) grants may be used to reduce energy use and fossil fuel emissions and for improvements in energy efficiency. Section 7 of the funding announcement states that these grants provide opportunities for the development and implementation of transportation programs to conserve energy used in transportation including development of infrastructure such as bike lanes and pathways and pedestrian walkways. North Carolina was allocated \$20,925,300 in 2009. More information can be found at <http://www.eecbg.energy.gov/>

V. LOCAL FUNDING SOURCES

Municipalities often plan for the funding of pedestrian facilities or improvements through development of Capital Improvement Programs (CIP). In Raleigh, for example, the



greenways system has been developed over many years through a dedicated source of annual funding that has ranged from \$100,000 to \$500,000, administered through the Recreation and Parks Department. CIPs should include all types of capital improvements (water, sewer, buildings, streets, etc.) versus programs for single purposes. This allows municipal decision-makers to balance all capital needs. Typical capital funding mechanisms include the following: capital reserve fund, capital protection ordinances, municipal service district, tax increment financing, taxes, fees, and bonds. Each of these categories are described below.

CAPITAL RESERVE FUND

Municipalities have statutory authority to create capital reserve funds for any capital purpose, including pedestrian facilities. The reserve fund must be created through ordinance or resolution that states the purpose of the fund, the duration of the fund, the approximate amount of the fund, and the source of revenue for the fund. Sources of revenue can include general fund allocations, fund balance allocations, grants and donations for the specified use.

CAPITAL PROJECT ORDINANCES

Municipalities can pass Capital Project Ordinances that are project specific. The ordinance identifies and makes appropriations for the project.

MUNICIPAL SERVICE DISTRICT

Municipalities have statutory authority to establish municipal service districts, to levy a property tax in the district additional to the citywide property tax, and to use the proceeds to provide services in the district. Downtown revitalization projects are one of the eligible uses of service districts.

TAX INCREMENT FINANCING

Tax increment financing is a tool to use future gains in taxes to finance the current improvements that will create those gains. When a public project, such as the construction of a greenway, is carried out, there is an increase in the value of surrounding real estate. Oftentimes, new investment in the area follows such a project. This increase in value and investment creates more taxable property, which increases tax revenues. These increased revenues can be referred to as the "tax increment." Tax Increment Financing dedicates that increased revenue to finance debt issued to pay for the project. TIF is designed to channel funding toward improvements in distressed or underdeveloped areas where development would not otherwise occur. TIF creates funding for public projects that may otherwise be unaffordable to localities. The large majority of states have enabling legislation for tax increment financing.

INSTALLMENT PURCHASE FINANCING

As an alternative to debt financing of capital improvements, communities can execute installment/ lease purchase contracts for improvements. This type of financing is typically used for relatively small projects that the seller or a financial institution is willing to finance or when up-front funds are unavailable. In a lease purchase contract the community leases the property or improvement from the seller or financial institution. The lease is paid in installments that include principal, interest, and associated costs. Upon completion of the lease period, the community owns the property or improvement. While lease purchase contracts are similar to a bond, this arrangement allows the community to acquire the property or improvement without issuing debt. These instruments, however, are more costly than issuing debt.



TAXES

Many communities have raised money through self-imposed increases in taxes and bonds. For example, Pinellas County residents in Florida voted to adopt a one-cent sales tax increase, which provided an additional \$5 million for the development of the overwhelmingly popular Pinellas Trail. Sales taxes have also been used in Allegheny County, Pennsylvania, and in Boulder, Colorado to fund open space projects. A gas tax is another method used by some municipalities to fund public improvements. A number of taxes provide direct or indirect funding for the operations of local governments. Some of them are:

Sales Tax

In North Carolina, the state has authorized a sales tax at the state and county levels. Local governments that choose to exercise the local option sales tax (all counties currently do), use the tax revenues to provide funding for a wide variety of projects and activities. Any increase in the sales tax, even if applying to a single county, must gain approval of the state legislature.

Property Tax

Property taxes generally support a significant portion of a municipality's activities. However, the revenues from property taxes can also be used to pay debt service on general obligation bonds issued to finance greenway system acquisitions. Because of limits imposed on tax rates, use of property taxes to fund greenways could limit the municipality's ability to raise funds for other activities. Property taxes can provide a steady stream of financing while broadly distributing the tax burden. In other parts of the country, this mechanism has been popular with voters as long as the increase is restricted to parks and open space. Note, other public agencies compete vigorously for these funds, and taxpayers are generally concerned about high property tax rates.

Excise Taxes

Excise taxes are taxes on specific goods and services. These taxes require special legislation and the use of the funds generated through the tax are limited to specific uses. Examples include lodging, food, and beverage taxes that generate funds for promotion of tourism, and the gas tax that generates revenues for transportation related activities.

Occupancy Tax

The NC General Assembly may grant towns the authority to levy occupancy tax on hotel and motel rooms. The act granting the taxing authority limits the use of the proceeds, usually for tourism-promotion purposes.

FEES

Three fee options that have been used by local governments to assist in funding pedestrian and bicycle facilities are listed here:

Stormwater Utility Fees

Greenway sections may be purchased with stormwater fees, if the property in question is used to mitigate floodwater or filter pollutants.

Stormwater charges are typically based on an estimate of the amount of impervious surface on a user's property. Impervious surfaces (such as rooftops and paved areas) increase both the amount and rate of stormwater runoff compared to natural conditions. Such surfaces cause runoff that directly or indirectly discharge into public storm drainage facilities and creates a need for stormwater management services. Thus, users with more impervious surface are charged more for stormwater service than users with less impervious surface. The rates, fees, and charges collected for stormwater management services may not exceed the costs incurred to provide these services. The costs



that may be recovered through the stormwater rates, fees, and charges includes any costs necessary to assure that all aspects of stormwater quality and quantity are managed in accordance with federal and state laws, regulations, and rules.

Streetscape Utility Fees

Streetscape Utility Fees could help support streetscape maintenance of the area between the curb and the property line through a flat monthly fee per residential dwelling unit. Discounts would be available for senior and disabled citizens. Non-residential customers would be charged a per foot fee based on the length of frontage on streetscape improvements. This amount could be capped for non-residential customers with extremely large amounts of street frontage. The revenues raised from Streetscape Utility fees would be limited by ordinance to maintenance (or construction and maintenance) activities in support of the streetscape.

Impact Fees

Developers can be required to provide greenway impact fees through local enabling legislation. Impact fees, which are also known as capital contributions, facilities fees, or system development charges, are typically collected from developers or property owners at the time of building permit issuance to pay for capital improvements that provide capacity to serve new growth. The intent of these fees is to avoid burdening existing customers with the costs of providing capacity to serve new growth ("growth pays its own way"). Greenway impact fees are designed to reflect the costs incurred to provide sufficient capacity in the system to meet the additional needs of a growing community. These charges are set in a fee schedule applied uniformly to all new development. Communities that institute impact fees must develop a sound financial model that enables policy makers to justify fee levels for different user groups, and

to ensure that revenues generated meet (but do not exceed) the needs of development. Factors used to determine an appropriate impact fee amount can include: lot size, number of occupants, and types of subdivision improvements. If a Cabarrus County municipality is interested in pursuing open space impact fees, it will require enabling legislation to authorize the collection of the fees.

Exactions

Exactions are similar to impact fees in that they provide facilities to growing communities. The difference is that through exactions it can be established that it is the responsibility of the developer to build the greenway or pedestrian facility that crosses through the property, or adjacent to the property being developed.

In-Lieu-Of Fees

As an alternative to requiring developers to dedicate on-site greenway sections that would serve their development, some communities provide a choice of paying a front-end charge for off-site protection of pieces of the larger system. Payment is generally a condition of development approval and recovers the cost of the off-site land acquisition or the development's proportionate share of the cost of a regional facility serving a larger area. Some communities prefer in-lieu-of fees. This alternative allows community staff to purchase land worthy of protection rather than accept marginal land that meets the quantitative requirements of a developer dedication but falls a bit short of qualitative interests.

BONDS AND LOANS

Bonds have been a very popular way for communities across the country to finance their pedestrian and greenway projects. A number of bond options are listed below. Contracting with a



private consultant to assist with this program may be advisable. Since bonds rely on the support of the voting population, an education and awareness program should be implemented prior to any vote. Billings, Montana used the issuance of a bond in the amount of \$599,000 to provide the matching funds for several of their TEA-21 enhancement dollars. Austin, Texas has also used bond issues to fund a portion of their bicycle and trail system.

Revenue Bonds

Revenue bonds are bonds that are secured by a pledge of the revenues from a certain local government activity. The entity issuing bonds, pledges to generate sufficient revenue annually to cover the program's operating costs, plus meet the annual debt service requirements (principal and interest payment). Revenue bonds are not constrained by the debt ceilings of general obligation bonds, but they are generally more expensive than general obligation bonds.

General Obligation Bonds

Cities, counties, and service districts generally are able to issue general obligation (G.O.) bonds that are secured by the full faith and credit of the entity. In this case, the local government issuing the bonds pledges to raise its property taxes, or use any other sources of revenue, to generate sufficient revenues to make the debt service payments on the bonds. A general obligation pledge is stronger than a revenue pledge, and thus may carry a lower interest rate than a revenue bond. Frequently, when local governments issue G.O. bonds for public enterprise improvements, the public enterprise will make the debt service payments on the G.O. bonds with revenues generated through the public entity's rates and charges. However, if those rate revenues are insufficient to make the debt payment, the local government is obligated to raise taxes or use other sources of

revenue to make the payments. G.O. bonds distribute the costs of land acquisition and greenway development and make funds available for immediate purchases and projects. Voter approval is required.

Special Assessment Bonds

Special assessment bonds are secured by a lien on the property that benefits by the improvements funded with the special assessment bond proceeds. Debt service payments on these bonds are funded through annual assessments to the property owners in the assessment area.

State Revolving Fund (SRF) Loans

Initially funded with federal and state money, and continued by funds generated by repayment of earlier loans, State Revolving Funds (SRFs) provide low interest loans for local governments to fund water pollution control and water supply related projects including many watershed management activities. These loans typically require a revenue pledge, like a revenue bond, but carry a below market interest rate and limited term for debt repayment (20 years).

VI. OTHER LOCAL OPTIONS

FACILITY MAINTENANCE DISTRICTS

Facility Maintenance Districts (FMDs) can be created to pay for the costs of on-going maintenance of public facilities and landscaping within the areas of the Town where improvements have been concentrated and where their benefits most directly benefit business and institutional property owners. An FMD is needed in order to assure a sustainable maintenance program. Fees may be based upon the length of lot frontage along streets where improvements have been installed, or upon other factors such as the size of the parcel. The program supported by the



FMD should include regular maintenance of streetscape of off road trail improvements. The municipality can initiate public outreach efforts to merchants, the Chamber of Commerce, and property owners. In these meetings, Town staff will discuss the proposed apportionment and allocation methodology and will explore implementation strategies.

The municipality can manage maintenance responsibilities either through its own staff or through private contractors.

PARTNERSHIPS

Another method of funding facilities is to partner with public agencies and private companies and organizations. Partnerships engender a spirit of cooperation, civic pride and community participation. The key to the involvement of private partners is to make a compelling argument for their participation. Very specific routes that make critical connections to place of business would be targeted for private partners' monetary support following a successful master planning effort. Potential partners include major employers which are located along or accessible to pedestrian facilities such as multi-use paths or greenways. Name recognition for corporate partnerships would be accomplished through signage trail heads or interpretive signage along greenway systems. Utilities often make good partners and many trails now share corridors with them. Money raised from providing an easement to utilities can help defray the costs of maintenance. It is important to have a lawyer review the legal agreement and verify ownership of the subsurface, surface or air rights in order to enter into an agreement.

LOCAL TRAIL SPONSORS

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with

the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

VOLUNTEER WORK

It is expected that many citizens will be excited about the development of a greenway corridor. Individual volunteers from the community can be brought together with groups of volunteers form church groups, civic groups, scout troops and environmental groups to work on greenway development on special community work days. Volunteers can also be used for fund-raising, maintenance, and programming needs.

VII. PRIVATE FOUNDATIONS AND ORGANIZATIONS

Many communities have solicited greenway funding assistance from private foundations and other conservation-minded benefactors. Below are a few examples of private funding opportunities available in North Carolina and locally to Cabarrus County.

CANNON FOUNDATION, INC

The Cannon Foundation gives grants across the State, with its highest priority in Cabarrus County and related communities. Preference is given to rural communities. Grants have been provided in the fields of health, environment, cultural/historic, human services, and education. The majority of the grants go to capital improvements (75%) while 25% goes to project support and programs. The foundation has given millions of dollars in grant money over the years, making it the leading foundation



giver in Cabarrus County.

LAND FOR TOMORROW CAMPAIGN

Land for Tomorrow is a diverse partnership of businesses, conservationists, farmers, environmental groups, health professionals and community groups committed to securing support from the public and General Assembly for protecting land, water and historic places. The campaign is asking the North Carolina General Assembly to support issuance of a bond for \$200 million a year for five years to preserve and protect its special land and water resources. Land for Tomorrow will enable North Carolina to reach a goal of ensuring that working farms and forests; sanctuaries for wildlife; land bordering streams, parks and greenways; land that helps strengthen communities and promotes job growth; historic downtowns and neighborhoods; and more, will be there to enhance the quality of life for generations to come. For more information, visit www.landfortomorrow.org/

THE TRUST FOR PUBLIC LAND

Land conservation is central to the mission of the Trust for Public Land (TPL). Founded in 1972, the Trust for Public Land is the only national nonprofit working exclusively to protect land for human enjoyment and well being. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of American communities. TPL's legal and real estate specialists work with landowners, government agencies, and community groups to:

- Create urban parks, gardens, greenways, riverways
- Build livable communities by setting aside open space in the path of growth
- Conserve land for watershed protection, scenic beauty, and close-to home recreation safeguard the character

of communities by preserving historic landmarks and landscapes.

The following are TPL's Conservation Services:

- Conservation Vision: TPL helps agencies and communities define conservation priorities, identify lands to be protected, and plan networks of conserved land that meet public need.
- Conservation Finance: TPL helps agencies and communities identify and raise funds for conservation from federal, state, local, and philanthropic sources.
- Conservation Transactions: TPL helps structure, negotiate, and complete land transactions that create parks, playgrounds, and protected natural areas.
- Research and Education: TPL acquires and shares knowledge of conservation issues and techniques to improve the practice of conservation and promote its public benefits.

Since 1972, TPL has worked with willing landowners, community groups, and national, state, and local agencies to complete more than 3,000 land conservation projects in 46 states, protecting more than 2 million acres. Since 1994, TPL has helped states and communities craft and pass over 330 ballot measures, generating almost \$25 billion in new conservation-related funding. For more information, visit www.tpl.org/.

Z. SMITH REYNOLDS FOUNDATION

This Winston-Salem based Foundation has been assisting the environmental projects of local governments and non-profits in North Carolina for many years. The foundation has two grant cycles per year and generally does not fund land acquisition. However, the foundation may be able to support municipalities in other areas of greenways development. More



information is available at www.zsr.org.

NORTH CAROLINA COMMUNITY FOUNDATION

The North Carolina Community Foundation, established in 1988, is a statewide foundation seeking gifts from individuals, corporations, and other foundations to build endowments and ensure financial security for nonprofit organizations and institutions throughout the state. Based in Raleigh, North Carolina, the foundation also manages a number of community affiliates throughout North Carolina that make grants in the areas of human services, education, health, arts, religion, civic affairs, and the conservation and preservation of historical, cultural, and environmental resources. In addition, the foundation manages various scholarship programs statewide. Web site: <http://nccommunityfoundation.org/>

NATIONAL TRAILS FUND

In 1998, the American Hiking Society created the National Trails Fund, the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. Each year, 73 million people enjoy foot trails, yet many of our favorite trails need major repairs due to a \$200 million in badly needed maintenance. National Trails Fund grants give local organizations the resources they need to secure access, volunteers, tools and materials to protect America's cherished public trails. For 2005, American Hiking distributed over \$40,000 in grants thanks to the generous support of Cascade Designs and L.L.Bean, the program's Charter Sponsors. To date, American Hiking has granted nearly \$382,000 to 105 different trail projects across the U.S. for land acquisition, constituency building campaigns, and a variety of trail work projects. Awards typically range from \$500 to \$5,000 per project.

American Hiking Society considers several project types: securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements. Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage. Constituency buildingsurroundingspecifictrailprojects-includingvolunteer recruitment and support. Web site: www.americanhiking.org/NTF.aspx



APPENDIX VI: CONSERVATION TOOLBOX

There are many different ways for Cabarrus County to secure trail right-of-way for the Carolina Thread Trail. The recommended alignment of the trail will follow publicly owned land (easements, parklands, and conservation lands) wherever possible through a significant portion of its length. However, it will be necessary to work with landowners along the route to secure trail right-of-way. The following text provides a list of options that should be considered in securing right-of-way for the Carolina Thread Trail.

I. Partnerships

Cabarrus County and its municipalities should pursue partnerships with land trusts and land managers to make more effective use of their land acquisition funds and strategies. The following offers recommendations on how these partnerships could be strengthened

Land Trusts

Land trust organizations, such as the Trust for Public Lands and Conservation Trust for North Carolina to name just two, are valuable partners, when it comes to acquiring land and rights-of-way for greenways. These groups can work directly with landowners and conduct their business in private so that sensitive land transactions are handled in an appropriate manner. Once the transaction has occurred, the land trust will usually convey the acquired land or easement to a public agency, such as a town or county for permanent stewardship and ownership.

Private Land Managers

Another possible partnership that could be strengthened would be with the utility companies that manage land throughout the Cabarrus County region. Trails and greenways can be built

on rights-of-ways that are either owned or leased by electric and natural gas companies. Electric utility companies have long recognized the value of partnering with local communities, non-profit trail organizations, and private land owners to permit their rights-of-ways to be used for trail development. This has occurred all over the United States and throughout North Carolina.

Cabarrus County and its municipalities should actively update and maintain relationships with private utility and land managers to ensure that community wide bicycle, pedestrian and greenway system can be accommodated within these rights-of-way. The respective municipalities will need to demonstrate to these companies that maintenance will be addressed, liability will be reduced and minimized and access to utility needs will be provided.

II. Greenway Acquisition Tools

The following menu of tools describe various methods of acquisition that can be used by landowners, land conservation organizations, Cabarrus County, and other surrounding municipalities to acquire greenway lands.

IIA. Government Regulation

Regulation is defined as the government's ability to control the use and development of land through legislative powers. Regulatory methods help shape the use of land without transferring or selling the land. The following types of development ordinances are regulatory tools that can meet the challenges of projected suburban growth and development as well as conserve and protect greenway resources.



Exactions

An exaction is a condition of development approval that requires development to provide or contribute to the financing of public facilities at their own expense. For example, a developer may be required to build a greenway on-site as a condition of developing a certain number of units because the development will create the need for new parks or will harm existing parks due to overuse. This mechanism can be used to protect or preserve greenway lands, which are then donated to Cabarrus County or towns within the county. Consideration should be given to include greenway development in future exaction programs. Most commonly, exactions are in the form of mandatory dedications of lands for parks and infrastructure, fees in lieu of mandatory dedication, or impact fees.

Mandatory Dedication

This is a type of exaction where subdivision regulations require a developer to dedicate or donate improved land to the public interest. A dedication may involve the fee simple title to the land, an easement, or some other property interest. Sometimes, the construction of an improvement itself is required such as a park or greenway.

Fee-in-Lieu

An exaction can take the form of a fee-in-lieu of mandatory dedication. It can also complement negotiated dedications (described below). Based on the density of development, this program allows a developer the alternative of paying money for the development/protection of open space and greenways in lieu of dedicating greenway and park lands. Payments are made representing the value of the site or improvement that would have been dedicated or provided. This allows local governments to pool fees from various subdivisions to finance facilities like

parks and greenways. This money can be used to implement greenway management programs or acquire additional open space.

Impact Fee

A final type of exaction, an impact fee can fund a broader range of facilities that serve the public interest. They are commonly imposed on a per unit rather than a build out basis, making them more flexible and keeping developers from having to pay large up front costs. These do not have to be directly tied to any requirements for improvements or dedications of land. They can be more easily applied to off-site improvements.

Growth Management Measures (Concurrency)

Concurrency-based development approaches to growth management simply limit development to areas with adequate public infrastructure. This helps regulate urban sprawl, provides for quality of life in new development, and can help protect open space. In the famous case with the Town of Ramapo (1972), the Town initiated a zoning ordinance making the issue of a development permit contingent on the presence of public facilities such as utilities and parks. This was upheld in Court and initiated a wave of slow-growth management programs nationwide. This type of growth management can take the form of an adequate public facilities ordinance.

Performance Zoning

Performance zoning is zoning based on standards that establish minimum requirements or maximum limits on the effects or characteristics of a use. This is often used for the mixing of different uses to minimize incompatibility and improve the quality of development. For example, how a commercial use is designed and functions determines whether it could be allowed next to a residential area or connected to a greenway.



Incentive Zoning (Dedication/Density Transfers)

Also known as incentive zoning, this mechanism allows greenways to be dedicated for density transfers on development of a property. The potential for improving or subdividing part or all of a parcel can be expressed in dwelling unit equivalents or other measures of development density or intensity. Known as density transfers, these dwelling unit equivalents may be relocated to other portions of the same parcel or to contiguous land that is part of a common development plan. Dedicated density transfers can also be conveyed to subsequent holders if properly noted as transfer deeds.

Conservation Zoning

This mechanism recognizes the problem of reconciling different, potentially incompatible land uses by preserving natural areas, open spaces, waterways, and/or greenways that function as buffers or transition zones. It can also be called buffer or transition zoning. This type of zoning, for example, can protect waterways by creating buffer zones where no development can take place. Care must be taken to ensure that the use of this mechanism is reasonable and will not destroy the value of a property.

Overlay Zoning

An overlay zone and its regulations are established in addition to the zoning classification and regulations already in place. These are commonly used to protect natural or cultural features such as historic areas, unique terrain features, scenic vistas, agricultural areas, wetlands, stream corridors, and wildlife areas.

Negotiated Dedications

This type of mechanism allows municipalities to negotiate with landowners for certain parcels of land that are deemed beneficial to the protection and preservation of specific stream corridors. This type of mechanism can also be exercised through dedication of greenway lands when a parcel is subdivided. Such dedications would be proportionate to the relationship between the impact of the subdivision on community services and the percentage of land required for dedication—as defined by the US Supreme Court in *Dolan v Tigard*.

Reservation of Land

This type of mechanism does not involve any transfer of property rights but simply constitutes an obligation to keep property free from development for a stated period of time. Reservations are normally subject to a specified period of time, such as 6 or 12 months. At the end of this period, if an agreement has not already been reached to transfer certain property rights, the reservation expires.

Planned Unit Development

A planned unit development allows a mixture of uses. It also allows for flexibility in density and dimensional requirements, making clustered housing and common open space along with addressing environmental conditions a possibility. It emphasizes more planning and can allow for open space and greenway development and connectivity.

Cluster Development

Cluster development refers to a type of development with generally smaller lots and homes close to one another. Clustering can allow for more units on smaller acreages of land, allowing for larger percentages of the property to be used for open space and greenways.



IIB. Land Management

Management is a method of conserving the resources of a specific greenway parcel by an established set of policies called management plans for publicly owned greenway land or through easements with private property owners. Property owners who grant easements retain all rights to the property except those which have been described in the terms of the easement. The property owner is responsible for all taxes associated with the property, less the value of the easement granted. Easements are generally restricted to certain portions of the property, although in certain cases an easement can be applied to an entire parcel of land. Easements are transferable through title transactions, thus the easement remains in effect perpetually.

Management Plans

The purpose of a management plan is to establish legally binding contracts which define the specific use, treatment, and protection for publicly owned greenway lands. Management plans should identify valuable resources; determine compatible uses for the parcel; determine administrative needs of the parcel, such as maintenance, security, and funding requirements; and recommend short-term and long-term action plans for the treatment and protection of greenway lands.

Conservation Easement

This type of easement generally establishes permanent limits on the use and development of land to protect the natural resources of that land. When public access to the easement is desired, a clause defining the conditions of public access can be added to the terms of the easement. Dedicated conservation easements can qualify for both federal income tax deductions and state tax credits. Tax deductions are allowed by the Federal government for donations of certain conservation easements. The donation may reduce the donor's taxable income.

Preservation Easement

This type of easement is intended to protect the historical integrity of a structure or important elements in the landscape by sound management practices. When public access to the easement is desired, a clause defining the conditions of public access can be added to the terms of the easement. Preservation easements may qualify for the same federal income tax deductions and state tax credits as conservation easements.

Public Access Easements

This type of easement grants public access to a specific parcel of property when a conservation or preservation easement is not necessary. The conditions of use are defined in the terms of the public access easement.

IIC. Acquisition

Acquisition requires land to be donated or purchased by a government body, public agency, greenway manager, or qualified conservation organization.

Donation or Tax Incentives

In this type of acquisition, a government body, public agency, or qualified conservation organization agrees to receive the full title or a conservation easement to a parcel of land at no cost or at a "bargain sale" rate. The donor is then eligible to receive a federal tax deduction of up to 30 to 50 percent of their adjusted gross income. Additionally, North Carolina offers a tax credit of up to 25 percent of the property's fair market value (up to \$5000). Any portion of the fair market value not used for tax credits may be deducted as a charitable contribution. Also, property owners may be able to avoid any inheritance taxes, capital gains taxes, and recurring property taxes.



Fee Simple Purchase

This is a common method of acquisition where a local government agency or private greenway manager purchases property outright. Fee simple ownership conveys full title to the land and the entire "bundle" of property rights including the right to possess land, to exclude others, to use land, and to alienate or sell land.

Easement Purchase

This type of acquisition is the fee simple purchase of an easement. Full title to the land is not purchased, only those rights granted in the easement agreement. Therefore the easement purchase price is less than the full title value.

Purchase / Lease Back

A local government agency or private greenway organization can purchase a piece of land and then lease it back to the seller for a specified period of time. This lease may contain restrictions regarding the development and use of the property.

Bargain Sale

A property owner can sell property at a price less than the appraised fair market value of the land. Sometimes the seller can derive the same benefits as if the property were donated. Bargain Sale is attractive to sellers when the seller wants cash for the property, the seller paid a low cash price and thus is not liable for high capital gains tax, and/or the seller has a fairly high current income and could benefit from the donation of the property as an income tax deduction.

Installment Sale

An installment sale is a sale of property at a gain where at least one payment is to be received after the tax year in which

the sale occurs. These are valuable tools to help sellers defer capital gains tax. This provides a potentially attractive option when purchasing land for open space from a possible seller.

Option / First Right of Refusal

A local government agency or private organization establishes an agreement with a public agency or private property owner to provide the right of first refusal on a parcel of land that is scheduled to be sold. This form of agreement can be used in conjunction with other techniques, such as an easement to protect the land in the short-term. An option would provide the agency with sufficient time to obtain capital to purchase the property or successfully negotiate some other means of conserving the greenway resource.

Purchase of Development Rights

A voluntary purchase of development rights involves purchasing the development rights from a private property owner at a fair market value. The landowner retains all ownership rights under current use, but exchanges the rights to develop the property for cash payment.

Land Banking

Land banking involves land acquisition in advance of expanding urbanization. The price of an open space parcel prior to development pressures is more affordable to a jurisdiction seeking to preserve open space. A City or County might use this technique to develop a greenbelt or preserve key open space or agricultural tracts. The jurisdiction should have a definite public purpose for a land banking project.

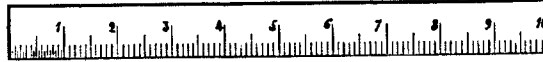
Condemnation

The practice of condemning private land for use as a greenway is viewed as a last resort policy. Using condemnation



Appendix VI. Conservation Toolbox, continued

to acquire property or property rights can be avoided if private and public support for the greenway program is present. Condemnation is seldom used for the purpose of dealing with an unwilling property owner. In most cases, condemnation has been exercised when there has been an absentee property ownership, when the title of the property is not clear, or when it becomes apparent that obtaining the consent for purchase would be difficult because there are numerous heirs located in other parts of the United States or different countries.



FOOTNOTES

[1] American Planning Association. (2002). *How Cities Use Parks for Economic Development*.

[2] National Association of Realtors and National Association of Home Builders. (2002). *Consumer's Survey on Smart Choices for Home Buyers*.

[3] Rails to Trails Conservancy. (2005). *Economic Benefits of Trails and Greenways*.

[4] NCDOT and ITRE. (2006). *Bikeways to Prosperity: Assessing the Economic Impact of Bicycle Facilities*.

[5] Virginia Department of Conservation. (2004). *The Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics*.

[6] Rails to Trails. (Danzer, 2006). *Trails and Tourism*.

[7] American Planning Association. (2002). *How Cities Use Parks for Economic Development*.

[8] Rails to Trails. (Danzer, 2006). *Trails and Tourism*.

[9] U.S. Department of Transportation (DOT), Bureau of Transportation Statistics (BTS) and the Federal Highway Administration (FHWA). (2002). *National Household Travel Survey*.

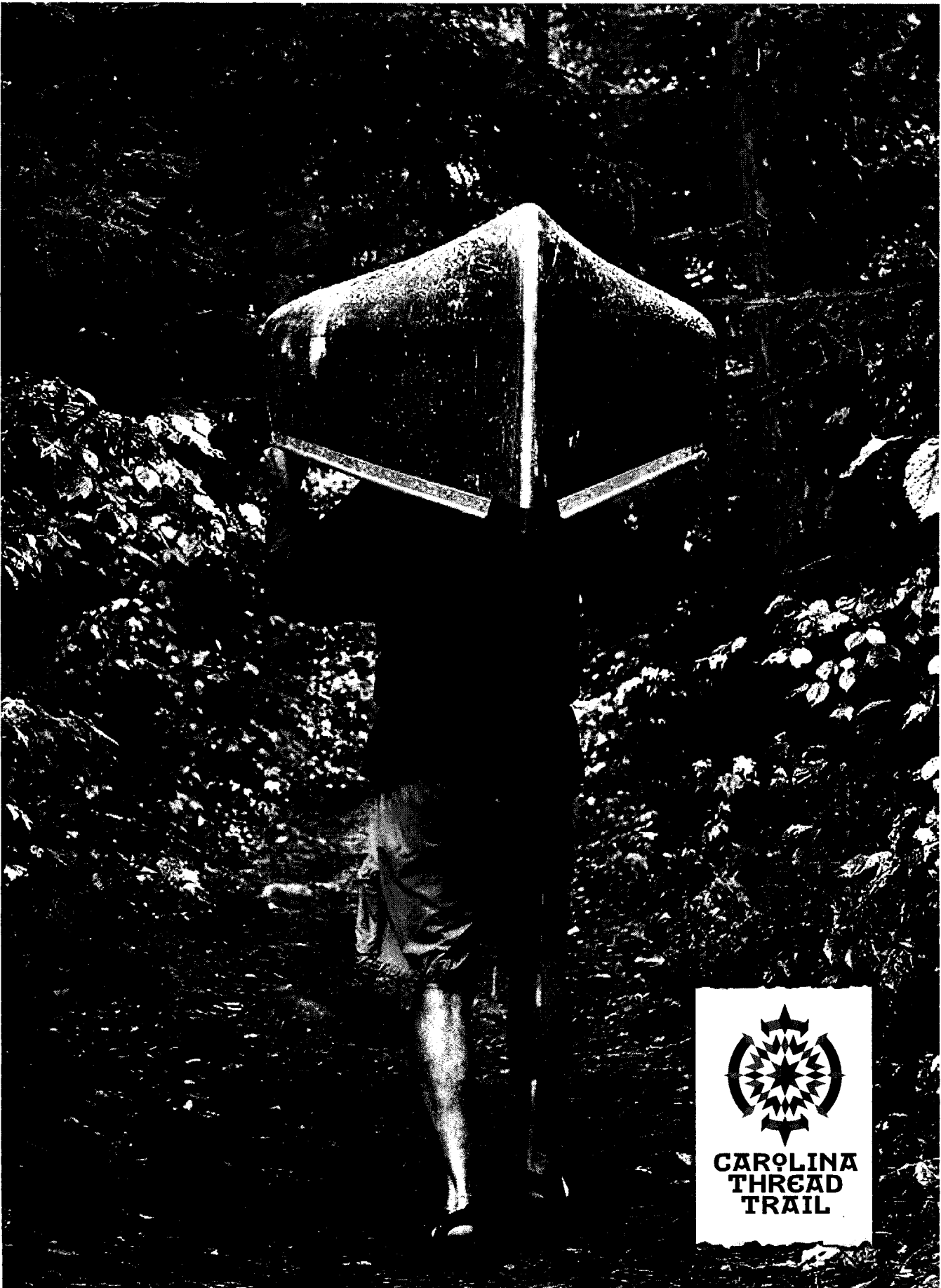
[10] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (1996). *Physical Activity and Health: A Report of the Surgeon General*.

[11] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2002). *Guide to Community Preventive Services*.

[12] Rails-to-Trails Conservancy. (2006) *Health and Wellness Benefits*.

[13] Newsweek Magazine. (10/3/2005). *Designing Heart-Healthy Communities*.

[14] Federal Emergency Management Agency. (2005) *Building Stronger: State and Local Mitigation Planning*.



Memo

To: Cabarrus County Planning and Zoning Commission
From: Susie Morris, AICP, Planning and Zoning Manager
CC: File
Date: 7/6/2009
Re: Information for County Parcels Located Adjacent to Concord Regional Airport

As directed at the June Planning and Zoning Commission meeting, Staff is providing information related to the Concord Regional Airport (CRA) property, the airport overlay and county zoned properties located near the airport.

Map 1

This is a map illustrating the Airport Overlay Zone near the CRA. Properties in yellow are within the City Limits of the City of Concord and are regulated by Concord.

Map 2

This map illustrates the CRA property and parcels adjacent to the CRA. Parcels with red cross-hatching share a common boundary line with the airport parcel. Parcels subject to the Cabarrus County Zoning Ordinance are shown with the zoning for the parcels. Cabarrus parcels are colored and labeled with the appropriate zoning classification.

Map 3

This map illustrates County zoning for parcels adjacent to CRA. (Southern)

Map 4

This map provides an aerial view of the adjacent parcels surrounding the airport. (Southern)

Map 5

This map illustrates County zoning for parcels adjacent to CRA. (Northern)

Map 6

This map provides an aerial view of the adjacent parcels surrounding the airport. (Northern)

Map 7

This map illustrates airport property and county zoning only.

Map 8

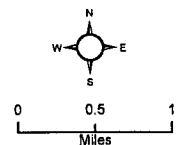
This map illustrates all zoning (city and county) around the airport property.

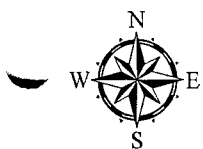
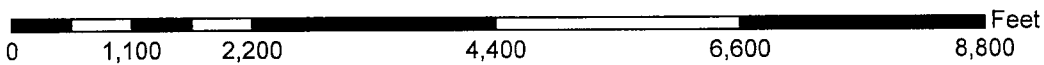
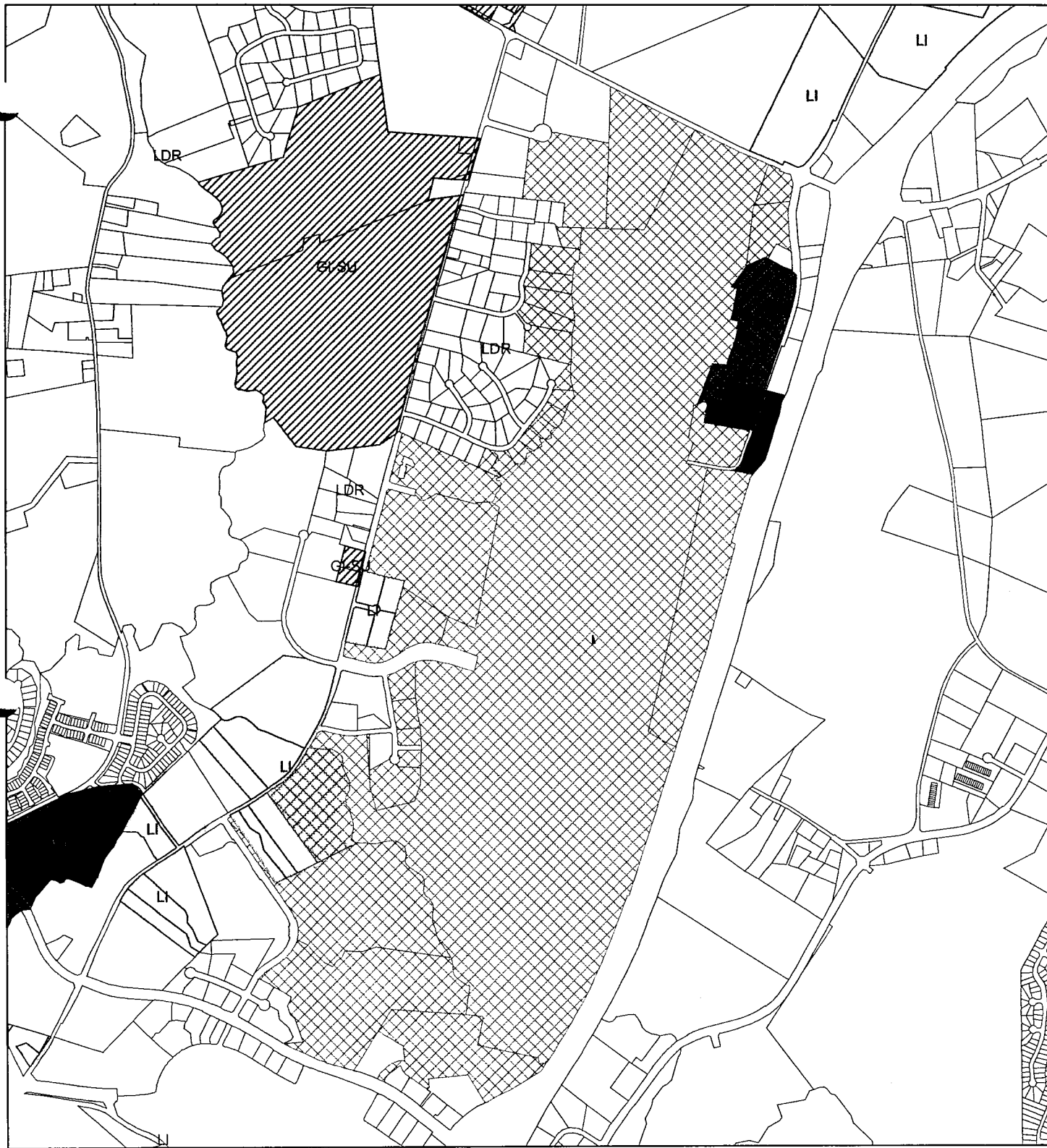
Please be prepared to discuss at the meeting in relation to the Commissions' inquiry about a text amendment to the landscape standards to accommodate properties in the airport overlay.





Airport Overlay District

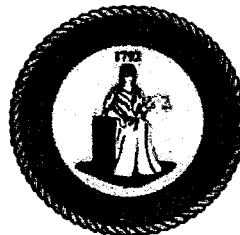
- | | |
|-----------------|----------------------|
| Airport Overlay | City of Charlotte |
| Parcels | City of Concord |
| Lakes & Ponds | City of Kannapolis |
| Rivers | Town of Harrisburg |
| | Town of Huntersville |
| | County Boundary |





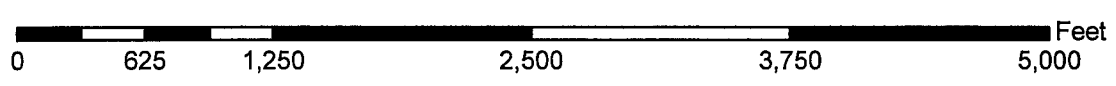
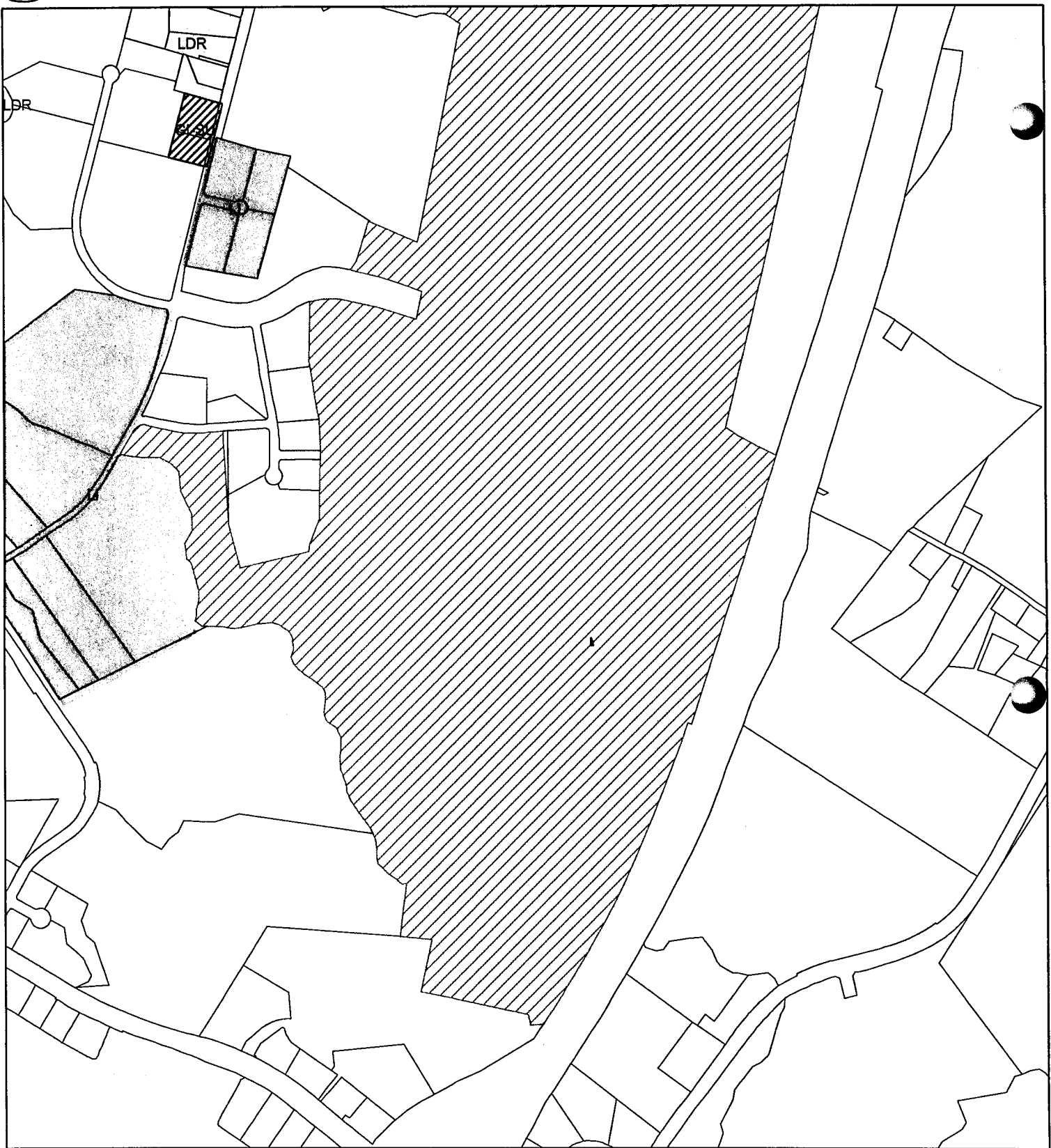
Legend

-  Concord Airport Property
-  Adjacent Parcels (County and City)



Cabarrus County shall not be held liable for any errors in these data. This includes errors of omission, commission, errors concerning the content of the data, and relative and positional accuracy of the data. These data cannot be construed to be a legal document. Primary sources from which these data were compiled must be consulted for verification of information contained within the data.

1 inch equals 1,667 feet



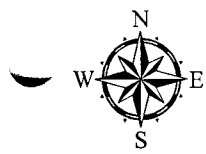
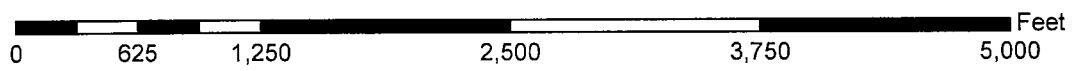
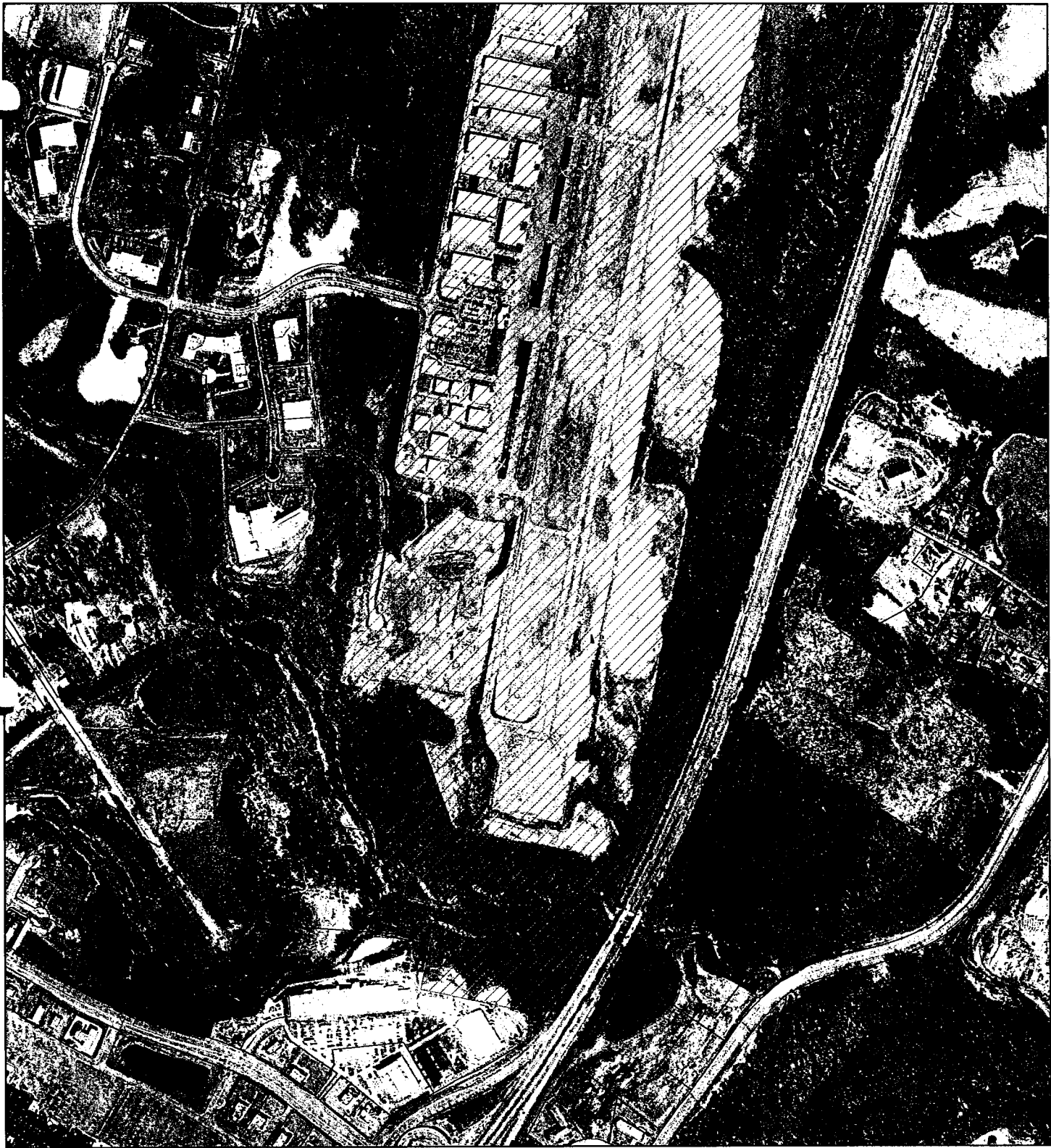
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 Concord Airport Property




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1 inch equals 928 feet



Legend

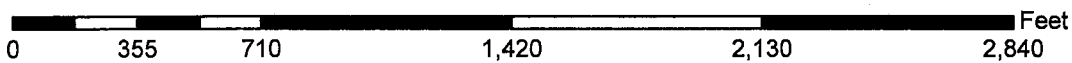
 Concord Airport Property



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1 inch equals 928 feet

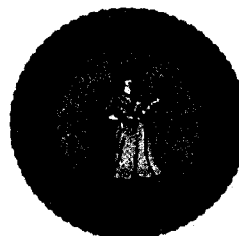
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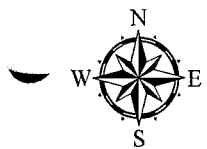
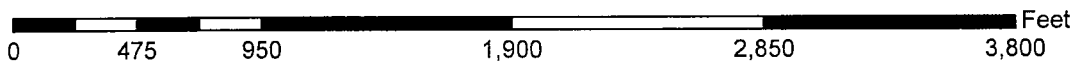
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 Concord Airport Property

1 inch equals 522 feet



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Legend

 Concord Airport Property



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1 inch equals 700 feet

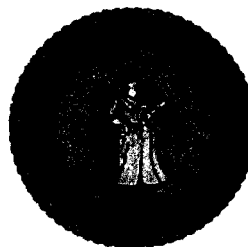


0 1,150 2,300 4,600 6,900 9,200 Feet



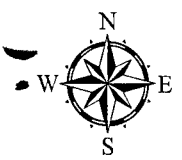
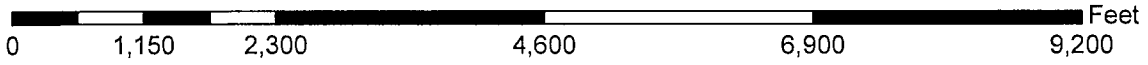
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 Airport Property

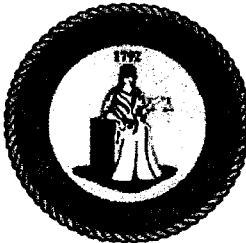


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1 inch equals 1,649 feet



Legend



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1 inch equals 1,649 feet

Memo

To: Cabarrus County Planning and Zoning Commission
From: Susie Morris, AICP, Planning and Zoning Manager
CC: File
Date: July 13, 2009
Re: Proposed Text Amendment TEXT2009-00008

- Attached you will find proposed changes to Appendix B of the Zoning Ordinance.
- The proposed changes modify the current standards to better define the applicable standards and address conflicts that existed with other sections and standards in the Zoning Ordinance.
- The proposed amendment will remove Appendix B and move the language for standards related to commercial and office projects to Chapter 5.
- Please read over the materials and be prepared to discuss the proposed text at the meeting.

Chapter 5. District Development Standards

Section 5-1. Intent.

The district development standards of this Zoning Ordinance establish lot sizes and certain restrictions for residential and nonresidential development. These standards allow for variety in housing types while maintaining the overall character of neighborhoods and commercial areas of the County. Development standards are based on the County's suburban and rural planning tiers. Separate standards are established to regulate development in each residential district. This approach to district development standards and planning tiers has several public benefits:

- A. It allows for development that is more sensitive to the environment and allows for the preservation of open and natural areas.
- B. It promotes quality site layout and energy-efficient development.
- C. It promotes affordable and life-cycle housing.
- D. It promotes development intensities that match existing and proposed infrastructure investments.

Section 5-2. How to use this Chapter.

This Chapter is divided into the following parts:

PART I. RESIDENTIAL DISTRICTS. This Part sets forth the standards for all types of residential subdivisions in all residential districts.	Section 5-3 to Section 5-8
PART II. NON-RESIDENTIAL DISTRICTS. This Part sets forth the standards for development in non-residential districts.	Section 5-9

PART I. RESIDENTIAL DISTRICTS.

Section 5-3. Subdivision types.

Development within the residential districts allows three types of subdivision.

A. *Conventional Subdivision*

Conventional subdivision is a pattern of residential development that provides a majority of property owners with substantial yards on their own property.

B. *Open Space Subdivision*

Open space subdivisions trade smaller lot sizes (with smaller yards) for additional common open space. An open space subdivision shall be a minimum size to ensure sufficient common open space can be incorporated into the subdivision design.

C. *Amenity Subdivision*

Amenity subdivisions trade even smaller lot sizes (with smaller yards) for additional common open space. An amenity subdivision allows additional density provided certain enhancements are incorporated into the design of the subdivision.

D. *Subdivision Type by Planning Tier*

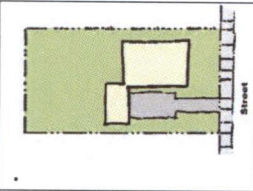
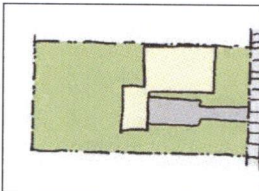
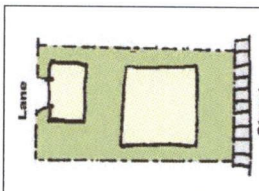
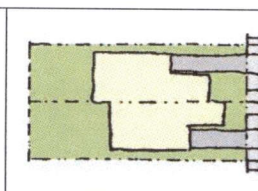
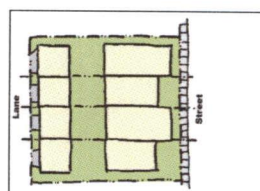
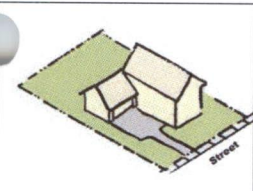
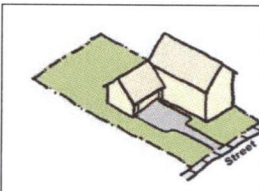
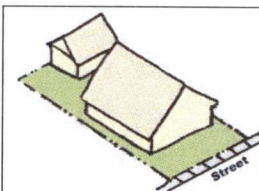
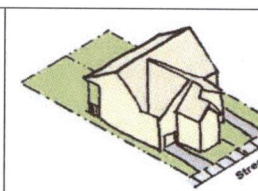
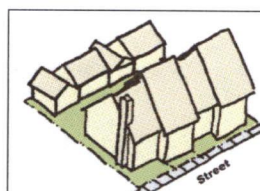
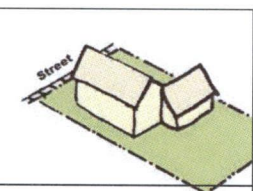
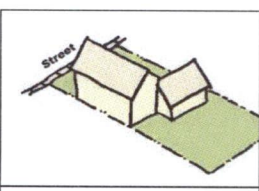
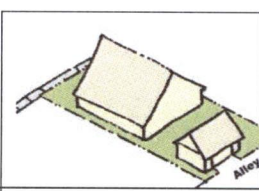
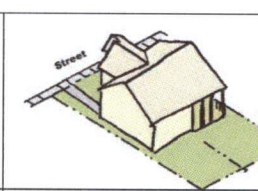
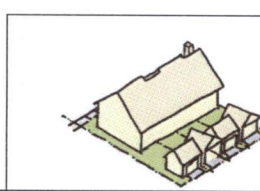
The district standards set forth in this Chapter provide for alternative subdivision types in each planning tier, as follows.

	R U R A L		S U B U R B A N		
	AO	CR	LDR	MDR	HDR
Conventional Subdivision	✓	✓	✓		
Open Space Subdivision	✓	✓	✓	✓	✓
Amenity Subdivision			✓	✓	✓

Section 5-4. Housing types.

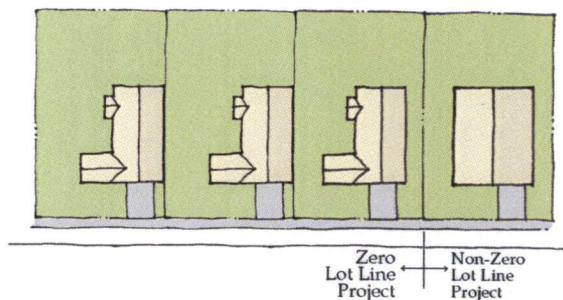
A. Definitions

The following housing types are established to provide a common terminology for housing in the County. All drawings are for illustrative purposes only.

Single Family Detached	Zero Lot Line House	Alley-Loaded House	Semi-Attached House	Townhouse
A dwelling unit located on a single lot with private yards on all four sides	A dwelling unit located on a single lot with private yards on three sides. The house has only a single side yard comprising the equivalent of the two side yards of a single-family detached house.	A dwelling unit located on a single lot with private yards on all four sides. The house is set much closer to the street than a single-family detached house, and alley access is required.	Two attached single-family units located on two lots that share a common wall along the lot line, providing for fee-simple ownership.	Three or more attached units where the units are lined up in a row and share side walls. Access to garages is from the rear.
				
				
				

B. Special standards for a zero lot line house.

1. A single side yard shall be provided. This reduction shall not be allowed for the front yard on a corner lot or for the side yard adjacent to lots developed with other housing types.
2. An easement between the two property owners to allow for maintenance or repair of the house shall be required when the roof overhang or side wall of the house are within four feet of the adjacent property line (no roof overhang shall be permitted to extend

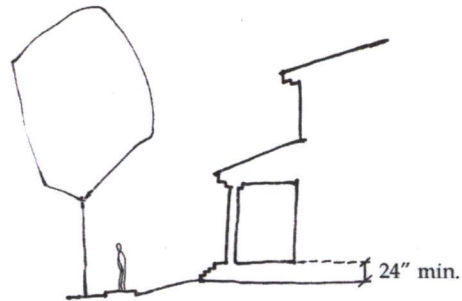


across the property line). The easement on the adjacent property must provide at least five feet of unobstructed space. The easement shall be recorded on the subdivision plat.

3. If the side wall of the house is on the property line, or within three feet of the property line, windows or other openings that allow for visibility into the side yard of the adjacent lot shall not be allowed. Windows that do not allow visibility into the side yard of the adjacent lot, such as clerestory windows or translucent windows, shall be allowed.

C. *Special standards for an alley-loaded house.*

1. An alley shall be provided to the rear of all alley-loaded houses. All vehicular access shall take place from the alley. No parking shall be permitted in the required front yard.
2. The first floor shall be a minimum of 24 inches above the finished grade. Any house built on a slab foundation shall have a brick, stone or other masonry veneer skirt extending up the face of the slab.
3. Front porch.
 - a. A front porch minimum of eight feet in depth shall be required over a minimum of 50 percent of the building width along the street front.
 - b. Front porches may encroach a maximum of eight feet into the front yard and shall be at the same first floor elevation as the home.



D. *Special standards for a townhouse.*

1. Side yards are not required for interior townhouses, but street and rear yards shall be provided for all townhouses, and building separation requirements shall be maintained for all townhouse structures.
2. All townhouse garages and parking areas shall be located to the rear.
3. The maximum number of units allowed in a single building is eight.
4. The first floor shall be located a minimum of two feet and a maximum of three feet above grade.

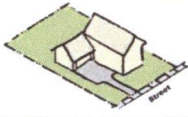
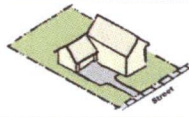
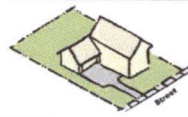
Section 5-5. Conventional subdivision standards.

A. *Applicability.*

A conventional subdivision is permitted in the AO, CR and LDR districts. Applicants shall comply with all other provisions of this ordinance and all other applicable laws, except those that are incompatible with the provisions contained herein.

B. *Dimensional standards.*

Applicants using the conventional subdivision option shall meet the following standards.

	AO	CR	LDR
	Single-Family Detached	Single-Family Detached	Single-Family Detached
CONVENTIONAL SUBDIVISION			
<i>Tract</i>			
Density (maximum units/acre)	0.33	0.50	0.50
Public water and sewer	not permitted*	not permitted*	optional
<i>Lot Dimensions</i> (minimum)			
Lot area (acres)	3	2	2
Average lot width (feet)	150	150	150
<i>Principal</i> (minimum feet)			
Front yard (minor collector)	75	75	75
Front yard (local road)	50	50	50
Side yard (single)	20	10	20
Side yard (total)	40	40	40
Rear yard	30	30	30
<i>Height</i> (maximum feet)	40	40	40
<i>Lot Coverage</i> (maximum)			
Impermeable surface	15%	20%	20%
Structural coverage	10%	15%	15%

* Governmental water may be provided to individual lots in these areas for public health reasons.

C. 1. *Exception for minor subdivisions.*

In the AO, CR, LDR, MDR and HDR Districts, applicants meeting the standards for a minor subdivision as defined by the subdivision ordinance may create no more than one conventional minor subdivision out of each parent tract existing as of June 20, 2005 with lots at least one acre in size, provided that each lot meets any minimum area requirements for public health purposes. The property may be further divided. However, any additional divisions shall be deemed major subdivisions and shall be processed as such and subject to all ordinances and policies related to major subdivisions.

2. *Minor Subdivision Dimensional Standards*

Subdivisions that are classified as minor subdivisions in the AO, CR, and LDR zoning districts shall be subject to the tract requirements listed for public water and sewer, the minimum average lot width listed in lot dimensions, the setbacks, height and lot coverage standards in Section 5-5, Conventional Subdivision Standards, Section B,

Dimensional Standards. NOTE: Density standards in table shall not apply. Minimum lot size shall be one acre (43,560 SF) as stated above.

Subdivisions in the MDR and HDR zoning districts shall be subject to the tract requirements as listed for governmental water and sewer, the lot dimension minimum average lot width listed in the lot dimensions, the setbacks, height and lot coverage standards established in Section 5-6, Open Space Subdivision Standards, Section D, Dimensional Standards. NOTE: Density standards in table shall not apply. Minimum lot size shall be one acre (43,560 SF) as stated above.

D. *Tree planting required.*

1. *Front yard trees.*

- a. One canopy tree shall be provided for each 1,000 square feet of area in the required front yard. For the purpose of calculating required trees, any fraction shall require an additional tree (always round up). Portions of the required front yard covered by allowed encroachments such as front porches (see section 6-15) shall be deleted from the calculation. The tree shall have a minimum size of 2½-inch caliper. Two ornamental trees may be substituted for one canopy tree in a front yard.
- b. One additional front yard tree shall be required in any front (corner) yard.
- c. Any existing tree in the required front yard area over 6 caliper inches shall be credited for one required tree to be planted.

Section 5-6. Open space subdivision standards.

A. *Intent.*

The intent of an open space subdivision is to provide a development alternative to a conventional subdivision. An open space subdivision involves placing a cluster of home-sites within a portion of the development site, allowing housing units on smaller lots than those permitted in a conventional subdivision to promote environmentally sensitive, more efficient use of the land and provide additional common open space. Other purposes of an open space subdivision include the following:

1. To preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams, steep slopes, woodlands and wildlife habitat.
2. To preserve important historic and archaeological sites.
3. To permit clustering of houses and structures in a manner that will reduce the amount of infrastructure, including paved surfaces and utility easements, necessary for residential development.
4. To reduce erosion and sedimentation by minimizing land disturbance and removal of vegetation in residential development.
5. To promote interconnected greenways and corridors throughout the community.
6. To create contiguous greenspace within and adjacent to the development site.
7. To protect scenic views.
8. To protect prime agricultural land and retain farming as an economic activity.

B. *Applicability.*

An open space subdivision is permitted in the AO, CR, LDR, MDR and HDR districts. Applicants shall comply with all other provisions of this ordinance and all other applicable laws, except those that are incompatible with the provisions contained herein.

C. *Ownership of development site.*

The development site to be subdivided may be held in single and separate ownership or in multiple ownership. If held in multiple ownership, however, the site shall be developed according to a single plan with common authority and common responsibility.

D. *Dimensional standards.*

Applicants utilizing the open space subdivision option shall meet the following standards.

CABARRUS COUNTY ZONING ORDINANCE

OPEN SPACE SUBDIVISION

AO

Tract

Density (maximum units/acre)

Area (minimum acres)

Open space (minimum)

Public water and sewer

Lot Dimensions (minimum)

Lot area (square feet)

Average lot width (feet)

Principal (minimum feet)

Front yard (minor collector)

Front yard (local road)

Side yard (single)

Side yard (total)

Rear yard

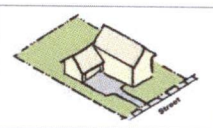
Height (maximum feet)

Lot Coverage (maximum)

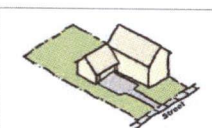
Impermeable surface

Structural coverage

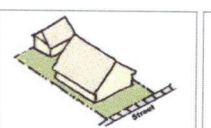
Single-Family
Detached



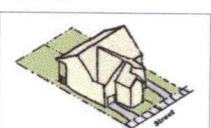
Zero Lot Line
House



Alley-Loaded
House



Semi-Attached
House



0.50

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10

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40%

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not permitted*

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150

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20

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30

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40

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15%

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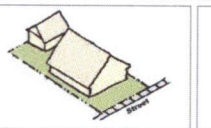
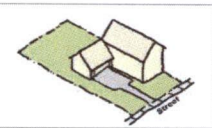
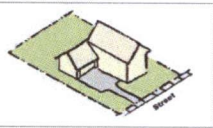
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10%

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CR

Tract

Density (maximum units/acre)

Area (minimum acres)

Open Space (minimum)

Public water and sewer

Lot Dimensions (minimum)

Lot area (square feet)

Average lot width (feet)

Principal (minimum feet)

Front yard (minor collector)

Front yard (local road)

Side yard (single)

Side yard (total)

Rear yard

Height (maximum feet)

Lot Coverage (maximum)

Impermeable surface

Structural coverage

1.00

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5

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40%

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not permitted*

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125

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75

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40

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20%

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15%

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** Minimum lot size shall be no less than one acre. All lots shall be required to meet County Health Department requirements for septic system installation prior to approval of the subdivision.

* Governmental water may be provided to individual lots in these areas for public health reasons.

OPEN SPACE SUBDIVISION

LDR

Tract

Density (maximum units/acre)

Area (minimum acres)

Open space (minimum)

Governmental water and sewer

Lot Dimensions (minimum)

Lot area (square feet)

Average lot width (feet)

Site Dimensions (minimum feet)

Per building

Per unit

Width

Principal (minimum feet)

Front yard

Front yard (corner)

Side yard (single)

Side yard (total)

Rear yard

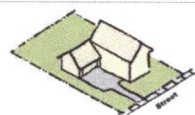
Height (maximum feet)

Lot Coverage (maximum)

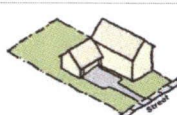
Impermeable surface

Structural coverage

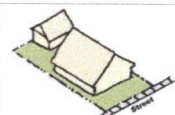
Single-Family
Detached



Zero Lot Line
House



Alley-Loaded
House



Semi-Attached
House



1.5

5

35%

required

15,000

75

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30

20

10

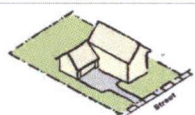
20

30

40

35%

30%



1.5

5

35%

required

15,000

75

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--

30

20

0

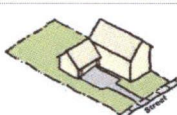
20

30

40

35%

30%



1.5

5

35%

required

12,000

65

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10

10

10

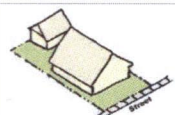
20

30

40

35%

30%



1.5

5

35%

required

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15,000

7,500

75

30

20

10

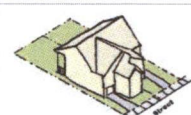
--

30

40

35%

30%



MDR

Tract

Density (maximum units/acre)

Area (minimum acres)

Open space (minimum)

Governmental water and sewer

Lot Dimensions (minimum)

Lot area (square feet)

Average lot width (feet)

Site Dimensions (minimum feet)

Per building

Per unit

Width

Principal (minimum feet)

Front yard

Front yard (corner)

Side yard (single)

Side yard (total)

Rear yard

Height (maximum feet)

Lot Coverage (maximum)

Impermeable surface

Structural coverage

2.50

5

35%

required

8,000

60

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25

15

5

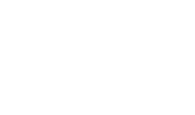
10

20

40

40%

35%



2.50

5

35%

required

8,000

60

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--

--

25

15

0

10

20

40

40%

35%



2.50

5

35%

required

7,000

55

--

--

--

10

10

5

10

20

40

40%

35%



2.50

5

35%

required

--

--

8,000

4,000

60

25

15

5

--

20

40

40%

35%



CABARRUS COUNTY ZONING ORDINANCE

OPEN SPACE SUBDIVISION

HDR

Tract

Density (maximum units/acre)

Area (minimum acres)

Open space (minimum)

Governmental water and sewer

Lot Dimensions (minimum)

Lot area (square feet)

Average lot width (feet)

Site Dimensions (minimum feet)

Per building

Per unit

Width

Principal (minimum feet)

Front yard

Front yard (corner)

Side yard (single)

Side yard (total)

Rear yard

Garage setback from front ROW

Height (maximum feet)

Principal

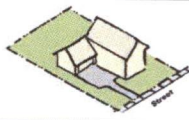
Accessory

Lot Coverage (maximum)

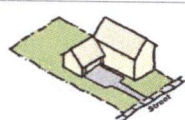
Impermeable surface

Structural coverage

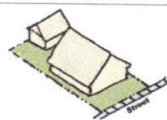
Single-Family Detached



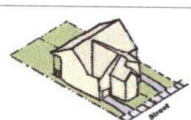
Zero Lot Line House



Alley-Loaded House



Semi-Attached House



4.50

5

35%

required

4,000

40

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--

--

15

10

5

10

15

20

40

40

45%

35%

4.50

5

35%

required

4,000

40

--

--

--

15

10

0

10

15

20

40

40

45%

35%

4.50

5

35%

required

3,500

35

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--

10

10

5

10

15

--

40

40

45%

35%

4.50

5

35%

required

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4,000

2,000

40

15

10

5

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15

20

40

40

45%

35%

Section 5-7. Amenity subdivision standards.

A. *Intent.*

The intent of an amenity subdivision is very similar to that of an open space subdivision; however, an amenity subdivision creates even more open space through more intense clustering of housing units on smaller lots. To diminish the visual effect of housing units on smaller lots, applicants choosing this option are required to incorporate enhanced standards into the design of the subdivision. Other purposes of an amenity subdivision include the following:

1. To preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams, steep slopes, woodlands and wildlife habitat.
2. To preserve important historic and archaeological sites.
3. To permit clustering of houses and structures in a manner that will reduce the amount of infrastructure, including paved surfaces and utility easements, necessary for residential development.
4. To reduce erosion and sedimentation by minimizing land disturbance and removal of vegetation in residential development.
5. To promote interconnected greenways and corridors throughout the community.
6. To create opportunities for promote contiguous greenspace within and adjacent to the development site.
7. To protect scenic views.
8. To protect prime agricultural land and retain farming as an economic activity.

B. *Applicability.*

An amenity subdivision is permitted in the LDR, MDR and HDR districts. Applicants shall comply with all other provisions of this ordinance and all other applicable laws, except those that are incompatible with the provisions contained herein.

C. *Ownership of development site.*

The development site to be subdivided may be held in single and separate ownership or in multiple ownership. If held in multiple ownership, however, the site shall be developed according to a single plan with common authority and common responsibility.

D. *Dimensional standards.*

Applicants utilizing the amenity subdivision option shall meet the following standards.

CABARRUS COUNTY ZONING ORDINANCE

MINORITY SUBDIVISION

LDR

Density (maximum units/acre)
Area (minimum acres)
Open space (minimum)
Governmental water and sewer

Lot Dimensions (minimum)

Lot area (square feet)
Average lot width (feet)

Site Dimensions (minimum feet)

Per building
Per unit
Width

Principal (minimum feet)

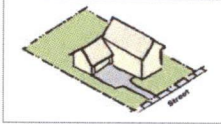
Front yard
Front yard (corner)
Side yard (single)
Side yard (total)
Rear yard

Height (maximum feet)

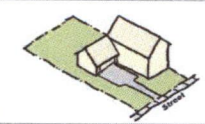
Lot Coverage (maximum)

Impermeable surface
Structural coverage

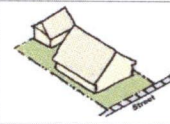
Single-Family
Detached



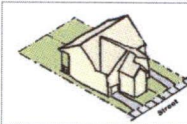
Zero Lot Line
House



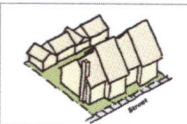
Alley-Loaded
House



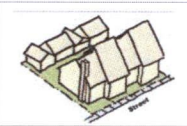
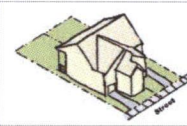
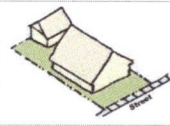
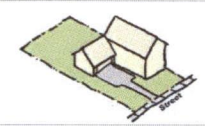
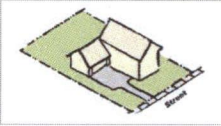
Semi-Attached
House



Townhouse or
Rowhouse



2.00	2.00	2.00	2.00	--
5	5	5	5	--
40%	40%	40%	40%	--
required	required	required	required	--
10,000	10,000	8,000	--	--
60	60	50	--	--
--	--	--	10,000	--
--	--	--	5,000	--
--	--	--	60	--
25	25	10	25	--
15	15	10	15	--
5	0	5	5	--
10	10	10	--	--
20	20	20	20	--
40	40	40	40	--
35%	35%	35%	35%	--
30%	30%	30%	30%	--



3.00	3.00	3.00	3.00	3.00
5	5	5	5	5
50%	50%	50%	50%	50%
required	required	required	required	required
5,000	5,000	4,500	--	2,500
50	50	40	--	24
--	--	--	5,000	7,500
--	--	--	2,500	2,500
--	--	--	50	100
15	15	10	15	15
10	10	10	10	10
5	0	5	0	0
10	10	10	5	5
15	15	15	15	15
20	20	--	20	--
40	40	40	40	40
45%	45%	45%	45%	45%
35%	35%	35%	35%	35%

MDR

Density (maximum units/acre)
Area (minimum acres)
Open space (minimum)
Governmental water and sewer

Lot Dimensions (minimum)

Lot area (square feet)
Average lot width (feet)

Site Dimensions (minimum feet)

Per building
Per unit
Width

Principal (minimum feet)

Front yard
Front yard (corner)
Side yard (single)
Side yard (total)
Rear yard
Garage setback from front ROW

Height (maximum feet)

Lot Coverage (maximum)

Impermeable surface
Structural coverage

AMENITY SUBDIVISION

HDR

Density (maximum units/acre)
Area (minimum acres)
Open space (minimum)
Governmental water and sewer

Lot Dimensions (minimum)

Lot area (square feet)
Average lot width (feet)

Site Dimensions (minimum feet)

Per building
Per unit
Site Width

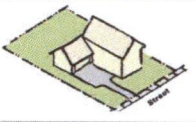
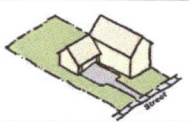
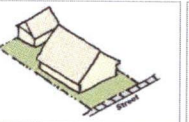
Principal (minimum feet)

Front yard
Front yard (corner)
Side yard (single)
Side yard (total)
Rear yard
Garage setback from front ROW

Height (maximum feet)

Lot Coverage (maximum)

Impermeable surface
Structural coverage

	Single-Family Detached	Zero Lot Line House	Alley-Loaded House	Semi-Attached House	Townhouse or Rowhouse
					
Density (maximum units/acre)	6.00	6.00	6.00	6.00	6.00
Area (minimum acres)	5	5	5	5	5
Open space (minimum)	50%	50%	50%	50%	50%
Governmental water and sewer	required	required	required	required	required
Lot Dimensions (minimum)					
Lot area (square feet)	3,000	3,000	2,500	--	2,500
Average lot width (feet)	30	30	30	--	24
Site Dimensions (minimum feet)					
Per building	--	--	--	3,000	7,500
Per unit	--	--	--	1,500	2,500
Site Width	--	--	--	30	100
Principal (minimum feet)					
Front yard	15	15	10	15	10
Front yard (corner)	10	10	10	10	10
Side yard (single)	5	0	5	0	0
Side yard (total)	10	10	10	5	5
Rear yard	15	15	15	15	15
Garage setback from front ROW	20	20	--	20	--
Height (maximum feet)	40	40	40	40	40
Lot Coverage (maximum)					
Impermeable surface	50%	50%	50%	50%	50%
Structural coverage	40%	40%	40%	40%	40%

E. Special standards for amenity subdivisions.

1. Subdivision design.

a. Block elements.

No block shall be longer than 600 feet in length unless a mid-block pedestrian and bicycle connection is provided, in which case the block may extend up to 1,000 feet. A single-loaded street (houses on only one side) shall not be restricted in length, provided that mid-block pedestrian and bicycle connections are made at the rate of one for every 600 feet in length.

b. Residential collector streets.

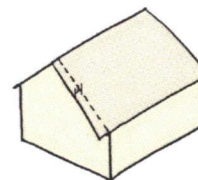
All residential collector streets shall be designed as parkways.

2. Site and building elements.

All housing types shall comply with the following standards.

a. Roof overhang.

- i. Eaves shall extend beyond the exterior face.
- ii. Gable end rakes shall overhang beyond the exterior face.

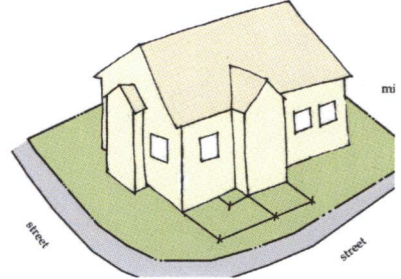


- iii. Eaves and rakes on smaller accessory buildings and dormers shall overhang and shall be architecturally consistent with the primary structure.

b. *Additional standards for corner lots.*

i. *Side wall articulation.*

The street facing side wall(s) of the home shall include projections, recesses and fenestration.



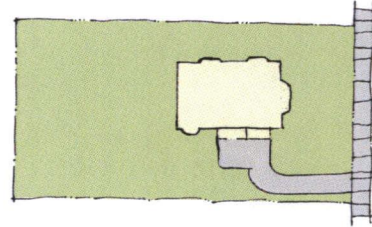
c. *Front yard fences.*

Front yard fences, including fences on corner lots, shall not exceed four feet in height. Such fences shall also be subject to the provisions of Section 6-8.

d. *Front yard trees.*

- i. One canopy tree shall be provided for each 1,000 square feet of area in the required front yard. For the purpose of calculating required trees, any fraction shall require an additional tree (always round up). Portions of the required front yard covered by allowed encroachments such as front porches (see section 6-15) shall be deleted from the calculation. The tree shall have a minimum size of 2½-inch caliper. Two ornamental trees may be substituted for one canopy tree in a front yard.
- ii. One additional front yard tree shall be required in any front (corner) yard.
- iii. Any existing tree in the required front yard area over 6 caliper inches shall be credited for one required tree to be planted.

- e. **Side Load Garages** Orient the garage door perpendicular to the street and provide an integrated architectural treatment such as columns and a trellis, eyebrow roof, decorative masonry or other materials to provide articulation and to visually diminish the impact of the garage doors.



- f. **Covenants, Conditions and Restrictions**

As part of the preliminary plat application process, the applicant shall provide a copy of the Covenants, Conditions and Restrictions for the proposed subdivision and shall demonstrate that the elements included in this section are incorporated into the established design standards for construction for the subdivision. Said Covenants, Conditions and Restrictions shall be recorded prior to any permits being issued for the proposed subdivision.

- g. **Sample Elevations**

As part of the preliminary plat application process, the applicant shall provide example elevations to accompany the established Covenants, Conditions and Restrictions for the proposed subdivision and shall show that the standards established in this section are in compliance with the established standards.

Section 5-8. Residential development standards (all subdivisions).

A. *Open space.*

1. *Applicability.*

Open space is an integral part of both the open space subdivision and the amenity subdivision. The minimum protected open space for each subdivision type by district is set forth in Section 5-6 and Section 5-7. Once this minimum open space requirement has been met, no additional open space shall be required on the site, except where otherwise required by state or federal law.

2. *Primary open space.*

The following are considered primary open space areas and are shall be included within the open space, unless the Applicant demonstrates that this provision would constitute an unusual hardship and is counter to the purposes of this chapter:

- a. The 100-year floodplain;
- b. Stream buffer areas required by the County along each side of all perennial and intermittent streams;
- c. Slopes above 25 percent of at least 10,000 square feet contiguous area;
- d. Jurisdictional wetlands under federal law (Section 404) that meet the definition applied by the Army Corps of Engineers;
- e. Habitat for federally-listed endangered or threatened species;
- f. Archaeological sites, cemeteries and burial grounds;

- g. State-designated Natural Heritage Sites;
- h. Existing healthy native forests of at least 10 contiguous acres in size that are subject to a forestry management plan approved by the NC Division of Forestry; and
- i. Agricultural lands of at least 20 contiguous acres located in the Rural Tier containing at least 25 percent prime farmland soils or other soils of statewide importance.

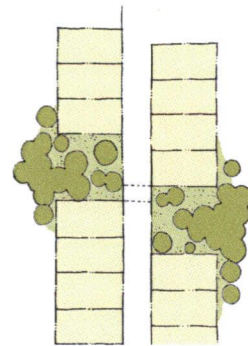
3. *Secondary open space.*

The following are considered secondary open space areas and shall be included within the required open space to the maximum extent feasible.

- a. Important historic sites;
- b. Existing healthy, native forests of at least one acre contiguous area;
- c. Individual existing healthy trees greater than 12 inches DBH;
- d. Other significant natural features and scenic viewsheds such as ridge lines, hedge rows, field borders, meadows, fields, peaks and rock outcroppings, particularly those that can be seen from public roadways;
- e. Agricultural lands of at least five contiguous acres located in the Suburban Tier containing at least 25 percent prime farmland soils or other soils of statewide importance;
- f. Areas that connect the tract to neighboring open space, trails or greenways;
- g. Soils with "Severe" limitations for development due to drainage problems, including but not limited to, Armenia loam (Ar) Altavista sandy loam (AaB), Chewacia sandy loam (Ch), Iredell loam (IdA), Sedgewick sandy loam (SfB) and Wedhadkee (We); and
- h. Landscaped site elements such as arterial street buffers, district boundary buffers, civic greens and landscaped medians.

4. *Configuration of open space.*

- a. The minimum width for any required open space shall be 50 feet. Exceptions may be granted for items such as trail easements, mid-block crossings, linear parks/medians, when their purpose meets the intent of the open space section.
- b. At least 60 percent of the required open space shall be in a contiguous tract. For the purposes of this section, contiguous shall include any open space bisected by a residential street (including a residential collector), provided that:
 - i. A pedestrian crosswalk is constructed to provide access to the open space on both sides of the street; and
 - ii. The right-of-way area is not included in the calculation of minimum open space required.



- c. The open space shall adjoin any neighboring areas of open space, other protected areas, and non-protected natural areas that would be candidates for inclusion as part of a future area of protected open space.
 - d. At least 25 percent of the open space shall be made accessible with trails, active recreation areas or other similar improvements. Trails shall be developed in accordance with the County Trail Design Standards (providing for neighborhood, connector and regional corridors). Active recreation areas shall be developed in accordance with the requirements in Chapter 5, Recreational Areas, of the Subdivision Ordinance. Where open space consists of prime agricultural land, this accessibility requirement shall not apply.
 - e. The open space shall be directly accessible to the largest practicable number of lots within the subdivision. Non-adjoining lots shall be provided with safe, convenient access to the open space (i.e. mid-block connections in logical locations). No lot within the subdivision shall further than a ¼ -mile radius from the required open space. This radius shall be measured in a straight line, without regard for street, sidewalk or trail connections to the open space.
5. *Permitted uses of open space.*
- Uses of open space may include the following:
- a. Conservation areas for natural, archeological or historical resources;
 - b. Meadows, woodlands, wetlands, wildlife corridors, game preserves, or similar conservation-oriented areas;
 - c. Pedestrian or multipurpose trails;
 - d. Passive recreation areas, including pocket parks;
 - e. Active recreation areas, such as ballfields and playgrounds, provided that impervious area is limited to no more than 10 percent of the total open space (active recreation areas in excess of this impervious area limit shall be located outside of the protected open space);
 - f. Golf courses in the suburban tier (excluding clubhouse areas and maintenance facilities), provided the area does not exceed 50 percent of the required open space, and further provided that impervious area is limited to no more than 10 percent of the total open space;
 - g. Above-ground utility rights-of-way, provided the area does not exceed 50 percent of the required open space;
 - h. Water bodies, such as lakes and ponds, and floodways provided the total surface area does not exceed 50 percent of the required open space;
 - i. Agriculture, horticulture, silviculture or pasture uses as provided for in a conservation plan approved by the Cabarrus Soil and Water Conservation District;
 - j. Landscaped stormwater management facilities;
 - k. Easements for drainage, access, and underground utility lines; and
 - l. Other conservation-oriented uses compatible with the purposes of these regulations.

6. *Prohibited uses of open space.*

Open space shall not include the following:

- a. Golf courses and above-ground utility rights-of-way in the Rural Tier.
- b. Community or individual wastewater disposal systems in the Rural Tier;
- c. Streets (except for street crossings as expressly provided above) and parking areas;
- d. Agricultural and forestry activities not conducted according to a conservation plan approved by the Cabarrus Soil and Water Conservation District or a forest management plan approved by the NC Division of Forestry; and
- e. Other activities as determined by the applicant and recorded on the legal instrument providing for permanent protection.

7. *Ownership and management of open space.*

a. *Ownership of open space.*

No residential lots shall be allowed to extend into the required open space. Open space shall be accepted and owned by one of the following entities:

- i. Cabarrus Soil and Water Conservation District. The responsibility for maintaining the open space and any facilities shall be borne by the District.
- ii. Cabarrus County. The responsibility for maintaining the open space and any facilities shall be borne by the County.
- iii. Land conservancy or land trust. The responsibility for maintaining the open space and any facilities shall be borne by a land conservancy or land trust.
- iv. Homeowners association. A homeowners association representing residents of the subdivision shall own the open space. Membership in the association shall be mandatory and automatic for all homeowners of the subdivision and their successors. The Homeowners' Association shall have lien authority to ensure the collection of dues from all members. The responsibility for maintaining the open space and any facilities shall be borne by the Homeowner's Association.
- v. Private landowner. A private landowner may retain ownership of open space, provided that a conservation easement approved by the Cabarrus County Soil and Water Conservation District is recorded. The responsibility for maintaining the open space and any facilities shall be borne by the private landowner.

b. *Management plan.*

Applicants shall submit a Plan for the management of open space and other common facilities that:

- i. Allocates responsibility and guidelines for the maintenance and operation of the open and any facilities located thereon, including provisions for ongoing maintenance and for long-term capital improvements;

- ii. Estimates the costs and staffing requirements needed for maintenance and operation of, and insurance for, the open space and outlines the means by which such funding will be obtained or provided;
- iii. Provides that any changes to the Plan be approved by the County; and
- iv. Provides for enforcement of the Plan.

c. *Maintenance of open space.*

- i. Passive open space maintenance is limited to removal of litter, dead tree and plant materials (that is obstructing pedestrian movement), and brush; weeding and mowing. Natural water courses are to be maintained as free-flowing and devoid of debris. Stream channels shall be maintained so as not to alter floodplain levels.
- ii. No specific maintenance is required for agricultural uses.
- iii. Active open space areas shall be accessible to all residents of the development. Maintenance is limited to ensuring that there exist no hazards, nuisances or unhealthy conditions.

d. *Failure to maintain open space.*

In the event the party responsible for maintenance of the open space fails to maintain all or any portion in reasonable order and condition, the County may assume responsibility for its maintenance and may enter the premises and take corrective action, including the provision of extended maintenance. The costs of such maintenance may be charged to the Homeowner's Association, or to the individual property owners that make up the Homeowner's Association, and may include administrative costs and penalties. Such costs shall become a lien on all subdivision properties.

8. *Legal instrument for permanent protection.*

- a. The open space shall be protected in perpetuity by a binding legal instrument that is recorded with the deed. The instrument shall be one of the following:
 - i. *A permanent conservation easement in favor of either:*
 - a) The Cabarrus Soil and Water Conservation District; or
 - b) A land trust or similar conservation-oriented non-profit organization with legal authority to accept such easements. The organization shall be *bona fide* and in perpetual existence and the conveyance instruments shall contain an appropriate provision for re-transfer in the event the organization becomes unable to carry out its functions; or
 - c) A governmental entity with an interest in pursuing goals compatible with the purposes of this ordinance. If the entity accepting the easement is not the County, then a third right of enforcement favoring the County shall be included in the easement.
 - ii. A permanent restrictive covenant for conservation purposes in favor of a governmental entity.
 - iii. An equivalent legal tool that provides permanent protection, if approved by the County.

- b. The instrument for permanent protection shall include clear restrictions on the use of the open space. These restrictions shall include all restrictions contained in this chapter, as well as any further restrictions the Applicant chooses to place on the use of the open space. Where appropriate, the instrument shall allow for stream or habitat restoration within the easement area.

B. *Stream buffer limitations.*

- 1. Land within a stream buffer shall not be used to meet minimum lot size requirements, except where lots are greater than one acre in area, in which case at least 50 percent of the lot shall remain outside the stream buffer. For additional stream buffer requirements see Section 4-11.
- 2. Buildings and other features that require grading and construction shall be set back at least twenty feet from the edge of any stream buffer.

C. *Utilities.*

To the maximum extent determined feasible, utilities in open space and amenity subdivisions shall be placed underground.

D. *Perimeter compatibility.*

1. *Applicability.*

Perimeter compatibility is required along project boundaries for both open space and amenity subdivisions to provide a suitable transition between the proposed subdivision and adjacent development.

2. *Buffer required.*

A landscaped buffer shall be required along all boundaries of an open space or amenity subdivision. This buffer shall be a natural, undisturbed wooded area where possible, and shall count towards the provision of open space for the development where the buffer is not platted and made part of an individual, privately-owned lot. Where an existing natural, undisturbed wooded area does not exist, a planted buffer shall be required as follows:

a. *Project Boundary Buffer.*

A project boundary buffer shall be provided along all project boundaries other than arterial streets, and shall be measured perpendicular to the property lines that define the project area.

b. *Minimum Project Boundary Buffer Width.*

- i. The minimum width of the project boundary buffer shall be 25 feet where the width of the project's perimeter lots adjacent to the buffer is equal to or greater than the minimum lot width of the adjoining development or the minimum lot width required by the zoning district applied to any adjoining undeveloped parcel.
- ii. Where narrower lot widths are provided, the minimum buffer width shall be 50 feet.
- iii. In the Suburban Tier, the required width of any project boundary buffer may be reduced by 33 percent, provided a minimum six-foot tall opaque wall is constructed along the project boundary.

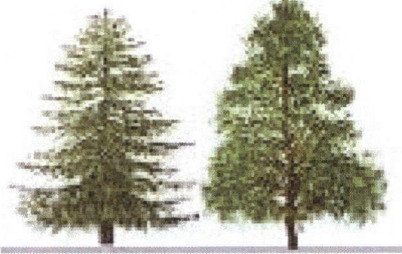


c. **Arterial Street Buffer.**

An arterial street buffer shall be provided along any project boundary that abuts an arterial street. The buffer shall be measured perpendicular to the right-of-way line that defines the project area.

- i. The minimum width of the buffer shall be 50 feet.
- ii. In the Suburban Tier, the required width of a project boundary buffer may be reduced by 33 percent, provided that an opaque wall is constructed along the arterial street.
- iii. Where a berm is created in an unvegetated portion of buffer, the shrub planting requirement below shall be waived. Such berms shall have a minimum height of three feet and a maximum height of six feet. The maximum slope of the berm shall be 3:1. Berms shall vary in size (length and width) and in shape to avoid a strictly linear or repetitive appearance.

d. **Required Buffer Planting.**

Required project boundary and arterial street buffers shall incorporate existing natural vegetation to the maximum extent feasible. Prior to disturbance of a required buffer approval shall be obtained from Cabarrus County. Where existing vegetation is inadequate to meet the planting standards below, additional plant material shall be required. The planting standard below is intentionally over-planted at maturity, in order to provide an immediate beneficial impact.

 <p>Large Trees</p>	 <p>Small Trees</p>	 <p>Shrubs</p>
<p>3 per 100 linear feet 2" caliper minimum 50% evergreen</p>	<p>6 per 100 linear feet 1" caliper minimum</p>	<p>22 per 100 linear feet 24" height minimum 50% evergreen</p>

e. **Credit for Existing Vegetation**

Credit shall be given for existing vegetation within the required buffer area that meets the planting requirements above.

f. **Trails within Required Buffers**

Trails may be incorporated into required buffer areas provided adequate width (minimum 15 feet) is added to the required buffer width to accommodate both the trail and the required buffer plantings. Buffers with trails may also count toward the provision of open space for the development.

E. *Anti-Monotony.*

1. *Applicability.*

- a. No building permit shall be issued for any new home that has been determined to be similar in appearance to any home near the proposed home in accordance with the review criteria below.
- b. The following homes or projects shall be exempt from the provisions of this section.
 - i. Any subdivision with lots of one acre or more;
 - ii. Any home for which a building permit was approved before June 20, 2005, including a home being remodeled, reconstructed or replaced after damage by fire, windstorm or other casualty; and

2. *Lots to be reviewed.*

- a. Differences shall be reviewed for two lots on either side of the proposed home on the same side of the street.
- b. Where lots are interrupted by an intervening street, parkland or similar feature of at least 50 feet in width, no review shall be necessary.
- c. The proposed home shall be considered different from any vacant lot for which no building permit has been issued without requiring further documentation.

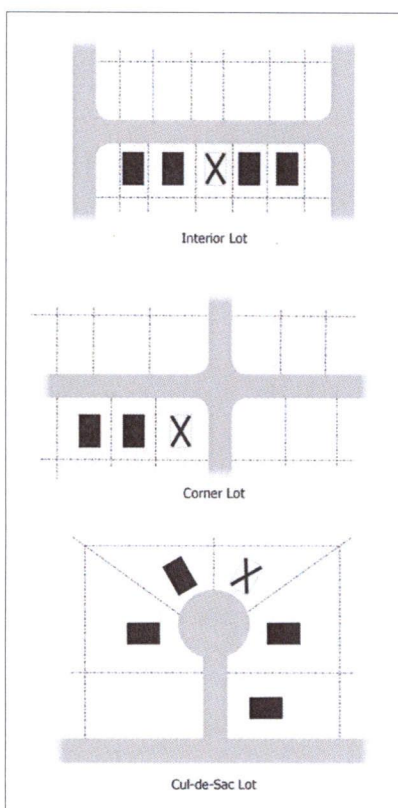
3. *Review criteria.*

In determining whether a proposed home is similar in appearance, the following elements shall be considered. At least one of the elements of the proposed home must differ from each existing or permitted home.

- a. Number of stories;
- b. Garage location;
- c. Articulation of front façade.

4. *Review procedure.*

- a. Applicant shall provide a copy of the Covenants, Conditions and Restrictions for the proposed subdivision at part of the preliminary plat review process that addresses the standards established in this section related to anti-monotony.
- b. A subdivision or phase of a subdivision may be reviewed as a whole for conformity with this requirement, provided that adequate documentation to ensure conformity is submitted with the plat.
- c. The County shall review the submitted documentation and make a determination. Where the County finds that a home for which a building permit is being requested is similar in appearance based on the standards above, the permit shall be denied.



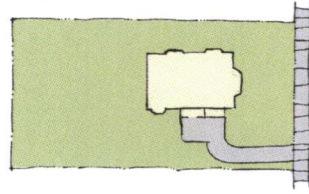
F. Garage location.

1. Applicability.

On lots of less than one acre, garage placement shall match one of the following garage standards.

2. Garage Standards

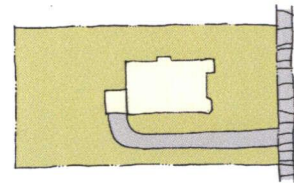
a. Side-loaded garage



- b.** Orient the garage door perpendicular to the street and provide an integrated architectural treatment such as columns and a trellis, eyebrow roof, decorative masonry or other materials to provide articulation and to visually diminish the impact of the garage doors.

c. Rear yard garage (alley or front loaded).

Locate the garage behind the rear of the principal building.



d. Front-loaded garage.

Orient the garage toward the street, provided the following conditions are met.

- i. Position garage door at least four feet behind the primary front wall plane of the building front; or
- ii. Position the garage doors flush with or forward of the front of the building and provide an integrated architectural treatment such as columns and a trellis, eyebrow roof, decorative masonry or other materials to provide articulation and to visually diminish the impact of the garage doors. No individual garage door may exceed 12 feet in width when applying this alternative and a maximum of two garage doors shall be allowed.



G. Accessory structures.

1. Height.

An accessory structure shall not exceed the height of the principal structure.

2. Setbacks.

- a.** Accessory structures up to 15 feet in height shall meet the front and side setback requirements of the principal structure. The rear setback shall be no less than five feet.
- b.** Accessory structures greater than 15 feet in height shall meet the setback requirements of the principal structure.

3. Additional requirements.

For additional requirements see Section 7-4.1, Accessory building and apartments.

PART II. NONRESIDENTIAL DISTRICTS.

Section 5-9. Nonresidential development standards.

A. *Dimensional standards.*

Nonresidential development shall meet the following standards.

	OI	LC	GC	LI	GI
<i>Lot Dimensions</i> (minimum)					
Lot area (square feet)	10,000	10,000	1 acre	1 acre	1 acre
Lot width (feet)	50	50	120	120	200
<i>Principal</i> (minimum feet)					
Front yard	30	30	40	50	75
Side yard (single)	5	5	10	10	30
Side yard (total)	20	20	30	30	30
Rear yard	20	20	20	20	30
<i>Accessory</i> (minimum feet)					
Front yard	30	30	same as principal	same as principal	same as principal
Side yard (single)	5	5			
Side yard (total)	20	20			
Rear yard	5	5			
<i>Height</i> (maximum feet)					
Principal	40	40	60	60	60
Accessory	20	20	30	30	30
<i>Lot Coverage</i> (maximum)					
Impermeable surface	75%	75%	75%	70%	60%
Structural coverage	50%	50%	50%	50%	40%

B. *Residential development in nonresidential districts.*

All residential development in nonresidential districts shall meet the standards of the HDR District.

C. *Commercial design standards.*

The Commercial Design Standards shall apply to new or expanding commercial and office developments in the O-I, LC, and GC zoning districts. Commercial and office projects permitted in the AO, CR, LDR, HDR and MDR zoning districts shall also be subject to these standards. (See Chapter 3, Table of Permitted Uses-Commercial Uses)

Applicability

The Commercial Design Standards are intended to be used for all commercial developments located within the jurisdiction of Cabarrus County.

Purpose

The purpose of these design standards is to establish a general set of principles to serve as a guide for new development and renovations of commercial properties.

Permitted Uses

11.3.3.1 Permitted uses shall be governed by Chapter 3, Establishment of Zoning Districts.

Review Criteria

The following criteria shall be considered by staff in reviewing development proposals in addition to the standards established for major and minor site plan review:

Amenity Areas

- Projects containing groups of buildings to be devoted primarily to office and/or retail activities shall incorporate amenity areas into the site design. Amenity areas include, but are not limited to, public plazas, courtyards, squares or small parks on the site. Design elements include seating walls, benches, outdoor dining/gathering areas, decorative fountains or water features, clock towers and/or garden areas.

Setbacks

- Setbacks shall be determined by the zoning district and any additional standards in Chapter 4, Chapter 7, or Chapter 8 related to the proposed use. In the event there are discrepancies between the standards established for the zoning district and setbacks established in Chapter 4, Chapters 7 or Chapter 8, the stricter of the two shall apply.

Connectivity and Sidewalks

- Sidewalks shall serve as the secondary mode of transportation and shall link residential and commercial developments, common areas and parking areas. Sidewalks shall be a minimum of five feet wide and shall have a minimum six-foot landscaped buffer area between the road and the sidewalk itself.

Parking

- Off street parking shall be required and determined per Chapter 10.

Parking lot design

- Parking lots shall be designed to allow pedestrians to safely move from their vehicles to the buildings and shall include designated walkways. Parking lots shall be adequately screened from public view and shall include landscaping and buffering per Chapter 9 of the Cabarrus County Zoning Ordinance.

Landscape

- A Landscaping plan shall be submitted in accordance with Chapter 9 of the Cabarrus County Zoning Ordinance.

Loading/Unloading Areas and Loading Docks

- Loading and unloading areas shall be installed per Chapter 10. Loading/unloading areas shall be placed, to the greatest extent possible, to the rear of the structure and shall be screened from the view of any street or any residentially developed or residentially zoned property. Loading docks

shall be located to the rear of the structure and shall not be visible from any street right-of-way or residentially developed or residentially zoned property.

Solid Waste Storage

- Solid waste containers shall be confined to an enclosed area that is screened on all sides. Solid waste storage areas shall be located to the rear or side of the structure. These areas shall be designed to compliment the structure and should be constructed from materials that match the building. Solid waste storage areas shall not be located in any planting yard and shall be screened from any street and/or any residentially developed or residentially zoned property.

Mechanical Equipment

- All rooftop mechanical and electrical equipment shall be completely screened from view from all streets and adjacent properties. All screening walls/parapets shall be constructed and designed of materials compatible to that of the primary structure and shall be incorporated into the design of the structure. Metal screening walls shall not be permitted. To the greatest extent possible, mechanical appurtenances shall be located within the structure. Appurtenances such as heating and air conditioning equipment, coolers, etc. shall be screened entirely from public view and shall be designed and finished to match adjacent building materials. In addition to design elements, landscape materials shall be incorporated to provide additional screening and/or softening of equipment areas.

Height

- Building height shall be regulated in accordance with Chapter 5, Dimensional Requirements.

Building Materials

- All buildings shall be constructed of quality materials. These materials include brick, either plain or painted, split faced block either plain or painted, horizontal siding, wood, wood shingle, architectural metal, stone or concrete-based stucco. Corrugated metal may be used as an accent material only.

PART II. NONRESIDENTIAL DISTRICTS.

Section 5-9. Nonresidential development standards.

A. *Dimensional standards.*

Nonresidential development shall meet the following standards.

	OI	LC	GC	LI	GI
<i>Lot Dimensions</i> (minimum)					
Lot area (square feet)	10,000	10,000	1 acre	1 acre	1 acre
Lot width (feet)	50	50	120	120	200
<i>Principal</i> (minimum feet)					
Front yard	30	30	40	50	75
Side yard (single)	5	5	10	10	30
Side yard (total)	20	20	30	30	30
Rear yard	20	20	20	20	30
<i>Accessory</i> (minimum feet)					
Front yard	30	30	same as principal	same as principal	same as principal
Side yard (single)	5	5			
Side yard (total)	20	20			
Rear yard	5	5			
<i>Height</i> (maximum feet)					
Principal	40	40	60	60	60
Accessory	20	20	30	30	30
<i>Lot Coverage</i> (maximum)					
Impermeable surface	75%	75%	75%	70%	60%
Structural coverage	50%	50%	50%	50%	40%

B. *Residential development in nonresidential districts.*

All residential development in nonresidential districts shall meet the standards of the HDR District.

C. *Commercial design standards.*

The Commercial Design Standards shall apply to new or expanding commercial and office developments in the O-I, LC, and GC zoning districts. Commercial and office projects permitted in the AO, CR, LDR, HDR and MDR zoning districts shall also be subject to these standards. (See Chapter 3, Table of Permitted Uses-Commercial Uses)

Applicability

The Commercial Design Standards are intended to be used for all commercial developments located within the jurisdiction of Cabarrus County.

Purpose

The purpose of these design standards is to establish a general set of principles to serve as a guide for new development and renovations of commercial properties.

Permitted Uses

11.3.3.1 Permitted uses shall be governed by Chapter 3, Establishment of Zoning Districts.

Review Criteria

The following criteria shall be considered by staff in reviewing development proposals in addition to the standards established for major and minor site plan review:

Amenity Areas

- Projects containing groups of buildings to be devoted primarily to office and/or retail activities shall incorporate amenity areas into the site design. Amenity areas include, but are not limited to, public plazas, courtyards, squares or small parks on the site. Design elements include seating walls, benches, outdoor dining/gathering areas, decorative fountains or water features, clock towers and/or garden areas.

Setbacks

- Setbacks shall be determined by the zoning district and any additional standards in Chapter 4, Chapter 7, or Chapter 8 related to the proposed use. In the event there are discrepancies between the standards established for the zoning district and setbacks established in Chapter 4, Chapters 7 or Chapter 8, the stricter of the two shall apply.

Connectivity and Sidewalks

- Sidewalks shall serve as the secondary mode of transportation and shall link residential and commercial developments, common areas and parking areas. Sidewalks shall be a minimum of five feet wide and shall have a minimum six-foot landscaped buffer area between the road and the sidewalk itself.

Parking

- Off street parking shall be required and determined per Chapter 10.

Parking lot design

- Parking lots shall be designed to allow pedestrians to safely move from their vehicles to the buildings and shall include designated walkways. Parking lots shall be adequately screened from public view and shall include landscaping and buffering per Chapter 9 of the Cabarrus County Zoning Ordinance.

Landscape

- A Landscaping plan shall be submitted in accordance with Chapter 9 of the Cabarrus County Zoning Ordinance.

Loading/Unloading Areas and Loading Docks

- Loading and unloading areas shall be installed per Chapter 10. Loading/unloading areas shall be placed, to the greatest extent possible, to the rear of the structure and shall be screened from the view of any street or any residentially developed or residentially zoned property. Loading docks

shall be located to the rear of the structure and shall not be visible from any street right-of-way or residentially developed or residentially zoned property.

Solid Waste Storage

- Solid waste containers shall be confined to an enclosed area that is screened on all sides. Solid waste storage areas shall be located to the rear or side of the structure. These areas shall be designed to compliment the structure and should be constructed from materials that match the building. Solid waste storage areas shall not be located in any planting yard and shall be screened from any street and/or any residentially developed or residentially zoned property.

Mechanical Equipment

- All rooftop mechanical and electrical equipment shall be completely screened from view from all streets and adjacent properties. All screening walls/parapets shall be constructed and designed of materials compatible to that of the primarily structure and shall be incorporated into the design of the structure. Metal screening walls shall not be permitted. To the greatest extent possible, mechanical appurtenances shall be located within the structure. Appurtenances such as heating and air conditioning equipment, coolers, etc. shall be screened entirely from public view and shall be designed and finished to match adjacent building materials. In addition to design elements, landscape materials shall be incorporated to provide additional screening and/or softening of equipment areas.

Height

- Building height shall be regulated in accordance with Chapter 5, Dimensional Requirements.

Building Materials

- All buildings shall be constructed of quality materials. These materials include brick, either plain or painted, split faced block either plain or painted, horizontal siding, wood, wood shingle, architectural metal, stone or concrete-based stucco. Corrugated metal may be used as an accent material only.



Planning and Zoning Commission Minutes
July 16, 2009
7:00 P.M.

Mr. Todd Berg, Chair, called the meeting to order at 7:00 p.m. Members present in addition to the Chair were, Mr. David Baucom, Ms. Brenda Cook, Mr. Eugene Divine, Mr. Larry Ensley, Mr. Danny Feserman, Mr. Larry Griffin, Mr. Tommy Porter, Mr. Ian Prince and Mr. Barry Shoemaker. Attending from the Planning and Zoning Division were, Ms. Susie Morris, Planning and Zoning Manager, and Ms. Arlena Roberts, Clerk to the Planning and Zoning Commission.

Roll Call

The Chair said a Proposed Text Amendment has been added to the Agenda.

Approval of Minutes

Mr. Barry Shoemaker, **MOTIONED, SECONDED** by Mr. Tommy Porter to **APPROVE** the June 18, 2009, meeting minutes with the findings of fact attached, adding Mr. Divine as being present at the meeting and with the correction to page 16 paragraph 4 to read: Ms. Watts said we would not expect that Mr. Testerman would just forget about it, that is what he does. The vote was unanimous.

New Business

The Chair introduced Appeal Application –App12009-0003 – Appeal of Interpretation for the Cabarrus County Zoning and Subdivision Ordinance

The Chair said a letter was received from the attorney for the Appellant requesting that this Appeal request be tabled.

Mr. Larry Griffin, **MOTIONED, SECONDED** by Mr. Larry Ensley to **TABLE** Appeal Application APP120099-0003.

Ms. Morris said the Appellant asked for Tabling until next month. We will expect that it will be on the Agenda next month, but it may or may not actually show up.

The Chair introduced Mr. Travis Morehead, Carolina Thread Trail.

Ms. Morris said this presentation is on the Carolina Thread Trail. It is the Cabarrus County portion of that and you will see it fits into context. This is a very large project that started about a year ago. She said there were pre-planning meetings and they are now getting down to the final draft. There have been several public meetings and the Parks and Recreation Board has been very involved in this. We are excited about this and it will be something that will be Cabarrus County wide. She said it is a follow-up to the

Livable Community Blue Print (document). It will go to the different municipalities and then once they have it approved and through the Planning and Zoning Boards with a recommendation, it will move to the Board of Commissioners for recommendation.

Ms. Morris said if the Board is comfortable with the draft presented tonight, the Board can make a recommendation. If the Board is not comfortable, we can have the Carolina Thread Trail folks come back with the final document. She said it is completely up to the Board. She said this may be the first time that some of the Board may have seen it, so it is what ever the Board is comfortable with.

Mr. Travis Morehead, Community Coordinator, Carolina Thread Trail, 105 West Morehead Street, Charlotte, NC made a presentation to the Planning and Zoning Commission and the Parks and Recreation Board on the Carolina Thread Trail Draft Master Plan for Cabarrus County Communities (See attached slides presented).

He said the presentation will give a brief history and bring the Boards up to speed on where they are with the plan to date. He said this is an information briefing. They have already found items in the document that will need to be modified; language in the document that will need to be modified. He said if the Boards feel comfortable with approving or recommending approval for it tonight that is fine. They have found errors that they are going to change in the document and bring it through.

Mr. Morehead said the Cabarrus County plan was put together by a group of professionals throughout the County made primarily of Planning Staff and Parks and Recreation Staff from each municipality, Town Managers, and also local citizen input.

Mr. Morehead said the Carolina Thread Trail began in late 2005 or early 2006, with the Foundation for the Carolinas, a major non-profit organization within the region. They were looking to sponsor a project that had a maximum impact on the environment. He said forty organizations participated, and they came into a brain storming effort; a process of discovery if you will, and the Thread emerged as their optimal project. He said it did so for several reasons: it provides a permanent legacy of conservation and connectivity throughout the region; it is freely accessible to all of its citizens and promotes community health.

He said as you can see by the Concept Map, it is a regional greenway and trail system that connects fifteen counties; eleven in North Carolina and four in South Carolina. He said if this trail were built today it would connect 2.3 million citizens. He said what they tell folks about this map is that it is very conceptual. We think it is important for the folks in each county that we have a planning process, determine where trails should go, or if trails should go, or if they want to participate. That decision is left at the community level. They believe very strongly in community self-determination. They have had some counties and some towns choose not to participate; which is fine; they get to choose.

He said the map shows about 500 miles of trail. What they have noticed in their planning process is that it is going to get a little bit larger than they anticipated initially.

He said the two pilot counties that have adopted the plan are Gaston County, NC and York County, SC. They have both been through the planning process and all municipalities in those counties that participated have adopted and are in the process of applying for and receiving grant money from this organization. They have about 16 million dollars to give out in grants. This process started as a grant to Cabarrus County and its municipalities; worth about \$60,000, to hire a consultant to prepare this plan. The grant process that York and Gaston are in is an implementation step, where they are applying for monies that are allocated per county to actually build, construct, and design these trails. He said that opportunity will be available for Cabarrus County and its municipalities as they see fit and as they adopt the Carolina Thread Trail Master Plan.

He said there are two counties in the adoption phase, Chester County and Cabarrus County. He said we are going before boards, just like this one, and governing boards throughout the region to ask for their endorsement and their adoption so they can put this in practice as plans become available.

Mr. Morehead said there are several communities in the planning process; Stanly County, NC is next on the list on this side of the region. They are going to do interviews next Tuesday and look to hire a planning consultant and receive a planning grant from the Carolina Thread Trail. He said Catawba County, NC is on the same tract as Stanly; Lincoln and Cleveland County's have already hired a planning consultant and are already well under way with the planning process.

We are doing community outreach meetings with local grassroots organizations, Chambers of Commerce, Rotary Clubs, and Civic Organizations, trying to generate support and to get a feeling for how ready folks are for the Carolina Thread Trail in both Lancaster County, SC, Union County, NC, Anson County, Iredell County, Cherokee, County and Rowan County. He said Union County will be next after Stanly in this end of the region. They have all adopted a resolution of support, their municipalities have; except for Unionville, NC. He said they are well underway beginning the process to plan for the Carolina Thread Trail.

He said the planning process for this effort, the one taking place in Cabarrus County breaks down into three phases: community outreach, plan preparation phase and now we are in the adoption phase where we are presenting to you for your recommendation, your insight and guidance and suggestions on how this may or may not happen here in Cabarrus County.

The municipalities that will eventually review this plan are the City of Concord, City of Kannapolis, Town of Harrisburg, Town of Midland, Town of Mt. Pleasant and Cabarrus County. He said much like the Planning Board and the Parks and Recreation Board, these municipalities have those same levels of review and they will go into each one and ask for their recommendations, listen to them and see what they think and how we can change it if we need too, to make it fit better.

Mr. Morehead said in regards to this, Cabarrus County is well ahead of any other county, and probably on par with Mecklenburg, as far as having a very well thought out previous document that already did some of this effort. You had your Livable Community Blue Print that prepared a lot of this early on. He said they tried to capitalize on that as much as possible, but this effort really presents a first ever plan to integrate all those proposed trails throughout the county on a countywide basis; but above and beyond the county it goes to the region wide basis.

He said this began in January with a kick-off meeting with the steering committee made up of local citizens, staff members and interested parties in Cabarrus County. The first open house was at the library in February with about 27-30 people attending and providing their input. In March, they met with a smaller group of the steering committee to develop routes. In April, they had inter-jurisdictional meetings, meeting with municipalities outside of Cabarrus County to coordinate where the trails should take up in Mecklenburg, in Iredell and in Stanly counties; where those pickups should be so they can carry the Thread further on down the road. In May and June, there were two open houses and now in July we are here at plan review time.

He said there is roughly 105 miles of Carolina Thread Trail planned, about 72-73% of that was already planned, either in the form of a state bike route or using your Community Livable Blueprint plan for greenways. He said a lot of that effort had already been done, a lot of the homework was completed; all six towns are connected. He said there are actually 180% of the inter-jurisdictional connections; they have connected to more counties or places than necessary. He said a lot of the plan relies on the stream buffer corridor, and the primary route for stream buffers here as you well know is the Rocky River running northwest to southeast. He said that was the primary corridor. He said the unique thing about the planning process here is some of the demographics this plan touches; roughly in this service area are 34.5% children, 32.3% seniors, and 37% low income. He said the regional metrics used to identify between Carolina Thread Trail staff, how much one county has trail planned, compared to other counties within the region. He said Cabarrus County metrics at .68 per thousand residents is right on tract.

Mr. Morehead said not only did they have public meetings where folks came out to talk with them and tell them what they wanted; they also had an online survey. He said there were over 630 people who participated in the online survey. They told us what they thought about greenways and what they wanted to connect too; those listed were Lowe's Motor Speedway, NC Research Campus, Reed Goldmine, Concord Mills Mall, Dale Earnhardt Tribute and the Great Philadelphia Wagon Road.

Mr. Morehead showed a map of the Carolina Thread Trail proposed connections dated July 15, 2009. He said the current map has had one alteration based on comments from the City of Concord. He said in Concord's jurisdiction, they have had a secondary greenway that they did not see coming to fruition, so they asked that that be removed and instead of a local connection that an existing greenway be made in a general area he showed on the map.

He said again, the primary corridor ends up being the Rocky River; that came out loud and strong. He said that is coming out more and more throughout the region. He thinks the Rocky River is going to play a key factor, starting in Iredell County working its way through Mecklenburg and Cabarrus all the way into Stanly, Union and Anson counties.

He said something that has not been discussed in the steering committee level yet is that the consultant who was hired is Greenways Incorporated. He said what they did was look very closely at their priorities and gauged some criteria for priorities; but we would like to hear the Board's input on what those priorities should be for greenways. He listed a few that were the first couple on the document the Board received, they all basically lined up along the Rocky River, but there are a lot of things that need to be taken in to account. He said that includes population, how populated it is and that it is not in the middle of nowhere and how well it will be used. So we need the Boards' input on that and the input of your staff as well.

He said what does this mean for Cabarrus County if you or your Board should choose to adopt it? It could augment your existing plans, it could be used by your Planning and Parks Departments as development occurs. It qualifies the County to receive catalytic funding from the Carolina Thread Trail. They have raised 16 million dollars and are trying to raise 25 million dollars as a capital campaign goal. He said it does not force or mandate that the county implement this or fund this at any level. It is funded at the counties discretion, you get to build it however you see fit; phase it, and time it. We want to help you the best we can. We believe very much in greenways, that is their effort and their goal. We have grant opportunities in the form of corridor design, and acquisitions grants, where municipalities and organizations can acquire land to put greenways and lastly there are construction grants where they can actually build it.

The Chair asked if there were any questions for Mr. Morehead.

Mr. Ian Prince asked if the grant opportunities Mr. Morehead spoke of were just for the 16 million or was it beyond that.

Mr. Morehead said beyond that. He said what their governing board has said and they had an original goal of giving a million dollars per county. At this time, due to giving and the economy, we can only at this time afford about \$300,000, but the governing board is committed to raise the million dollars per county to help you fund greenway opportunities. What we hope you will do with that money is leverage federal grants, state grants and local opportunities as they come up to extend the Carolina Thread Trail.

Mr. Larry Ensley asked what their current status is with Mecklenburg County.

Mr. Morehead is the project manager for Mecklenburg and he said they have just finished with a small group of technical advisors. They have developed a plan that will go back before the whole steering committee, and when we do that and they give their blessing, if that is what they would like to see, we will take that out to the community and vet that plan and get their comments. There is an online survey for Mecklenburg County as well

and about 400 have responded so far about what they would like to see and will go through the same adoption process.

Mr. Ensley said the reason he asked that is because Lowe's Motor Speedway and Concord Mills are so close to Mecklenburg County.

Mr. Morehead said they listed that destination even though it was not necessarily in their county. He said that was a very popular destination.

Ms. Londa Strong, Parks and Recreation Department Director, asked if Mecklenburg County has determined their southern connection points yet.

Mr. Morehead said Mecklenburg has elected to follow the current plan and they deleted the Park Creek option.

Mr. Jim Guess, Cabarrus County Parks Commission, said one of the things the City of Concord is paying for now is the design of Rocky River from Weddington Road to US 29, as part of the segment. One of the earlier concepts is that WSACC currently runs on the Rocky River alignment with a 150 foot right of way. If you have gone down to McAlpine Creek Parkway off of Independence and Monroe Road, basically, that scheme satisfies that opportunity on a 150 wide. The County is currently developing that sewer alignment; it is under construction. He said it double functions; it allows for service access for WSACC, as well as creating a recreational link between parks, and being a first phase link with the cities; it then ties into the southern part of the county as a first phase, and then Kannapolis and Concord are trying to link together and link it with North Mecklenburg Park as well and some how get underneath I-85 and link parks all the way through to the south. He said it is kind of a growing opportunity if we all can kind of network together.

The Chair said we could take action on this tonight. He does not know if everyone has had an opportunity to go to the link and print out the very detailed document that was emailed to the board. He suggests that if the board has not had an opportunity to read the document that they take an opportunity to do so.

Mr. Shoemaker said it would be nice if the entire concept was included in the document. He said it really just focused on Cabarrus County, but yet they talked about the 15 counties involved and that they would be updating some of the metrics. He said certain things have definitely changed in our county recently, as far as employers.

The Chair asked what the pleasure of the Planning and Zoning commission was.

Mr. Shoemaker asked what the impact would be on landowners once we adopt a plan like this and people who actually owned land that are on the thread trail. How would they be impacted by it if they are non-profit or something like that? He said there are a number of churches that are bordering this Thread Trail. He said for them there is not much opportunity for tax breaks and things like that. How would they fit into the plan and still

be able to maintain their non-profit status and not be trounced upon during there services and that kind of thing.

Mr. Morehead said property rights and those kinds of questions have come up in the past and they are sensitive to those. What they would hope is that as property is acquired, either with an easement or with fee simple; that is taken on a case by case basis. They are a non-profit organization and they do not have any authority, nor do they seek any authority for eminent domain; that rests with municipalities in which that property is located. We do not advocate it and in fact, nationally, eminent domain is rarely used for trail acquisition. He said some counties, in particular Gaston County, have signed resolutions saying they would not use it. He said those are really a case by case basis and your staff here in the county and each municipality will have to look at it very closely to see if they have willing property owners. He said we are looking for willing property owners, people that will see the advantage. He said this is a 20 or 30 year project and we are not looking to build this tomorrow. If times change and they want to look at that that is fine, we are not here to take any ones land or to beat down anybody's doors.

It was the consensus of the Board to wait on the final draft plan before recommending the plan to the Board of Commissioners.

Information for County parcels located adjacent to Concord Regional Airport

Ms. Susie Morris, Planning and Zoning Manager presented information to the Board related to the Concord Regional Airport (CRA) property, the airport overlay and county zoned properties located near the airport. (Reference the Variance request for landscaping at the Concord Airport – Ronald Overcash). She said the airport overlay map from the City of Concord shows the Airport Overlay differently. The property joined aeriels show that most of the properties surrounding the airport are already developed. She said the county property, based on the zoning, show most of the property is in Concord; and are mostly houses or special use rezoning.

The Chair does not see doing a text amendment for one piece of property. He said the applicant could request voluntary annexation into the City of Concord.

It was the consensus of the Board not to take any action.

The Chair introduced Proposed Text Amendment 2009-00008- Appendix B and Commercial Design Standards.

Ms. Morris addressed the Board stating that the proposed text amendment will modify the current standards to better define the applicable standards and will address conflicts that exist with other sections and standards in the Zoning Ordinance. She said this amendment will remove the current Appendix B and move the language for standards related to commercial and office project to Chapter 5 - District Development Standards. She said request would be handled at staff level, but the appeal option would still be there.

Mr. Shoemaker said it simplifies things and eliminates the need for a design review committee. He said it is summed up in Chapter 5 and is more manageable.

Ms. Ginger Moore, 74 Spring Street NW, Concord, NC addressed the Board stating that she is in favor of the proposed text amendment. She said it allows project siting according to the land and it would be more feasible.

There being no further discussion, Mr. Barry Shoemaker, **MOTIONED, SECONDED** by Mr. Ian Prince, to recommend **Approval** of the Proposed Text Amendment Text 2009-0008 to the Board of Commissioners. The vote was unanimous.

Directors Report

Ms. Susie Morris, Planning and Zoning Manager addressed the Board stating that the nominations for the Planning and Zoning Board will go before the Board of Commissioners on Monday, July 20, 2009.

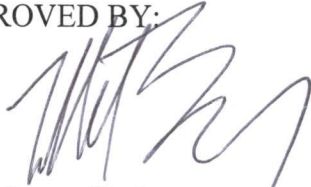
She said there was a kick off meeting with the Town of Harrisburg for the Harrisburg Land Use Plan. She said recommendations for the advisory committee will be taken until July 22, 2009; then on to the Board of Commissioners in August, and the Advisory Committee ready for September.

She said there will be an appeal case next month. She said Mr. Small filed litigation on the appeal of the interpretation of the Conditional Use for the well house, and Mr. Berg has been served. She said there has been no word on the Adequate Public Facilities case. She said Mr. Scribner was appealing his preliminary plat extension and vested rights cases and they will be going to the Board of Commissioners.

Ms. Morris asked the Board to be sure that all of their contact information was up to date. She said because of the County Green Initiative, there will be more email use.

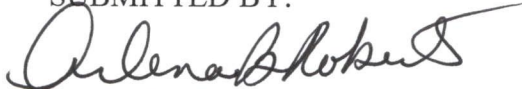
There being no further discussion, Mr. Larry Griffin **MOTIONED, SECONDED** by Mr. Tommy Porter to **Adjourn** the meeting. The vote was unanimous. The meeting ended at 8:20 p.m.

APPROVED BY:



Todd Berg, Chairman

SUBMITTED BY:



Arlena B. Roberts

ATTEST BY:

Susie Morris
Planning and Zoning Manager



CAROLINA
THREAD
TRAIL

Weaving Communities Together

Carolina Thread Trail- Cabarrus County

Carolina Thread Trail - Presentation
by Travis Morehead

Agenda

- Carolina Thread Trail
- Project Overview
- Regional Update
- Cabarrus County Plan
- Conclusion

CAROLINA
THREAD
TRAIL

Project Overview

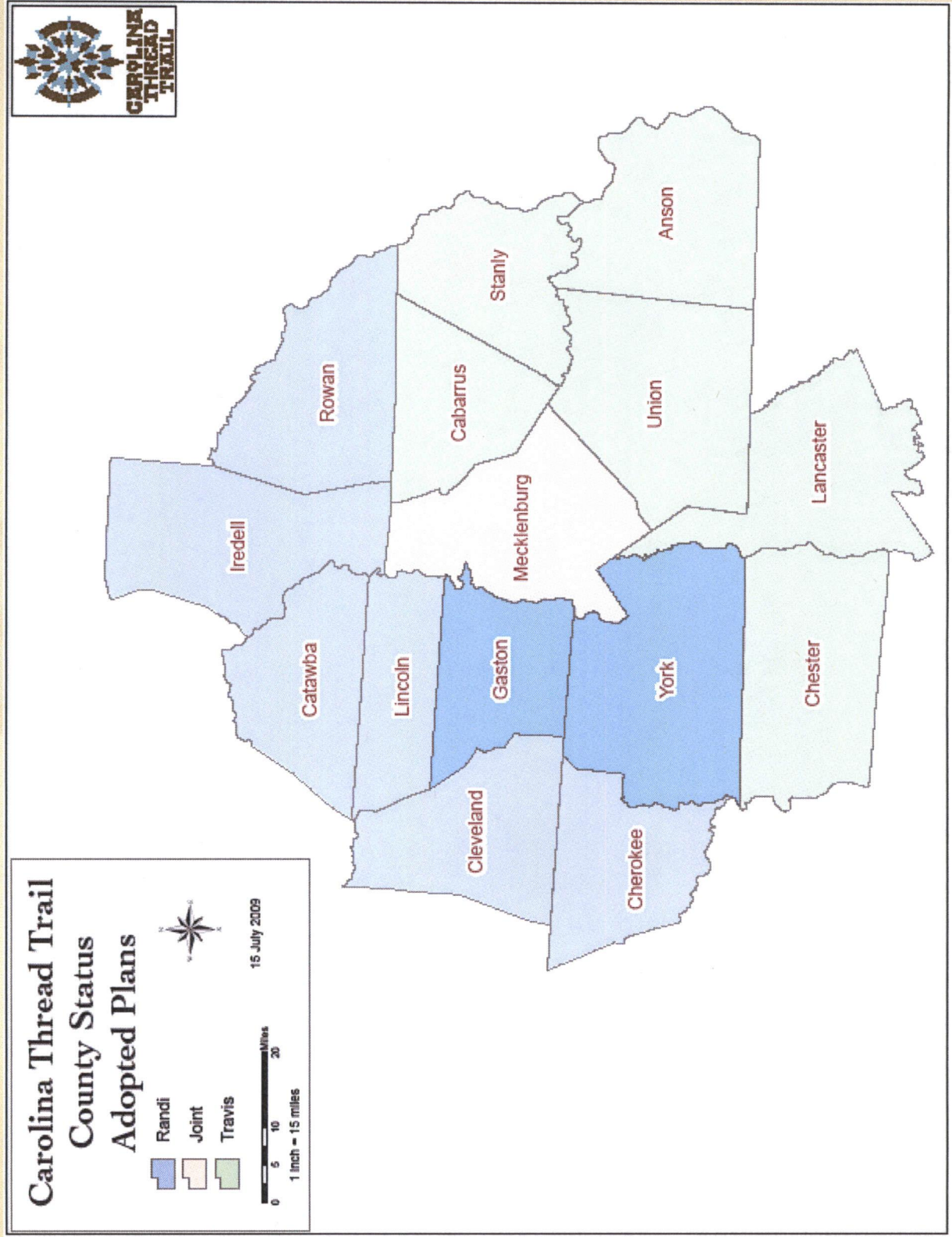
- Foundation For the Carolinas (FFTC) discovery process – 2005 & 2006
 - How can FFTC maximize impact on the environment
 - Over 40 organizations participated
 - The Thread emerged as the optimal project
- Permanent legacy of conservation & connectivity
- Freely accessible to all citizens
- Promote community health

Project Overview

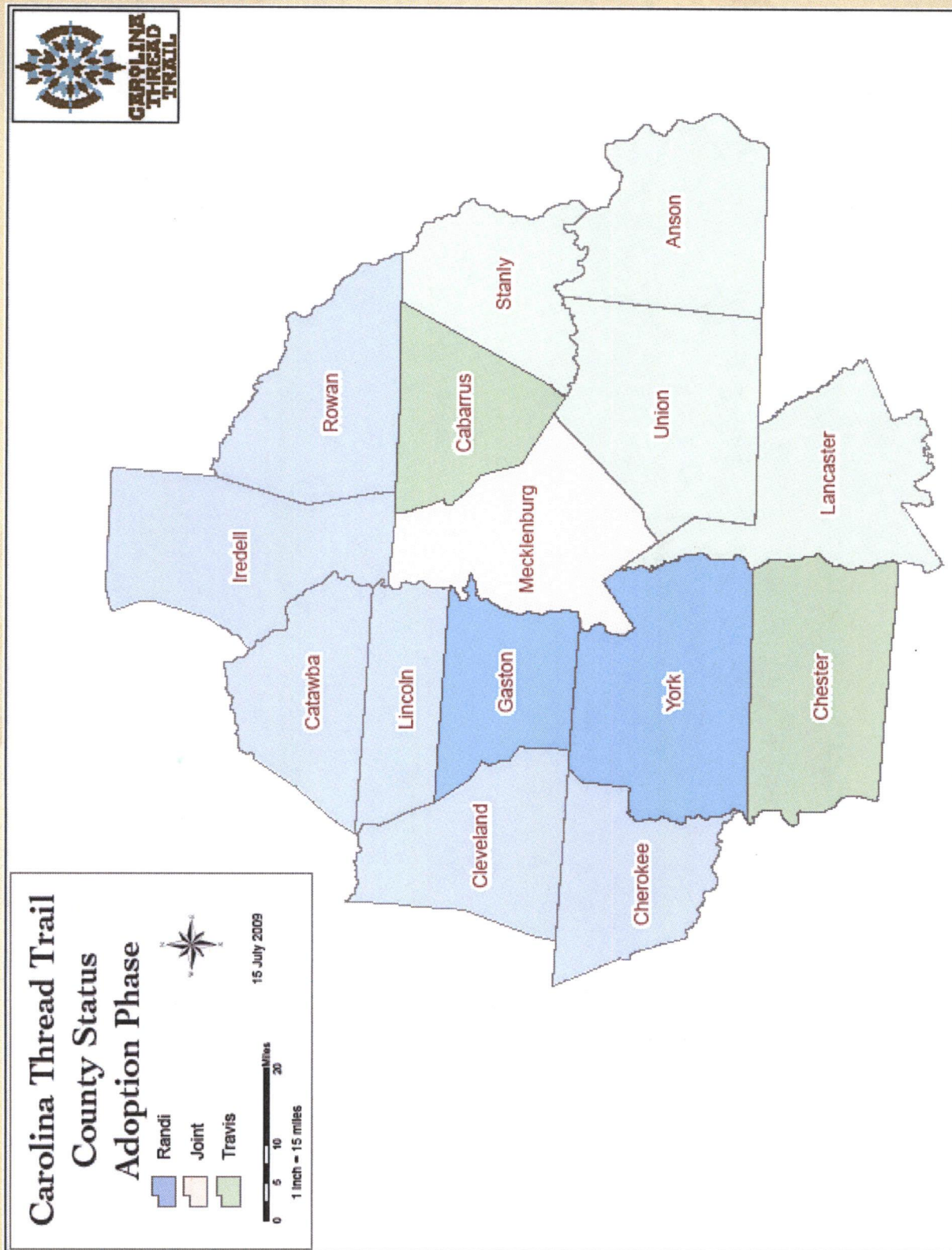
- Regional
greenway and
trail system
- Connecting 15
Counties
- 11 NC Counties, 4
SC Counties
- Estimated 2.3
million people



Adopted Plans



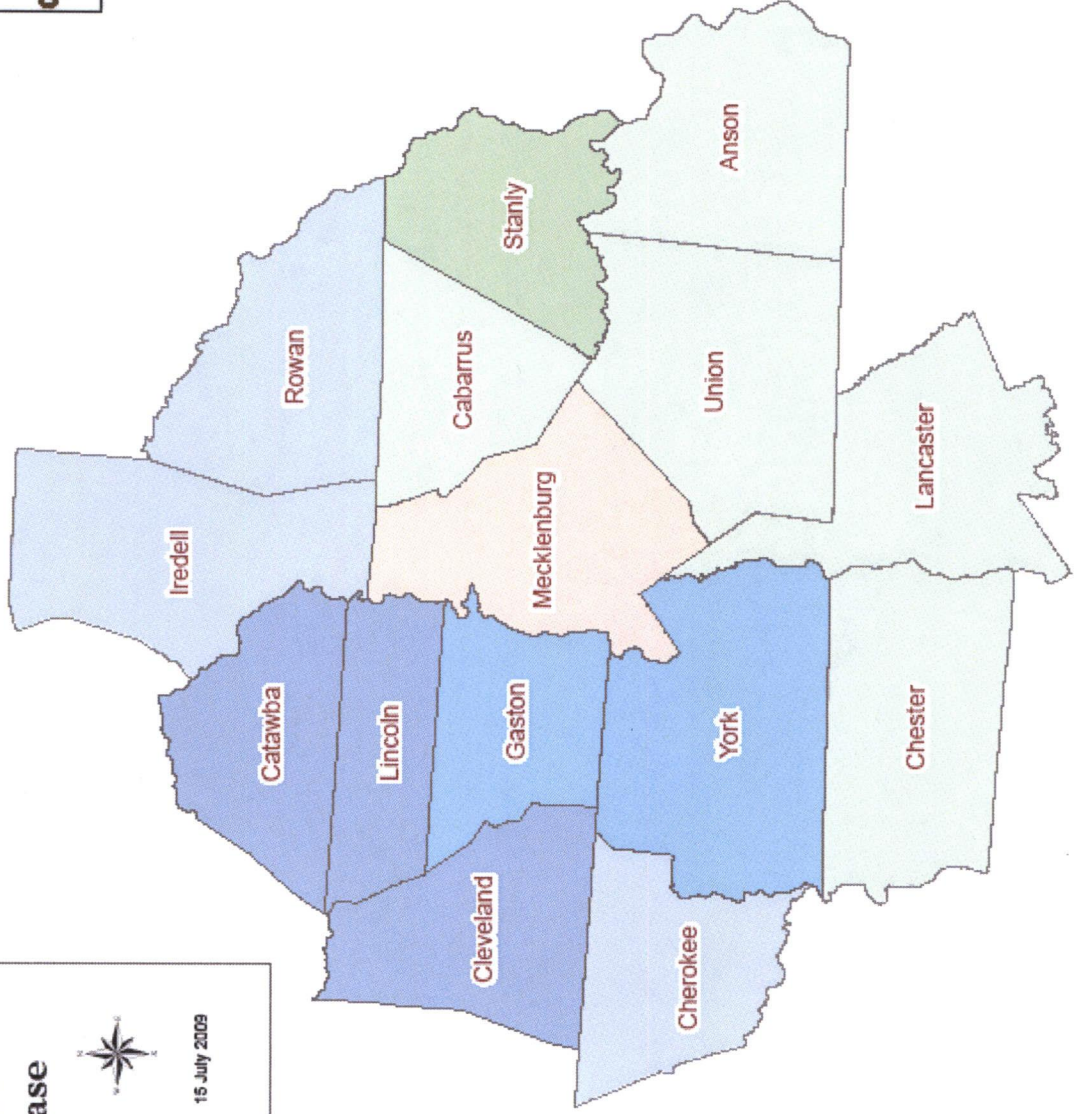
Adoption Phase



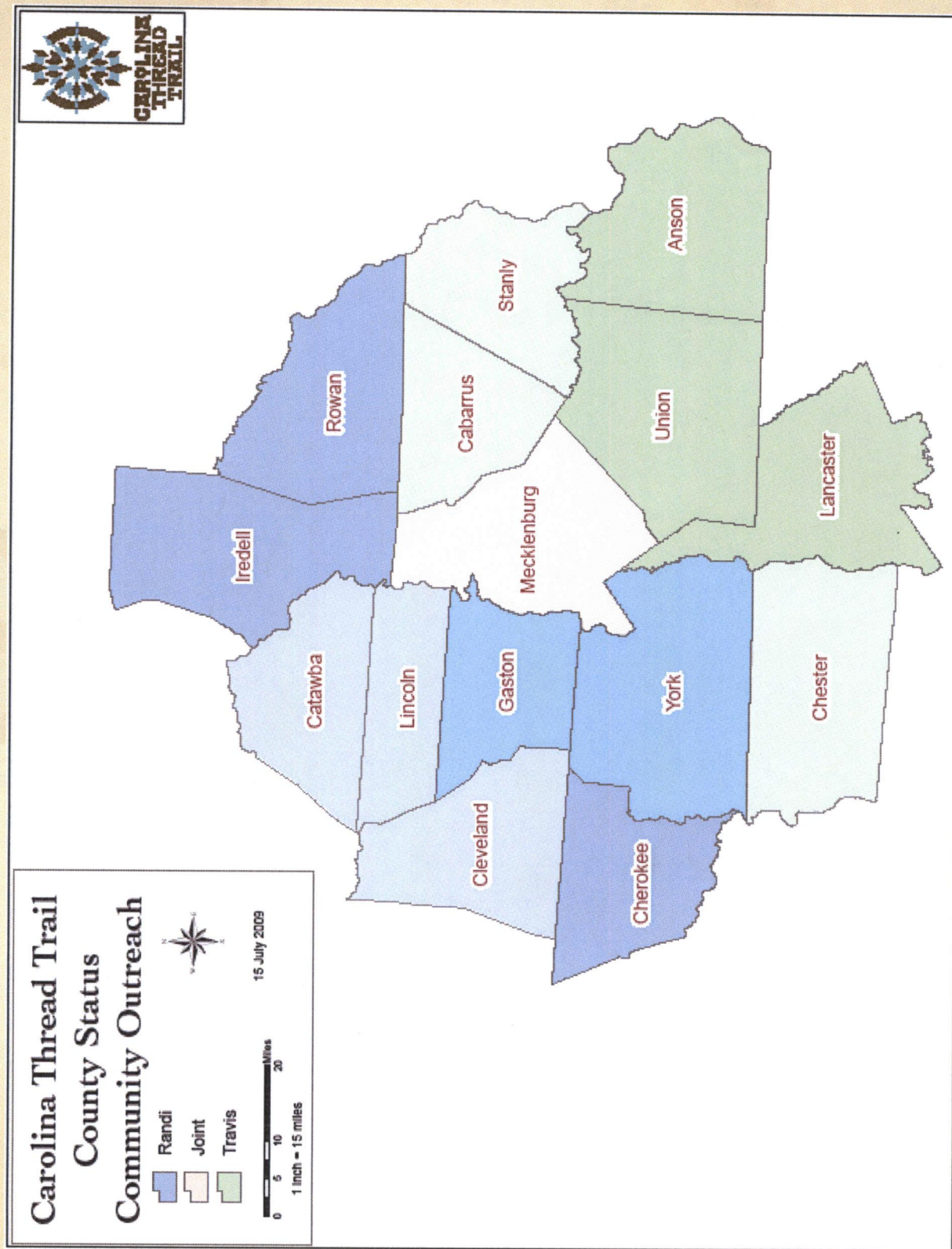
Planning Phase



Carolina Thread Trail County Status Planning Phase



Community Outreach



Planning Process

Phase I

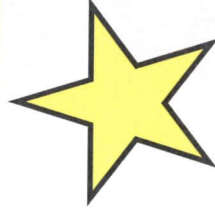
- Phase I: Community Outreach
- Resolutions of Support
- Steering Committee Development
- Presentations to Civic Groups

Phase II

- Plan Preparation (6-8 Months)
- Steering Committee selects consultant
- Prepares draft plan
- Presents draft plan to public/revises as necessary

Phase III

- Plan Adoption (3-4 Months)
- Presentation to Advisory Boards
- Adoption by all Municipal and Governing Boards



Local Carolina Thread Trail Adoption

- ☐ City of Concord
- ☐ City of Kannapolis
- ☐ Town of Harrisburg
- ☐ Town of Midland
- ☐ Town of
Mt. Pleasant
- ☐ Cabarrus County



Cabarrus County Plan

- Created by local communities working together with their neighbors to identify connection points.
- Outlines a means for long-term coordination of greenway and trail development so that trails will grow together over time.
- Presents a first-ever plan to integrate all existing and proposed trails throughout county.
- Creates a comprehensive multi-use network of connectivity.

Master Planning Process

- **January** – Kick-off meeting
- **February** – First open house
- **March**- Route development (TAT)
- **April**- Inter-jurisdictional meeting
- **May/June**- 2nd and 3rd Open houses
- **July/August**- Plan Review.

Cabarrus County Metrics

Route		PROPOSED ROUTE
Total Length (mi)	105.8	
Existing Greenways (mi)	6	5.7%
Newly Proposed Greenway (mi)	99.8	94.3%
New Trail Stream/River Corridor (mi)	81.1	76.7%
New Trail Utility ROW (mi)	0.3	0.3%
New Trail Existing Bike Routes (mi)	13.1	12.4%
New Trail Sidewalks (mi)	1.0	0.9%
New Trail via Existing Road ROW (mi)	4.3	4.1%
Other (mi)	0.0	0.0%
Use of Livable Community Blueprint Regional Plan (mi)	64.4	60.9%
Use of Central Area Plan Bike Routes (mi)	13.1	12.4%
Connections and Destinations		
Town connections	6	100.0%
Cross-County connections	9	180.0%
Priority Destinations within walking distance*	18	60.0%
Schools within walking distance*	13	27.7%
Libraries within walking distance*	2	50.0%
Recreational Facilities within walking distance*	3	13.6%
Parks within walking distance*	16	50.0%
Recreational Lakes within walking distance*	0	0.0%
Historic Districts within walking distance*	2	100.0%
Cemeteries within walking distance*	5	12.5%
Transit Stops within walking distance*	49	28.0%
Major Shopping Venues within walking distance*	4	50.0%
Regional Services**** within walking distance*	1	16.7%
Through Natural Landcover	69.2	65.4%
Along Stream/River Corridor	83.3	78.7%

Cabarrus County Metrics

Access		
Children within service area**	13966	34.5%
Seniors within service area**	5620	32.3%
Total Residents within service area**	53428	34.3%
Low Income Households within service area**	6898	37.8%
Regional Metrics		
Miles per 1000 residents	0.68	
Miles per 10 sq miles county area	2.90	

*Walking Distance assumed at ¼ mi

**Service Area assumed at ½ mi

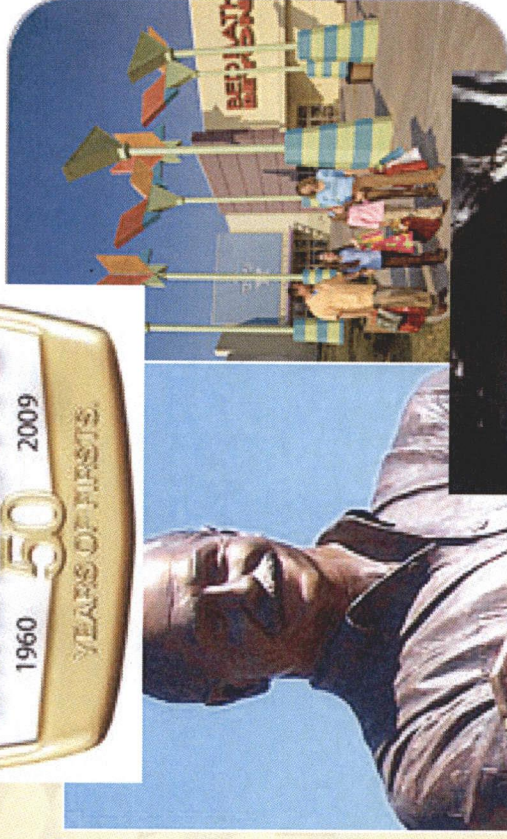
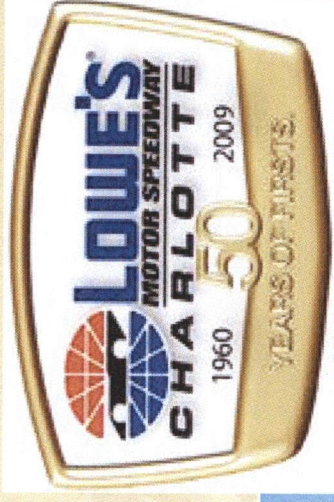
***Based on 2007 census projections (Claritas)

**** Regional Services include airports, hospitals, & race tracks

THREAD
TRAIL

Cabarrus County Destinations

- Lowe's Motor Speedway
- NC Research Campus
- Reed Gold Mine
- Concord Mills Mall
- Dale Earnhardt Tribute
- Great Philadelphia Wagon Road



Carolina Thread Trail - Proposed Connections
Cabarrus County, NC

Legend:

- Proposed Trail Connections:**
 - Orange County
 - Cabarrus County
 - Union County
 - Wake County
 - Durham County
 - Forsyth County
 - Guilford County
 - Johnston County
 - Wayne County
 - Mecklenburg County
 - Charlotte-Mecklenburg
 - Other Counties
- Priority Destinations:**
 - Green
 - Yellow
 - Red
 - Blue
- Other Destinations:**
 - Green
 - Yellow
 - Red
 - Blue

Scale: 0 to 10 miles

Date: July 15, 2009

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July 15, 2009

Possible Priorities

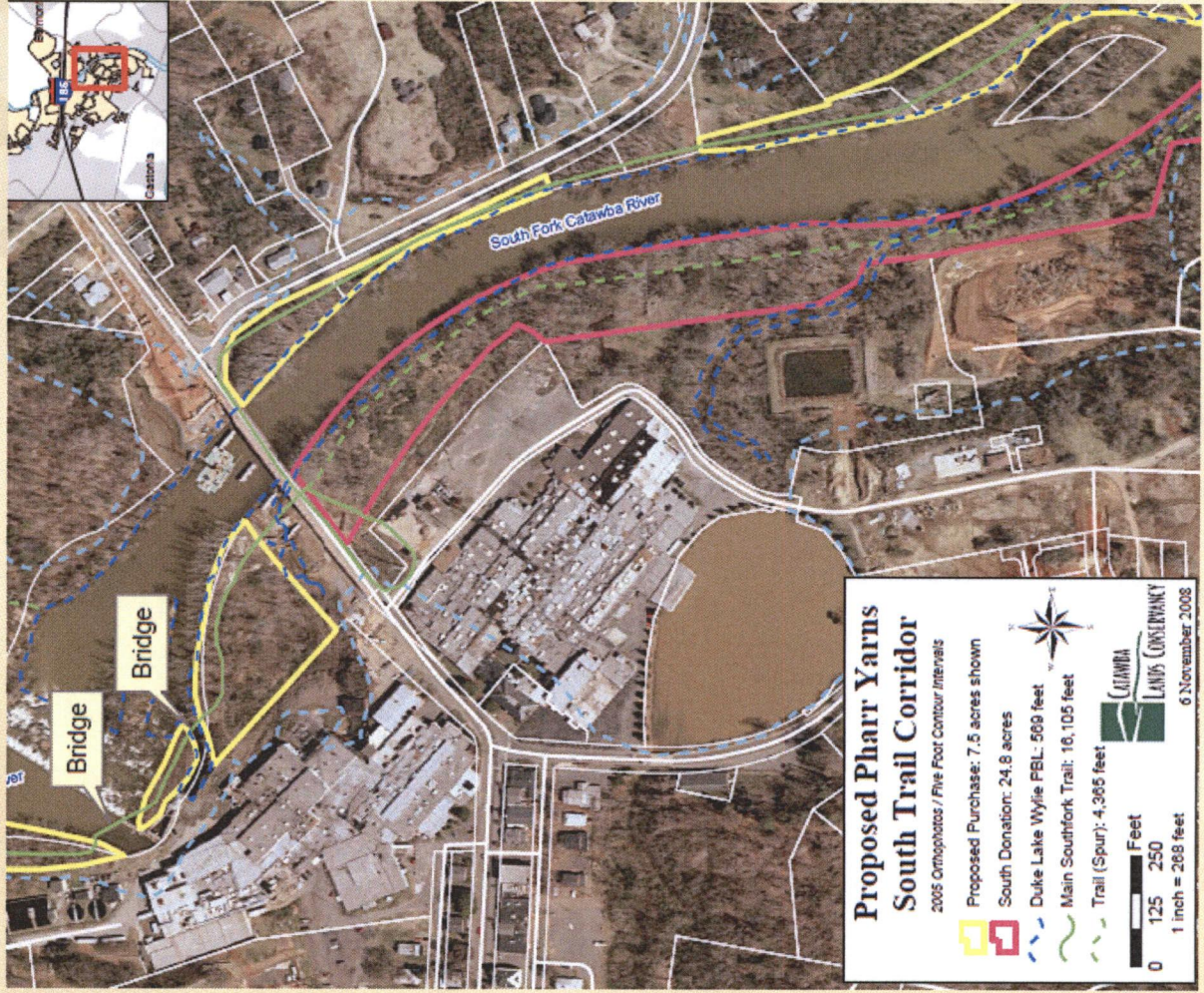
- Rocky River Corridor Iredell County Line to Clarke Creek
- Rocky River Corridor Clarke Creek To Harrisburg
- Mallard Creed Corridor Rocky River to Mecklenburg County Line
- Rocky River Corridor Harrisburg to Dutch Buffalo Creek

What does this mean for Cabarrus County

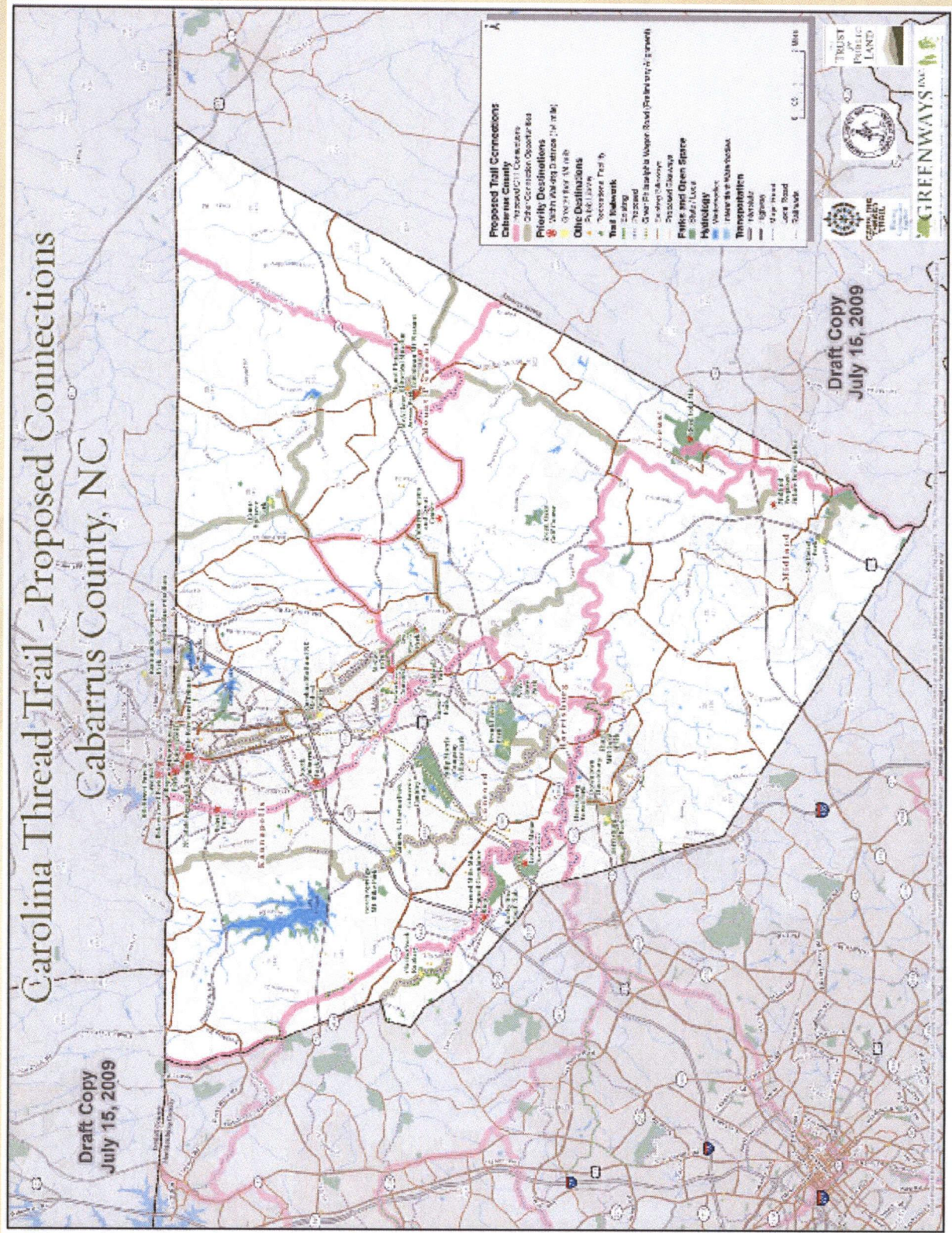
- This Plan could augment your existing planning documents and be used to help guide development.
- Qualifies the town to receive catalytic funding from the Carolina Thread Trail.
- Adopting this Master Plan does not commit the town to fund implementation themselves.

Types of Grant Opportunities

- Corridor Design Grant
- Acquisition Grant
- Construction Grant



Cabarrus County Plan



Suggestions/Questions

