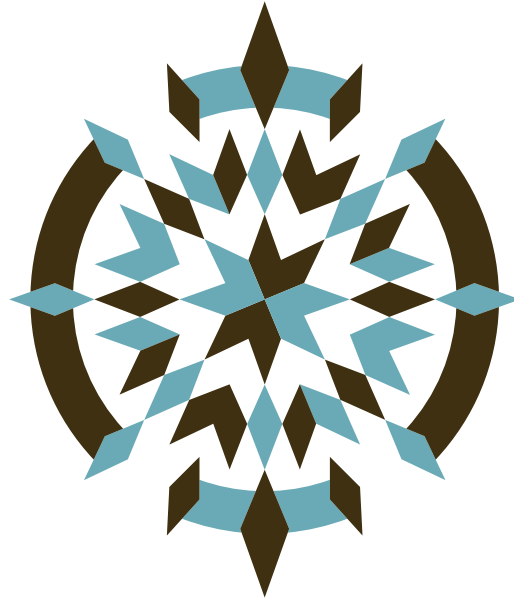


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CAROLINA THREAD TRAIL  
MASTER PLAN  
FOR UNION COUNTY AND  
PARTICIPATING MUNICIPALITIES

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**CAROLINA  
THREAD  
TRAIL**

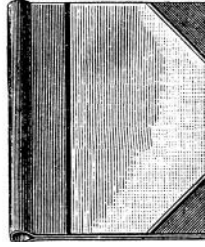
*Weaving  
Communities  
Together*

SEPTEMBER 2011





*Photo by Nancy Pierce*



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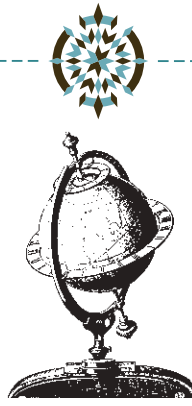
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**Town of Hemby Bridge**

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**Village of Lake Park**

**Town of Marshville**

**Village of Marvin**

**Mecklenburg Union Metropolitan  
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**Town of Mineral Springs**

**City of Monroe**

**Town of Stallings**

**Town of Waxhaw**

**Town of Wingate**

**Town of Weddington**

**Union County Board  
of Commissioners**

**Union County League  
of Women Voters**

**Village of Wesley Chapel**

*Carolina Thread Trail Steering Committee Members  
for Union County and Participating Municipalities:*

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**Marnie Holland**

*Community Outreach Subcommittee Chair*

**Travis Morehead**

*Carolina Thread Trail Community Coordinator*

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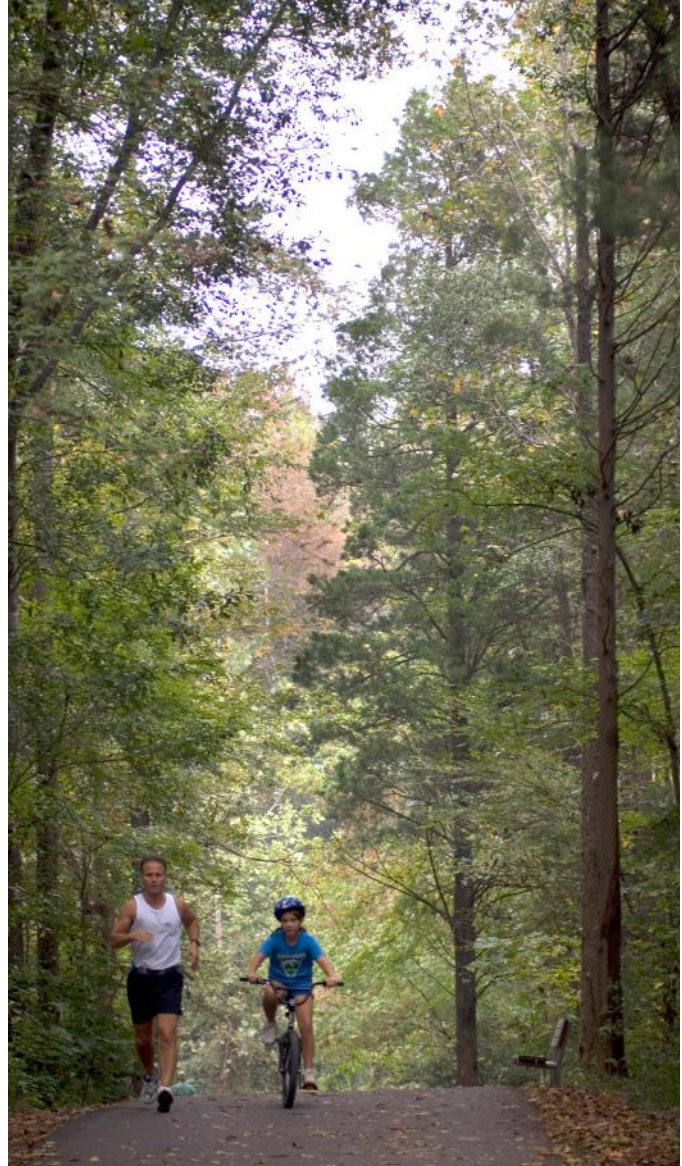


## EXECUTIVE SUMMARY

The culmination of a year-long, community-driven process, this plan articulates a vision for Union County focused on enhancing and ensuring a high quality of life for residents, utilizing the county's unique social, natural, and built assets. Led by the Carolina Thread Trail initiative, representatives from municipal and county governments as well as vested organizations and individuals worked together in an intensive planning process to prioritize important destinations and transportation routes within the county. The result of their efforts is a proposed system of greenways and trails linking together many of the existing trails, parks, town centers, historic sites, and natural features that define Union County.

The Carolina Thread Trail's mission is to bring resources to the 15-county region in the south-central piedmont of North Carolina and the north-central portion of South Carolina in order to create an interconnected trail system. The Carolina Thread Trail is indeed regional—the proposed trails in Union County plan provide linkages to Anson, Lancaster, and Mecklenburg counties. As such, the Thread can have significant economic potential for the small businesses within Union County by encouraging regional travel and outdoor recreation.

The proposed physical network of trails is both intuitive and creative. While the proposed network of trails spans 100 miles across the county, much of it utilizes existing infrastructure and greenways so as to help realize recreational and transportation potential within Union County. Roughly 40 percent of the proposed conceptual route was derived from preexisting trails and plans, and 60 percent consists of trail routes that are new to the county and its municipalities. Of those new routes, over half would travel along road rights-of-way and a third would follow streams. Chapter 4 includes detailed maps of the proposed trail segments.



*Photo by Nancy Pierce*

Community involvement has been absolutely essential to developing this vision and plan. Together, key stakeholders have set forth a plan of action to help actualize the Thread in Union County.





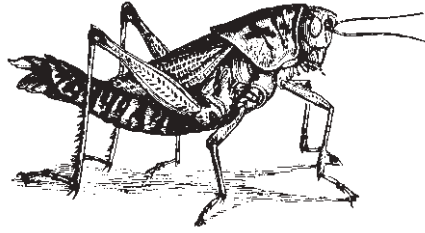
*Photo by Nancy Pierce*

The following steps are recommended to implement this plan (see Chapter 5 for details):

- Adopt the Carolina Thread Trail (CTT) Master Plan.
- Encourage the incorporation of this plan by the county and local governments as an integral part of local comprehensive planning and land use planning efforts.
- Build public support.
- Develop a minimum of 1.5 miles of greenways each year for the next 10 years and a minimum of 3 miles of greenways each year thereafter.
- Strategically pursue trail projects to maximize results and minimize costs.
- Ensure that the project list for the CTT Master Plan for Union County is current and relevant.

At each step in the planning process, stakeholders weighed potential costs and funding challenges to make plan implementation feasible. This report includes an overview of the costs associated with trail construction and a comprehensive funding opportunity guide. The guide is a resource not only to help identify potential funding for trail segments, but also to leverage funding for the ancillary benefits of trails.

The 2010 Census confirms that Union County is the fastest-growing county in North Carolina. People move here because of the county's wonderful rural settings and proximity to Charlotte. Now is the time to take the steps necessary to develop this network of trails and provide recreational, educational, and economic development opportunities, while helping to preserve Union County's natural assets.



## INTRODUCTION

With oversight provided by a Steering Committee of municipal, county, and interested nongovernmental organizations, residents in Union County, North Carolina, participated in a locally driven process to create a countywide Greenway Master Plan. This plan is meant to serve as a guiding document for Carolina Thread Trail development within the county and participating cities and towns in Union County.

The Master Plan includes an introduction to the benefits of greenways and trails, a description of current conditions in Union County, a summary of the planning process undertaken, an introduction to the Carolina Thread Trail (CTT) and its proposed route, and a description of recommended implementation steps. These action steps are intended to provide ideas for local governments to expeditiously and cost-effectively put segments 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 an 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 to receive the CTT designation. The range of land types to be incorporated can include the built environment, such as sidewalks, as well as wildlife habitat, environmentally fragile lands, farmland, and 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 brevity, the word “trail” will be used throughout this plan to encompass both types of amenities.

### CAROLINA THREAD TRAIL

The Carolina Thread Trail is a regional network of greenways, trails and conserved lands that will reach approximately 2.3 million citizens. It will link people, places, cities, towns and attractions. The Thread will help preserve our natural areas and will be a place for the exploration of nature, culture, science and history, for family adventures and celebrations of friendship. It will be for young, old, athlete and average. 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’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 Landowners.

- **Collaboration and community self-determination.** Collaboration and community self-determination among the Union County communities are almost as important as connectivity. The Master Plan aims to encourage a collaborative process by which trails are conceived and designed in cooperation with adjoining communities in such a way that a regional asset is created out of 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 one another 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 Master Plan’s success depends on generating additional investment of outside capital in the region’s natural resources. Funding sources at the local, state, and federal levels are included in Chapter 6.
- **Respect for the land and landowners.** During the planning process, Union County communities determined the location of their segments of the Thread by having alternative routes to consider that included public lands or property owned by private landholders, including developers who may want to offer this amenity to their neighborhoods. The broad corridors featured present multiple opportunities and adjustments to the route that can be incorporated as more landowners are engaged. Expert trail builders indicate that trails are built by assimilating parcels over time in this fashion and that eminent domain is very rarely used.

Individual residents and community leaders throughout the Carolina Thread Trail mission area have expressed concerns about the use of eminent domain. While the decision to exercise eminent domain is not within the Carolina Thread Trail’s purview, the organization does not support its use for creating trails and greenways. **It is highly recommended that local governments adopt this plan with language indicating that they will not utilize eminent domain in the development of their trails.**

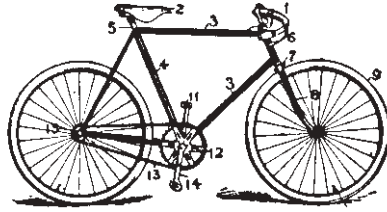
Through an inclusive, collaborative process, each county and the communities within that county decide where their local trail systems will connect and become part of the Thread. However, not all local trails will become part of the Carolina Thread Trail. Analogous to our highway systems, the Thread will develop 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

Carolina Thread Trail designation. Local trails will retain their own identities, whether or not they are designated as part of the Thread.

The look and feel of the Carolina Thread Trail may vary from community to community and county to county. Designation as the Carolina 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.



CTT Stock Photo



## CHAPTER 1. GREENWAY BENEFITS

Trails not only encourage friends, families, and communities to interact with one another and nature, they also provide a venue for physical activities such as walking, jogging, running, horseback riding, skating, and biking. The benefits of these activities are significant and far-reaching.

### HEALTH

A landmark report by the U.S. Surgeon General found that “Americans can substantially improve their health and quality of life by including moderate amounts of physical activity in their daily lives.” It also found that “health benefits appear to be proportional to the amount of activity; thus, every increase in activity adds some benefit.”<sup>1</sup> Several studies have found that access to public green spaces increases physical activity levels.

A growing body of research suggests that mere contact with the natural world improves psychological health. Green settings have been shown to relieve feelings of anxiety and improve our ability to cope with stressful situations. In some cases, natural spaces provide therapy for conditions such as attention deficit disorder and improve cognitive function and work performance. In addition, greenways, trails, and parks provide safe places for kids to play, which is vital in the brain development of young children.

Trails also provide safe routes for pedestrians and bicyclists to travel. This separation from vehicular traffic can reduce the number of vehicle-pedestrian- and vehicle-bicyclist-related accidents.

### ECONOMIC

The economic benefits of the Thread to Union County will be numerous. For example, according to an economic impact study completed by The Trust for Public Land (TPL) in 2010 for Mecklenburg County, homes near parks have higher values. Higher property taxes amounted to almost \$4 million in direct

income to the county’s treasury for FY 2009. Another source of direct income is “sales tax receipts from tourism spending by out-of-towners who came to Mecklenburg County primarily because of its parks. This value came to more than \$4.3 million for Mecklenburg County. Beyond the tax money, these factors also bolstered the collective wealth of Mecklenburgers—by more than \$10 million in total property value and by almost \$19 million in net income from tourist spending.”

TPL’s study for Mecklenburg County considered other specific benefits and concluded that “the park system of Mecklenburg County thus provided the county in 2009 with revenue of \$8.3 million, a collective increase of resident wealth of almost \$29 million, resident savings of more than \$922 million, and municipal savings of \$25 million.”<sup>2</sup>

Union County linear parks are expected not only to bring new visitors and tourists to the region and inject new dollars into the local economy, but also to promote connectivity between tourist destinations for visitors, as well as local residents.

### ENVIRONMENTAL

The establishment of trails can restore natural corridors within already densely populated regions and preserve them in areas soon to be developed. This is particularly important in rapidly growing areas like the Charlotte region, where substantial growth can be positive from an economic standpoint but can place a very serious strain on the area’s natural resources such as water and air quality, open space, and wildlife habitats.

If current growth trends continue, treasured natural areas will disappear as vast tracts of land are developed into urban areas in the next 20 years. It is critical that our communities band together now to help preserve natural areas for the health and sustainability of future generations.



Green space created by these natural corridors helps to mitigate storm-water runoff and encourages water table recharge. It also serves as a natural filter, trapping pollutants from urban runoff that erode areas and agricultural lands, in order to keep our water supplies healthy.

Tree cover provided by these trails contributes to air quality by removing substantial amounts of particulate matter and carbon dioxide from the atmosphere. Trails also encourage nonmotorized means of transportation, which can significantly reduce air pollutants derived from mobile sources, such as automobiles. Reducing overall vehicle-miles traveled (VMT) will help to decrease the amount of pollutants emitted that contribute to ozone formation in the atmosphere. Projects like the Carolina Thread Trail will enhance the pedestrian environment and facilitate walking and biking, which is a critical component to making emissions reductions. The net benefits to the community are reduced VMT, which leads to reduced pollutants, thus making the air safer to breathe.

Trails and conservation corridors help to preserve habitat for many plants, insects, and animals that are so important and unique to this region. Creative interpretation of specific environmental attributes throughout the trail system will educate the casual visitor and inspire continued environmental stewardship. Conserving the natural environment that surrounds us is an important piece of the legacy that we will leave behind for our children, grandchildren, and great-grandchildren.

#### CULTURAL

Because the emphasis is on empowering local communities and weaving them together, the Thread could be considered a “civic engagement project dressed in greenway clothes” that will help to build stronger communities in many ways.

The Thread will provide connections for adjoining

neighborhoods and social centers such as schools, churches, cultural institutions, and other community facilities. It will help to reinforce the identity of neighborhoods through greenway design by incorporating public art, recognizing local history, and creating landmark open spaces.

As a free, accessible community asset, the Thread will offer opportunities for recreation and exercise to everyone, including children, youth, and families who might not be able to afford them elsewhere. The Thread also will offer opportunities for people to experience a sense of community and create stronger social and familial ties.

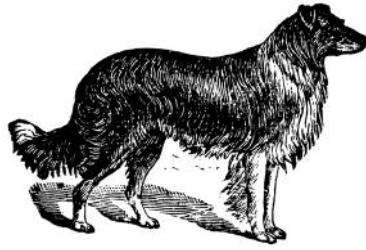
By preserving green spaces from development, the Thread will provide safe places for our children to play outside with others from surrounding communities and will create awareness of one another, as well as of the natural world.

As a tangible project that links people and places, the Thread will encourage communities, leaders, and municipalities to build partnerships. It will provide a framework and “pathway” for future regional initiatives and will encourage communities to act locally while thinking regionally.

#### TRANSPORTATION

Trails serve as highways for alternate means of transportation. As gas prices rise, commuters look for transportation alternatives. If given the option, more people would use trails to commute. The Carolina Thread Trail and local Union County trails will give citizens this option.

According to a 1990 National Personal Transportation Survey, more than half of all commuter trips and three out of four shopping trips are less than five miles in length (ideal for bicycling), with 40 percent of all trips being less than two miles. People who would ordinarily drive to these places will be presented with another mode of travel, thus helping to keep cars in driveways instead of on the road.



## CHAPTER 2. EXISTING CONDITIONS

Union County is located in the southern piedmont region of North Carolina, bordering the Charlotte metro region. Fourteen municipalities currently make up the county: to the west, Waxhaw, Wesley Chapel, Weddington, Marvin, Mineral Springs, Indian Trail, Stallings, Hemby Bridge, and Lake Park; in the center, Monroe, Fairview, and Unionville; and to the east, Wingate and Marshville. Monroe is the county seat and home to the stately 1886 Union County Courthouse.

### EARLY HISTORY

The Waxhaw Indians were the original inhabitants of the county.<sup>3</sup> The earliest European settlers—Scots-Irish and German immigrants along with some descendants of New England settlers—arrived in the mid-eighteenth century. Born among the Scots-Irish community in the Waxhaw region in 1767 was President Andrew Jackson.<sup>4</sup> An influx of settlers after the Revolutionary War contributed to the population growth of the region, culminating in the creation of the county from parts of Anson and Mecklenburg Counties in 1842.

For much of Union County's history, the economy was based on agriculture and cotton was the predominant cash crop. However, the county was also home to a significant moment in American retail history. In 1888, William Henry

Belk opened his first store, a small bargain shop, in Monroe. Today, Belk is the nation's largest privately held department store company.<sup>5</sup> After World War II, manufacturing began moving into the county.

### DEMOGRAPHICS

The population of Union County has grown steadily for the past several decades, and rapidly within the last 10 years. Since 2000, the county's population has grown by more than 77,000 people to a total of 201,992 in 2010—a 62.8 percent increase—four times the growth rate of the state as a whole over the same time period.<sup>6</sup> It is the fastest-growing county in the state. Table 1 shows the population growth of Union County municipalities in North Carolina.

The racial and ethnic makeup of the county has changed slightly since 2000. As of 2010, the breakdown of race by percentage of the total population is 79 percent white, 11.7 percent black, 5.3 percent some other race, 1.9 percent two or more races, 1.6 percent Asian American, and 0.4 percent American Indian.<sup>7</sup> The most significant change has been the increase of people of Latino or Hispanic origin, as a percentage of the county's total population, from 6.2 percent in 2000 to 10.4 percent in 2010.<sup>8</sup>

**Table 1: Municipal Population Growth between 2000 and 2010**

	2000	2010	% Change		2000	2010	% Change
Fairview	3,017	3,324	10	Monroe	26,228	32,797	25
Hemby Bridge	1,414	1,520	7	Stallings	3,171	10,660	336
Indian Trail	11,749	33,518	185	Unionville	4,797	5,929	24
Lake Park	2,093	3,422	63	Waxhaw	2,625	9,859	276
Marshville	2,360	2,402	2	Weddington	6,696	9,459	41
Marvin	1,039	5,579	437	Wesley Chapel	2,549	7,463	193
Mineral Springs	1,370	2,639	93	Wingate	2,406	3,491	45

Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table Pt. Business Location Profile.



While Union County still retains its rural character, the percent of the total population living in the unincorporated parts of the county is declining—from 69 percent in 1970 to 53 percent in 2000.<sup>9</sup> At the same time the population is becoming denser, increasing from 198.9 people/square mile (mi<sup>2</sup>) in 2000 to 314.5 people/mi<sup>2</sup> in 2010.<sup>10</sup> Much of the growth is occurring in the areas closest to the Charlotte metropolitan area.

In step with the population increase in Union County is the increase in housing units. In 2000, there were 45,727 total housing units in the county. By 2009 that number increased 54.3 percent to 70,505.<sup>11</sup> Over the span of the past decade, in addition to becoming the fastest-growing county in North Carolina, Union County has become the eighteenth fastest-growing county in the entire United States.<sup>12</sup> As of 2000, the housing stock consisted primarily of single-family homes and the homeownership rate was 80.5 percent.<sup>13</sup> Home building boomed during the past decade, and the county issued 25,479 residential building permits between 2000 and 2007.<sup>14</sup> However, permitting has declined the past couple of years due to issues with water infrastructure capacity and the decline of the regional and national housing markets.<sup>15</sup>

Union County is projected to experience substantial population growth well into the future. By 2029, the county is expected to reach a population over three times greater than the population in 2000, as shown in Table 2.

**Table 2: Union County Historic and Projected Population Growth**

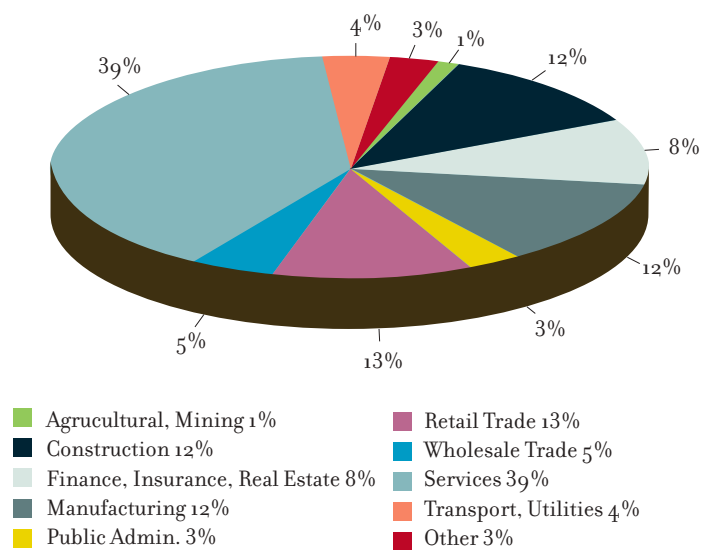
	2000	2010	2020	2029
Population	123,738	201,992	304,247	389,098
Growth (%Change)	---	62.8	44.9	27.9

Sources: North Carolina Office of State Budget and Management; e. U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File, Table Pt.

**ECONOMY**

The Union County economy has grown rapidly in the past decade—from the development of new residential communities and retail centers to the location of new businesses in the county.<sup>16</sup> In 2009, CNN Money ranked Union County 10th best in the nation for job growth between 2000 and 2008 due to a 57.5 percent increase over that time period.<sup>17</sup> Much of that growth is tied to the services industry, but the region has substantial manufacturing, construction, and trade industries. Figure 1 summarizes employment by industry as a percentage of total workers (80,319 people). That 10-year growth is also reflected in other indicators: certified property values soared from \$12.8 million in 2005 to \$21 million in 2009, almost doubling in four years; and median household incomes have jumped nearly 32 percent, from \$50,622 in 2000 to \$66,561 in 2009.

**Figure 1: Employment by Industry, 2009**



Source: Charlotte Regional Partnership, Union County, Business Location Profile.



Photo by Nancy Pierce

Although agriculture employs a fraction of Union County’s workers, the county posted the state’s third-highest agricultural sales in 2008 at \$454.8 million.<sup>18</sup> In 2008, Union County was first in the state for wheat production and third in the state for soybeans. The county is second in the state for production of broilers and fourth in turkeys raised. Livestock and poultry sales account for over 80 percent of total agricultural sales in the county. Moreover, Tyson Foods and Pilgrim’s Pride, as poultry growers and processing plants, employ over 1,500 people.

While Union County possesses a substantial and diversified industrial base, it has seen a decrease in employment over the past 10 years. The number of manufacturing workers decreased 27 percent from 2000 to 2009.<sup>19</sup> Nonetheless, over 100 manufacturing and distribution companies call Monroe home.<sup>20</sup> Turbomeca Manufacturing Inc., a French-owned firm, recently located an aerospace manufacturing facility in Monroe, and ATI Allvac has completed a \$210 million expansion to its existing facility.<sup>21</sup>

The top employers in the county for 2008 were the Union County Schools, Tyson Foods, Union Memorial Medical Center, ATI Allvac, the county itself, and Walmart. However, like the rest of North Carolina, Union County has experienced double-digit unemployment since the economic downturn in 2009. Nonetheless, as Table 3

**Table 3: Unemployment Rates (%)**

	Monroe	Union County	Charlotte Regional Partnership <sup>22</sup>	North Carolina
2000	5.0	4.5	5.3	5.3
2006	4.3	3.9	4.7	4.7
2007	4.2	4.0	4.9	4.7
2008	6.0	5.5	6.5	6.2
2009	10.0	10.3	11.9	10.6
2010*	10.3	10.9	12.3	11.1

Source: Employment Security Commission of North Carolina;

\*2010 average through April.

shows, the county has fared slightly better than the rest of its economic development region and the state as a whole.

Many residents are commuting long distances to work outside the county. Nearly half of all Union County workers travel outside the county for work, and many are traveling along US 74 to Mecklenburg County.<sup>23</sup> As of 2000, the average commute time for Union County workers was 29 minutes. It is safe to surmise that owing to the rapid growth of the county, residents will continue to experience longer travel times to and from work.<sup>24</sup>

Despite the economic downturn, there still have been growth and development opportunities in the region. Over 1 million square feet of multitenant retail space was under construction as of mid-2008, and another 3.1 million square feet were proposed in 17 projects.<sup>25</sup> Moreover, the Union County Partnership for Progress has proposed a 5,000-acre site for future business and industrial park development.<sup>26</sup> The park would be situated east of Marshville and is envisioned as a major industrial and commercial hub accessible to interstates (such as the future Monroe bypass), airports, and rail lines.<sup>27</sup> Also, the City of Monroe has received a \$2 million grant for completion of its project to expand and strengthen its airport runway.<sup>28</sup>





LAND USE AND NATURAL RESOURCES

Union County is in the southern piedmont physiographic region.<sup>29</sup> It is characterized by gently sloping hills with steeper areas along drainage ways. The Catawba and Yadkin-Pee Dee River basins drain all of the land in the county. Elevation ranges from about 275 feet above sea level along the Rocky River in the northeastern part of the county to about 770 feet in an area southwest of Waxhaw in the southwestern part of the county. The county has a total area of 645 square miles (412,881 acres).<sup>30</sup>

The western side of the county, located just four miles from Charlotte city limits, is densely populated with residential housing and big-chain retail and restaurants, while the east is more rural.<sup>31</sup> Overall, a majority—61 percent—of the land in the county is agricultural and located in unincorporated areas, while 31 percent is utilized for residential purposes.<sup>32</sup> In fact, in 2007, there were 1,107 farms in the county covering 178,193 acres.<sup>33</sup> Of the land used for residential purposes, 27.1 percent is located in unincorporated Union County.<sup>34</sup> Much of employment and commercial uses are located in incorporated communities, while a majority of the county’s vacant land is in unincorporated areas.

Urban development over the last 25 years has impacted much of the landscape in the county, as seen in the Table 4. Urban areas have expanded sixfold since 1984.

As of 2003, land cover as a percentage of total county area was as follows: 46.3 percent grass and cropland, 34.8 percent trees, 18.1 percent urban, and 0.79 percent water. In 1984, urban land cover was only 2.35 percent of the total area of Union County. The significant increase in the population of the county over the past 20 years has led to increased urbanization. With population projections showing that the county will continue to grow substantially, it is likely this trend in urbanization will persist into the county’s foreseeable future.

The North Carolina Natural Heritage Program has identified 36 elements of natural diversity—including rare plant and animal species, exemplary natural communities, and special animal habitats—known to occur, or to have occurred, in Union County.<sup>35</sup> Among these are both federally and state endangered species such as Michaux’s sumac, the Carolina heelsplitter (a freshwater mussel), and Schweinitz’s sunflower. For example, there are two small populations of the heelsplitter in Union County, one in Waxhaw Creek, a tributary to the Catawba River, and the other in Goose Creek, a tributary to the Rocky River.<sup>36</sup> Table 5 presents a list of those species currently or historically in Union County that are endangered, threatened, or of special concern at the state level.

Source water bodies in the county include surface streams, groundwater, and lakes and reservoirs.<sup>37</sup> However, the major sources of drinking water are Lake Twitty (north of Monroe), Lake Lee, and Lake Monroe (both south of Monroe).<sup>38</sup> The county has adopted regulations under the state’s Water Supply Watershed Protection Act to protect those water supplies. The restrictions cover Stewart’s Creek, which feeds Lake Twitty, and Richardson Creek, which feeds into Lakes Lee and Monroe.<sup>39</sup> Other water resources include the Rocky River in the north and Cane Creek Lake in the southwest part of the county.

Table 4: Land Cover Change (acres)

	1984	2003	% Change
Trees	164,307	142,384	-13.3
Grass, crops with vegetation, fallow	232,772	189,484	-18.6
Urban	9,619	73,929	668.6
Water	2,361	3,260	38.1

Source: American Forests, Carolina Piedmont Green Initiative, Part of the Solution, Analysis Report, Union County.



**Table 5: Species That Are Endangered, Threatened or of Special Concern**

<i>Major Group</i>	<i>Common Name</i>	<i>State Status</i>	<i>Federal Status</i>	<i>County Status</i>
Invertebrate animal	Atlantic pigtoe	Endangered	Species of concern	
	Carolina heelsplitter	Endangered	Endangered	
	Creeper	Threatened	None	
	Savannah lilliput	Endangered	Species of concern	Current
	Notched rainbow	Special concern	None	
	Carolina creekshell	Endangered	Species of concern	
Vascular plant	Schweinitz's sunflower	Endangered	Endangered	Current
	Michaux's sumac	Endangered, special concern	Endangered	Historical
	Georgia aster	Threatened	Candidate	Current
Vertebrate animal	Mole salamander	Special concern	None	Current
	Timber rattlesnake	Special concern	None	Obscure
	Carolina darter (central piedmont population)	Special concern	Species of concern	Current
	Loggerhead shrike	Special concern	None	Current
	Robust redhorse	Endangered	Species of concern	Historical

Source: North Carolina Natural Heritage Program (database updated April 23, 2010).

### EXISTING PARKS AND TRAILS

Although no state or national parks are within the borders of Union County, there are 97 separate recreational facilities within county borders—42 of which are owned and operated by the public sector, while the remaining facilities are private or public-private partnerships.<sup>40</sup> The county is home to Cane Creek Park, a water-based recreation facility near Waxhaw that comprises 1,050 acres of land surrounding a 350-acre lake. It is home to miles of multipurpose trails and accommodates various recreational activities.

The Town of Indian Trail is home to one park: the privately owned Edna Love Park, which is located downtown.<sup>41</sup> However, the town is scheduled to open a one-acre event park on May 14, 2011, and has finalized the purchase of 51 acres of land to build its first large community park. Indian Trail will actively work with community organizations, town committees, and residents to develop the park. The town also has many trails and parks located in

subdivisions owned by homeowners associations. There are many opportunities for greenway development via private and public partnerships.

The Village of Lake Park has multiple common areas, ponds, Veteran's Park, and Russell Park.<sup>42</sup> The village is also home to Fred Kirby Park. The park is a small athletic complex for baseball and soccer and includes a paved walking path. The county runs the park.

The Town of Marshville maintains a 13-acre park north of the downtown.<sup>43</sup> A one-acre "Marshville Mini Park" was constructed in 2008 and features walking trails, benches, picnic tables, and grills.

The Village of Marvin has planned and constructed segments of the Marvin Loop, a four-mile walking circuit, and Chimney's Trail, a natural walking and horse trail. Marvin has also purchased 28 acres for its first municipal park, which includes plans for picnic areas, community gardens, benches, open fields, and trails.



The Town of Mineral Springs has developed several miles of natural surface trails for its new greenway, mostly utilizing volunteer labor. It has acquired nearly 60 acres dedicated to conservation that will be open for hiking, mountain biking, and horseback riding. The town plans to connect at least five new and existing subdivisions to this network of trails and to create trailheads at several locations along major thoroughfares. The town's vision ultimately calls for the greenway to include a branch that connects to the downtown area.<sup>44</sup>

The City of Monroe currently has 13 municipal park facilities within city borders. While over 60 miles of trails and sidewalks are envisioned in the city's *Greenway Master Plan* (2005), the *Downtown Master Plan* (2008) indicates that the downtown does not yet have a well-defined pedestrian trail system to provide interconnectivity internally and with adjacent neighborhoods.<sup>45</sup>

The Town of Stallings Council approved master plans for the Stallings Municipal Park and Fairhaven Park in April 2009.<sup>46</sup> Currently under way, Phase I includes expansion of Municipal Park's property to include wooded park trails and an open playing field.

The Town of Waxhaw recently renovated the David G. Barnes Children's Park located in downtown Waxhaw. Next to Barnes Park is the SK8 Skateboard Park. The Harvey Clay Nesbit Park is under construction.

The Village of Wesley Chapel has playgrounds at Wesley Chapel Elementary School and New Town Elementary School. These are the only public recreation facilities currently within municipal limits,<sup>47</sup> but the village has acquired 16.5 acres for its first park.

The Town of Wingate has two parks: Wingate Community Park and Highland Park Playground. Wingate Community Park is a 20-acre site complete with two baseballfields, a multiuse playing field, walking trails, and a children's playground,

while Highland Park Playground is a 2-acre pocket park complete with playground equipment and a basketball court.<sup>48</sup> Moreover, Wingate University is developing a two-mile nature walk through a wooded area of its campus.

#### DESTINATIONS

Citizens of Union County currently drive, walk, or bike to numerous destinations throughout the community. Whether people are traveling from home to work, to school, or to shopping, some of these connections are available by way of the proposed countywide greenway system. Attendees at public input sessions that were held in 2010 mentioned the following destinations most frequently:

#### **Towns, parks, and cultural/recreation/historic places in Union County:**

- Waxhaw
- Mineral Springs
- Monroe
- Indian Trail
- Cane Creek Park
- Jesse Helms Park
- Stallings Municipal Park
- Museum of the Waxhaws
- JAARS (Museum of the Alphabet)

#### **In other counties:**

- Colonel Francis Beatty Park
- Andrew Jackson State Park
- Mint Hill Park

#### **Water-related:**

- Twelve Mile Creek
- Cane Creek
- Goose Creek
- Six Mile Creek



CTT Stock Photo

Other important public facilities that could be linked up by a trail system are Wingate University and South Piedmont Community College in Monroe.

In June 2010, The Trust for Public Land commissioned a consulting firm to conduct a survey of Union County residents to determine perceptions and attitudes on a number of issues, including the identification of places and destinations that could be connected by a system of trails.<sup>49</sup> The destinations identified by listening-session participants corroborate many of the destinations identified by a cross-section of Union County residents. For example, of the 403 people randomly surveyed, in response to the question of which important towns should be connected, 15 percent said they wanted to see Monroe connected and 11 percent

identified Waxhaw. Furthermore, in response to the question about the most important cultural, recreational, and natural resources to connect with a trail system, a full 10 percent of those surveyed wanted to see Cane Creek Park connected. This percentage was statistically significant because the question was open ended and responses for Cane Creek Park were unprompted.

#### RELEVANT PLANNING DOCUMENTS

In 2006, Union County adopted a *Parks and Recreation Comprehensive Master Plan* update that sets forth strategies for providing adequate parks and recreation facilities through 2015.<sup>50</sup> The plan includes the Jesse Helms Park Site development, the acquisition and development of a North District Park, and, ultimately, over 120 miles of trails. The *Parks and Recreation Comprehensive Master Plan* calls for the cultivation of partnerships with the school system and private recreational providers for the expansion of parks and recreational activities. It also recommends an increase in funding for the countywide program to assist municipalities in park development.

The Town of Indian Trail adopted its first *Comprehensive Plan* in 2005. That document focused on making Indian Trail more pedestrian friendly and promoting multimodal transportation options.<sup>51</sup> In the past several years the town has taken steps to ensure that development involves pedestrian facilities by developing a *Comprehensive Land Use Plan*, a *Downtown Master Plan*, and the *Indian Trail Comprehensive Pedestrian Plan*. The *Master Plan* provides an inventory of existing pedestrian facilities, identifies deficiencies, and recommends improvements. The *Master Plan* coincides with the town's *Comprehensive Plan*. In 2010, the town adopted the *Park and Greenway Master Plan: A 10-Year Vision Plan*



Photo by Nancy Pierce

to ensure the provision of park and recreational opportunities to meet the needs of Indian Trail residents. Finally, the town is currently developing a *Bicycle Plan*, which should be completed by the spring of 2011.

The Town of Marshville adopted its *Land Use Plan* in 2004. Among the town's goals are (1) ensuring that the park and recreation needs of residents are met and (2) providing safe and convenient mobility for residents.<sup>52</sup>

The Village of Marvin initiated and adopted its *Park and Greenway Master Plan* to help ensure responsible growth for parkland and greenways and to provide maximum recreational opportunities for residents.<sup>53</sup> The plan reflects the community's desires for more open space and recreation facilities. The document identifies strategies for building a network of parks and greenways within the village.

The City of Monroe adopted its *Parks, Recreation, Greenways and Open Space Master Plan* in 2002 to guide the direction of parks and recreation facility planning through 2012.<sup>54</sup> Monroe then updated its *Land Development Plan*. Both documents plan for the development of pedestrian and bikeway corridors (greenways) for the city. Subsequently, the city adopted the *Greenway Master Plan* in 2005 to guide the planning and implementation of a greenway/bikeway system for 10 years.

The Town of Mineral Springs initiated a *Vision Plan* in 2006 to address issues of growth.<sup>55</sup> One of the results was a land use plan that addresses open space and recreational opportunities. One of the goals of the plan is to maintain the town's high quality of life by protecting open space throughout the community. Recommended actions included establishing standards for natural



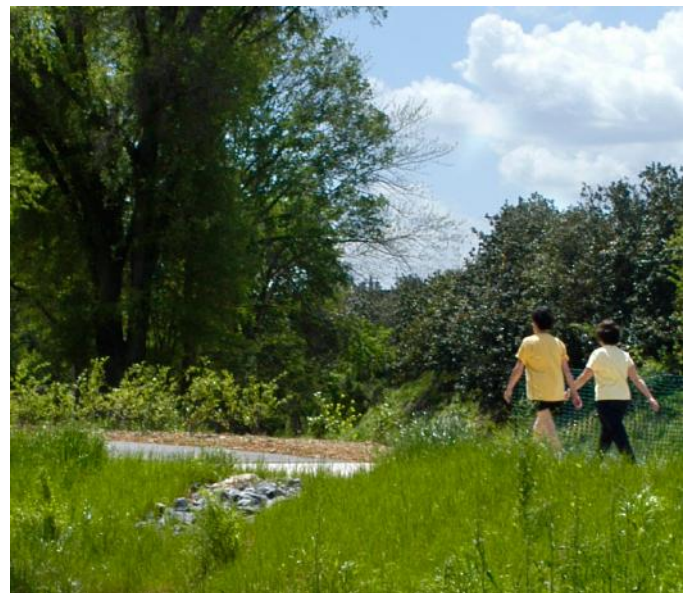
features to be preserved, adopting a greenway plan, and providing parks and open space areas in the town center.

The Town of Stallings's 2008 *Pedestrian Plan* addresses the recent explosion of growth and traffic in the area.<sup>56</sup> The plan seeks, among several goals, to encourage the creation of walkable centers at strategic locations, to improve pedestrian connectivity throughout town and with regional greenways and networks, and to provide more outdoor recreational activities.

The Town of Waxhaw's *Comprehensive Plan 2030* indicates that new developments in the town should have greenways.<sup>57</sup> In addition, there are private plans for linking the various greenways. The document also notes that the town's 2003 *Future Land Use Plan* recommends limiting development in floodplain areas where trails could be developed.

The Village of Wesley Chapel's 2009 *Comprehensive Parks & Recreation Plan* seeks to address the rapid rate of growth and development in the village.<sup>58</sup> Surveys of residents made in preparation of the village's *Master Plan* indicated strong support for pursuing parks and recreation initiatives—77 percent of respondents favored developing an active park and 84 percent approved of developing greenways in the community. The *Parks and Recreation Plan* was the end product of that public response.

The Town of Wingate is currently in the process of developing its first comprehensive plan. The town is concerned with promoting community, development, walkability, and a small-town character.<sup>59</sup> The plan will provide a framework for future growth and policy formation.



Photos by Nancy Pierce



## CHAPTER 3. STAKEHOLDER AND PUBLIC OUTREACH

### PROJECT TIMELINE

May 2010	Initial Steering Committee meeting Community Outreach Subcommittee meeting
June 2010	Telephone poll
July 2010	Community listening sessions
September 2010	Steering Committee meeting Technical Advisory Team meeting
October 2010	Technical Advisory Team meeting
November 2010	Technical Advisory Team meeting
December 2010	Steering Committee meeting Interjurisdictional meeting Technical Advisory Team meeting
February 2011	Open houses Online public poll
March 2011	Two Steering Committee meetings
April 2011	Greenway Master Plan to be vetted by municipal governments

### PLANNING

#### Steering Committee

The steering committee, comprising 29 representatives from municipal and county governments, invested organizations, and individuals, supervised the CTT planning process in Union County. The committee decided on the process for developing cross-county trail connections and a preferred CTT route in the county. The committee met five times over the course of the project.

At the initial meeting in May 2010, the committee agreed on the overarching CTT plan goals and opportunities. Members also discussed the development of an online survey, planned upcoming listening sessions, and reviewed the roles of the Technical Advisory Team and Community Outreach Subcommittee. At a meeting in September 2010, committee members discussed the results of the public poll and listening sessions, as well as the proposed set of open houses. In December 2010, the committee finalized the open house format for the next



Photo by Kelley Hart

round of public input and brainstormed potential locations for the events. The steering committee also met with the representatives of surrounding counties to discuss potential trail connections across county boundaries within the proposed Carolina Thread Trail footprint. At the first meeting in March 2011, committee members briefly discussed their impressions of the open houses. They reviewed the draft route selection factors, evaluated different parts of the study area, discussed the trade-offs between different segments, and identified top-priority segments for the CTT Master Plan for Union County. At the second March meeting, they agreed on a recommended action plan. (Meeting summaries are provided in Appendix A.)

#### Technical Advisory Team (TAT)

The 13 members of the TAT assisted in collecting and analyzing data and proposing alternative scenarios for consideration by the public and the steering committee. The TAT looked at existing and proposed trails and used listening-session results to outline potential corridors for trails and destinations to connect. Over multiple meetings during the planning process,



the TAT reviewed information gathered from the public listening sessions and created draft conceptual route alternatives that reflect public preferences, including connecting popular destinations.

### Community Outreach Subcommittee (COS)

The COS was instrumental in advertising for the listening sessions, open houses, and online survey. Team members reached Union County residents by email, telephone, web postings, flyers for businesses and municipal buildings, and newspaper and radio announcements. The COS and some mayoral offices (at the request of the COS) sent out personal invitations by paperless post to over 1,000 residents on sunshine lists. Event times, dates, and locations were posted on community

calendars. Union County commissioners were personally invited over the phone. A press release was published in the *Charlotte Observer* and the *Enquirer Journal* and broadcasted on WSOC. These efforts, in conjunction with emails sent to homeowners' associations, postings on community calendars, and flyers distributed throughout Union County communities, helped to bring substantial numbers to the events. (Public outreach materials are provided in Appendix C.)

### PUBLIC PARTICIPATION

#### Round 1 (June–July 2010): Public Poll and Listening Sessions

The Trust for Public Land commissioned a polling firm to conduct a telephone poll of 403 people in Union County to determine residents' general attitudes toward trails and the



Photo by Kelley Hart





outdoors. Sixty-six percent of those surveyed engaged in outdoor recreational activity within 20 miles of their home with regular frequency (from sometimes to very frequently). Fifty-nine percent of participants indicated that the creation of, and access to, trails are important and would increase trail use. A majority of respondents were willing to fund programs for programs to purchase land for conservation purposes.

Survey participants also provided more detailed information about destinations for connection in a trail system. Fifteen percent said they wanted to see Monroe connected and 11 percent indicated Waxhaw. Ten percent of participants explicitly mentioned Cane Creek Park as an important natural or cultural resource to connect by trail.

During the week of July 19, 2010, four public input meetings were held in different parts of Union County: Weddington, Waxhaw, Indian Trail, and Monroe. The meetings drew a total of 86 stakeholders and members of the general public. Steering Committee members were present at each meeting and helped facilitate dialogue among attendees. CTT and TPL provided an introduction to the Thread Trail vision and greenways in general. Meeting participants answered questions, discussed benefits and concerns associated with trails, and took part in a charrette-style workshop in which they drew on maps to indicate where they wished to see trails or destinations.

### **Round 2 (February 2011): Open Houses and Online Survey**

In early February 2011, a total of 200 Union County residents participated in four open houses—Monroe Aquatic Center, Wingate Community Center, First Friday in Waxhaw (at the Woman’s Club), and Extreme Ice Center—to share their opinions about potential CTT routes. Participants were asked to identify the most important and least important segments for Union County.

An online survey was made available to collect public input. Survey participants shared written comments in addition to

selecting important segments and destinations. Two hundred eight people responded between January 28 and February 28. Eighty-seven percent of those who took the online survey did not attend the open houses. Seventy-one percent said they wanted to see Waxhaw connected and 46 indicated Weddington. Similarly, 70 percent of participants selected Cane Creek Park as an important park to connect by trail. Participants were also asked to identify the most important and least important segments for Union County.

Attractions in the western part of the county (particularly Waxhaw) dominated the lists of preferred destinations. That may reflect the high percentage of online participants who were from zip code 28173, which encompasses Waxhaw. The choice of preferred destinations and trail segments also indicates that Union County residents would like to connect natural and cultural destinations in parts of the county where the population density is higher.

### **MAPPING PRIORITY ROUTES**

The Steering Committee reviewed route selection factors and weighed the pros and cons of different segments. The following factors guided committee members in their analysis of potential routes: public preference (from open houses and the online survey) regarding segments to include and destinations to connect; the readiness of the route and whether there is political will; existing trails and trail plans; regional access (connecting to other counties in the Thread footprint) or other regional benefits; low costs (for building or maintaining); funding availability for design, construction, or maintenance; aesthetics; and likely capacity of the proposed right-of-way (e.g., if the terrain or the right of way permit a suitable width trail). The maps in Chapter 4 reflect the Steering Committee’s recommendations for the location of the Carolina Thread Trail through Union County.



Chapter 3. Stakeholder and Public Outreach



Photo by Kelley Hart



## CHAPTER 4. TRAIL ROUTES

### OVERVIEW

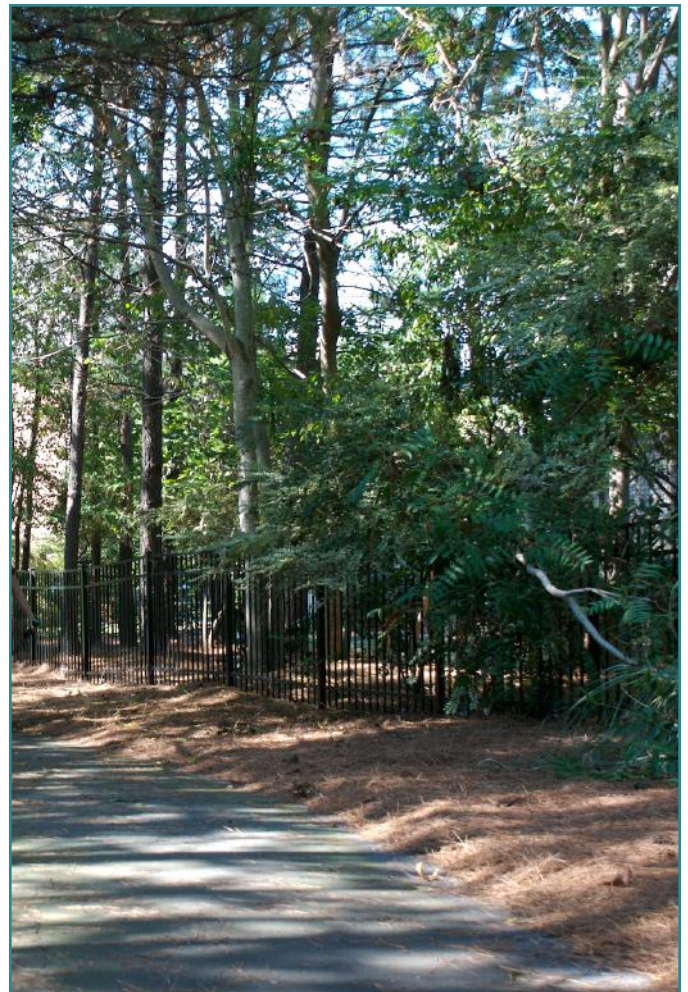
After two thorough rounds of detailed public input, the CTT planning process culminated in a proposed system of trails for Union County. The map on page 28 displays the entire proposed CTT system in Union County as well as regional connection opportunities.

### Map 1. Connection Opportunities

The conceptual CTT Union County route is the quarter-mile-wide purple line that stretches 100 miles through the county and connects to other CTT sections in the west and northwest to Mecklenburg County, in the east to Anson County, and in the southwest and south to Lancaster County, South Carolina. While the trail itself will be much narrower (likely 6 to 12 feet wide), the conceptual route includes an “opportunity swath” in recognition of the fact that communities determine the exact location of their CTT segments—a process that entails alternatives that may include public lands or property owned by landholders, such as developers who want to offer this amenity to their neighborhoods.

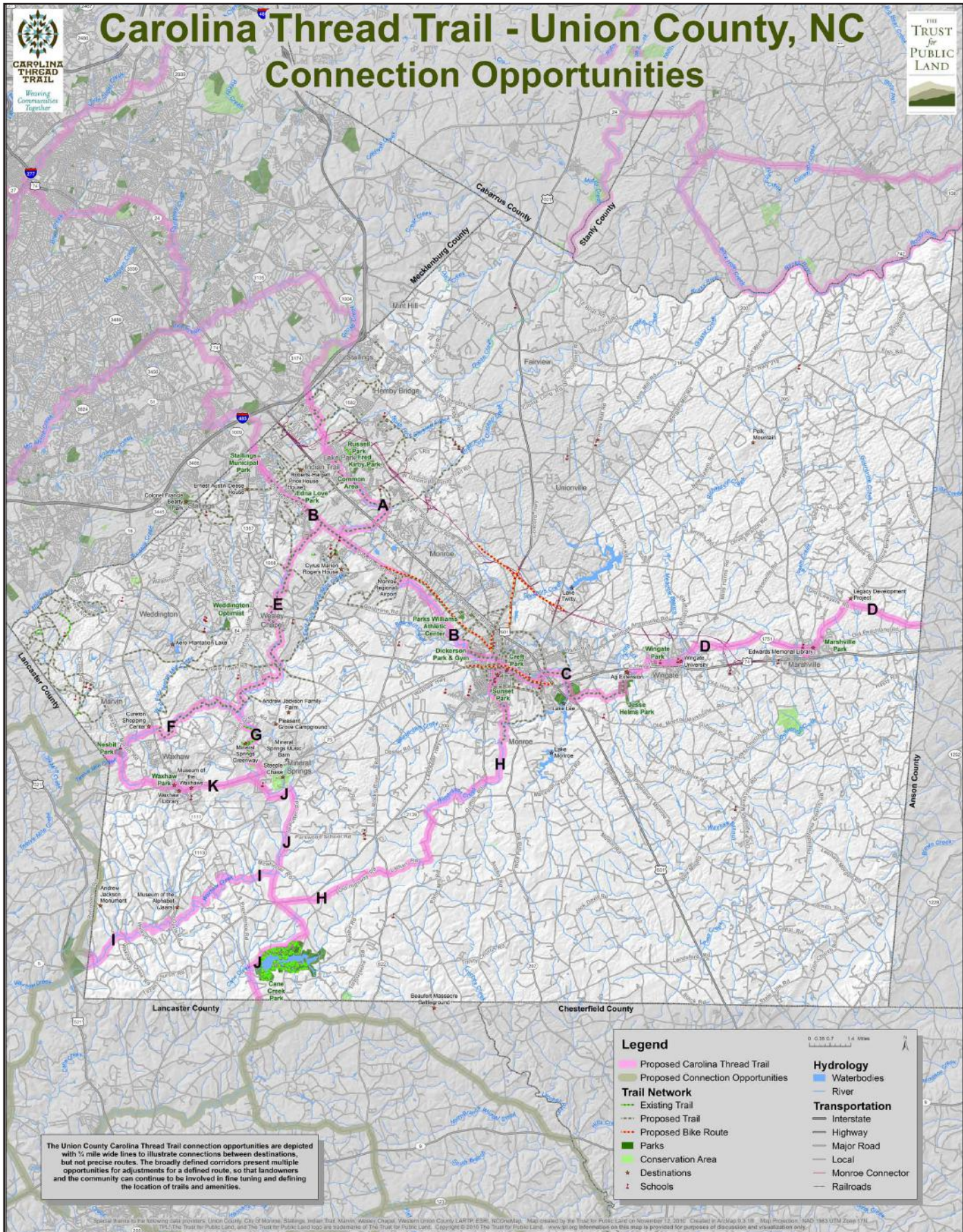
This conceptual route includes about 1.7 miles of existing greenways, and it incorporates 34.3 miles of trails that were already proposed by local governments in Union County. So about 34 percent of the proposed Carolina Thread Trail conceptual route was derived from preexisting trails and plans, and 64 percent—64.6 miles—consists of trail routes that are new to the county and its municipalities. Of those new routes, 38 miles would be along road rights-of-way, 21.5 miles along streams and river corridors, 4.3 miles within utility rights-of-way, and another short segment via new trail.

The proposed trail brings much of the county together. Eight of the 14 municipalities in the county would be connected by the CTT. More than 28 percent of all county residents live within a half-mile of the proposed trail route. Almost 50 percent of Union County seniors and children live within this proposed CTT service area, as do 33 percent of low-income households.<sup>60</sup>



*CTT Stock Photo*

Map 1. Connection Opportunities





### Carolina Thread Trail Route Descriptions

<i>Type</i>	<i>Description</i>	<i>Miles</i>
A Road right-of-way New trail Proposed trail	From the Mecklenburg County line, follow Stallings Rd., then the proposed trail to Oak Springs Rd. Take the new trail to connect to the proposed trail along Crooked Creek. Go south, picking up Wesley Chapel Stouts Rd. until the segment ends at the connection with segment B.	7.7
B Road right-of-way Proposed tra	From the Mecklenburg County line, follow Campus Ridge Rd. to Old Monroe Rd., joining the proposed trail along Old Monroe Rd., which turns into Old Charlotte Hwy. Continue on proposed trail until it ends at segment C (City of Monroe proposed trail).	9.9
C Proposed trail	From segment B, follow the proposed trail south through Dickerson Park toward Belk Tonawanda Park. Then follow the proposed trail south along Charlotte Ave., to Main St., then Franklin St. Then head north on Sunset Dr. to Quarry Rd., then south along the Richardson Creek proposed trail to Flag Branch, ending at Jesse Helms Park.	8.9
D Road right-of-way	From segment C in Jesse Helms Park, follow Presson Rd. east to Hwy. 74. Cross the railroad on Edgewood Dr. into the Wingate city limits. Make a right onto Elm St., right on Bivens St., and left onto Wilson St. Follow Wilson—it turns into Ansonville Rd. Make a right onto Phifer Rd., which turns into Phifer St., and enter Marshville. From there proceed to Elm St., to Union St., to Olive Branch St. connecting Legacy Development. Then take Old Lawyers Rd., ending at the Anson County line.	11.9
E Proposed trail	From the junction with segment F, follow the proposed trail north along Price Mill Creek, ending at segment B.	6.5
F River corridor Proposed trail	From the Lancaster County line, follow Twelve Mile Creek east until it eventually joins the proposed trail along the creek ending at the segment E junction.	10.0
G Road right-of-way Existing trail River corridor	From the junction of segments J and K, take Waxhaw Hwy. to McNeely Rd. Then go to Mineral Springs Greenway along the Bates Branch, continuing until the end at segment F.	3.9
H Proposed trail River corridor Road right-of-way	From segment C, follow Charlotte Ave. to Lancaster Ave. Then go on to Griffith Rd., Victoria Ave., then Crescent St. At Richardson Creek, go south along the creek to Griffith Rd. Then on to McManus Rd., to Lathan Rd., to Old Highway Rd., and finally to Lancaster Hwy., ending at segment J.	15.4
I River corridor	From the Lancaster County line, follow Waxhaw Creek north and east ending at segment J.	9.8
J Road right-of-way	From Lancaster County line, follow Providence Rd. north to Harkey Rd., connecting to Cane Creek Park. Then take Harkey Rd., to Potter Rd., to Old Waxhaw Monroe Rd., to Robinson Rd., to Western Union School Rd., ending at junction with segments G and K.	10.9
K Road right-of-way River corridor	From the junction with segments G and J, take Waxhaw Hwy. west, to Main, to Waxhaw Marvin Rd., to Twelve Mile Creek, ending at segment F.	5.4



*Photo by Nancy Pierce*

## PRIORITY CORRIDORS

Stakeholders identified three priority corridors to develop specific plans. These corridors were singled out to be included in the action plan because, based on the same criteria that determined proposed trail routes, they were particularly urgent, especially important, and likely to get built in the near term. These corridors also could appreciably benefit from being highlighted in the plan, or help give momentum to CTT implementation in Union County. Steering Committee members nominated segments for consideration and then voted on their top three.

**Stallings to Indian Trail Route.** From the Mecklenburg County line, this proposed route follows Stallings Road, then a proposed trail (in the Stallings Pedestrian Plan) to Oak Springs Road. It connects to an Indian Trail–proposed trail that eventually follows Crooked Creek and heads south, picking up Wesley Chapel Stouts Road. This segment has priority status because these two communities have already adopted pedestrian plans that include much of this route. Also, the public input revealed great interest in trails that connect to Mecklenburg County.

**Indian Trail to Wesley Chapel Route.** From Segment F at New Town Road, this route follows the proposed trail north along Price Mill Creek, ending at Segment B on Old Monroe

Road. This segment has priority status because it seeks to connect to Cane Creek Park, the most popular destination identified by the public. Also, it utilizes trails already proposed by a municipality as well as potential routes identified in the Local Area Regional Transportation Plan (LARTP).

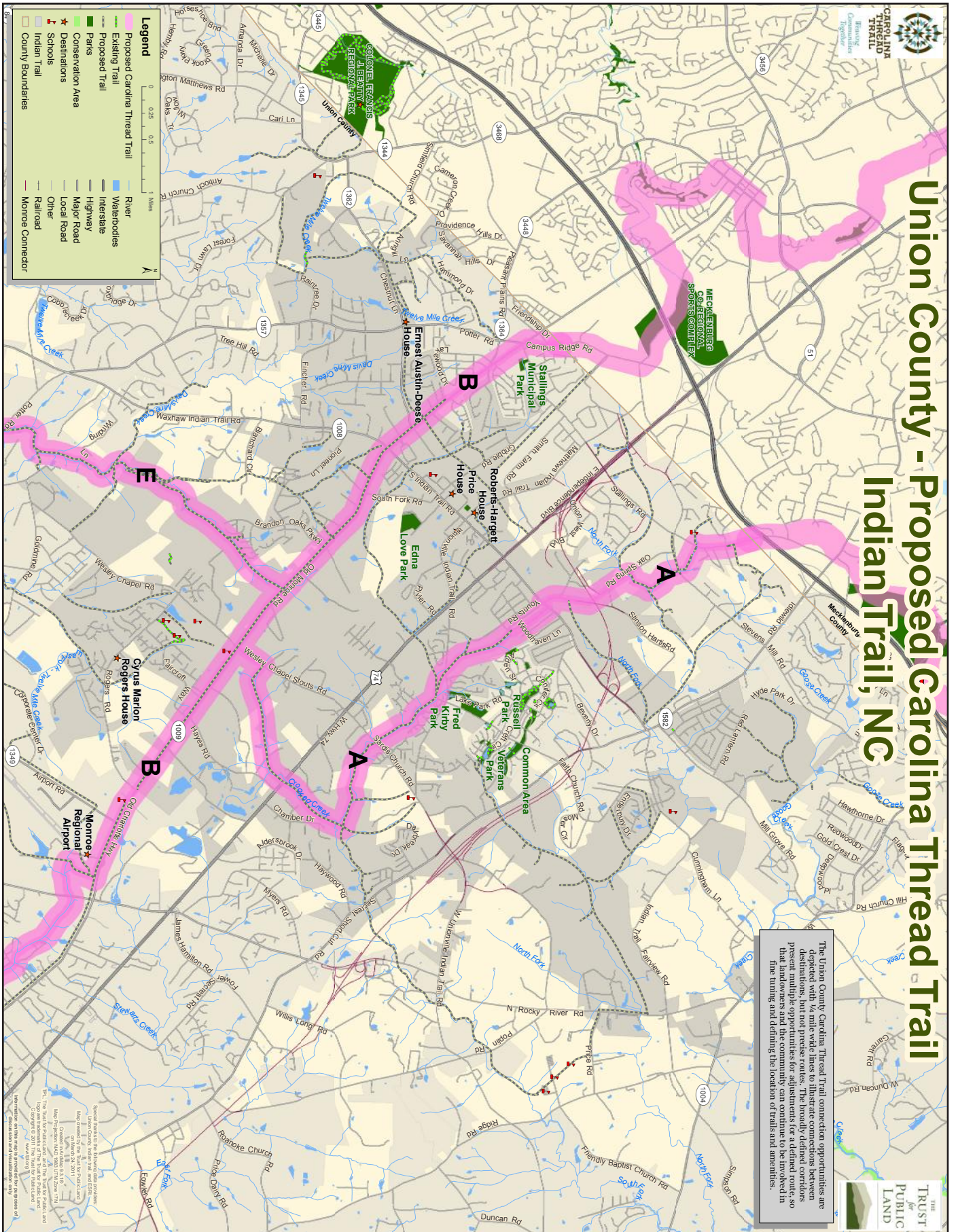
**Route from Mecklenburg County to Monroe.** From the county line, this proposed route follows Campus Ridge Road to Old Monroe Road, joins a proposed trail along Old Monroe Road, turns into Old Charlotte Hwy., continues on an existing proposed trail, and ends in Monroe. This segment has priority status because it cuts across the county, providing linear park access to residents near the center of Union County. Also, this trail could potentially be developed as part of a road expansion/improvement project, which would help keep costs comparatively low for alignment and construction.

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## PROPOSED TRAIL ROUTE MAPS

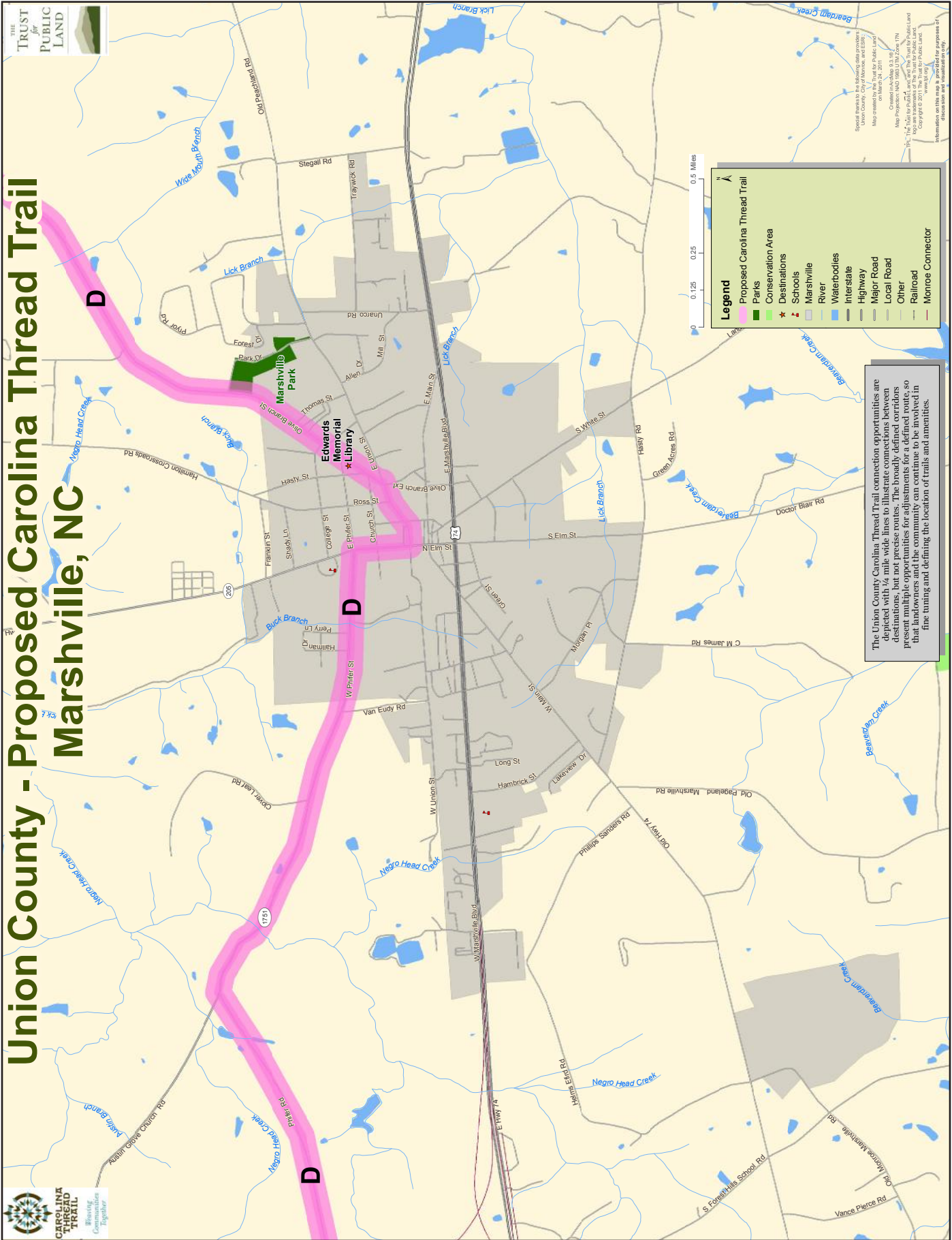
The maps on the following pages provide a detailed representation of the proposed routes in Union County. The product of extensive public input and community involvement, these maps articulate Union County’s vision for a countywide and regional trail system.

Map 2. Indian Trail



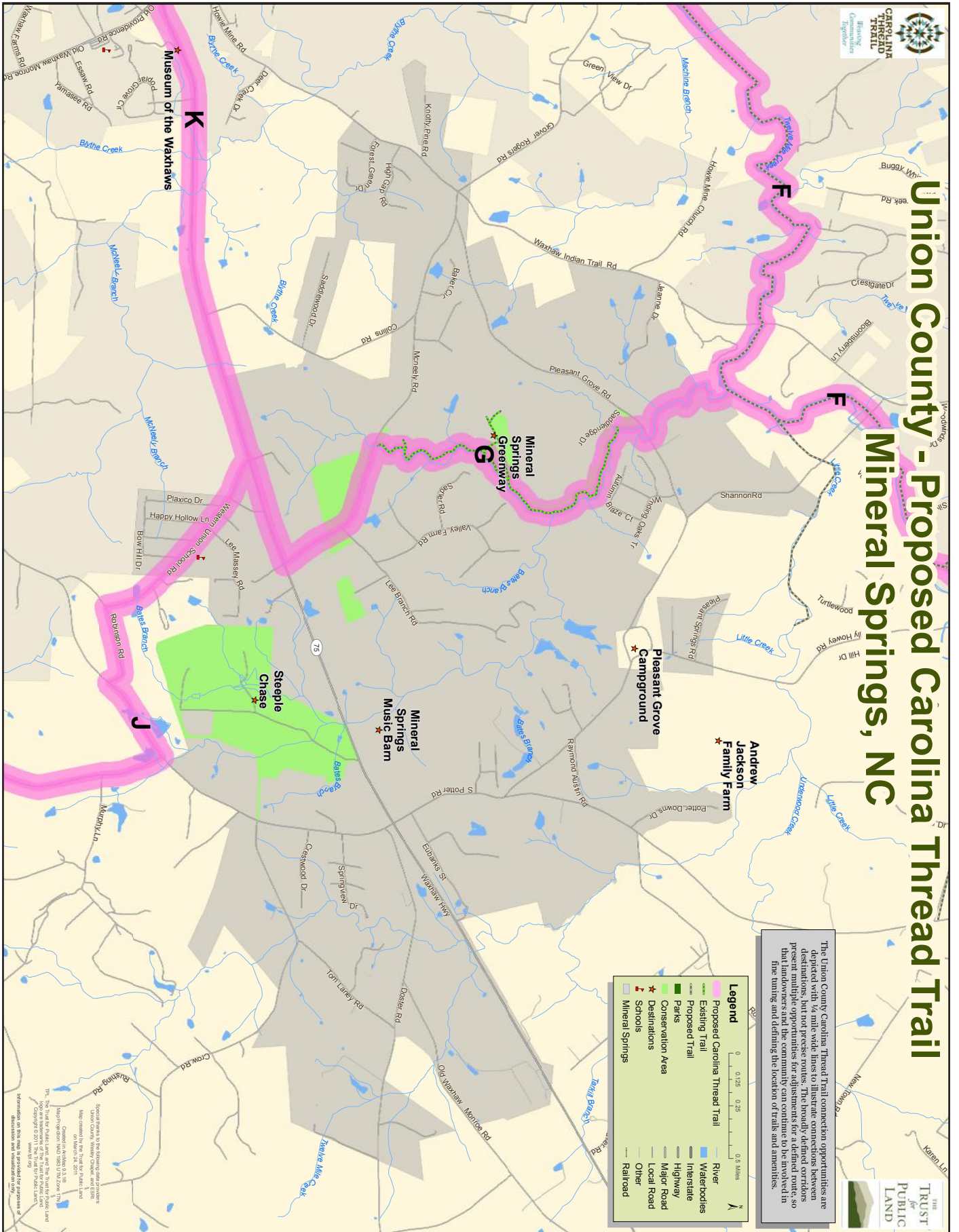
Map 3. Marshville

# Union County - Proposed Carolina Thread Trail Marshville, NC

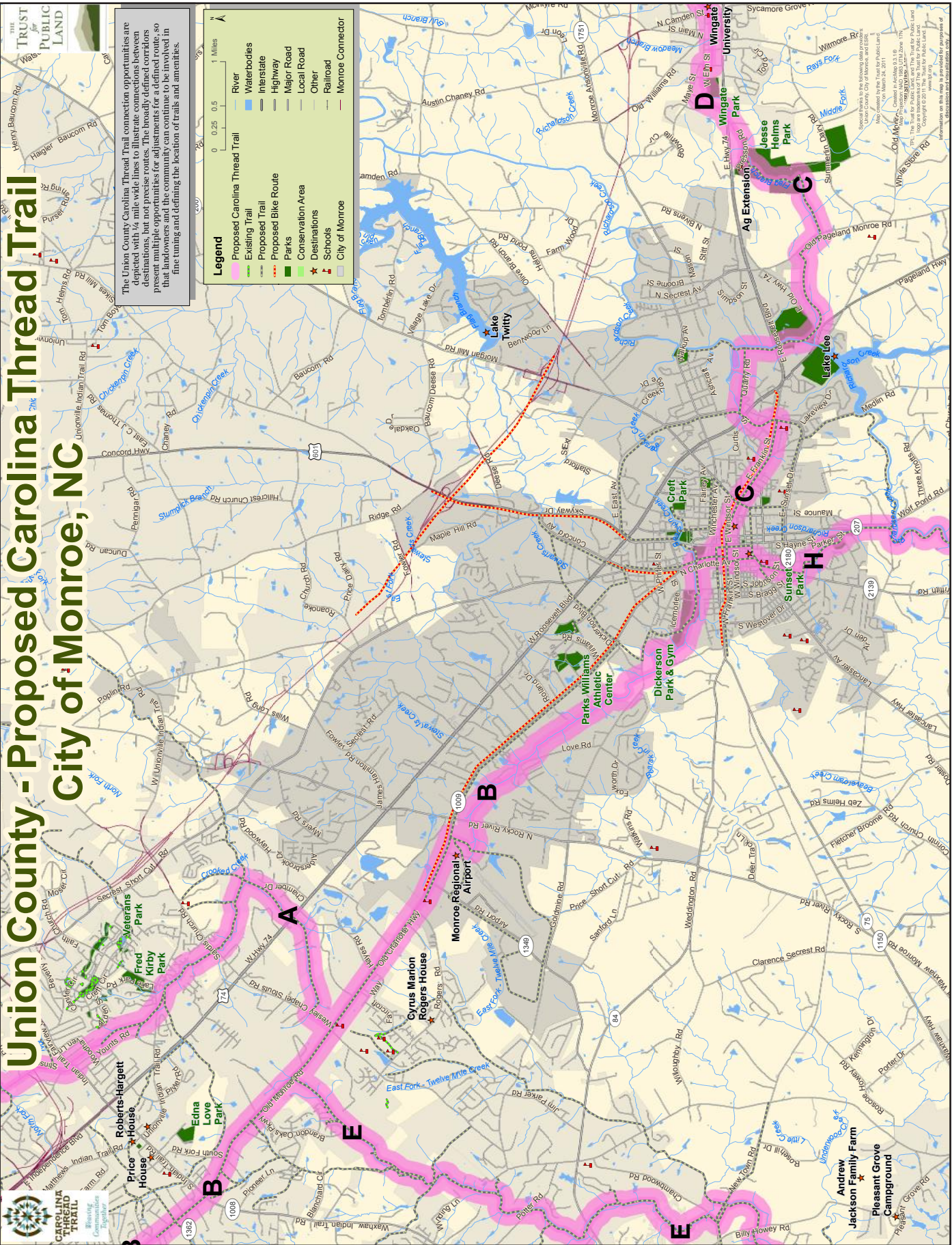




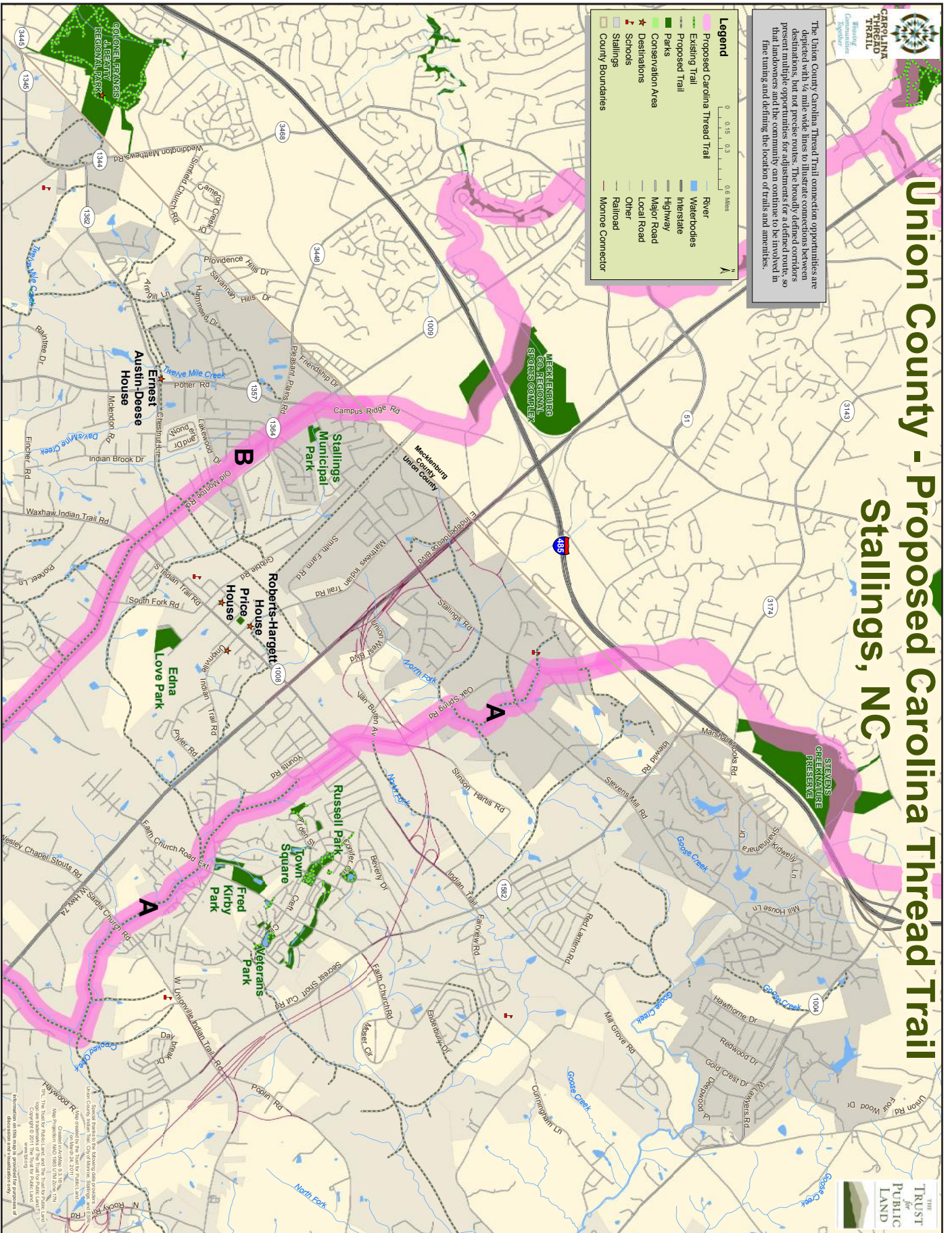
Map 4. Mineral Springs



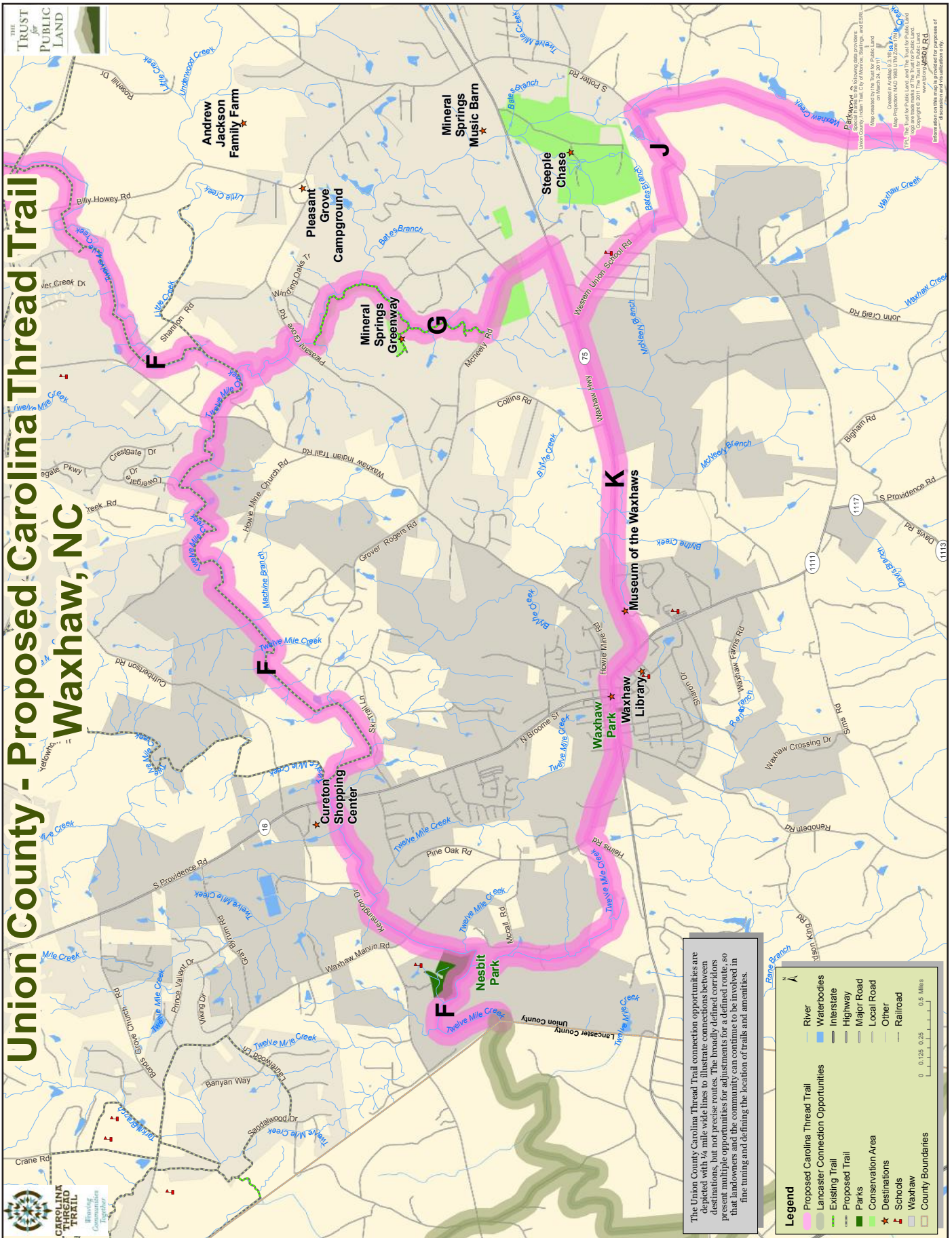
# Union County - Proposed Carolina Thread Trail City of Monroe, NC



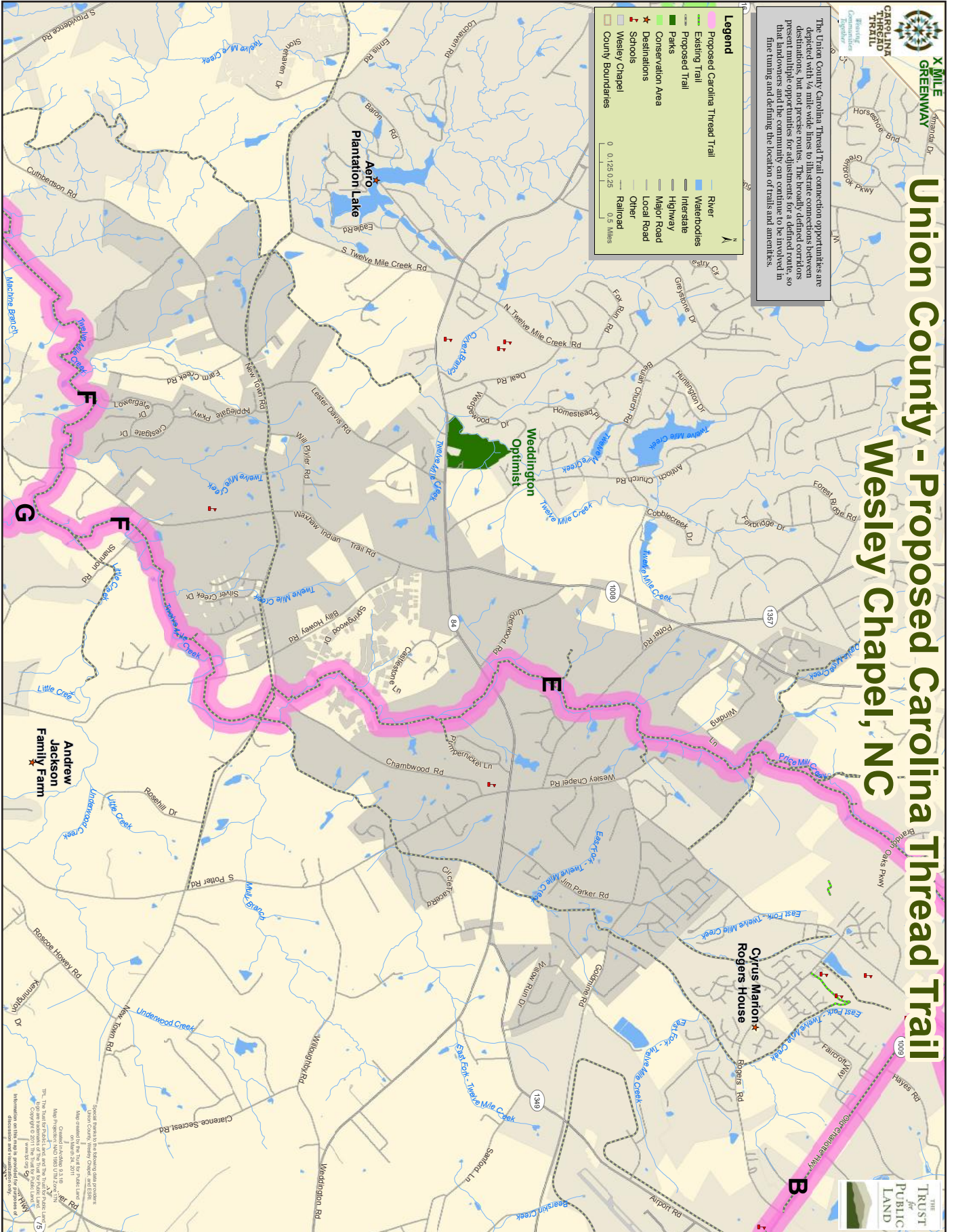
Map 6. Stallings



Map 7. Waxhaw

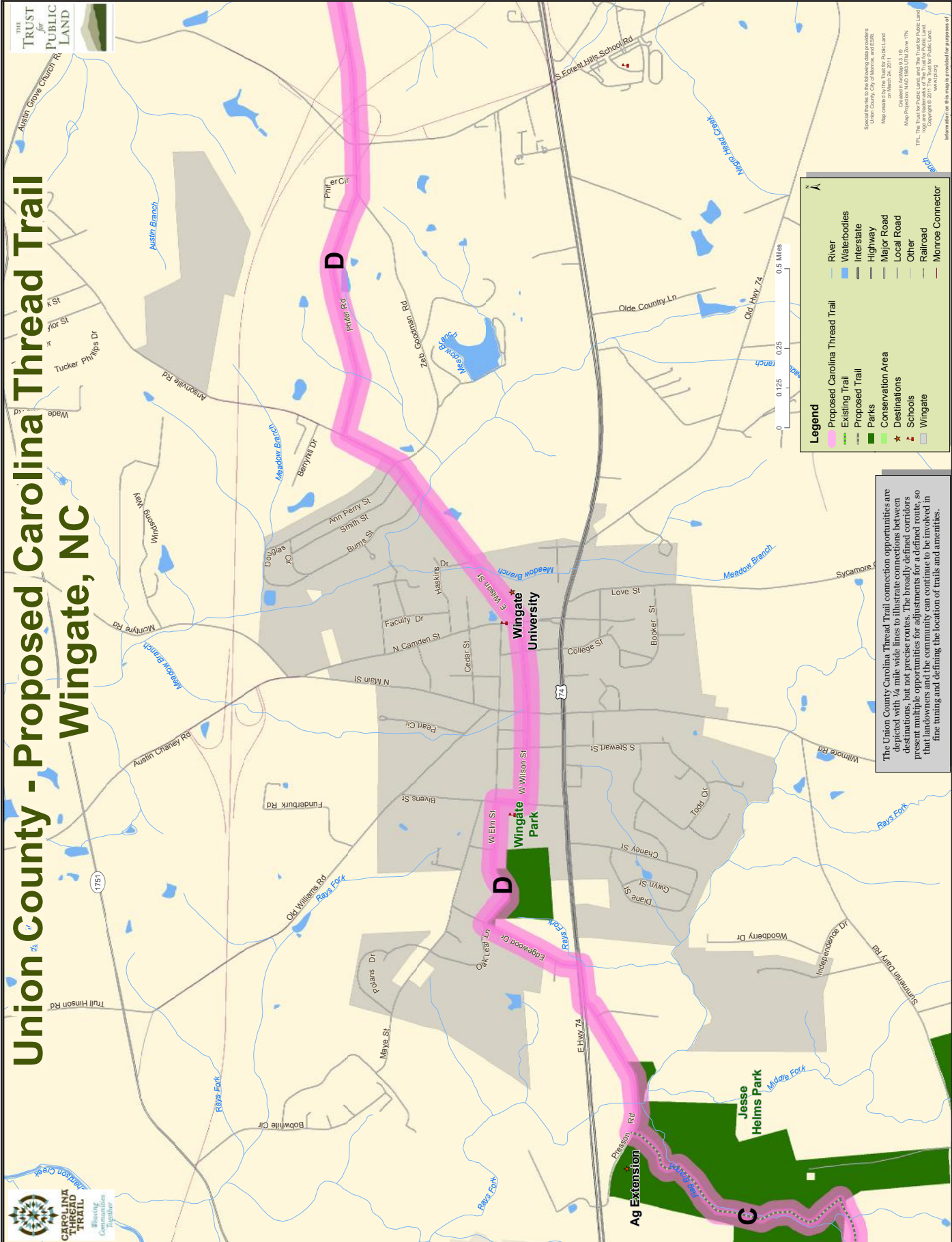


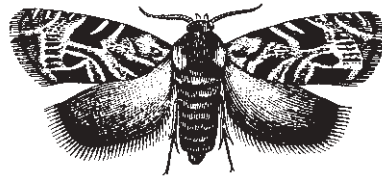
Map 8. Wesley Chapel



Map 9. Wingate

# Union County - Proposed Carolina Thread Trail Wingate, NC





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## CHAPTER 5. RECOMMENDED ACTIONS FOR IMPLEMENTATION

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*Photo by Nancy Pierce*

The trail routes for the Union County CTT are proposed, which means it is up to residents, organizations, and local and county governments to help realize the vision they were so instrumental in creating. The action plan is long in scope and vision—the creation of trails will take a sustained and concerted effort over the next 20 years. Yet it also requires a sense of immediacy in order to build on the momentum created by the CTT planning process in the county. Utilizing a variety of organizational and funding opportunities, CTT stakeholders can use these action steps, in conjunction with the Master Plan, as a “green” print to guide the CTT along to fruition.



**Union County CTT Master Plan Action Steps**

<i>Step</i>	<i>Actions</i>	<i>Timeframe</i>
1	<b>Adopt the CTT Master Plan.</b>	1 year
2	<p><b>Encourage the incorporation of this plan by the county and local governments as an integral part of local comprehensive planning and land use planning efforts.</b></p> <ul style="list-style-type: none"> <li>a. Create greenway-specific recommendations in all future planning efforts when applicable.</li> <li>b. Specifically reference this plan in all future planning efforts that impact greenway development.</li> <li>c. County or local jurisdictions shall inform the Carolina Thread Trail and volunteer trail easement program (see 4c. below) of any development projects that could have impact on the creation of trails or greenways.</li> </ul>	1–3 years
3	<p><b>Build public support.</b></p> <ul style="list-style-type: none"> <li>a. Establish a “Friends of the Carolina Thread Trail” organization.</li> <li>b. Develop a trail identity for Union County (image or concept).</li> </ul>	1–2 years
4	<p><b>Develop a minimum of 1.5 miles of greenways each year for the next 10 years and a minimum of 3 miles of greenways each year thereafter.</b></p> <ul style="list-style-type: none"> <li>a. Develop corridor specific plans for the top three priority corridors: the Stallings to Indian Trail route, the Indian Trail to Wesley Chapel route, and the route from Mecklenburg County to Monroe.</li> <li>b. Leverage volunteers, private and public partnerships, and grant money to help build and open these trails.</li> <li>c. Create a volunteer trail easement program to capture future trail easements from willing landowners prior to development.</li> </ul>	20 years
5	<p><b>Strategically pursue trail projects to maximize results and minimize costs.</b></p> <ul style="list-style-type: none"> <li>a. Work with local agencies and private landowners to secure trail easements and access to green space for trail connections.</li> <li>b. Pursue funding for trail projects.               <ul style="list-style-type: none"> <li>i. Partner with nonprofits, CTT, and cooperative government agencies on funding applications.</li> <li>ii. Apply for corridor design grants from the CTT that provide funds to conduct detailed corridor design studies on the priority segments highlighted in this plan.</li> <li>iii. Apply for Parks and Recreation Trust Fund (PARTF) matching funds from the state to help acquire, develop, and build priority greenway segments highlighted in this plan.</li> <li>iv. Apply for a National Recreational Trails Program grant through the state of North Carolina to fund new greenway construction along the priority corridors.</li> <li>v. Coordinate with North Carolina Department of Transportation (NCDOT) and the Rural Planning Organization for opportunities to fund and develop the CTT routes.</li> <li>vi. In coordination with CTT and TPL, identify specific greenway projects that could be eligible for NC Clean Water Management Trust Fund and Land and Water Conservation Fund grants and apply accordingly.</li> </ul> </li> <li>c. Adopt incentives for private landowners and developments that set aside land for greenway uses.</li> <li>d. Coordinate with other trail development efforts in the region.</li> <li>e. Where grant requirements or construction in conjunction with another project makes construction of a lower-priority trail project possible, pursue funding sources for that trail project regardless of priority.</li> <li>f. Publish a public report documenting the status and ongoing actions of all trail projects at the end of each year.</li> </ul>	1 year–ongoing
6	<p><b>Ensure that the project list for the CTT Master Plan for Union County is current and relevant.</b></p> <ul style="list-style-type: none"> <li>a. Review and update the CTT Master Plan as needed, within 10 years, with input from the CTT Steering Committee, local advocacy groups, and land use agencies.</li> <li>b. Share the updated CTT Master Plan project list with the public and the municipalities.</li> </ul>	Within 10 years





## CHAPTER 6. COSTS AND FUNDING OPTIONS

The success of the CTT in Union County is likely predicated on minimizing the cost of trails and tapping into the wealth of funding opportunities available for trail projects. This chapter provides an overview of potential costs and funding options.

### COSTS

#### Land Acquisition

Total costs of capital improvement projects include the cost of land acquisition. Avenues of acquisition available to municipal governments include donations, purchase, and developer contributions. Flexibility and creativity will be required to minimize acquisition costs, so any one of these methods may be combined when feasible.

#### Trail Construction

A variety of factors impact the cost of trail construction: surface materials, labor, signage, and ancillary items from benches to garbage cans. In turn, the amount of materials and labor will depend on intended trail use, the amount of use the trail might receive, and funds available. The three most common trail construction materials are granite screening, asphalt, and concrete. The prices of the each material are subject to fluctuation depending on transportation, energy costs, and other factors related to regional and global supply and demand.

#### Operation and Maintenance (O&M)

O&M costs vary depending on community expectations but ultimately entail staffing, management, and security costs. With careful planning, the CTT can be maintained in a variety of ways to help reduce the overall costs.

Savvy trail planning and design can reduce long-term O&M investments. Cost saving should be a part of any design plan while still in a preliminary stage. Best practices include:

- Reviewing preliminary site plans by staff responsible for trail maintenance so they can offer suggestions and guidance and have their voices heard from the beginning;
- Writing an operation and maintenance plan when initial design plans are presented, allowing staff to analyze staffing levels, determine the most appropriate maintenance standards, develop potential operating budgets, and look for ways to involve partners in trail maintenance; and
- Deciding, during the design phase, the level of maintenance the managing agency can afford, thus allowing the designers the opportunity to make adjustments in material selection, ancillary facilities, and size of parking lots, as applicable.

As in the case of land acquisition, there are several possible O&M arrangements. For example, a single government agency could provide all O&M for the trail regardless of where it runs in the county. On the other hand, each government unit with a trail in its corporate limits could be responsible for its own O&M within those limits. Another approach could be to contract, through a bidding process, trail management to a private land management firm. While each option would incur management costs, savings could be realized through making extensive use of volunteers, establishing an “adopt a trail” program, and special projects undertaken by scouts or other civic-minded groups.



### A Cost Illustration

Based on a corridor study of the Lower Catawba River in York County, South Carolina, the following estimates provide a ballpark figure, including labor, for costs involved with trail construction.

**Table 6. Trail Construction Cost Estimates**

Nature trail	\$4/ft
Paved trail	\$130/linear foot (LF)
8-foot sidewalk, curb, and gutter	\$15.39/LF
5-foot bike lanes (2 sides)	\$21/LF
Stream crossings	\$150–\$235/ft
Pedestrian bridge	\$1,200–\$1,700 LF

Based on these estimates, the following illustration provides a very rough example of the potential cost of a trail segment. A 1-mile trail that traverses a stream and requires a pedestrian bridge could cost between \$36,120 and \$42,820 to construct, including labor but excluding signs and other ancillary items (e.g., garbage cans).

**Table 7. Trail Construction Cost Illustration**

Feature	Cost per unit of length	Example length	Total Costs
Nature trail	\$4/ft	1 mile (5,280 ft)	\$21,120
Stream crossings	\$150–\$235/ft	20 ft	\$3,000–\$4,700
Pedestrian bridge	\$1,200–\$1,700 LF	10 LF	\$12,000–\$17,000
<b>Total</b>			<b>\$36,120–\$42,820</b>

### FUNDING

A variety of potential funding sources are available to help pay for the Carolina Thread Trail in Union County, including private, local, state, regional, and federal funding programs.

### Private

Land trusts are valuable advisors and facilitators when pursuing conservation funding opportunities for trail projects. Land trusts are nonprofit organizations that assist landowners seeking to conserve their land, often through the use of conservation easements or land donations. In Union County, the Catawba Lands Conservancy, which serves as the lead agent for the Carolina Thread Trail, assists landowners with land conservation and can provide excellent advice regarding potential funding avenues. The Trust for Public Land, a national conservation organization, can also assist private landowners who wish to sell or donate their land for public parks, gardens, greenways, or watershed protection.

Private individuals may donate land or liquid investments, such as cash or stock, to a municipality or land trust. Donations to municipalities generally support the implementation of a capital improvement program discussed in more detail below. Private landowners may also choose to donate their land to a land trust, whereby the trust is responsible for protecting the land and donors permanently preserve their property and can receive substantial tax benefits.

Corporations and businesses are excellent partners for trail projects. Businesses that rely on natural resources or tourism have a stake in enhancing the recreation and conservation opportunities in Union County. Corporate donations, like individual donations, may be land or liquid investments, while corporate sponsorships often take the form of services, personnel volunteers, liquid investments, or land. Public-private partnerships can drive a trail project forward: municipalities and corporations can work together for funding. A sponsorship often involves marketing or



Photo by Nancy Pierce

recognizing the contribution of the corporation, creating positive publicity for the corporation and the project itself.

Private foundation grants depend on funding capacity and distribution requirements. While there are many foundations working in North Carolina, it will be necessary to identify foundation missions that align with CTT goals. Two potential examples include the Union County Community Foundation, which has an annual grantmaking program that addresses local needs and improve the lives of Union County citizens, and the Duke Energy Foundation, which offers grants that support conservation, training, and research around environmental and energy efficiency initiatives.

Organizations and individuals can also participate in a fundraiser or a campaign drive. Fundraisers require marketing to rally support and financial backing. Fundraising has the potential to increase public awareness, public education, and financial support needs.

### **Local**

The options for local public funding are presented in this section for discussion purposes only, and each community adopting this plan will make its own determination on how and when it chooses to fund trail development with public dollars. Generally, there are three primary types of revenue sources available to local governments in North Carolina to pay for trails: discretionary annual spending, creation of dedicated funding streams, and debt financing. The financing options utilized by a community will depend on a variety of factors, such as taxing capacity, budgetary resources, voter preferences, and political will. The local public funding options available to Union County are listed in Table 8 and described below.



**Table 8. Common Local Conservation Financing Sources in North Carolina**

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

Bond issues are one option for public financing of local capital improvements. A bond issue provides up-front funds that allow for the immediate purchase of land or conservation easement and distributes the cost of acquisition over time so that future beneficiaries also share in the cost to acquire land. A general obligation (GO) bond could provide revenue for the county, though it would mean adding to Union County’s existing debt.<sup>61</sup>

Alternatively, a local government could choose to contribute to a capital improvement project using existing property tax revenue or request a capital budget increase. The property tax is the largest revenue source for many local jurisdictions in North Carolina. There is no enabling authority by which a portion of the tax may be dedicated for trails, so expenditures depend on the annual appropriations process.<sup>62</sup>

At the municipal or county level, another option for raising capital improvement dollars for trails is creating a park/recreation impact fee program. Although uncommon in North Carolina, impact fees are sometimes used by local governments in other states to help defray costs of new roads, water and sewer treatment, schools, parks, and other infrastructure necessitated by new development. Under this type of program, a fee is charged against new development to generate revenue to pay for the particular type of capital improvement. For example, Chatham County, North Carolina, has both a Recreation Impact Fee and an Education Facilities Impact Fee.<sup>63</sup> Note that this option would require special legislation from the General Assembly of North Carolina.



The county could also levy a land transfer tax (up to 0.4 percent) or a local sales tax (0.25 percent) to be for operations and maintenance as well as capital projects.<sup>64</sup> A county may not enact both. Small increases with respect to either option can create substantial funding, however, both options can also be unpredictable sources of revenue.



Photo by Ray Williams

### State

Most statewide conservation funding comes through four major trust fund programs. Two of the funds—the Clean Water Management Trust Fund and the Agricultural Development and Farmland Preservation Trust Fund—are typically financed from general state appropriations. The other two—the Natural Heritage Trust Fund and the Parks and Recreation Trust Fund—are financed by the real estate transfer tax and personalized license plate sales. The tax levied is \$2 per \$1,000 of the value of the property. Of every two dollars generated from the real estate transfer tax, one dollar goes to conservation, the other to local governments. The dollar for conservation is split between the Parks and Recreation Trust Fund and the Natural Heritage Trust Fund.

The Natural Heritage Trust Fund (NHTF) (est. 1987) provides funding to select state agencies for the acquisition of important natural areas to conserve the state's ecological diversity and cultural heritage, and to inventory the state's natural heritage resources.<sup>65</sup> A 12-member appointed Board of Trustees and the Natural Heritage Program award grants. Of every dollar for conservation received from the real estate transfer tax, 25 cents goes to the Natural Heritage Trust Fund. Only state agencies may apply for these grants.

The Parks and Recreation Trust Fund (PARTF) (est. 1994) provides dollars not only for land acquisition and capital improvements in the state's park system (65 percent of fund), but also for local government park and recreation purposes (30 percent of fund) and for increasing the public's access to beaches (5 percent of fund). Local government grants require a dollar-for-dollar match. To apply for a PARTF grant, local governments must complete an application detailing such aspects of the project as (1) basic facts and assurances, (2) justification for the project, (3) proof of site control, (4) project costs, (5) sources of local matching funds, (6) site plan and location map, (7) legal description of land and statements of value, and (8) environmental review. Local governments can request up to \$500,000 in assistance for each application.<sup>66</sup>

The North Carolina General Assembly established the Clean Water Management Trust Fund (CWMTF) in 1996 to help finance projects that specifically address water pollution problems, including the protection and conservation of watersheds through land acquisition.<sup>67</sup> The Clean Water Management Trust Fund provides grants to add riparian buffers and greenways for environmental, educational, and recreational benefits, among other things. In support of a million-acre conservation goal established in 2000, the General Assembly agreed to increase funding



for CWMTF to \$100 million per year (up from approximately \$30 million), beginning in 2003. CWMTF is administered by a 21-member, independent Board of Trustees and is housed for administrative purposes in the Department of Environment and Natural Resources (DENR).

Eligible grant applicants include (a) a state agency, (b) a local government or other political subdivision of the state or a combination of such entities, or (c) a nonprofit corporation whose primary purpose is the conservation, preservation, and restoration of North Carolina's environmental and natural resources. No match is required; however, a match is recommended and trustees may choose to fund projects at less than 100 percent of the application request. CWMTF funds about one-third of the grant requests that it receives.<sup>68</sup>

To apply for a CWMTF grant, local governments must complete an application form that will be evaluated based on how well the projects meet the program objectives.<sup>69</sup>

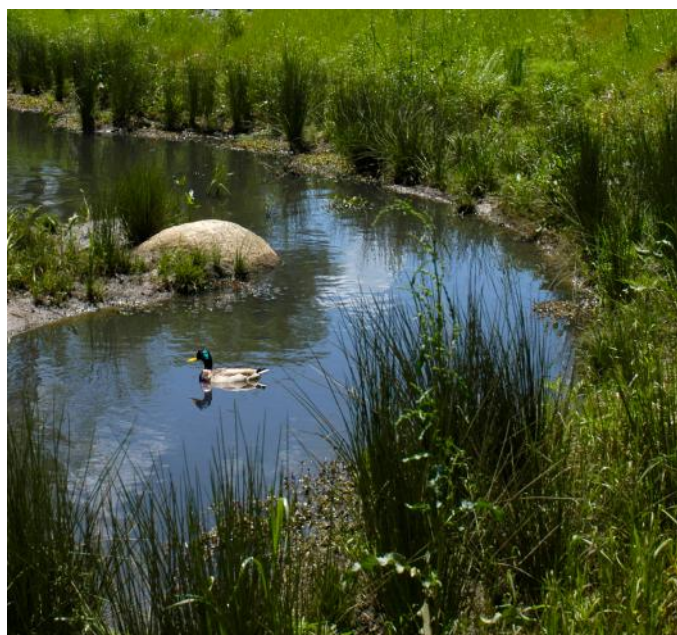


Photo by Nancy Pierce

The Farmland Preservation Trust Fund<sup>70</sup> was originally established in 1986, and in 2005, the legislature renamed the program the Agricultural Development and Farmland Preservation Trust Fund (ADFPTF). At that time the description was broadened to include three grant areas: conservation easements, agricultural agreements, and programs that develop sustainable or viable agriculture. While this program does not specifically address trail acquisition and development, it could possibly be helpful when linking areas of open space to a proposed greenway. The commissioner of agriculture administers the trust fund, and a 19-member advisory committee was established to help direct funds and the application process. Revenue is derived from annual allocations from the General Fund.<sup>71</sup>

Counties are eligible to apply for funding, and match requirements depend on various factors.<sup>72</sup> Nonprofit conservation organization applicants must match 30 percent of trust fund monies received from sources other than ADFPTF. To apply for a grant from ADFPTF, local governments must submit the following: (1) an application, (2) a budget narrative, (3) a contact list for funding sources, and (4) a financial affidavit.<sup>73</sup>

Union County and its cities and towns have had fairly good success in garnering state funds from North Carolina conservation trust funds. In particular, the State Parks and Recreation Trust Fund has awarded 12 grants in the county over the past decade totaling \$4.5 million (see Table 9). Such partnerships are an important component in leveraging funds for parks and conservation.

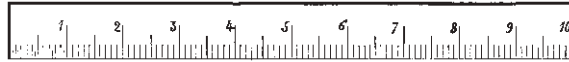


**Table 9. North Carolina Conservation Trust Fund Grants Awarded in Union County (1997–2008)**

<i>Year</i>	<i>Project</i>	<i>Amount</i>	<i>Fund</i>
1997	Union: Cane Creek Park Cabins	\$75,000	Parks and Recreation Trust Fund
2000	Lake Park: Lake Park Community Recreation Project Wingate: Wingate Town Park	\$79,995 \$250,000	Parks and Recreation Trust Fund Parks and Recreation Trust Fund
2002	Weddington: Hunter Farm	\$24,000	Agricultural Development and Farmland Preservation Trust Fund
2003	Stallings: Stallings Municipal Park Monroe: Parks Williams Athletic Complex Union: Cane Creek Park	\$30,000 \$249,202 \$250,000	Parks and Recreation Trust Fund Parks and Recreation Trust Fund Parks and Recreation Trust Fund
2004	Wingate: Wingate Community Building Monroe Parks Williams Athletic Complex–Phase II Union: Jesse Helms Park Land Acquisition and Development Union: Cane Creek Park Acquisition–Development, Acquisition, Renovation	\$142,658 \$250,000 \$250,000 \$250,000	Parks and Recreation Trust Fund Parks and Recreation Trust Fund Parks and Recreation Trust Fund Parks and Recreation Trust Fund
2005	Stallings: Stallings Municipal Park	\$34,300	Parks and Recreation Trust Fund
2006	Wingate: WW/Sewer Repair, Ray’s Branch	\$100,000	Clean Water Management Trust Fund
2007	Mineral Springs: Acq/Greenway Project, Wolf and Bates Branches Wingate: WW/Sewer Rehabilitation, Ray’s Branch	\$307,000 \$1,731,000	Clean Water Management Trust Fund Clean Water Management Trust Fund
2008	Union County	\$500,000	Parks and Recreation Trust Fund
	<b>TOTAL</b>	<b>\$4,523,155</b>	

**Federal**

Appendix D lists various funding programs administered by federal agencies. The programs vary in how funds are delivered and distributed. For example, some program funds are directed to the states, which decide what projects to fund, while other funds are granted by a federal agency through a competitive process.



## FOOTNOTES

[1] U.S. Department of Health and Human Services, *Physical Activity and Health: A Report of the Surgeon General* (Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996), p. 3. <http://www.cdc.gov/nccdphp/sgr/pdf/sgrfull.pdf>.

[2] The Trust for Public Land, *The Economic Benefits of the Park and Recreation System of Mecklenburg County, North Carolina* (Washington, DC: The Trust for Public Land, Center for City Park Excellence, 2010), pp. 3–4. [http://www.tpl.org/content\\_documents/ccpe\\_Mecklenburg\\_county-report1.pdf](http://www.tpl.org/content_documents/ccpe_Mecklenburg_county-report1.pdf).

[3] Union County, *2025 Comprehensive Plan: Planning Board Review Draft* (July 2009), p. 48 (hereinafter Union County CP).

[4] Because President Jackson was born before the determination of the Carolina borders, there is some disagreement about whether he is a native son of Union County or Lancaster County, South Carolina.

[5] Belk, History. [http://www.belk.com/AST/Misc/Belk\\_Stores/About\\_Us/History.jsp](http://www.belk.com/AST/Misc/Belk_Stores/About_Us/History.jsp).

[6] U.S. Census Bureau, *Census 2000 Redistricting Data (Public Law 94-171) Summary File, Table PL1*, and *2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1*.

[7] U.S. Census Bureau, *Census 2000 Redistricting Data (Public Law 94-171) Summary File, Table PL1*, and *2010 Census Redistricting Data (Public Law 94-171) Summary File, Table P1*.

[8] *Ibid.*; U.S. Census Bureau, *State and County QuickFacts*, <http://quickfacts.census.gov/qfd/states/37/37179.html>.

[9] Union County CP, p. 50.

[10] North Carolina Office of State Budget and Management, *County Densities: 2000–2030*.

[11] U.S. Census Bureau, Population Division, “Annual Estimates of Housing Units for Counties in North Carolina: April 1, 2000 to July 1, 2009” (June 2010).

[12] U.S. Census Bureau, Population Division, “Housing Unit Estimates for the 100 Fastest Growing Counties With 5,000 or More Housing Units in 2009: April 1, 2000 to July 1, 2009” (June 2010).

[13] U.S. Census Bureau., *State and County QuickFacts*.

[14] Union County CP, p. 51.

[15] *Ibid.*, p. 53.

[16] *Ibid.*

[17] CNN Money, [http://money.cnn.com/galleries/2009/moneymag/0906/gallery.bplive\\_jobgrowth.moneymag/10.html](http://money.cnn.com/galleries/2009/moneymag/0906/gallery.bplive_jobgrowth.moneymag/10.html) (accessed June 7, 2009).

[18] North Carolina Division of Agriculture and Consumer Services, Agricultural Statistics Division, *Summary of Commodities by County*, <http://www.agr.state.nc.us/stats/codata/index.htm> (accessed June 3, 2010).

[19] The percent decrease was calculated using statistics from the North Carolina Employment and Securities Commission and the Charlotte Regional Partnership.

[20] Charlotte Regional Partnership, Union County, *Business Location Profile*, [http://www.charlotteusa.com/documents/CharlotteUSA\\_UnionCo\\_Business\\_Location\\_Profile.pdf](http://www.charlotteusa.com/documents/CharlotteUSA_UnionCo_Business_Location_Profile.pdf) (accessed June 3, 2010).

[21] *Ibid.*

[22] The Charlotte Regional Partnership is an economic development region that consists of Alexander County, Anson County, Cabarrus County, Catawba County, Cleveland County, Gaston County, Iredell County, Lincoln County, Mecklenburg County, Rowan County, Stanly County, and Union County.

[23] See U.S. Census Bureau, *MCD/County-To-MCD/County Worker Flow Files*, [http://www.census.gov/population/www/cen2000/commuting/files/2kresmcd\\_NC.xls](http://www.census.gov/population/www/cen2000/commuting/files/2kresmcd_NC.xls).

[24] “One of the most visible side effects of the tremendous growth in Union County is an increase in traffic and its resulting congestion, delays, and safety concerns.” Union County CP, p. 72.

[25] *Ibid.*, p. 8.

[26] *Ibid.*, p. 9.

[27] Union County Partnership for Progress, *2008–2009 Annual Report*, p. 2.

[28] Union County Chamber of Commerce, *Business News 2009*, <http://www.unioncountyeoc.com/bn-2009.html>.





- [29] Natural Resources Conservation Service, *Soil Survey of Union County, North Carolina* (Washington, DC: U.S. Department of Agriculture, January 1996), p. 2.
- [30] *Union County CP*, p. 47.
- [31] CNN Money, [http://money.cnn.com/galleries/2009/moneymag/0906/gallery.bplive\\_jobgrowth.moneymag/10.html](http://money.cnn.com/galleries/2009/moneymag/0906/gallery.bplive_jobgrowth.moneymag/10.html).
- [32] *Union County CP*, p. 52.
- [33] North Carolina Division of Agriculture and Consumer Services, Agricultural Statistics Division, *Summary of Commodities by County*, <http://www.agr.state.nc.us/stats/codata/index.htm>.
- [34] *Union County CP*, p. 52.
- [35] North Carolina Natural Heritage Program, *Heritage Data*, <http://www.ncnhp.org/Pages/heritagedata.html>.
- [36] South Carolina Department of Resources, *South Carolina Rare, Threatened and Endangered Species Inventory* (last updated January 2006).
- [37] *Union County CP*, p. 82.
- [38] *Ibid.*
- [39] North Carolina Department of Environment and Natural Resources, Division of Water Quality, *Waterbody Report—Union County*, <http://portal.ncdenr.org/web/wq/ps/csu/classifications>.
- [40] *Union County CP*, p. 87.
- [41] *Village of Indian Trail, Comprehensive Plan* (2005), pp. 2–11.
- [42] *Village of Lake Park, NC Reference Desk*, <http://www.lakeparknc.gov/Home/VillageReferenceDesk/tabid/78/Default.aspx>.
- [43] *Town of Marshville website*, <http://marshvillenc.govoffice2.com/>.
- [44] *Town of Mineral Springs*, [http://www.mineralspringsnc.com/Mineral\\_Springs\\_Greenway\\_Sneak\\_Peek.htm](http://www.mineralspringsnc.com/Mineral_Springs_Greenway_Sneak_Peek.htm). Additional information obtained from email correspondence with Vicky Brooks, town clerk, October 12, 2010.
- [45] *City of Monroe, Downtown Master Plan* (2008), p. 24.
- [46] *Town of Stallings, Park Master Plans*, [http://www.stallingsnc.org/index.asp?Type=B\\_BASIC&SEC={D070FC7F-D6AC-46D0-AF2E-B322F0173BFF}](http://www.stallingsnc.org/index.asp?Type=B_BASIC&SEC={D070FC7F-D6AC-46D0-AF2E-B322F0173BFF}).
- [47] *Village of Wesley Chapel, Village of Wesley Chapel Comprehensive Parks & Recreation Plan* (Fall 2009), p. 24.
- [48] *Town of Wingate, Parks and Recreation*, <http://wingate.govoffice.com>.
- [49] For more information on the background and methodology of the survey, see Appendix B.
- [50] *Union County CP*, p. 87.
- [51] *Town of Indian Trail, Indian Trail Comprehensive Pedestrian Plan* (2009), pp. 1–2.
- [52] *Town of Marshville, Land Use Plan* (2004), p. 6.
- [53] *Village of Marvin, Park and Greenway Master Plan* (2008), pp. 1–3.
- [54] *City of Monroe, Greenway Master Plan* (2005), introduction.
- [55] *Town of Mineral Springs, Vision Plan* (2006), *Land Use Plan*.
- [56] *Town of Stallings, Pedestrian Plan* (2008), pp. 9, 11–12.
- [57] *Town of Waxhaw, Comprehensive Plan 2030* (working draft, 2008), p. 29. As noted in *Western Union County Local Area Regional Transportation Plan* (November 2009), private greenways are not regulated or required by the town.
- [58] *Village of Wesley Chapel, Village of Wesley Chapel Comprehensive Parks & Recreation Plan* (Fall 2009), pp. 4, 11–12.
- [59] *Wingate 2020: Comprehensive and Downtown Plan*, <http://wingate2020.squarespace.com/aboutwingate/>.
- [60] Low-income households are defined as households with combined income of less than \$35,000 per year.
- [61] *Union County has capacity under existing debt limits to issue general obligation bonds for parks and trail purposes. As of FY 2010, Union County had roughly \$553 million in debt applicable to the debt limit, \$450.2 million of which is general obligation debt. This leaves about \$1.2 billion in remaining*



bonding capacity under legal state debt limits. The county's general obligation bond rating is strong at Aa1/AA/AA+ by Moody's Investors Services, Standard & Poors, and Fitch. Union County FY2010 Comprehensive Annual Financial Report. As an illustration, a \$10 million bond would add roughly \$802,000 to the county's annual debt service and would cost the average homeowner approximately \$6 per year in additional property taxes over the life of the bond; this would add 0.0035 mills to the county's existing property tax rate. Assumes 20-year bond at 5.0% interest rate; 2010 Total Assessed Valuation (AV) = \$22.9 billion; Median home value \$179,351 (<https://edis.commerce.state.nc.us/docs/countyProfile/NC/37179.pdf>). Assumptions for bond cost calculation include the following: (1) the entire debt amount is issued in the first year and payments are equal until maturity, (2) 20-year maturity and 5 percent interest rate, (3) the property tax estimates assume that the jurisdiction would raise property taxes to pay the debt service on bonds; however, other revenue streams may be used, (4) the cost per household represents the average annual impact of increased property taxes levied to pay the debt service, (5) the estimates do not take into account growth in the tax base due to new construction and annexation over the life of the bonds, and (6) the jurisdiction's officials, financial advisors, bond counsel, and underwriters would establish the actual terms of any bond.

[62] As an illustration, a one-cent increase in the property tax levy could generate roughly \$2.3 million a year at a cost to the average homeowner of approximately \$18. Total taxable property = \$22.9 billion and median home value = \$179,351. <https://edis.commerce.state.nc.us/docs/countyProfile/NC/37179.pdf>.

[63] For more information visit the County of Chatham's website, <http://www.chathamnc.org/Index.aspx?page=730>.

[64] The North Carolina Association of County Commissioners estimated that, based on values for 2007, Union County could generate approximately \$3.6 million from a \$0.25 local sales tax increase. At this tax rate, the average household would pay about \$42 per year. The amount for the estimated annual revenue is derived from calculations completed by the North Carolina Association of County Commissioners, [http://www.ncacc.org/documents/revenueauthority\\_073107.pdf](http://www.ncacc.org/documents/revenueauthority_073107.pdf).

[65] N.C. Gen. Stat. 5A §§113-77.6 to -77.9.

[66] More information on application requirements is available on the state website, [http://www.ncparks.gov/About/grants/partf\\_forms.php](http://www.ncparks.gov/About/grants/partf_forms.php).

[67] N.C. Gen. Stat. 18 §113A.

[68] The CWMTF is facing potential budget cuts in the 2011 legislation session.

[69] More information on application requirements is available on the state website, <http://www.cwmtf.net/acqbuffers.htm>.

[71] N.C. Gen. Stat. 61 §§ 106 745 to -749.

[72] The ADFPTF is facing potential budget cuts in the 2011 legislation session.

[72] Match requirements are as follows: (1) Tier One Enterprise Counties: (a) with a County Farmland Protection Plan must submit a 0 percent match, or (b) without a County Farmland Protection Plan must have a 30 percent match. (2) Tier Two or Three Enterprise Counties: (a) with a County Farmland Protection Plan must submit a 15 percent match OR (b) without a County Farmland Protection Plan must submit a 30 percent match.

[73] More information on application requirements is available on the state website, <http://ww>

## APPENDICES

## Appendix A: Steering Committee Meeting Summaries



### Carolina Thread Trail- Union County Steering Committee Minutes

May 6, 2010 6:00 PM

#### Members Present

Erin Kilpatrick	Doug Britt	Bill Whitley
Ray Williams	Lisa Stiwinter	Travis Morehead, Carolina Thread Trail
Katie Ross	Katie Reeves	Kelley Hart, The Trust for Public Land
Joshua Langen	Brian Olin	Saxby Chaplin, The Trust for Public Land
Jordan Cook	Marnie Holland	

#### Topics of Discussion

##### Welcome

Travis Morehead welcomed the group. He announced that Union County and participating municipalities have received the planning grant from Carolina Thread Trail for \$60,000 (that has a local match requirement of \$6,000). He asked that steering committee members think region-wide as we undertake this process, as not every town will have a CTT trail segment – the CTT is intended to be the “interstate” and can link up the “highway system” of local trails. Katie Reeves, Steering Committee Chair, made welcoming remarks, thanking the City of Monroe for hosting the meeting.

##### Project overview

Kelley Hart reviewed the overarching goals and objectives of Greenway Master Plan Process:

- a. Develop action plan for Carolina Thread Trail in Union County and with participating municipalities
- b. Develop concept plan for broader trail system throughout county
- c. Produce CTT Master Plan and marketing brochure by March 2011

She asked steering committee members, as part of a round robin of introductions, to explain what they would like the plan to accomplish and what overarching issues the plan should address. Here are the responses [none have been deleted, but they have been re-ordered]

1. What would you like the plan to accomplish? [Items in bold were mentioned by more than one person.]

- Building a trail system – keep that goal in mind at all times
- Connect natural resources throughout county
- **Potential to bridge gaps between east and west of county**
- Create a regional identity
- **Trails/greenways need to be *accessible* for all types of users**
- Marketing plan needs to be able to convince landowners that this is a good idea
- Need to appeal to wide/diverse audience – townspeople and county residents
- **Win people over to the idea of trails/greenways – we need some strategies for doing this!**
- Include a cost-benefit analysis making the case for “why”

2. What overarching issues/opportunities would you like the plan address or consider: (Countywide and/or community level?)

Concerns that some residents have that will need to be addressed:

- People will want us to justify expenditures for trails/greenways
- There are some concerns about crime and privacy (e.g. NIMBYs)
- County residents – some concerns about “takings”

Ideas for addressing concerns:

- Discuss how safety has worked in other communities – need details about how it is made and kept safe.
- Need examples of how land-use regulations interplay with greenway opportunities. Regulations that can support safety.
- Convincing citizens that we’re going to take their input into consideration and try to make it work for everyone

Constituents/audiences that need to be kept in mind:

- Horses are a vital element. Union C. has more horses than any other in the state – need to use this for promoting the trail and consider when thinking about how to build the trail. Accommodate equestrian uses on trails
- How to mesh urban and rural environment, communicating between two
- There are some issues around long-time residents v. newer residents
- Different towns will have different interests, e.g. range of access issues

Other: Need to think region-wide as we plan! Put down individual town/city “hats”

**Project timeline and timing of surveys**

Kelley reviewed the timeline handout (see attached), and mentioned that it's possible this schedule will be altered after we get started, but that we will try to follow it as much as we can.

The group decided to have the telephone survey during the first round of public input. Ray and Josh volunteered to assist by reviewing and commenting on the draft survey questions. There was some discussion about how to adequately represent the varied viewpoints across the county, given the fact that the majority of the population lives in the western part of the county but there are significant landholdings in the eastern portion of the county, and we are interested in hearing the views of both. There was a request that we consider sampling a bit more in the eastern portion of the county than the census data numbers would suggest, making sure that those views are captured. There was also a request that the survey include background questions so we can understand the audience that has participated, including questions that get at what town they are from. Other ideas: subtly ask about affiliations, length of residence, size of property owned (find a nice way to ask this), if possible.

Next the group discussed when to have an on-line survey, as there is one built into the planning process budget. They decided to wait until some groundwork has been done (the first round of public listening sessions and telephone survey), to determine if an on-line survey is needed to gather more input on those topics or if it would best be used during the second round of public input.

There were a number of other ideas related to the online survey:

- If people answer "no," explore why they don't want something. Have the telephone survey and on-line survey set up to have different questions or format.
- Only one survey per computer.
- How to get word out about on-line survey: send link to "sunshine" lists.

### **Committee membership**

Kelley reviewed the role of the Technical Advisory Team, mentioning that the TAT comes up with alternate routes through the County based on the public input received and members' knowledge about on-the-ground opportunities/impediments. The TAT meets about 4 times in total over 4-5 months via webinar. Katie Reeves handed out a spreadsheet that included a list of TAT members (and indicated Community Outreach Team members) Ray Williams and Doug Britt noted that they would like to be added to the Technical Advisory Team.

We also reviewed the role of the Community Outreach Team. These folks will reach out to the local citizens and are responsible for energizing the citizens for greenway planning. We have planned a total of eight public meetings throughout the county – 4 will be held at the beginning of the process to gather public input and 4 later to review the draft plan. The Community Outreach Team is responsible for spreading the news of these meetings. Marnie and Lisa both volunteered for the Community Outreach Team, joining Shelley DeHart (COT Chair), Severin Jacobsen, Nancy Jacobsen, and Cheri Clark. This committee will meet soon to begin outreach for the upcoming public listening sessions.

### **Listening session planning**

Kelley explained the format that we'd like to use for the four listening sessions: start with the CTT 12-minute video, have a brief introduction on greenways, have a group discussion that includes some keypad voting, and then an opportunity to draw on maps. Kelley demonstrated how we can have keypad voting around potential important places by providing a list of categories of places (e.g. schools, towns, parks, etc.) and asking participants to vote on which is most important to connect. Steering committee members used keypads to answer a couple of other questions we might ask with keypad voting: have you ever been on a greenway? Rank in order which activity you would do on a greenway.

Then we brainstormed a number of ideas for locations/events that might be good places for seeking public input. Because of the nature of these public listening sessions (needing at least 15 minutes, but really wanting to capture folks' attention for an hour), a number of the ideas were ruled out, such as hosting one at an existing 4<sup>th</sup> of July festival, Cane Creek Park, or Waxhaw's First Friday event.

We decided to have the four public listening sessions between July 19 and 22<sup>nd</sup> and the following people volunteered to make inquiries about availability of these spaces on these dates and coordinate with Kelley by May 20 so that we can secure and announce the schedule.

- Katie Reeves: Ag Extension or Wingate - between Monroe and Wingate on 74. Consider pairing with an existing event there.
- Katie Ross: Museum of the Waxhaws (with elementary school for potential overflow)
- Katie Reeves: Stallings or Indian Trail or Hemby Bridge
- Jordan Cook: Weddington or Marvin (would be a school)

**Listening session outreach suggestions for the Community Outreach Team:**

1. Consider asking the communities that host local movie nights throughout the summer if they would show the 12-minute CTT video as a preview to their feature films. Note: We'd need to add a final slide that has the dates/times/locations of the public listening sessions.

2. Hand-out flyers at:

- 4th of July events: Waxhaw (7/3) or Indian Trail's event (7/3)
- farmer's markets
- movie nights, such as those in Stallings, Waxhaw and Monroe

Suggest about flyers – smaller, pocket size papers.

3. Consider utility bill insert

4. Email invitation that can be passed along to elected officials

5. E-vite that can be forwarded; facebook invitation.

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6. Local access channel/ Radio Station advertisement - WIXE 1190.

### **Current Conditions**

Meeting participants recommended we review the following plans as part of the current conditions endeavor:

- Marvin's park and greenways master plan is on their website [[www.marvinnc.org](http://www.marvinnc.org); Select council/boards; Select PRG; Scroll down to find the links to the plan.]
- Waxhaw 2030 Comprehensive Plan; LARTP; mainstreet economic development plan
- Wesley Chapel: LARTP; Village Masterplan; Parks and Rec Master Plan; Downtown Resolution. Note: Wesley Chapel is building their first park – they'll send location.
- Weddington: LARTP; Land-use Plan
- Monroe: Greenway/Bikeway Master Plan (Lisa will send); downtown master plan
- Indian Trail: Comprehensive Plan; Downtown Master Plan; Pedestrian Plan; Park and Greenway Master Plan; Bicycle Plan (underway)
- Union County Parks and Recreation Master Plan
- [Stallings Pedestrian Plan]

### **Next Steps**

- Two weeks: Katie Reeves, Katie Ross and Jordan Cook are firming up locations/times/dates for the listening sessions for the week of July 19-22. (lunchtime or evening meetings)
- Two weeks: Kelley will work on crafting an email to all steering committee members with consistent messaging about goal of the project and the process that steering committee members can use as talking points throughout this project.
- Four weeks: Community Outreach Team to meet and begin planning outreach for listening sessions.
- Six weeks: TPL will complete the current conditions report/chapter.
- Ten weeks: Steering committee members agreed to help get the word out through their networks and to attend the listening sessions. Kelley mentioned that we may need some folks to volunteer to help lead small group discussion, but she'll circle back as the dates get closer.
- The next Steering Committee meeting will not be until September, date TBD.



## Summary of Carolina Thread Trail- Union County Steering Committee Conference Call

September 14, 2010 10:00 AM

### Members Present

Doug Brtt	Jordan Cook	Katie Drye
Ray Williams	Vicky Brooks	Travis Morehead, Carolina Thread Trail
Katie Ross	Nancy Jacobsen	Kelley Hart, The Trust for Public Land
Joshua Langen	Nancy Franza (Stallings)	John Crotty, The Trust for Public Land
Severin Jacobsen	Marnie Holland	Bob Heuer, The Trust for Public Land

### Topics of Discussion

#### Welcome

Katie Drye welcomed the group. She explained that we have modified the schedule from our original workplan because we are still finalizing the contract between TPL and participating municipalities and the county for this project. She explained that all of the elected bodies have already approved participation, and they have approved the contract, but we are still awaiting signatures from two participants. Until the contract becomes finalized, we'll continue working towards our ultimate objectives but will hold back on particularly labor-intensive tasks (namely, another round of public input).

#### Impressions and information gained from July listening sessions and telephone survey

Kelley Hart thanked the steering committee for their outreach around the listening sessions in July and for their exceptional participation levels in the listening sessions. She shared the list of who came to

Steering Committee				
Attendees	19-Jul	20-Jul	21-Jul	22-Jul
Mary Jo Gollnitz				P
Marnie Holland	P	P	P	
Severin Jacobsen	P	P	P	
Nancy Jacobsen	P	P	P	
Joshua Langen	P			
Katie Reeves	P	P		P
Katie Ross		P		
Lisa Stiwinter				P
Ray Williams	P	P		P
Jordan Cook	P			
Anthony Burman	P			

which meetings (see chart) and expressed gratitude to the many members who attended listening sessions, helped with check-in, note taking, facilitation, and refreshments.

Then she explained the format for each of the listening sessions and reported generally on the attendance (as high as 34 for one meeting and as low as 16 for another). She shared the major findings, as follows, which we tracked by using keypad voting during the meetings:

- Question 1: How did you hear about this meeting? Word of mouth and newspaper were the most effective means of communication. We were able to recruit a handful of people at the Indian Trail Library.
- Question 2: Have you ever been on a greenway trail before? Nearly everyone had been on a greenway trail.

- Question 3: How important to you is the goal of creating more trails? Over 70% of respondents said the goal of creating more trails was very important. Over 85% of respondents said it was important (either very or somewhat).
- Question 4: How do you want to use trails now or in the future? Top 3 only. Top five uses were: walking/hiking, nature education, biking, seeing historic or cultural sites, and bird watching.
- Question 5: What do you want to connect with trails/greenways? Top 3 only. Top five connections were: existing trails, parks, towns, historic buildings/sites, and waterways.

Other key findings from discussion were:

- Most attendees thought the creation of parks and trails was very important
- Attendees identified many benefits of greenways and trails, including: sense of community, health, safety for walkers and bikers, educational opportunities, cultural connections, business opportunities. Underlying theme: higher quality of life
- Some attendees expressed concern about trails and greenways
  - Common issues: long-term maintenance, the potential for trespassing on private property, landowner liability, eminent domain, and public safety
- Popular destinations that attendees thought should be connected by trails: Wingate University; Cane Creek Park, Jesse Helms Park, and Colonel Francis Beatty Park; the Museum of the Waxhaws and JAARS; Steeplechase and Pleasant Grove Campground; the towns of Waxhaw, Mineral Springs, and Monroe; the Marvin Trail and the Mineral Springs Greenway; and Twelve Mile Creek
- Some participants did express reservations about the CTT in the northern (Near the Rocky River) and *eastern* parts of the county.

Next Kelley reviewed the slides from the telephone survey of 403 residents, randomly selected, yet basically reflecting of the demographics of Union County. Steering committee members received a copy of these results earlier this summer. Poll results related to destinations and potential routes will also be shared at the next Technical Advisory Team (TAT) meeting so that TAT members can consider them as they think about proposed destinations and routes.

Then steering committee members offered feedback around the listening sessions and the telephone survey. Ray Williams commented that he was surprised by the lack of participation in the listening sessions by those who ride horses. We discussed the fact that the telephone survey doesn't reveal how many equestrians participated and they may have been better represented there. Ray also mentioned that some voices got more emphasis than others in the listening sessions and one result may have been that negativity about trails in the north and west of the county may have been over-represented. Josh Langen commented that the technical advisory team has been working to come up with some options for trails in those areas.

### **Current Conditions Update**

John Crotty reviewed the existing conditions draft (circulated by email last week) that will be one chapter in the final master plan. He talked about the major themes and asked that ***all steering committee members provide comments to him by this Friday, September 17***. He can be reached at: [john.crotty@tpl.org](mailto:john.crotty@tpl.org) or 202-543-7552(ext 41). In particular there's a section about existing parks and trails and another about existing plans that has a break-down by local government. He'd like to make sure that the information contained there is accurate.

### Technical Advisory Team Meetings

Bob Heuer announced that he has been gathering all existing and proposed trail data layers, and TAT members have been helping. The TAT has met once already to look at the existing/proposed trails and to use listening session results to begin to sketch out potential corridors for trails and destinations to connect. Ray Williams requested to be included on the TAT. ***The next TAT call is on September 20 at 11:00 am. Only 4 TAT members have RSVPd so far, but all are encouraged to attend. The TAT members are now as follows: Bill Whitley, Richard Melton, Kevin Pressley, Katie R Drye, Mary Jo Gollnitz, Ray Williams, Vicky Brooks, Doug Britt, Tracy Frost, Katie Ross, Bud Stewart, Jordan Cook, Joshua Langen, and Dryw Blanchard.***

Those on this conference call set the dates and times for the ***two upcoming TAT calls: Tuesday October 5, 11- 12 and Tuesday, October 19, 11- 12. Please mark your calendars.*** Bob explained that these three calls are extremely important because through their duration all of the initial corridors that could be part of the plan will need to be fleshed out. (The next step will be sharing them with the public at open houses).

### Fall and Winter Schedule

Kelley explained that she, Katie Drye and Travis Morehead altered the schedule a bit from that proposed last week to try and provide more time for the TAT deliberations and for the project contract to be finalized. ***They proposed this schedule and ask for steering committee members to provide feedback if they see the need for any alterations:***

- a. TAT meetings – About 3 more calls with TAT, between mid-September and end of October.
- b. Interjurisdictional meeting – Lancaster, Union County, Anson, (involvement not needed from neighbors that have already completed plans: Mecklenburg, Stanly, Cabarrus, Chester, York). Ideas: last week Oct. or first week Nov.
- c. Steering committee meeting - Outreach and preparation for open houses and discussion of on-line survey – consider combining in one in-person meeting or conference call with the interjurisdictional meeting. Ideas: first week in November. (2 hours total)
- d. On-line survey: November - December, potential 6-week duration. (Discuss at next steering committee meeting, including how to do outreach around it).
- e. Open Houses - Ideas: 2<sup>nd</sup> week of January.
- f. TAT call/meeting in January to discuss findings, make adjustments to the maps after the open houses.
- g. Steering Committee meeting. Topics: review results from open houses and talk about initial impressions of priorities, and make decisions around groundtruthing, [Ideas: early February]
- h. Groundtruthing - steering committee members to volunteer for groundtruthing hotspots. [February]
- i. Final decisions – in-person meeting once the groundtruthing is finished. Idea: early March.

There were no comments on the proposed schedule, and Kelley invited members to be in touch if they have any suggestions or comments.



## Summary of Union County Steering Committee Meeting

December 1, 2010 9:00 AM, Indian Trail Government Building

### Members Present:

Doug Britt, Monroe  
Cheri Clark, Lake Park  
Jordan Cook, Weddington  
Shelley DeHart, Indian Trail  
Tracie Frost, Stallings  
Lynne Hair, Stallings  
Marnie Holland, Wesley Chapel  
Nancy Jacobsen, Indian Trail  
Severin Jacobsen, Indian Trail

Joshua Langen, Wesley Chapel  
Terri Patton, Marvin [for Anthony Burman]  
Katie Ross, Waxhaw  
Lisa Thompson, Marvin  
Bill Whitley, Union County  
Ray Williams, Marvin  
Kelley Hart, TPL  
Bob Heuer, TPL  
Travis Morehead, CTT

### Discussion Summary:

#### 1. Welcome and Announcements

Shelley DeHart welcomed steering committee members. She explained that Katie (Reeves) Drye recently accepted a state government position, and Shelley will resume steering committee leadership. Shelley announced that the contract for consulting with The Trust for Public Land has been officially approved by all parties, and we can resume project work.

Kelley Hart invited announcements from other steering committee members. A few reported on changes to park/trail plans and construction, as follows:

- Indian Trail purchased a 51-acre parcel that will become "Crossing Paths Park." Indian Trail's Park and Greenway Master Plan already reflects the planned park.
- The Village of Marvin has been discussing potentially purchasing a piece of land for a park but has heard some opposition. The proposed parkland is not part of Marvin's current Park and Greenway Master Plan.
- Wesley Chapel had planned to create a new park, but those plans have fallen through.

Other announcements:

- Travis Morehead will be presenting on the Carolina Thread Trail (CTT) to the Fairview Council on 12/13. There may be trail opponents and the draft conceptual routes may need to be adjusted. The Technical Advisory Team (TAT) will meet by conference call the following day.
- Joshua Langen mentioned that TCC is considering road expansion projects now. Our current draft plan assumes that Old Monroe Road may be improved, which could mean adding sidewalks/trails, though expansion is uncertain at this time.

#### 2. Project Timeline

Kelley reviewed the attached project timeline and explained that this should be a reasonable schedule for moving forward if we don't encounter any major difficulties. There were no questions or comments.

### 3. Technical Advisory Team Update

Bob Heuer said the TAT has had 3-4 conference calls since the July public listening sessions. They reviewed information gathered from the public listening sessions and tried to create draft conceptual route alternatives that reflect the preferences of the public so far, including connecting popular destinations and incorporating specific ideas for connections generated during the public listening sessions. They've also tried to utilize existing trails or existing proposals for new trails. There will be some revisions based on recent conversations.

Bob encouraged steering committee members to look at the draft map (poster on display in meeting room) after the meeting and come talk to him if they want to zoom into a particular area (on Bob's computer) to review it in more detail.

### 4. Planning for Public Open Houses

Kelley described the proposed "open house" format for the next round of public input, explaining that the information shared with and gathered from the public should accommodate people already knowledgeable about the CTT concept as well as newcomers. With this format we could have 3-4 stations, with steering committee members, CTT, and TPL staffing those stations. For example:

- Station 1: Carolina Thread Trail banner and brochure-type material about the overall project, as well as someone present to share high points about the regional trail concept. People staffing this station may need to do outreach to catch the interest of passersby. At Station 1 we would need to convey our objective with the open house, which is to let people know about the CTT concept for Union County (and its municipalities) and get feedback from them on draft conceptual routes.
- Station 2: the sign-in station where we give people a copy of the survey that they will complete at a later station. [Note, stations 1 and 2 could be reversed]
- Station 3: storyboards about the benefits of trails and greenways
- Station 4: provide information about the Union County process, featuring a poster of the timeline, copies of the listening session notes, and a description of roles/responsibilities related to the planning process.
- Station 5: the map/survey station. We may need 2-3 maps of the draft conceptual routes so there is enough room for everyone to quickly approach a map and talk to one of us. We would encourage participants to complete the survey at this station, using the poster maps as a visual aid. There would be at least one map that people can write directly on.

Steering Committee members agreed to this format. Marnie Holland suggested that – depending on the open house locations – we may want the first station close to foot traffic and the other stations nearby, so that people can be ushered to them once we have met them at the initial station.

The steering committee brainstormed potential locations for open houses. The items in bold are the first choice locations for 4 open houses. We also discussed potential dates and people volunteered, as indicated, to look into these possibilities and get back to Kelley.

Location 1:

- **Indian Trail – Extreme Ice (2/5 as possible day, would need to be a Saturday to maximize attendance)** or library. Shelley will look into this.
- Stallings – basketball games, large athletic facilities or coffee shop as part of Mayor coffee chat.

Location 2:

- **Waxhaw – First Friday (2/4, store to store; Waxhaw Women’s Club to potentially host us) –** Katie Ross will look into this.

Location 3:

- **Monroe Aquatic and Fitness Center** (there is area for booth or table). Doug Britt will look into this. (The committee agreed this might get lots of foot traffic during week, in evening)
- Wingate - University events, basketball game (here or Monroe)
- Ag Center events in winter
- Brown Derby in Monroe
- Monroe farmers market
- Shredded events?

Location 4:

- Marvin, something between Weddington and Wesley Chapel. (Events: **high school basketball games. A great event would be the Marvin/Weddington game.** Marnie will look into this.)

Other ideas discussed related to planning the open houses:

- How to engage elected officials (there are 13 municipalities) – ideas: sharing the map, personal invitations from steering committee members to their elected officials to attend the open houses. Terri Patton mentioned that elected officials may want to review draft maps before the end of the process. There was some discussion around this and the challenges of trying to brief so many elected officials. Kelley suggested that if elected officials are unable to attend open houses, they should be encouraged to take an on-line survey, and that survey should include draft maps. Travis mentioned that CTT can do a work session with a board before it goes to a vote.
- Ray Williams mentioned the possibility of an event on an existing trail for an open house, but then we discussed the drawbacks related to weather and the number of people we would likely reach. Marnie pointed out that we want to capture a cross-section of residents and the larger sample the better for our open houses. We discussed that rather than a stand-alone event, we could dovetail on an existing event like a 5k race. E.g. Girls on the Run in the spring could be an event. Cheri knows a 5k trail in Lake Park that we could utilize for an event. We decided to revisit this idea for a ribbon cutting or celebration event when the weather will be warmer.
- Ray suggested that we have a steering committee conference call just before the first open house to figure out who is attending which open houses and what our respective roles may be.

Kelley announced that Marnie will lead the outreach committee going forward. Outreach ideas mentioned for the outreach committee to consider are:

- Advertise in all the venues one month in advance,
- Emails,
- Telephone calls,
- Web postings,
- Posters to downtown businesses in Waxhaw (that are part of the First Friday event)
- Wal-Mart bulletin board

- Flyer in municipal buildings,
- Announcement at council meetings,
- WSOC,
- Charlotte Observer,
- Union County community calendar,
- Government channel, and
- Article in Union County weekly

The following people agreed to be on the committee:

Cheri, Travis, Shelley, Ray, Katie, Lisa and Nancy Franza [Nancy couldn't attend this meeting but sent an email in advance saying that she'd like to be involved in the open house preparations]

#### 5. Placement of on-line survey:

We ran out of time to have much discussion about the placement of the on-line survey, but the discussion about outreach for elected officials revealed that people want to see draft maps (besides at the open houses), which suggests that having an on-line survey with draft maps available sooner than later would be desirable. Kelley proposed that we have the on-line survey around the same time as the open houses. The on-line survey would be available for about a month (i.e. the month of February). People seemed generally in favor of this approach so TPL will work on preparing a draft survey. Kelley asked steering committee members to review the draft in today's meeting packet and let her know if they have any specific suggestions.





## Summary of Union/Lancaster County Inter-jurisdictional Meeting

December 1, 2010 10:30 – 11:30 AM, Indian Trail Government Building

### **Meeting Participants:**

Cheri Clark, Lake Park	Chris Karres, Lancaster County Planning [by phone]
Shelley DeHart, Indian Trail	Bert Lynn, Haden Stanziale
Tracie Frost, Stallings	Jill Marshall
Lynne Hair, Stallings	Sherron Marshall, Catawba Regional COG
Kelley Hart, TPL	Travis Morehead, CTT
Bob Heuer, TPL	Susie Morris, Cabarrus County Planning [by phone]
Marnie Holland, Wesley Chapel	Terri Patton, Marvin
Tobe Holmes, York County [by phone]	Dana Stoogenke, Rocky River RPO [by phone]
Nancy Jacobsen, Indian Trail	Lisa Thompson, Marvin
Severin Jacobsen, Indian Trail	Ray Williams, Marvin

### **Discussion Summary:**

#### **I. Introduction and Overview**

Travis Morehead welcomed participants and explained the purpose of the meeting, which is to discuss potential trail connections across county boundaries, for the counties that surround Union County and Lancaster County within the proposed Carolina Thread Trail footprint. Travis explained that Mecklenburg, Cabarrus, Stanly, York and Chester Counties have already completed their CTT master greenway and trail plans. Their local governments have already approved proposed conceptual routes that extend to their borders so discussion around those connections is likely to be brief or unnecessary. Travis said that discussion will likely center around connections between Union and Lancaster since both of those plans are in progress and conceptual routes are still under development.

\*\*\* These notes refer to “county representatives” to encompass individual town representatives or the county representative for that steering committee.

#### **II. Union County Connections with Neighboring Counties**

Comments were as follows:

- People were in favor of a proposed connection between Lancaster and Union County that connects to Cane Creek Park in Union County, and deleting an alternative to the east suggested in Union County for its southern border with Lancaster County.
- There was some discussion about Waxhaw Creek and whether there should be a link between Union and Lancaster Counties near the creek. The group decided to have a proposed link in for public comment consideration in both counties, which meant adding a very short segment in Union County to make that connection to the west.
- Further north along western border of Union County, Lancaster County representatives asked Union County representatives to add a short segment along the portion of Rehobeth Road that curves briefly into Union County because Lancaster County would like to have a proposed

segment running along Rehobeth Road. Union County representatives were agreeable about vetting this proposed segment with the public.

- Next there was discussion about 12 Mile Creek and whether trails would be prohibited (if it had heelsplitter habitat). Union County is considering vetting a potential route near 12 Mile Creek and asked that Lancaster representatives consider continuing a proposed segment into Lancaster County. Lancaster County representatives said that it is mostly designated as open space currently so they could put a proposed segment there and then use 12-mile creek road (dirt road) to continue north.
- Continuing north along the Lancaster/Union border there was discussion about a potential trail along Man-O-War Road. It was pointed out that there may be issues in Marvin that preclude the whole route. It's also possible that the proposed route along Stacy Howe in Lancaster County could come off. The group decided not to try and make a connection between counties there for now.
- Another potential link between counties along Six Mile Creek has already been identified but may not be feasible because of heelsplitter habitat issues.
- Then discussion moved to Union County's northern border with Cabarrus and Stanly Counties. Union County representatives have tried to create a potential route that will meet existing proposed trails in those counties, and meeting participants seemed generally in favor of that cross-boundary connectivity but were put on alert that it could change depending on public comment in coming months (like all connections proposed).
- No one from Anson County was present and that county has not yet started CTT planning, so Travis said that this discussion would have to wait. Dana Stoogenke said she was surprised that there was only one proposed connection across the eastern part of Union County to meet with Anson County and requested to be involved in CTT work in Anson.

### **III. Lancaster County – Other Connections with Neighboring Counties**

- Lancaster and York County representatives made just a quick reference to Little Sugar Creek – there is one small segment that could be added to bridge a gap in the far north of Lancaster County that would permit a Little Sugar Creek connection between Mecklenburg County and York County.
- Tobe Holmes said that York County is already working on implementation related to the segments on the York County CTT map that run north to south within York County and near the Lancaster border.
- It was mentioned that the only opportunities for connection between Chester and Lancaster are the Highway 9 or Highway 200 bridges.

### **IV Next Steps**

Travis explained that next steps are to update the Union County and Lancaster draft maps with these new connection opportunities and then share the maps in public forums to see how they are received and which emerge as the best conceptual routes.



## **Summary of Union County Steering Committee Meeting**

March 2, 2011 10:00 AM, Village of Lake Park Town Hall

### **Members Present:**

Mayor Becker, for Vicky Brooks, Mineral Springs  
Doug Britt, Monroe  
Cheri Clark, Lake Park  
Jordan Cook, Weddington  
Shelley DeHart, Indian Trail  
Lynne Hair, Stallings  
Marnie Holland, Wesley Chapel  
Nancy Jacobsen, Indian Trail  
Severin Jacobsen, Indian Trail

Joshua Langen, Wesley Chapel  
Katie Ross, Waxhaw  
Lisa Thompson, Marvin  
Bill Whitley, Union County  
Ray Williams, Marvin  
  
Kelley Hart, TPL  
Bob Heuer, TPL (by telephone)  
Travis Morehead, CTT

### **Discussion Summary:**

#### **1. Welcome**

Kelley Hart thanked the steering committee for their outstanding outreach and planning for the open houses, and announced that our planning process reached almost 900 members of the public, and just as important, participants represented a good cross-section of the community, and most had never heard of the Carolina Thread Trail. Also, participation of our steering committee in the open houses was outstanding, as nearly everyone helped with at least one open house.

#### **2. Brief Summary and Discussion of Open Houses**

Steering committee members briefly discussed their impressions of the open houses, including the fact that there was an excellent turnout in Waxhaw despite inclement weather. Thanks were made to Katie Ross for providing special trail cookies for the Waxhaw event (which had a Valentine's Day theme) and for her effective cross-advertising campaign for the First Friday event. A special thanks was also given to Shelley DeHart for organizing a raffle and procuring donations of two bikes and several other prizes. (Thanks also to Marnie Holland for helping with the raffle!) One steering committee member commented that elected officials should be asked in the future to not participate in the public voting at open houses, but simply observe the process, since they will be voting later and will be informed by the earlier public voting

See attached public participation summary. This overall summary was reviewed in detail, and the steering committee briefly discussed the benefits and drawbacks of unpaved trails over paved trails, such as potentially large cost savings of constructing dirt trails, though some voiced concerns about handicap accessibility and maintenance costs of dirt trails. The steering committee also briefly discussed the narrative responses from the on-line survey (attached here). Kelley gave a quick summary of the responses to help inform conceptual route selection for this meeting, and encouraged steering committee members to review these in more detail. She said that compared to other on-line surveys, the respondents were especially thoughtful in providing detailed explanations. She apologized for not

giving steering committee more time to review the list, and explained that from a scheduling point of view, we were balancing the need to have this meeting as soon after the open houses as possible with the need to have the on-line survey open for at least one month. (The survey closed just two days ago).

Steering committee members also reviewed a couple of the major findings from the telephone poll that are applicable to this discussion: of the 403 people randomly surveyed, in response to an open ended question of what important towns should be connected, 15 percent said they wanted to see Monroe connected, and 11 percent identified Waxhaw (those were the two most frequent responses). In response to the open-ended question as to what are the most important cultural, recreation and natural resources to connect with a trail system, a full 10 percent of those surveyed wanted to see Cane Creek Park connected (most popular response).

### **3. Route Discussions and Selection for CTT**

The steering committee reviewed the draft route selection factors. Mayor Becker added one factor to the list, and the committee agreed to these factors:

- Public preference (from open houses and on-line survey) re: segments to include and destinations to connect
- Readiness/political will
- Incorporating an existing trail or an existing plan for a trail
- Regional access (connecting to other counties in the Thread footprint) or other regional benefits
- Low costs (for building or maintaining)
- Funding availability (for design, construction or maintenance)
- Good aesthetics
- Likely capacity of the proposed right-of-way (e.g. will the terrain or the right of way permit a suitable width trail?)

Kelley and Bob Heuer presented three different scenarios, each illustrating a potential CTT route. They explained the rationale behind each scenario: how each was an attempt to maximize the factors described above (except for the last, which was a new addition) but show different options, that these routes are just intended to help jump-start the discussion, and that we can build a new scenario based on the discussion today.

Then the steering committee evaluated the different parts of the study area, discussing the trade-offs between different segments. There was significant discussion around V and whether it could be incorporated even though it would result in a spur in the CTT (because no connections to Lancaster have been planned); whether O should be included (it has the advantage of being an existing/planned greenway for Mineral Springs but Mayor Becker cautioned that it might not be wide enough to have adequate capacity); what to do around A, C and D in the western part of the county; whether R would be a better alternative over S/T; and the benefits and drawbacks of having H as part of the system. After much discussion, the majority selected Scenario C with the addition of Segment P (thereby capturing the top 3 “vote-getters” from public input). See attached map reflecting the steering committee’s recommended route. *NOTE: the segments on the attached recommended route have been labeled in alphabetical order so they do not create confusion in the future. However, that means that they do not correspond with the segments listed above. Refer to the open house map if you want to cross-reference the segments described above.*

#### **4. Top Priority Segment Discussion**

Next the steering committee decided to identify top priority segments for the CTT master plan for Union County. Kelley explained that these segments will be included as part of the action plan, and that the idea is to identify a few segments that are: particularly urgent, especially important, already likely to get built in the near term, may benefit from being highlighted in our plan, and/or will help give momentum to CTT implementation in Union County. Steering committee members nominated the following segments for consideration for a variety of reasons, including those above: A, R, O, D, M, J, N and P. They discussed each and then voted on their top 3 (using electronic key pad voting with priority ranking). A and R emerged as the clear leaders (33% and 29% of the vote, respectively) and segment D came in 3<sup>rd</sup> place (17%), still far ahead of the others (the next option garnered 9% of the vote). Some of the benefits articulated around A related to the fact that Stallings already has an adopted pedestrian plan and it is possible that this trail segment could be developed in the next couple of years. Also, the public input revealed that lot of people were interested in trails that connect to Mecklenburg County, and this trail would do that. R goes through Indian Trail, another municipality with an adopted pedestrian plan that is likely to be supportive of building this trail in the near term. Also, this segment heads towards Cane Creek Park, the top destination according to the public. Some of the discussion around D had to do with developing a trail that gets further into Union County and provides linear park access to residents toward the center of the county. Another benefit is that this trail could potentially be developed as part of a road expansion/improvement project, which would help keep costs down (for alignment and construction).

*NOTE: the segments on the attached recommended route have been labeled in alphabetical order so they do not create confusion in the future. However, that means that they do not correspond with the segments listed above. Refer to the open house map if you want to cross-reference the segments described above.*

#### **5. Action Planning Discussion**

Because of time constraints, the action planning discussion was delayed. Instead, Steering Committee Members were asked to review the excerpted action plans from Cleveland and Stanly County (included as printed handouts and attached here). The steering committee agreed to convene by conference call in 2-3 weeks to develop the action plan, using these other two to commence our discussion. Steering Committee members are asked to consider which of the elements from the other two plans they would like to have in their action plan and if there are any new action plan steps that should be considered by the group. The next and final scheduled meeting of the steering committee will be by conference call on March 16 or March 23. Date/time and conference line TBD.

#### **6. Final Master Plan**

Kelley circulated a draft of chapters 1-3 of the CTT Master Plan for Union County and asked that committee members review and comment on these chapters within the next two weeks.



## Summary of Union County Steering Committee Conference Call

March 23, 2011 11:00 AM

### Members Participating:

Richard Melton, Ag. Extension  
Doug Britt, Monroe  
Jordan Cook, Weddington  
Shelley deHart, Indian Trail  
George Heyse, Stallings  
Marnie Holland, Wesley Chapel  
Nancy Jacobsen, Indian Trail  
Severin Jacobsen, Indian Trail

Joshua Langen, Wesley Chapel  
Katie Ross, Waxhaw  
Bill Whitley, Union County  
Jim [last name], Union County  
Ray Williams, Marvin  
Travis Morehead, CTT  
Kelley Hart, TPL  
Bob Heuer, TPL

### Next steps identified during this meeting:

1. Kelley to circulate the draft action plan created today, re-send Master Plan Draft of Chapters 1-3 for steering committee comment, and draft brochure text for steering committee comment (3/23)
2. Bob to create zoom-in maps for each jurisdiction by 3/25
3. Kelley to send remaining chapters of draft master plan for steering committee comment by 3/30
4. Travis to provide status checks to steering committee as we work through adoption process

### Discussion Summary:

#### **1. Review of timeline and outstanding steps**

Kelley Hart briefly reviewed the project timeline and progress made during our last meeting. A meeting summary was circulated by email prior to this call. Kelley explained that this will be our last meeting/call unless we have major issues during adoption, in which case we will ask the committee to reconvene.

Kelley quickly showed some draft text for an informational brochure about the project, and the group agreed, after some discussion that we can refer to this as a "20 year vision." Ray Williams requested a copy of the draft text by email for review.

Shelley deHart inquired about the availability of zoom-in maps of the proposed Thread conceptual route, and Bob Heuer said he can produce those promptly. Travis Morehead raised this topic later during our call, and Bob said he will aim to have those ready this Friday. Ray commented that the gray/pink contrast with the neighboring counties may not be visible to color-blind individuals, and Bob said he will look into adjusting the contrast. Marnie Holland asked about the re-labeling of segments, and Kelley explained that they have been relabeled to avoid future confusion for people seeing the maps for the first time.

#### **2. Action plan discussion**

Steering committee members received advance copies of excerpted action plans from Stanly and Cleveland Counties and considered them as models in the discussion that followed as they arrived at the attached draft action plan for Union County. Members agreed to review and provide comments to Kelley on this draft action plan, and then it will be incorporated into our master plan.

## **Appendix B: Polls, Surveys, & Listening Sessions**

### Public Poll Results

In June 2010, TPL commissioned a consulting firm based in Columbia, SC to conduct a telephone poll in Union County, NC as part of the Carolina Thread Trail Greenway Planning project. The goal of the poll was to determine perceptions and attitudes of residents who live in Union County on the outdoors and trails, including (1) interest and participation in outdoor recreational activities, (2) interest in trails and the establishment of a trail system, (3) identification of potential destinations that could be connected by a trail system, and (4) measure benefits to, factors in the development of trails.

A majority of Union County residents engage in outdoor activities with some regularity. 66 percent of those surveyed indicated that they participate in outdoor recreational activity within 20 miles of their home with regular frequency (from sometimes to very frequently). The most popular types of outdoor recreational activities are walking (59%), biking (23%), hiking (18%), swimming (16%), gardening (14%), and fishing (13%).

While many survey participants do not currently use trails, participants also indicated that the creation of, and access to, trails is important to them and would increase trail use. On the one hand a majority of those surveyed never use trails, while on the other hand, a majority would use trails more often if they could more easily bike, walk, or ride a horse to one. Moreover, creating more trails is important to 59% of those surveyed. In fact, survey participants indicated that the most important benefits of trails were exercise, education/interpretation, and recreation.

Survey participants identified important destinations for connection in a trail system. Unprompted as to which destination to choose, survey participants mentioned 35 towns, cities, or cross-roads as important places to connect via a trail system. Of those places listed, a full 15% said they wanted to see Monroe connected and 11% wanted to see Waxhaw – this is significant since there was no list of potential destinations from which to choose. In the same fashion, 10% of participants explicitly mentioned Cane Creek Park as an important natural or cultural resource to connect by trail. Beyond connecting other nature and recreational trails, survey participants indicated said they want to see cultural destinations connected. Though only 4%, it is as significant as any vote held at the listening sessions in July.

A majority of respondents were willing to fund programs for programs to purchase land for conservation purposes. A majority of respondents are willing to pay, through a small increase in taxes, \$30 a year for local programs created to purchase land to protect water quality, natural areas, and wildlife habitat. Survey participants also stated that the key factors they would consider when deciding to support a funded parks and open-space program are the protection of drinking water and water resources, landowner rights, the preservation Union County's small-town feel, and wildlife conservation.

To the extent that the survey reflects the cross-section of Union County residents, it is possible to paint a picture of residents' overall attitudes towards the outdoors and trails. Union County residents have a real interest in outdoor recreational activities and engage in them with some regularity. While a majority of residents do not currently use trails,

there is an interest in them and the establishment of a trail system. The County's major towns and parks are important destinations that could be connected by a trail system. And finally, a majority of residents are willing to pay a small amount in taxes to help acquire land for conservation purposes provided that a variety of factors are considered in the development of trails.

### Survey Background and Methodology

CRS and TPL collaborated to define the survey, and TPL approved the final version of the questionnaire before implementation. Between the evenings of July 6<sup>th</sup> and July 8<sup>th</sup>, 2010, CRS interviewers conducted 403 telephone surveys with residents of Union County, North Carolina aged 18 years or older. The representative sample of Union County was randomly selected in accordance with census and county government data.

The margin of error for this study is 4.9% at a confidence interval of 95%. This means if the study were repeated 100 times, then the results would be within that 4.9% margin of error 95 times out of 100. The margin of error within specific demographic subsections would be higher. There may be times when figures do not always equal 100.0 percent, due to the rounding of decimals.

### Demographics

53% of respondents were female and 47% male. 78% of respondents were married. The following table breaks down the age of the respondents:

<b>18 to 24</b>	<b>25 to 34</b>	<b>35 to 44</b>	<b>45 to 54</b>	<b>55 to 64</b>	<b>65 +</b>
9%	15%	25%	22%	15%	14%

32% had one or more children living at home with them, while 64% did not have any. 70 % of respondents completed community college or a higher level of education. 25% of respondents had a total household income of \$50,000 or less, 22% totaled between \$50,000 and \$100,000, and 16% possessed a total household income over \$100,000. It is important to note that 36% of respondents refused to answer the question about household income

49% of respondents lived in Union County for more than 20 years, while only 5% had lived there for less than 3 years. Respondents were geographically grouped by zip code:

<b>28079</b>	<b>28103 to 28107</b>	<b>28110</b>	<b>28112</b>	<b>28173 &amp; 28174</b>
Indian Trail	Matthews & Midland	Monroe	Monroe	Waxhaw & Wingate
16%	22%	22%	13%	26%



# Carolina Thread Trail for Union County Listening Session Participant List

Weddington, 7/19		Waxhaw, 7/20		Indian Trail, 7/21		Monroe, 7/22	
Barry	Daniel	Bryant	Gerry	Adams	Gayle	Barnett	Steve
Basri	David	Diller	Brett	Badley	Britt	Bond	Betsy
Basri	Vicki	Evdy	Marilyn	Blickmann	Bob	Duncan	Patti
Britt	Forest	Evdy	Mitch	Dettart	Shelley	Duncan	Bob
Browder	Joe	Evdy	Morgan	Durham	Tilisa D.	Haigler	Steve
Cock	John	Ferguson	Amy	Durham	Kyle	Kindley	Patricia H.
Denny	Chuck	Gardner	Daune	Durham	Krystopher	Melton	Richard
Denny	Kirk	Gerstner	Andy	Edwards	Jonathan	Ormond	Sally
Ghent	John	Gerstner	Rachel	Fish	Roger	Owens	Brad
Kravis	Jeff	Jones	Bill	Franza	Nancy	Stone	Vonn
Mobley	Vicki	Jones	Donna	Hadley	Debbie	Williams	Mrs.
Patton	Terri	Gamble-					
Searle	Jim	Thorne	Donna	Heroy	Karen		
Searle	Yvonne	Mahar	Greg	Heyse	George		
Thomisser	Werner	McLarren	Paul	Howard	Bill		
Zakary	Jon	McLaurin	Michael	Howard	Martha		
		Minsk	Laura	Huneycutt	Wayne		
		O'Donnell	Art	Land	John		
		Pate	Rad	Land	Carol		
		Presson	David	Long	Jill		
		Presson	Gunborg	Long	Elijah		
		Scott	Anne	O'Dell	Jim		
		Settle	Terry	Ormiston	Kim		
		Simpson	Jerry	Price	Hillary		
		Stewart	Leslie				
		Stewart	Bud				
		Terrell	Linda				
		Tesar	Vikki				
		Thwing	Ron				
		Tompkins	Lisa				
		Walsh	John				
		Walsh	Christine				
		Ward	Kimberly				
		Woodford	Chris				
		Woodford	Shannon				
		Wright	Skip				
		Zimmerman	Ron				

Steering Committee					
Attendees	19-Jul	20-Jul	21-Jul	22-Jul	
Mary Jo Gollnitz				P	
Marnie Holland	P	P	P		
Severin Jacobsen	P	P	P		
Nancy Jacobsen	P	P	P		
Joshua Langen	P				
Katie Reeves	P	P		P	
Katie Ross		P			
Lisa Stiwinter				P	
Ray Williams	P	P		P	
Jordan Cook	P				
Anthony Burman	P				

## **Summary: Union County Listening Sessions for the Carolina Thread Trail July 19 – 22, 2010**

During the week of July 19, the Carolina Thread Trail (CTT) held four public input meetings in different parts of Union County – Weddington, Waxhaw, Indian Trail, and Monroe – with invited stakeholders and the general public. There was good attendance at each meeting, including an exceptional turnout at the Museum of the Waxhaws. Steering Committee members were present at each meeting and helped facilitate dialogue amongst the attendees.

At each meeting, Travis Morehead of the CTT and a representative from the Trust for Public Land (Kelley Hart and/or John Crotty) made a presentation about the CTT vision and greenways in general. Following the presentation, several poll questions, and a discussion of the benefits and concerns associated with greenways and trails, there was a charette-style workshop where participants drew on maps, indicating where they wished to see trails or pinpointing destinations that ought to be connected.

### **Discussion Themes: Benefits and Concerns**

While attendees identified a wide array of benefits associated with greenways and trails, the underlying theme was a higher quality of life. They talked about how trails engender a sense of community – bringing together a diversity of people who share a love for the outdoors, or horses, or biking. Participants also talked about the positive impact that trails have on health – physical, mental, and emotional. Trails provide increased local opportunities for children and families to get out, exercise, and play. Safety was also mentioned. By getting pedestrians and cyclists off the road, trails make it safer for people to walk and bicycle. People also stated that those trails could provide a safe transportation alternative to driving every day.

Attendees commented that there is a significant educational value to trails and greenways. Greenways are venues for botanical and ecological expeditions. Moreover, they connect historic sites, providing a unique perspective on bygone eras in Union County. Many participants felt these natural and cultural connections were in jeopardy, especially in light of the County's lack of greenways and the region's rapid rate of development. Finally, attendees pointed out the entrepreneurial aspects of trails. Business opportunities, such as new shops and the attraction of flexible companies to an area with recreational opportunities are open to communities with the high quality of life associated with trails.

Some community members expressed concern about trails and greenways. Common issues included long-term maintenance, the potential for trespassing on private property, landowner liability, eminent domain, and public safety. The common themes here were respect for rights and local autonomy. Some attendees wondered if their land would be “taken” by the local government, or if a trail user that crossed private property could sue landowners. Furthermore participants were concerned about trail safety and the sustainability of trail maintenance and monitoring.

Travis and Kelley helped to clarify some of these issues and communicated the breadth of the CTT vision – one that is regional in scope but local in character and implementation. A key element of that vision is respect for the landowner. Both noted that the use of eminent domain for trails is extremely rare and that the County, in its resolution of support for the CTT, provided that eminent domain would not be used for the CTT. Moreover, North Carolina has a recreational use statute that places a high burden of proof on a plaintiff seeking to sue a landowner on whose land the plaintiff was injured when using a trail. Travis and Kelley made reference to several comprehensive studies done on the safety of trails – each one indicating that in almost all cases, trails are safer than the neighborhoods that surround them. Finally, to address the overall safety and cost concerns, they

noted that since the CTT is implemented at the local level, all decisions related to design, use, monitoring, and maintenance are the responsibility of the local officials that represent Union County's communities.

## **Poll Questions: Gauging Interest and Envisioning the CTT**

Averaging twenty-four participants per session, the sessions were well attended. The majority of the attendees heard about the listening sessions through word of mouth (including emails). Many also found out through the newspaper. Several patrons of the Indian Trail Library participated during the meeting at the Library. Nearly all the attendees had been on greenway trail before, so they were familiar with what would be on the ground when the CTT comes to fruition. Similarly, most attendees thought the goal of creating more trails was important. Only a small number thought trails were of little or no importance.

Amongst the attendees for the four meetings, the choice for the top three trail uses – in order of popularity – were hiking/walking/running, nature education, and biking. Other uses that received a number of votes were seeing historic/cultural sites, bird watching, and horseback riding.

Most people hoped to connect parks (the most popular), historic buildings/sites, existing trails, towns, and waterways with trails and greenways. These results closely follow the comments made by attendees regarding the benefits of trails and greenways. Community members are concerned with opportunities to get out and use parks and trails for exercise and for culture.

## **Destinations & Trail Connections**

During the mapping portion of the listening sessions, attendees had the opportunity to place specific destinations and trail proposals on paper. Several destinations and connections were highlighted in the various groups in several or all of the listening sessions. Amongst the most mentioned destinations were: Wingate University; Cane Creek Park, Jesse Helms Park, and Colonel Francis Beatty Park in Mecklenburg County; the Museum of the Waxhaws and JAARS (Museum of the Alphabet); Steeplechase and Pleasant Grove Campground; the towns of Waxhaw, Mineral Springs, and Monroe; the Marvin Trail and the Mineral Springs Greenway; and Twelve Mile Creek. Several participants noted a few potential areas might be utilized for trails, particularly: the informal trail along the power lines by Lake Providence subdivision to Colonel Francis Beatty Park, along the west fork of 12 Mile Creek, and along the east fork of 12 Mile Creek.

## **Conclusion**

The results of the discussion, polls, and mapping sessions were instructive. The majority of listening session attendees believed that adding more trails is a priority for their communities. A few participants requested that trails not appear in certain portions of the county, as some said they don't want trails adjacent to their homes and others said they don't think trails will be popular in the eastern portions of the county. Some attendees thought the CTT would best serve the needs of residents in the more populous western part of the county. As such, the next stage of planning will require a real focus on trails and greenways that make sense in light of resident and community concerns.

As a next step, members of the Steering Committee will discuss the listening sessions. Then a sub-group, the Technical Advisory Team, will begin exploring potential conceptual routes based on input received at the listening sessions. This fall there will be public open houses to vet potential conceptual routes, and all members of the public are encouraged to provide feedback.

# UNION COUNTY CTT PUBLIC INPUT (ROUND 2)

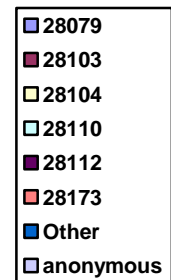
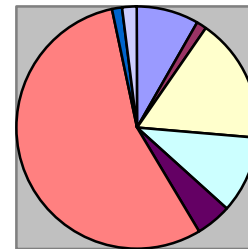
*March 2, 2011*

In early February 2011, Union County residents had the opportunity to participate in open houses and share their opinions about potential Carolina Thread Trail (CTT) routes. Open house participants were asked to comment on segment alternatives.<sup>1</sup> An online survey was also made available, and on-line survey participants were asked to share written comments in addition to selecting important segments and destinations. The following summarizes the results of the both the open houses and the online survey.

## I. Overview of Survey Respondents

200 Union County residents participated in four open houses - Monroe Aquatic Center (66), Wingate Community Center (13), First Friday in Waxhaw (53), and Extreme Ice Center (68); while 208 people responded online between January 28<sup>th</sup> and February 28<sup>th</sup>.

56 percent of online survey respondents provided their names, and the rest chose to remain anonymous. More than half of online respondents was from the 28173 zip code. 87 percent of those who took the online survey did not attend the open houses. 89 percent of online respondents had been on a greenway/trail in the past.



## II. Combined Results: Open Houses & Online Survey

Together the open houses and online survey provided important information about the most and least important proposed segments, as well as preferred trail types, for the CTT plan in Union County.

Open house participants were asked to select their most important 6 segments and least important 6 segments for Union County, while online participants were asked to select up to 10 in each category. Many open house participants did not identify any “least important” trail segments. Also, although there were over 200 online participants, many online respondents did not answer every question. The “r” in the table below is the total number of respondents in that category. The % total tells us what percentage of all respondents selected that segment.

Overall, segments N and J garnered the most support when participants were asked to identify the *most important* segment, while F and E garnered the least when respondents were asked to identify the least important segments. However, F was the second most popular segment at the open houses and in the top 1/3 when asked about *most important* segments on-line. Nevertheless, lots of on-line respondents selected it as *least important*.

### *Top 5 Most & Least Important Segments*

Most Important Segments	No. (r = 395)	% total	Least Important Segments	No. (r = 321)	% total
N	136	34.4	F	69	21.5
J	134	33.9	E	61	19
P	116	29.4	D	59	18.4
S	108	27.3	B	56	17.4
V	108	27.3	A	55	17.1

<sup>1</sup> The segment alternatives were developed by the Steering Committee and based on public input, existing plans and the guidance of Steering Committee members.

On-line participants and survey respondents overwhelmingly preferred unpaved hiking trails and paved trails through open space to any other type. (This was true whether the results were analyzed separately or combined.) Here n = the total number of responses, which was 741.

### ***Most Preferred Trail Types***

<b>Trail Type</b>	<b>No. (n= 741)</b>	<b>% total responses</b>
Unpaved hiking	270	36
Paved through open space	201	27
Unpaved suitable for horses	111	15
Bike lanes	64	9
Sidewalks	60	8
Paved along road	35	5

### **III. Online-Only Survey Results**

Survey respondents were asked to select up to 4 towns, 6 parks, 6 cultural/historical sites, 4 water bodies, and 2 museums or libraries (out of multiple choices of each) that ought to be connected in the CTT plan. In this table the % refers to the % of respondents who selected that destination.

#### ***Top 5 Towns, Parks, and Cultural or Historical Sites to Connect***

<b>Towns (r = 199)</b>			<b>Parks (r = 193)</b>			<b>Cultural / Historical Sites (r = 181)</b>		
Waxhaw	142	71%	Cane Creek	136	70%	Downtown Waxhaw	137	76%
Weddington	92	46%	Waxhaw	108	56%	Marvin Trail	74	41%
Marvin	88	44%	Colonel Francis Beatty	92	48%	Andrew Jackson Family Farm	72	40%
Wesley Chapel	78	39%	Weddington Optimist	89	46%	Mineral Springs Greenway	56	31%
Indian Trail	67	34%	Stallings Municipal	54	28%	Steeple Chase	55	30%

The top 3 museums or libraries selected were the Museum of the Waxhaws (48%), Waxhaw Library (37%), and Monroe Library (30%); the top 3 bodies of water were 12-Mile Creek (71%), Cane Creek (67%), and Waxhaw Creek (45%).

### **IV. Conclusion**

Attractions in the eastern part of the county (particularly Waxhaw) dominated the lists of preferred destinations. That may reflect the high percentage of online participants who were from zip code 28173. It also indicates that Union County residents would like to connect natural and cultural destinations in parts of the county where the population density is higher.

## CTT On-Line Survey

Created: January 28 2011, 2:23 PM  
Last Modified: February 07 2011, 8:28 AM  
Design Theme: Blue Horizon  
Language: English  
Button Options: Custom: Start Survey: "Start Survey!" Submit: "Submit"  
Disable Browser "Back" Button: False

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### CTT On-Line Survey

Page 1 - Heading

Trails and Greenways for Union County Communities

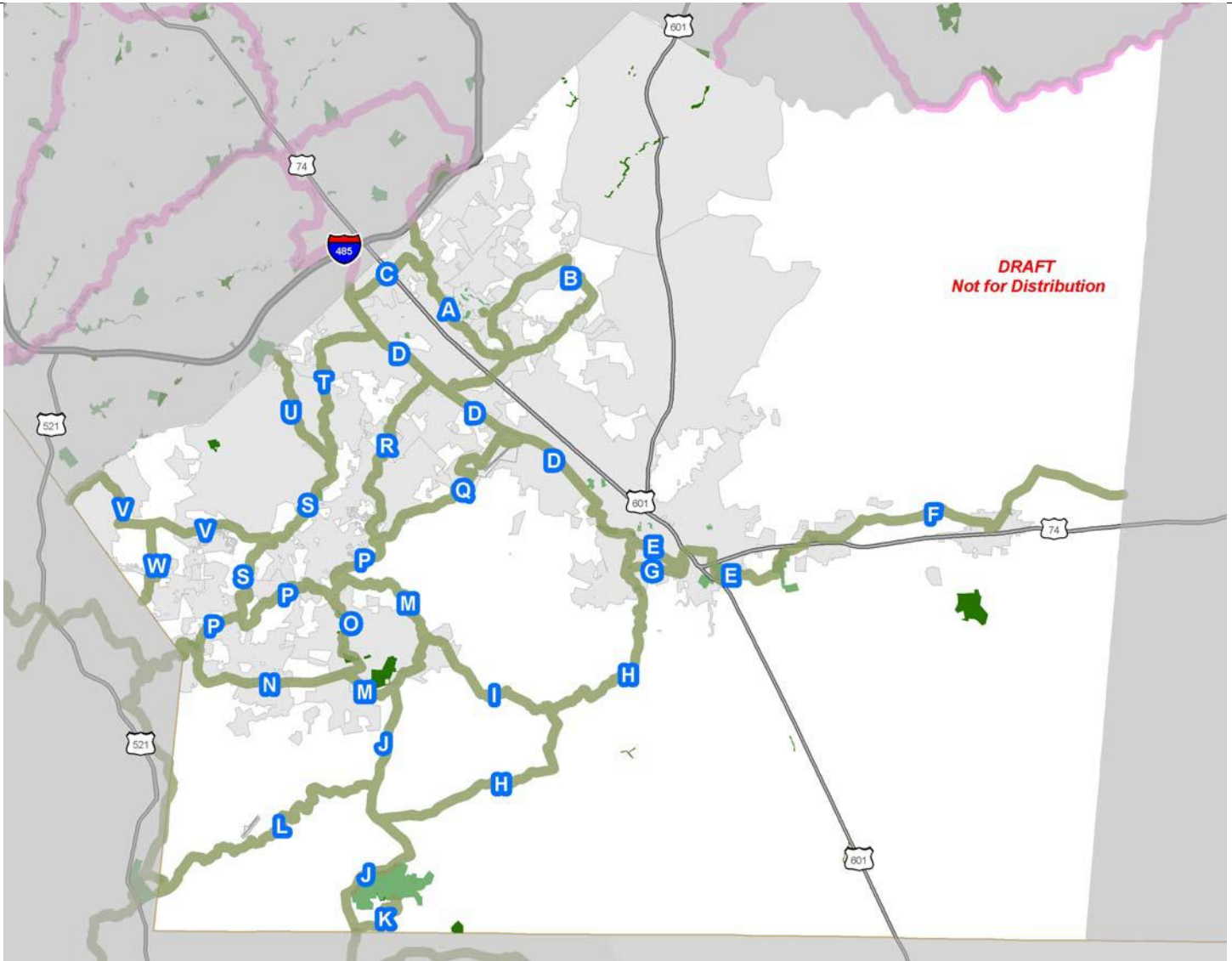
Page 1 - Heading

Welcome to our public survey on the Carolina Thread Trail route within Union County. There have been a series of public meetings and outreach efforts to solicit input for the development of a county wide trail plan. This survey has been created based on input to date. At previous public meetings participants were asked to draw their recommended routes on county maps and to identify most important destinations within the county. The maps and destinations that you will be asked to comment on today are the results of public input, existing plans and the guidance of the Steering Committee, which is composed of county and municipal staff and Union County citizens.

The map below represents the draft routes being analyzed for the final plan. Trails displayed in green are those being considered for the Carolina Thread Trail designation. The trail corridors in this plan are depicted with ¼ 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. 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.

Please take a moment to review the proposed trail segments on the map below. When you are ready to start, scroll down to view the questions. We greatly appreciate your time and participation in this process!

Please only take the survey once.



Page 1 - Question 1 - Yes or No

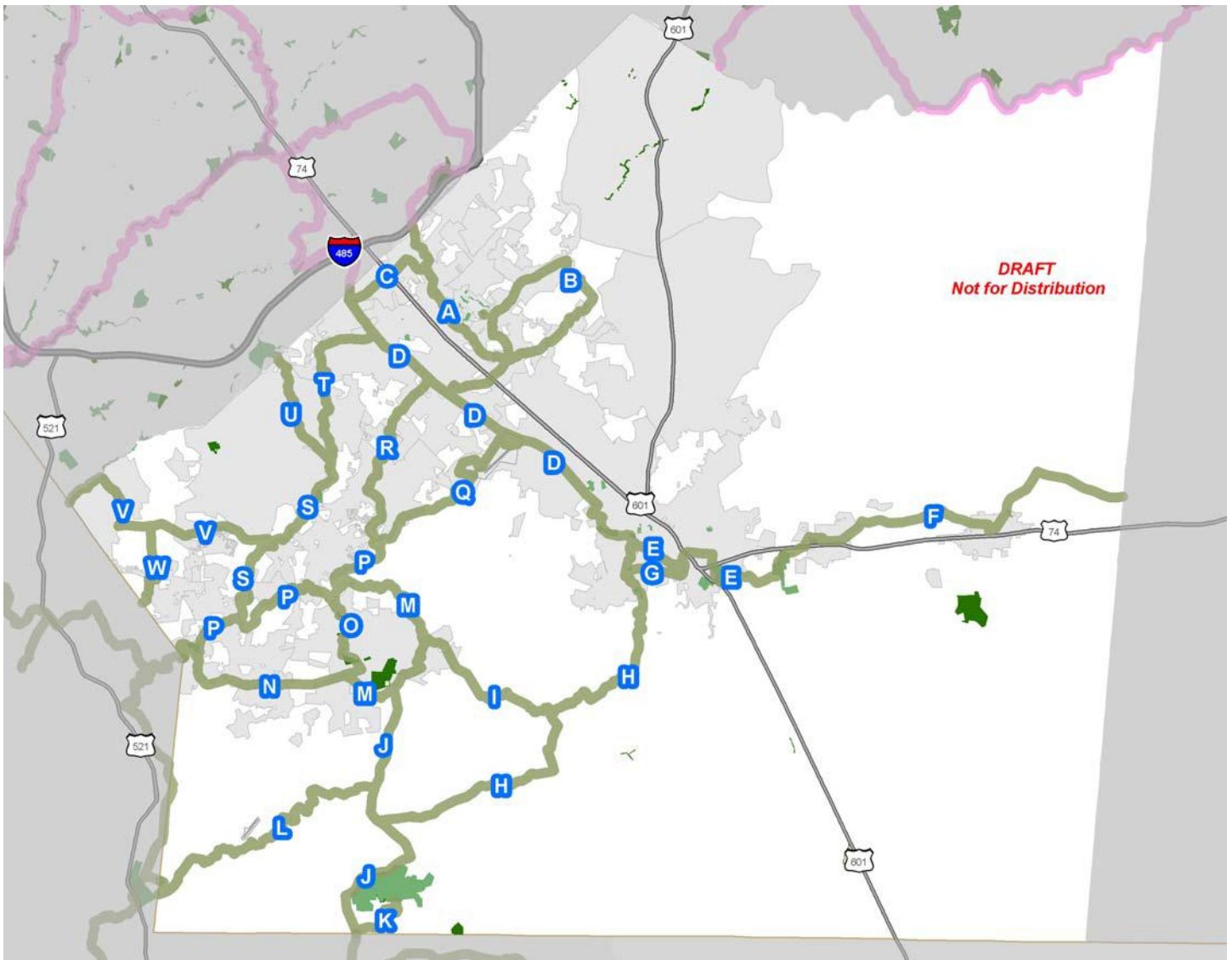
Did you attend an open house - Monroe Aquatic Center (2/2), Wingate Community Center (2/3), First Friday in Waxhaw (2/4), Extreme Ice Center (2/5)?

- Yes
- No

Page 1 - Question 2 - Yes or No

Have you ever been on a greenway/trail before?

- Yes
- No



Which of these segments are most important to be part of the Carolina Thread Trail regional system?  
 You may check up to 10, and not more than 10, from this list of about 30. (See map for corresponding segments):

- A. From the Mecklenburg County line follow Stallings Rd, then proposed trail to Oak Springs Rd. Connect to proposed trail that follows Crooked Creek. Pass intersection with segment B and go south picking up Wesley Chapel Stouts Rd. End at segment D.
- B. From segment A follow proposed trail on Crooked Creek to South Fork, past the schools along Porter Ridge Campus Dr. to Price Rd to Rocky River Rd to North Fork following proposed trail. Then take Hunters Trail Rd to Edgeview Dr. to Arbor Pointe Dr to Unionville Indian Trail Rd., joining up with proposed trail along Crooked Creek ending back at segment A.
- C. From segment A follow proposed trail along North Fork to Stallings Rd., ending at segment D.
- D. From Mecklenburg County line follow Campus Ridge Rd. to Old Monroe Rd., joining proposed trail along Old Monroe Rd., turning into Old Charlotte Hwy, continue on proposed trail, ending at segment E City of Monroe proposed trail.
- E. From segment D, follow proposed trail south through Dickerson Park to Belk Tonawanda Park. Then follow proposed trail south along Charlotte Ave to Main St. to Franklin St, then head north on Sunset Dr. to Quarry Rd., then south along Richardson Creek along proposed trail to Flag Branch ending at Jesse Helms Park and segment F.
- F. From Jesse Helms Park follow Presson Rd east to Hwy 74. Cross the railroad on Edgewood Dr. to Elm St to Bivens St to Wilson St to Ansonville Rd to Phifer Rd to Austin Grove Church Rd. to Phifer St. to Elm St to Union St to Olive Branch St connecting Legacy Development Project. Then take Old Lawyers Rd ending at the Anson



County line.

- G. In the City of Monroe from segment E take proposed trail on Sunset Dr. south and west to Griffith Rd. Head north to Lancaster Ave. to Charlotte Ave. ending at segment E.
- H. From segment G follow Griffith Rd south to Richardson Creek. Follow Richardson Creek south to Griffith Rd to McManus Rd to Lathan Rd. to Old Highway Rd to Lancaster Hwy, ending at segment J.
- I. From segment H on Richardson Creek, follow a branch of Richardson Creek west to the utility corridor, then onto Long Hope Rd to Rocky River Rd to Parks McCorkle Rd to New Trail, then onto utility corridor, finally onto Little Creek ending at segment M.
- J. From Lancaster County line follow Providence Rd north to Harkey Rd connecting Cane Creek Park. Then take Harkey Rd to Potter Rd, ending at segment M.
- K. From the Lancaster County line and segment J, follow Cane Creek Rd to Cane Creek, ending at Cane Creek Park.
- L. From Lancaster County line follow Waxhaw Creek north and east ending at segment J.
- M. From segment P. take proposed trail east along Little Creek, join Tarkill Branch to Twelve Mile Creek, then onto Crow Rd to Potter Rd to Old Waxhaw Monroe Rd to Robinson Rd to Western Union School Rd, ending at segment N.
- N. From junction with segment M and O, take Waxhaw Hwy west to Main to Waxhaw Marvin Rd to Twelve Mile Creek, ending at segment P.
- O. From junction with segment M and N, take Waxhaw Hwy to McNeely Rd to Mineral Springs Greenway along Bates Branch, continue on Bates Branch ending at segment P.
- P. From Lancaster County line, follow Twelve Mile Creek east eventually joining proposed trail along Twelve Mile Creek. Ending at junction with segments Q and R.
- Q. From junction with segments P and R, take proposed trail on East Fork of Twelve Mile Creek to Airport Rd. Join proposed trail at airport ending at segment D.
- R. From junction with segments P and Q, follow proposed trail along Price Mill Creek, ending at segment D.
- S. From segment P, follow proposed trail along Twelve Mile Creek ending at junction with segments T and U.
- T. From junction with segments S and U, follow Twelve Mile Creek joining proposed trail to Chestnut Lane, ending at segment D.
- U. From junction with segments S and T, follow Twelve Mile Creek join proposed trail ending at Mecklenburg County line and connect to Colonel Francis Beatty Community Park.
- V. From segment S follow proposed trail along New town Rd, joining proposed bike route to proposed trail on Marvin Branch to Six Mile Creek ending at Lancaster County line.
- W. From segment V, follow Crane Rd to proposed trail along Tarkill Branch to Waxhaw Marvin Rd to Cowhorn Branch ending at Lancaster County line.

Page 1 - Question 4 - Open Ended - Comments Box

Why did you choose those segments as the most important? Please describe their strengths/benefits.

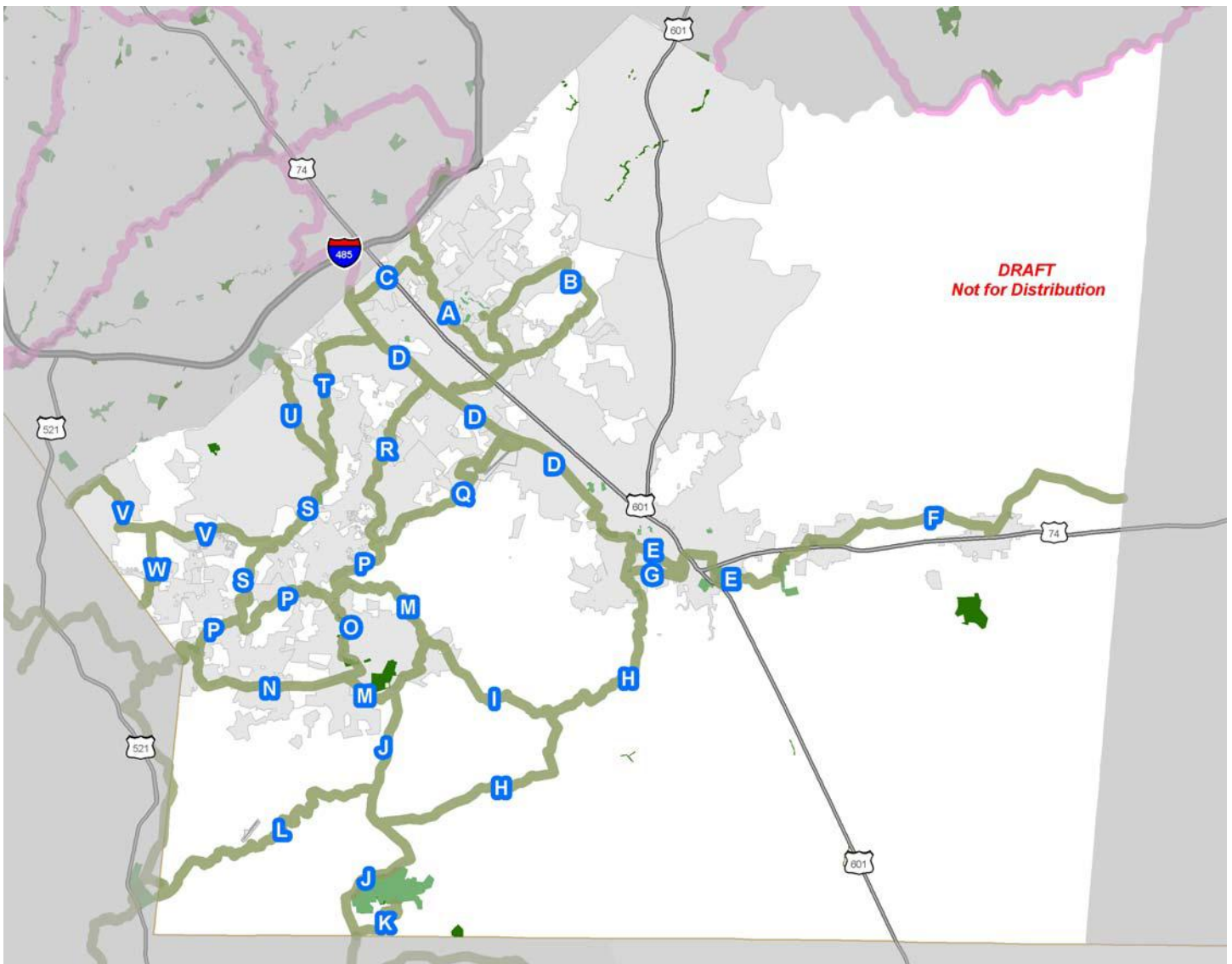
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Page 1 - Heading



Now please list which 10 segments are the least important to be part of the Carolina Thread Trail regional system? You may check up to 10, and not more than 10, from this list of about 30. (See map for corresponding segments):

- A. From the Mecklenburg County line follow Stallings Rd, then proposed trail to Oak Springs Rd. Connect to proposed trail that follows Crooked Creek. Pass intersection with segment B and go south picking up Wesley Chapel Stouts Rd. End at segment D.
- B. From segment A follow proposed trail on Crooked Creek to South Fork, past the schools along Porter Ridge Campus Dr. to Price Rd to Rocky River Rd to North Fork following proposed trail. Then take Hunters Trail Rd to Edgeview Dr. to Arbor Pointe Dr to Unionville Indian Trail Rd., joining up with proposed trail along Crooked Creek ending back at segment A.
- C. From segment A follow proposed trail along North Fork to Stallings Rd., ending at segment D.
- D. From Mecklenburg County line follow Campus Ridge Rd. to Old Monroe Rd., joining proposed trail along Old Monroe Rd., turning into Old Charlotte Hwy, continue on proposed trail, ending at segment E City of Monroe proposed trail.
- E. From segment D, follow proposed trail south through Dickerson Park to Belk Tonawanda Park. Then follow proposed trail south along Charlotte Ave to Main St. to Franklin St, then head north on Sunset Dr. to Quarry Rd., then south along Richardson Creek along proposed trail to Flag Branch ending at Jesse Helms Park and segment F.
- F. From Jesse Helms Park follow Presson Rd east to Hwy 74. Cross the railroad on Edgewood Dr. to Elm St to

Bivens St to Wilson St to Ansonville Rd to Phifer Rd to Austin Grove Church Rd. to Phifer St. to Elm St to Union St to Olive Branch St connecting Legacy Development Project. Then take Old Lawyers Rd ending at the Anson County line.

- G. In the City of Monroe from segment E take proposed trail on Sunset Dr. south and west to Griffith Rd. Head north to Lancaster Ave. to Charlotte Ave. ending at segment E.
- H. From segment G follow Griffith Rd south to Richardson Creek. Follow Richardson Creek south to Griffith Rd to McManus Rd to Lathan Rd. to Old Highway Rd to Lancaster Hwy, ending at segment J.
- I. From segment H on Richardson Creek, follow a branch of Richardson Creek west to the utility corridor, then onto Long Hope Rd to Rocky River Rd to Parks McCorkle Rd to New Trail, then onto utility corridor, finally onto Little Creek ending at segment M.
- J. From Lancaster County line follow Providence Rd north to Harkey Rd connecting Cane Creek Park. Then take Harkey Rd to Potter Rd, ending at segment M.
- K. From the Lancaster County line and segment J, follow Cane Creek Rd to Cane Creek, ending at Cane Creek Park.
- L. From Lancaster County line follow Waxhaw Creek north and east ending at segment J.
- M. From segment P. take proposed trail east along Little Creek, join Tarkill Branch to Twelve Mile Creek, then onto Crow Rd to Potter Rd to Old Waxhaw Monroe Rd to Robinson Rd to Western Union School Rd, ending at segment N.
- N. From junction with segment M and O, take Waxhaw Hwy west to Main to Waxhaw Marvin Rd to Twelve Mile Creek, ending at segment P.
- O. From junction with segment M and N, take Waxhaw Hwy to McNeely Rd to Mineral Springs Greenway along Bates Branch, continue on Bates Branch ending at segment P.
- P. From Lancaster County line, follow Twelve Mile Creek east eventually joining proposed trail along Twelve Mile Creek. Ending at junction with segments Q and R.
- Q. From junction with segments P and R, take proposed trail on East Fork of Twelve Mile Creek to Airport Rd. Join proposed trail at airport ending at segment D.
- R. From junction with segments P and Q, follow proposed trail along Price Mill Creek, ending at segment D.
- S. From segment P, follow proposed trail along Twelve Mile Creek ending at junction with segments T and U.
- T. From junction with segments S and U, follow Twelve Mile Creek joining proposed trail to Chestnut Lane, ending at segment D.
- U. From junction with segments S and T, follow Twelve Mile Creek join proposed trail ending at Mecklenburg County line and connect to Colonel Francis Beatty Community Park.
- V. From segment S follow proposed trail along New town Rd, joining proposed bike route to proposed trail on Marvin Branch to Six Mile Creek ending at Lancaster County line.
- W. From segment V, follow Crane Rd to proposed trail along Tarkill Branch to Waxhaw Marvin Rd to Cowhorn Branch ending at Lancaster County line.

Page 1 - Question 6 - Open Ended - Comments Box

Why did you choose those segments as the least important? Please describe their drawbacks/weaknesses.

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Page 1 - Question 7 - Choice - Multiple Answers (Bullets)

[Up To 4 Answers]

What are the most regionally significant towns in Union County that ought to be connected by a greenway or trail? You may select up to 4 from this list:

- Hemby Bridge
- Indian Trail
- Lake Park
- Marshville
- Marvin
- Mineral Springs

- Monroe
  - Stallings
  - Waxhaw
  - Weddington
  - Wesley Chapel
  - Wingate
  - Other, please specify
- 

Page 1 - Question 8 - Choice - Multiple Answers (Bullets)

[Up To 6 Answers]

What are the most regionally significant parks in Union County that ought to be connected by a greenway or trail?  
You may select up to 6 from this list:

- Cane Creek Park
  - Colonel Francis Beatty Park
  - Common Area Park (in Lake Park)
  - Creft Park
  - Crossings Path Park
  - Dickerson Park and Gym
  - Fred Kirby Park
  - Sunset Park
  - Jesse Helms Park
  - Marshville Park
  - Nesbit Park
  - Parks Williams Athletic Center
  - Russell Park
  - Stallings Municipal Park
  - Waxhaw Park
  - Weddington Optimist Park
  - Winchester Center
  - Wingate Park
  - Veterans Park (in Lake Park)
  - Other, please specify
- 

Page 1 - Question 9 - Choice - Multiple Answers (Bullets)

[Up To 2 Answers]

What are the most regionally significant libraries and museums in Union County that ought to be connected by a greenway or trail?  
You may select up to 2 from this list:

- Edwards Memorial Library
  - Monroe Library (Main Branch)
  - Union West Regional Library
  - Waxhaw Library Branch
  - Museum of the Alphabet
  - Museum of the Waxhaws
  - Other, please specify
-

What are the most regionally significant lakes and creeks in Union County that ought to be connected by a greenway or trail?

You may select up to 4 from this list:

- Aero Plantation Lake
  - Lake Lee
  - Lake Monroe
  - Lake Twitty
  - 6-Mile Creek
  - 12-Mile Creek
  - Cane Creek
  - Crooked Creek
  - Goose Creek
  - Stewart's Creek
  - Waxhaw Creek
  - Other, please specify
- 

What are the most regionally significant cultural, historic, or other places in Union County that ought to be connected by a greenway or trail?

You may select up to 6 from this list:

- Andrew Jackson Family Farm
  - Andrew Jackson Monument
  - Beaufort Massacre Battleground
  - City of Monroe Historic District
  - Cyrus Marion Rogers House
  - Downtown Waxhaw
  - Ernest Austin Deese House
  - Price House
  - Roberts-Hargett House
  - Steeple Chase (Mineral Springs)
  - Agriculture Extension Building
  - Cureton Shopping Center
  - Legacy Development Project
  - Marvin Trail
  - Mineral Springs Greenway
  - Mineral Springs Music Barn
  - Monroe Regional Airport
  - Pleasant Grove Campground
  - Polk Mountain
  - Other, please specify
-

There are many types of trails that vary between surface types, widths, and users.

**A. Paved Trail Along Roadway**



**B. Unpaved Hiking Trail**



**C. Unpaved Trail Suitable for Horses**



**D. Paved Trail Through Open Space**



**E. Bike Lanes**



**F. Sidewalks**



When you imagine the Thread Trail in Union County, what does it look like? Keep in mind that there will likely be a mix of trail types throughout the County.

Please select your 2 most preferred types of trails from this list:

- A. Paved along roadway
- B. Unpaved hiking trail
- C. Unpaved trail suitable for horses
- D. Paved trail through open space
- E. Bike lanes and sidewalks
- F. Sidewalks

Please share with us your thoughts for the best types of trails for the Thread Trail in Union County.

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Additional comments/concerns:

[Mandatory]

Your Information. [If you wish to remain anonymous, please write "anonymous" in the name box].

a) Name:

b) Zip Code:

**NOTE**

Not all segments appearing on the open house maps will become part of the Carolina Thread Trail or local government greenway master plans. In the near term, based on public feedback as well as technical and practical considerations, a final conceptual route will be selected from among the many alternatives appearing on the open house maps. The conceptual routes depicted illustrate connections between destinations, but not precise routes. Over time, exact routes will be determined, based on an ongoing dialogue with the community and potential interested landowners.

For more information on the Carolina Thread Trail:  
Shelley DeHart: 704-821-5401 Travis Morehead: 704-376-2556

Thank you for taking the time to share your thoughts and opinions. For more information on the Carolina Thread Trail, go to: <http://www.carolinathreadtrail.org>. <http://www.carolinathreadtrail.org>

Standard

Standard

The survey is now closed.

## **Appendix C: Public Outreach Materials**



[print](#)

## **Network of greenways proposed**

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by Tiffany Jothen

05.18.10 - 09:37 pm

MONROE -- Where do you run? Bike? Walk or ride horses?

The Carolina Thread Trail wants to give you room for all of the above.

The Thread Trail, a nonprofit organization, is planning a regional network of greenways that will eventually reach more than 2 million people and 15 counties across North and South Carolina.

Twelve of 14 Union County municipalities are on board to support it. All anticipate a group of community meetings set for July, hoping their residents can offer some direction.

Leadership members aren't the ones who will draw trail lines, community coordinator Travis Morehead said; locals are.

"The door is wide open," he said. "We believe very strongly in community self-determination. ... The map will totally reflect what Union County folks have said they wanted in regard to trails."

Trails might not reach every town, he said, but each town does have a steering committee — made of elected officials, town staff and residents — to head the process.

Katie Reeves, senior planner for Indian Trail, hopes to offer "a sense of regional connectivity" and alternate ways to travel.

"The trails are not determined, ... but there will likely be some thread trails running through Indian Trail," she said.

Lisa Stiwinter, director of planning for Monroe, wants to provide a space for runners, walkers, bikers and horseback riders of all ages while offering multiple economic and health benefits.

Trails promote recreational use, economic development and cleaner air, she said.

The county also received grant funding from Carolina Thread Trail to hire a consultant and draw maps.

Thread Trail efforts are led by the Catawba Lands Conservancy and The Trust for Public Land.

Community meetings are scheduled for July 19-22 across the county. Union County will also conduct phone surveys.

For more information, visit [www.carolinathreadtrail.org](http://www.carolinathreadtrail.org).

## MEETING SCHEDULE

July 19: 6 p.m. - 8 p.m., Weddington United Methodist Church (this date is pending)

July 20: 6 p.m. - 8 p.m., Museum of the Waxhaws

July 21: 5 p.m. - 7 p.m., Union West Regional Library, Indian Trail

July 22: 6 p.m. - 8 p.m., Union County Cooperative Extension

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## CAROLINA THREAD TRAIL

*Weaving  
Communities  
Together*

Date: July 19, 2010

Time: 6-8PM

Weddington Swim and Racquet Club  
4315 Matthews-Weddington Road  
Weddington, NC

Date: July 20, 2010

Time: 6-8PM

Museum of the Waxhaws  
8215 Waxhaw Highway  
Waxhaw, NC

Date: July 21, 2010

Time: 5-7PM

Union West Regional Library  
123 Unionville-Indian Trail Road  
Indian Trail, NC

Date: July 22, 2010

Time: 6-8PM

Union County Cooperative Extension  
3230-D Presson Road  
Monroe, NC

*Where do you want to walk,  
hike, bike, run or ride a  
horse? We need to hear  
your ideas about trails and  
greenways in Union  
County.*

*Please join us for any of  
these listening sessions.*



Katie Reeves: 704-821-5401  
Travis Morehead: 704-376-2556  
[www.carolinathreadtrail.org](http://www.carolinathreadtrail.org)



# CAROLINA THREAD TRAIL

*Weaving  
Communities  
Together*

Date: Wednesday, February 2, 2011  
Time: 6-8PM  
Monroe Aquatics & Fitness Center  
2325 Hanover Drive  
Monroe, NC 28110

Date: Thursday, February 3, 2011  
Time: 6-8PM  
Wingate Community Center  
315 West Elm Street  
Wingate, NC 28174

Date: Friday, February 4, 2011  
Time: 6-8PM  
Waxhaw First Friday at the Women's Club  
200 E. South Main Street  
Waxhaw, NC 28173

Date: Saturday, February 5, 2011  
Time: 10 AM-1PM  
Extreme Ice Center  
4705 Indian Trail-Fairview Road  
Indian Trail, NC 28079

*Where do you want to walk, hike, bike, run or ride a horse? We need to hear your ideas about proposed trails and greenways in Union County.*

*Please join us for any of these open houses.*



**Shelley DeHart: 704-821-5401**  
**Travis Morehead: 704-376-2556**



Contact: Dean Thompson  
Development and Communications Director  
704.376.2556 x218  
[dean@carolinathreadtrail.org](mailto:dean@carolinathreadtrail.org)  
[www.carolinathreadtrail.org](http://www.carolinathreadtrail.org)

**FOR IMMEDIATE RELEASE**

January 13, 2011

## **Union County to Host Open Houses Seeking Public Input on Carolina Thread Trail Master Plan**

Monroe, N.C. – Union County is hosting a series of public open houses this January and February to solicit input from residents about proposed routes for the Carolina Thread Trail (The Thread). The Thread is a regional network of trails, greenways, blueways and conservation corridors linking 15 counties in North and South Carolina. It offers opportunities for walking, biking, hiking, paddling and connecting with nature.

The Thread trail network is designed, built and owned by the counties and municipalities through which it is woven. Citizen participation is vital to the successful development of a final plan for areas served by the trail system, as well as the character, surface types and intended uses for the trails.

Starting on January 25, the public is invited to attend one of the following public open houses:

**Weddington – Tuesday, January 25, 6 - 7 pm**

Weddington High School (main entrance)  
4901 Monroe Weddington Road

**Monroe – Wednesday, February 2, 6 - 8 pm**

Monroe Aquatic & Fitness Center, 2325 Hanover Drive  
<http://www.monroeaquaticsandfitnesscenter.com/>

**Waxhaw – Friday, February 4, 6 – 8 pm**

Waxhaw First Friday at the Women's Club, 200 E. South Main Street  
<http://waxhawwomansclub.org/>

**Indian Trail – Saturday, February 5, 10 am – 1 pm**

Extreme Ice Center, 4705 Indian Trail - Fairview Road  
<http://www.xicenter.com/>

Open houses are structured so that residents may drop in at their convenience to learn more about The Thread and to provide input on proposed draft trail routes. Local representatives from the Union County Steering Committee and a representative from The Thread will be available to answer questions, share information about the regional scope of the project, and to discuss how to best serve the needs and wishes of community members in Union County. Union County kicked off its planning process for The Thread in July 2010.

For more information, please visit [carolinathreadtrail.org](http://carolinathreadtrail.org).

***About The Carolina Thread Trail***

*The Carolina Thread Trail (The Thread) is a 15-county, two state initiative designed to inspire and facilitate the creation of a regional network of trails, blueways, and conservation corridors that is growing to link more than 2.3 million citizens. With technical resources and catalytic funding from The Thread, local communities plan and implement their portions of this green interstate system. Catawba Lands Conservancy is the lead agency for The Thread, working in partnership with The Foundation For The Carolinas, and many local partners and land trusts.*

***About Catawba Lands Conservancy***

*Catawba Lands Conservancy is dedicated to saving land and connecting lives to nature. The Conservancy protects more than 10,000 acres in Catawba, Gaston, Iredell, Lincoln, Mecklenburg and Union counties and is one of 24 land trusts serving North Carolina. The organization focuses its efforts in four key areas: clean water, local farms, wildlife habitat and providing public access to nature. The Conservancy is supported in part with operating support by the Arts & Science Council of Charlotte-Mecklenburg, Inc. Catawba Lands Conservancy is the lead agency for the Carolina Thread Trail, an initiative that links more than two million citizens with hundreds of miles of trails that wind through fifteen counties in North and South Carolina.*

***Additional Resources:***

- [www.carolinathreadtrail.org](http://www.carolinathreadtrail.org)
- [www.catawbalands.org](http://www.catawbalands.org)

# # #

## **Appendix D: Federal Land Conservation Funding Opportunities**

### **Recreational Trails Grants Program**

US Department of Transportation

<http://www.fhwa.dot.gov/environment/rectrails/index.htm>

[http://www.ncparks.gov/About/trails\\_main.php](http://www.ncparks.gov/About/trails_main.php)

The Recreation Trails Program is a federal transportation program that provides monies for the maintenance, development, acquisition and construction of new and existing trail facilities for both motorized and nonmotorized recreational trail uses. Funds are distributed to the states according to a formula. Eligible applicants include nonprofit organizations, municipal agencies, state agencies, federal government agencies and other government entities (regional governments, port districts, etc.). Grants are distributed annually and require a twenty percent match. Eligible projects include:

- (1) maintenance and restoration of existing trails,
- (2) development and rehabilitation of existing trails,
- (3) construction of new recreation trails, and
- (4) acquisition of easements and fee simple title to property.

### **Transportation Enhancements (TE)**

US Department of Transportation

[www.enhancements.org](http://www.enhancements.org)

<http://www.ncdot.org/financial/fiscal/Enhancement/>

The federal Surface Transportation Program provides states with funding for highway projects. States are allocated funds based on a combination of population, transportation systems, miles of roads, and other factors. Each state must reserve at least 10% of its Surface Transportation Program dollars for transportation enhancement activities. These enhancement projects include historic preservation, rails-to-trails programs, easement and land acquisition, transportation museums, water pollution mitigation, wildlife connectivity, and scenic beautification. All projects must be related, in some way, to transportation.

In each state, TE projects are selected through a competitive process. Applications are submitted by local government entities, often in partnership with nonprofit organizations. The federal government provides 80 percent of the funds and the municipalities need to contribute a 20-percent match.

Transportation Enhancement (TE) activities, awarded through the North Carolina Call for Projects process, must benefit the traveling public and help communities increase transportation choices and access, enhance the built or natural environment and create a sense of place. Transportation Enhancement Projects must meet the following two federal requirements:

- Have a relationship to surface transportation
- Be one of twelve qualifying activities

### **Safe Routes to School Program**

US Department of Transportation

<http://safety.fhwa.dot.gov/saferoutes/>  
<http://www.ncdot.org/transit/bicycle/saferoutes/SafeRoutes.html>

SAFETEA-LU created a new program called Safe Routes to School. The goal of this program is to encourage children to walk to school by providing accessible and safe trails connecting schools to neighborhoods. 70% of the funds are used for infrastructure, 10% for education and enforcement, and 20% can be used for either category. Matching funds are not required.

### **Transportation and Community and System Preservation Program (TCSP)**

US Department of Transportation

<http://www.fhwa.dot.gov/tcsp/>

The Transportation and Community and System Preservation Program (TCSP) was established to help communities address the linkage between transportation, land use, and quality of life. Its goals are to improve the efficiency of transportation systems, reduce transportation's environmental impacts, reduce the need for costly future public infrastructure investments, and plan for development.

After the initial competitive funding rounds, Congress began to earmark this program for a wide variety of transportation projects, including trails. To gain access to these funds, it has been necessary for a member of the congressional delegation to request a project during the congressional appropriations process.

When there is a competitive process, the Federal Highway Administration will issue an RFP. Eligible entities include states, metropolitan planning organizations, local governments, and tribal governments. Nongovernmental organizations are encouraged to partner with a government agency. A 20% match is required. Grant proposals should address how proposed activities will meet the following:

- Improve the efficiency of the transportation system.
- Reduce the impacts of transportation on the environment.
- Reduce the need for costly future public infrastructure.
- Ensure efficient access to jobs, services and centers of trade.
- Encourage private sector development patterns.
- Planning grants are also available under this program to help communities achieve integration of transportation programs with community preservation and environmental activities.

### **Land and Water Conservation Fund (LWCF)**

Department of the Interior (varies by agency)

<http://www.nps.gov/ncrc/programs/lwcf/>

Created in 1965, the Land and Water Conservation Fund (LWCF) is the largest source of federal money for park, wildlife, and open space land acquisition. Specifically, the LWCF provides funding to assist in the acquiring, preserving, developing and assuring accessibility to outdoor recreation resources, including but not limited to open space, parks, trails, wildlife lands and other lands and facilities desirable for individual active participation. The program's funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year, while federal recreation fees, sales of federal surplus real property, and federal motorboat fuel taxes fund also contribute to the LWCF. Under this program, a portion of the money is



intended to go to federal land purchases and a portion to the states as matching grants for land protection projects.

### **LWCF – Federal**

Department of the Interior

Department of Agriculture/US Forest Service

The federal side of the Land and Water Conservation Fund provides funding for federal agencies (Fish and Wildlife Service, Forest Service, National Park Service, and the Bureau of Land Management) to add land to existing recreation areas, parks, forests, refuges and other federal units. LWCF funding provides the bulk of the money available for this purpose and is typically provided through the annual federal appropriations process, with Congress making the determination of what federal land units will receive LWCF funding each year.

In North Carolina, there are three national forests, several national wildlife refuges, two national seashores and scattered other national park service units – Great Smoky Mountains National Park, for example - that are eligible for LWCF acquisition funding. Funding levels for federal land acquisitions are determined by Congress or the relevant federal agency and are related to the property's value.

### **LWCF--Stateside**

National Park Service

[http://www.nps.gov/ncrc/programs/lwcf/fed\\_state.html](http://www.nps.gov/ncrc/programs/lwcf/fed_state.html)

<http://www.ils.unc.edu/parkproject/lwcf/home1.html>

The stateside LWCF program provides a 50 percent match to states for planning, developing and acquiring land and water areas for natural resource protection and recreation enhancement.

Funds are distributed to states based on population and need. Once the funds are distributed to the states, it is up to each state to choose the projects, though the National Park Service has final approval. Eligible grant recipients include municipal subdivisions, state agencies and tribal governments, each of whom must provide at least 50 percent matching funds in either cash or in-kind contributions and a detailed plan for the proposed project. Grant applications are evaluated based on the technical merits of the project, the public/private partnerships, and how the project addresses the identified needs and priorities of a statewide comprehensive plan. Annual appropriations to the fund have ranged from a high of \$369 million in 1979 to four years of zero funding between 1996 and 1999.

### **Forest Legacy Program (FLP)**

US Forest Service (USFS)

[www.fs.fed.us/spf/coop/programs/loa/aboutflp.shtml](http://www.fs.fed.us/spf/coop/programs/loa/aboutflp.shtml)

The Forest Legacy Program was established in 1990 to provide federal funding to states to assist in securing conservation easements on forestlands threatened with conversion to non-forest uses. Fee transactions are also used under the program, either for the whole transaction or combined with easements to achieve a state's highest conservation goals. A state voluntarily enters the program by submitting an Assessment of Need (AON) to the Secretary of Agriculture for approval. These plans establish the lead state agency, the state's criteria for Forest Legacy projects, and Forest Legacy areas within

which proposed Legacy projects must be located. Once the AON is approved, the state lead agency can submit up to three grants each year for projects within the FLAs. The federal government may fund up to 75 percent of project costs, with at least 25 percent coming from private, state or local sources. North Carolina and South Carolina are participating in the program.

### **Federal Aid in Sport Fish Restoration**

U.S. Fish and Wildlife Service

<http://federalasst.fws.gov/sfr/fasfr.html>

The Federal Aid in Sport Fish Restoration Act, commonly referred to as the Dingell-Johnson Act, was passed in 1950, to create a program for the management, conservation, and restoration of fishery resources. The program is funded by revenues collected from an excise tax paid by the manufacturers of fishing equipment. Appropriate State agencies are the only entities eligible to receive these grants and funds are apportioned to each State on a formula based on the percentage of licensed anglers in the state and the percentage of states' land and water area.

The program is a cost-reimbursement program in which the state applies for repayment of up to 75 percent of approved project expenses. The state must provide at least 25 percent of the project costs from non-federal sources.

Federal Aid in Wildlife Restoration (Pittman-Robertson Act)

U.S. Fish and Wildlife Service

<http://federalasst.fws.gov/wr/fawr.html>

Implemented in 1938, the Federal Aid in Wildlife Restoration Act, more commonly known as the Pittman-Robertson Act, provides funding for the selection, restoration, rehabilitation, and improvement of wildlife habitat as well as wildlife management research. Funds are derived from an excise tax on sporting arms, ammunition, and archery equipment as well as a percent tax on handguns. Funds are apportioned to state agencies on a formula based on the total area of the state and the number of licensed hunters in the state.

The program is a cost-reimbursement program in which the state applies for repayment of up to 75 percent of approved project expenses. The state must provide at least 25 percent of the project costs from non-federal sources.

### **Migratory Bird Conservation Fund**

U.S. Fish and Wildlife Service

<http://www.fws.gov/refuges/realty/mbcc.html>

Each year, duck stamp (migratory bird and conservation stamps) revenues are deposited into the Migratory Bird Conservation Fund along with appropriations from the Wetlands Loan Act of 1961, import duties from arms and ammunitions, receipts from refuge admission fees, receipts from the sale of refuge-land crops and refuge rights-of-way, and Federal Aid funds. Administered by the USFWS, the Migratory Bird Conservation Fund is used to acquire waterfowl breeding, wintering, and migration habitat needed for maintaining optimum migratory bird population levels and to achieve desirable migration and distribution patterns. The habitat areas, acquired in fee, easement, or other interests such as leases or cooperative agreements, become units of the National Wildlife Refuge System or Waterfowl Production Areas. The Service focuses its acquisition efforts to benefit waterfowl species most in need of habitat protection. Over

5 million acres have been protected with funds from the Migratory Bird Conservation Fund. Refuges with acquisitions funded through this program in North Carolina include Cedar Island NWR, Roanoke River NWR, Mackay Island NWR, and Currituck NWR.

### **The North American Wetlands Conservation Act (NAWCA)**

U.S. Fish and Wildlife Service

<http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm>

The North American Wetlands Conservation Act (NAWCA) was passed in 1989 to provide matching grants for the acquisition, restoration, and enhancement of wetland ecosystems for the benefit of waterfowl and other wetland dependent migratory species. Administered by the U.S. Fish and Wildlife Service, grants are available to nonprofit organizations, state and local agencies, tribes, and private individuals in the U.S., Canada, and Mexico. Two types of grants are awarded; small grants for up to \$75,000 and standard grants for up to \$1 million. There is a 1:1 non-federal match requirement for each grant although the average match of successful proposals is over 2:1.

In December 2002, Congress reauthorized the Act and expanded its scope to include the conservation of all habitats and birds associated with wetlands ecosystems.

### **State Wildlife Grants**

U.S. Fish and Wildlife Service

<http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG.htm>

Created by Congress in 2001, the State Wildlife Grants Program is a matching grant program available to every state in support of cost-effective, on-the-ground conservation efforts aimed at restoring or maintaining populations of native species before listing under the Endangered Species Act is required. In order to maximize the effectiveness of this program, Congress required each state to develop a comprehensive wildlife conservation strategy for the conservation of the state's full array of wildlife and the habitats they depend upon. These plans identify species and habitats of greatest conservation need and outline the steps necessary to keep them from becoming endangered. The State Wildlife Grants Program provides matching funds that are to be used to implement the conservation recommendations outlined in these state wildlife action plans.

Funds appropriated under the SWG program are allocated to every state according to a formula based on state size and population.

### **Cooperative Endangered Species Conservation Fund Recovery Land Acquisition Grants**

U.S. Fish and Wildlife Service

<http://www.fws.gov/endangered/grants/index.html>

Grants offered through the Cooperative Endangered Species Conservation Fund (authorized under section 6 of the Endangered Species Act) fund participation in a wide array of voluntary conservation projects for candidate, proposed and listed species. Recovery Land Acquisition Grants provide funds to States for the acquisition of habitat, through both fee and easement, for federally listed threatened and endangered species in support of approved recovery plans. These funds must contribute to the implementation of a finalized and approved recovery plan for at least one listed species. North Carolina hosts 63 threatened and endangered species while South Carolina hosts 42. Land acquisition projects that support the recovery of these species are eligible for funding under this program.

## **National Fish and Wildlife Foundation Keystone Initiative Grants & Special Grants Programs**

National Fish and Wildlife Foundation

<http://www.nfwf.org/programs.cfm>

In 1984, Congress created the National Fish and Wildlife Foundation to benefit the conservation of fish, wildlife, plants, and the habitat on which they depend by attracting diverse investments to conservation and encouraging locally supported stewardship on private and public lands. Through their Keystone Initiatives Grant Program, NFWF funds projects to conserve and restore bird, fish, and wildlife populations as well as the habitats on which they depend. The Foundation awards matching grants to projects that address priority actions laid out by their strategic plan, work proactively to involve other conservation and community interests, leverage funding, serve multiple objectives, involve strong partnerships, and fit into a larger ecosystem approach to conservation. The most successful applications will display the long-term environmental benefits of a project that yield high quality conservation returns.

Eligible grantees include federal, tribal, state, and local governments, educational institutions, and non-profit conservation organizations. Grants can range from \$50,000 to \$300,000 and typically require a 2:1 nonfederal match.

In addition to the Keystone Initiative matching grants, the Foundation administers a variety of special grant programs with specific conservation objectives, programmatic guidelines, and timelines. *(See the Foundation's website for more information on these numerous grant opportunities or call NFWF's Eastern Partnership Office (202) 857-0166.*

## **Brownfields Program**

U.S. Environmental Protection Agency (EPA)

<http://www.epa.gov/brownfields/applicat.htm>

If a property identified for acquisition or redevelopment is or might be a "brownfields" site, many programs and other benefits at the local, state and federal levels encourage its redevelopment. The U.S. Environmental Protection Agency's Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, and environmental job training. In addition, legislation signed into law in 2001 limits the liability of certain contiguous property owners and prospective purchasers of brownfields properties, and innocent landowner are also afforded liability benefits to encourage revitalization and reuse of brownfield sites. EPA's brownfields program provides several types of grants:

**Assessment Grants** provide funding for a grant recipient to inventory, characterize, assess, and conduct cleanup and redevelopment planning and community involvement related to brownfield sites. \$200,000 grants (or to \$350,000 with a waiver).

**Remediation grants** are available for remediation of brownfield sites. These grants are limited to \$200,000 per site, with no more than three applications per entity. There is a 20 percent cost-share. NGOs are eligible to apply, but must have site control of the property. One site may qualify for two grants if pollutants include petroleum and non-petroleum contaminants.

**Revolving Loan Fund grants (RLF)** provide funding for a grant recipient to capitalize a revolving loan fund to provide sub grants to carry out cleanup activities at brownfields sites. \$1 million per eligible entity, with a 20 percent cost share.

Annual grants are announced in approximately October of each calendar year.

In an example of this funding, TPL received an EPA brownfields grant to assist in the capping of a landfill in Providence, R.I. on a 1.5 acre property that is now part of the Woonasquatucket River Greenway.

### **Urban Park and Recreation Recovery Program (UPARR)**

National Park Service

<http://www.nps.gov/uprr/>

The Urban Park and Recreation Recovery Program was developed as the urban component to the Land and Water Conservation Fund in 1978. UPARR grants are given to eligible cities and counties and are meant to assist disadvantaged areas. The grants fund rehabilitation (capital funding for renovation or redesign of existing facilities), innovation (funding aimed to support specific activities that either increase recreation programs or improve the efficiency of the local government to operate recreation programs), and planning (funding for development of recovery action program plans) for recreational services in urban areas. From the program's inception in 1978 to 2002, it has distributed approximately \$272 million for 1,461 grants to local jurisdictions in 43 states, the District of Columbia and Puerto Rico. A local match of at least 30 percent is required for most grants. This program, however, has not been funded since 2002.

### **Clean Water and Drinking Water State Revolving Funds**

U.S. Environmental Protection Agency

<http://www.epa.gov/OWM/cwfinance/cwsrf/index.htm>

<http://www.epa.gov/safewater/dwsrf/index.html>

The U.S. Environmental Protection Agency is charged with implementing both the Clean Water Act and the Safe Drinking Water Act, two landmark pieces of legislation whose respective goals are to clean up America's waterways and to ensure that we have safe water to drink. Conservation is an eligible activity under both laws. Both programs utilize "State Revolving Funds" or SRFs to fund projects that better water quality and enhance our drinking water supplies. Every year, Congress appropriates funds that are apportioned out to the states on a formula basis to fund the SRFs.

#### **Clean Water State Revolving Fund (CWSRF)**

Through the CWSRF program, each state maintains a revolving loan fund to provide a source of low-cost financing for a wide range of water quality infrastructure projects. The CWSRF program is available to fund a wide variety of water quality projects including all types of nonpoint source, watershed protection or restoration, and estuary management projects, as well as more traditional municipal wastewater treatment projects. Nationwide, 95% of these funds go toward infrastructure projects, but watershed protection projects are increasing.

CWSRF programs operate much like environmental infrastructure banks that are capitalized with federal and state contributions. CWSRF monies are loaned to

communities and loan repayments are recycled back into the program to fund additional water quality protection projects. The revolving nature of these programs provides for an ongoing funding source that will last far into the future.

States have the flexibility to target resources to their particular environmental needs, including contaminated runoff from urban and agricultural areas, wetlands restoration, groundwater protection, Brownfield's remediation, estuary management, and wastewater treatment.

Land or easement acquisition is permitted with CWSRF funds as a method to reduce nonpoint source pollution. For example, California has already used \$112 million of its CWSRF funds to acquire over 29,000 acres of land for water quality benefits.

#### Drinking Water State Revolving Fund (DWSRF)

The Drinking Water State Revolving Fund (DWSRF) program was established by the 1996 Safe Drinking Water Act Amendments, under which EPA provides grants to States to establish revolving loan funds from which they provide loans and other types of financial assistance to public water systems for eligible infrastructure improvements. Since its inception, Congress has directed \$4.2 billion for the DWSRFs.

EPA has begun a concerted effort to focus more attention on protecting "source water," which they roughly define as "untreated water from streams, rivers, lakes, or underground aquifers which is used to supply private wells and public drinking water." There is growing recognition that protecting the source from contaminants is often more efficient and cost-effective than treating drinking water later.

Loans under the DWSRF are typically low interest and can be repaid over 20 years. There is some flexibility given to the states to allow them to waive the principal repayment, offer negative interest rates or extend the loans to 30 years in specific hardship cases.

Up to 31 percent of these capitalization grants can be set-aside to administer the SRF and state source protection programs and to fund source water protection activities, including land acquisition. Up to 15 percent of the set-aside can be used for land conservation and voluntary, incentive-based protection measures, with no more than 10 percent used for a single type of activity, such as land protection.

#### **Community Development Block Grants (CDBG)**

Federal Department of Housing and Urban Development

<http://www.hud.gov/offices/cpd/communitydevelopment/programs/entitlement/>

The Department of Housing and Urban Development provides Entitlement Communities Grants for the principal cities of Metropolitan Statistical Areas (MSAs), other metropolitan cities with populations of at least 50,000; and qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities). CDBG funds may be used for activities that include, but are not limited to acquisition of real property; relocation and demolition; and construction of public facilities and improvements, such as water and sewer facilities, streets, neighborhood centers, and the conversion of school buildings for eligible purposes.

For specifics on which community received CDBG funds, go to <http://www.hud.gov/offices/cpd/about/budget/budget08/> and click on the relevant state.

An additional HUD program is the Economic Development Initiative program (EDI). Projects within this program are earmarked directly by Congress and are generally awarded under \$300,000. Funds may go towards park acquisition and improvements, but directly compete with other economic, social, housing, and cultural development projects.

**Department Of Defense Buffer Program**

<http://www.denix.osd.mil/sri/rep/index.cfm>

The Department of Defense's Readiness and Environmental Protection Initiative (REPI) provides funding for the military to work with state and local governments, non-governmental organizations and willing land owners to help prevent encroachment from adversely impacting military facilities.

The military services are authorized to enter into agreements with conservation organizations and public agencies to acquire land or easements on land around military installations. The intent of the REPI program is (1) to limit development or property use that is incompatible with a military installation's mission and (2) to preserve habitat off base to relieve current or anticipated environmental restrictions that might interfere with military training on base. The Department of Defense can share real estate acquisition costs for projects that support these purposes and the military services are also authorized to use existing operations and maintenance funds for this purpose. The legislation does not authorize land acquisition for active military use.