

Crossville Greenway Master Plan

April 2021

Produced by the

Friends of the Trails, FOTT

(a 501(c)3 non-profit organization in Cumberland County, Tennessee)

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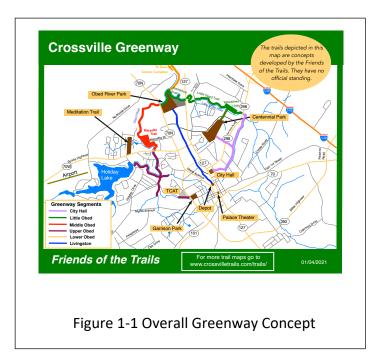
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1 Summary

The purpose of this plan is to provide an overview of hiking and hiking trails in Cumberland County in general and the future plans for trails within the city limits of Crossville in particular.



There are over 80 miles of hiking trails already in the county, up from 30 miles ten years ago, and these trails are well used by residents and visitors. The historical growth of the trails systems in the county shows there is a lot of public support for more trails as evidenced by the number of volunteers who do physical work on the trails, the enthusiasm shown by hikers when new trails are added into the inventory, the responses in the recent public survey and the enthusiastic participation in the local Hiking Marathon.

Trails are used more when they are

constructed near population centers and that is why the Friends of the Trails is concentrating its efforts on building the Greenway within the Crossville City limits. The benefits of Greenways to the community are described in some detail in order assist with fundraising and property access.

Rather than attempting one major project to construct a typical Greenway of wide paved trails at considerable cost, the Friends of the Trails has adopted an incremental approach. We have been building one or two miles of natural trails each year with the expectation that with increased public use there will be growing community support to upgrade these initial trails to full Greenway standards despite the significant cost involved.

This plan describes in some detail the planned routes for constructing the network of natural trails around the city. These are very pragmatic plans that the Friends of the Trails expects to implement in the not-too-distant future with the current level of community support- both financial and physical. If community support grows then this plan will be updated with more ambitious plans reflecting that increased support.

The final section of the report makes very specific recommendations to increase the probability that this ambitious plan will come to fruition sooner rather than later.

The top four recommendations are:

- 1) Make the negotiation of permissions to build trails along the proposed route of the Greenway a high priority.
- Continue FOTT construction of natural trails as soon as permission is obtained from property owners
- 3) Invite City and County Governments to adopt the Crossville Greenway Concept to achieve two primary goals
 - I. Accelerate property acquisition and construction of natural trails.
 - i.Rapid conversion of segments of the Greenway natural trails into 12ft-wide paved multi-use trails.
- 4) Increase the FOTT construction rate of natural trails from the current rate of 1.5 miles each year.

2 Introduction and Background

The purpose of this plan is to provide an overview of hiking and hiking trails in Cumberland County in general and the future plans for trails within the city limits of Crossville in particular. It has been prepared by the Planning Advisory Committee of the Friends of the Trails, a 501(c)3 organization incorporated in Cumberland County Tennessee and approved by the Board of Directors.

The primary attraction of Cumberland County and the City of Crossville is its scenic beauty, culture and history going back to the Walton Road and relatively flat land which makes residential, commercial and industrial development easy. Located adjacent to Interstate 40 is a positive which brings numerous people through the city and county each day and facilitates moving products made locally.

Cumberland County has been known for decades as a golfing mecca with numerous public and private courses scattered across the county. These golf courses were generally connected with large residential developments such as Fairfield Glade, Lake Tansi and Holiday Hills. Another significant feature is the history of the area and the beautiful Cumberland Mountain State Park which serves both the local citizens and visitors to this area.

In the last decade many hiking and walking trails have been constructed and promoted in Cumberland County creating a lot of interest in these activities as the recreational and health benefits of such exercise is appreciated.

This Greenway Master Plan builds on the work of the 2014 City of Crossville Recreation Master Plan -

http://www.crossvilletn.gov/ccgov_documents/recreation/Parks%20&%20Rec%20Master%20Plan%202014.pdf

3 Friends of the Trails



The Friends of the Trails is a 501(c) 3 organization formed in 2015 in the State of Tennessee. The purpose and mission of the organization is to promote the construction, maintenance and use of walking and hiking trails in

Cumberland County, Tennessee. We recruit and organize volunteers to build hiking trails as community projects. Our volunteers also construct bridges, signs, benches and other amenities along the trails using materials we provide. Once trails are constructed our volunteers help with much of their maintenance. In order to promote the use of the trails we organize regular guided hikes and we organize the annual Hiking Marathon.

More information is available at https://crossvilletrails.com

4 Public Input and Support

4.1 Hikers and Walkers

The primary reason for people using trails is to get out in nature, for their health and to relax after work or a long busy week. Users include walkers, runners, hikers, mountain bikers, bird watchers and others who enjoy the waterfalls and overlooks found across the county.

Retirees make up a high percentage of city and county residents and they make up by far the largest number of hiking trail-users. This is partially because the hiking activities over the last ten years have been centered on the retirement community of Fairfield Glade.

There are many hiking opportunities within the county: The Tennessee Trails Plateau Chapter and the Fairfield Glade Hiking Group both organize weekly hikes to destinations throughout the neighboring counties; The Friends of the Trails organizes weekly hikes within Fairfield Glade.

The Cumberland County Hiking Marathon is another hiking opportunity that has educated a great many people on the hiking trails within their community. The marathon has also been instrumental in expanding the demographics of hikers beyond the traditional retirees to a much younger group of people.

4.2 Cumberland County Hiking Marathon

The Cumberland County Hiking Marathon was conceived in 2015 by the Friends of the Trails to promote the use of all the trails within the county. The Hiking Marathon was started by an idea that came from Hot Springs, AR, where the community, held a simple marathon on their trails. Not a race just a commitment to complete 26.2 miles of trails in

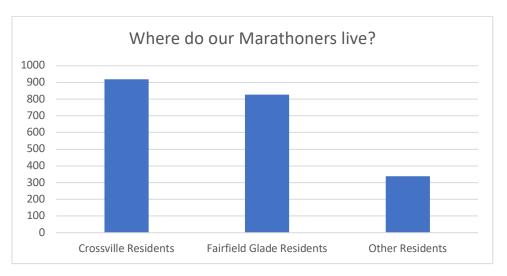
a set time. Fairfield Glade volunteers had been building trails for four years and it was thought that holding a marathon would be a great way to promote the use of the trails. The Friends of the Trails organized the event and generous sponsors stepped forward which enabled it to be free to enter for all hikers. The concept is simple: hikers commit to hiking a pre-specified list of trails throughout Cumberland County during the month of September. The entire event is run on the honor system and those that complete the entire 26.2 miles get a T-shirt and patch – dogs get a bandana or dog-tag.

The first marathon in 2015 was extremely successful with over 300 entries. This happened with little publicity. The marathon caught the imagination of the local people as a family-friendly, healthy event and in 2020 there were over 2,000 entries.

Probably because of the demographics of Cumberland County the ages of the hikers in the marathon are predominantly seniors. Also, with young families and jobs, younger adults have less time available for recreation.



The Cumberland County Hiking Marathon is not restricted to county residents. The first year it was composed of 90% Fairfield Glade Residents but now the word has spread further afield and there is more balance.



More information is available about the marathon at: https://hikingmarathon.com

4.3 Public Support Survey

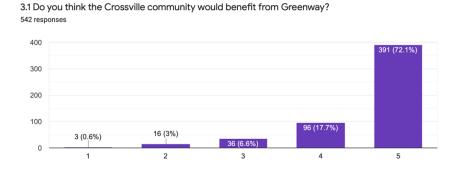
The historical growth of the trails systems in the county shows there is a lot of public support for more trails as evidenced by the number of volunteers who do physical work on the trails, the enthusiasm shown by hikers when new trails are added into the inventory, and the enthusiastic participation in the local Hiking Marathon.

In January 2021 the Friends of the Trails decided to gather opinions from the general public on the Greenway by conducting an online survey. We are very pleased at the level of interest illustrated by the receipt of over 550 responses to the survey. Here are a few key results from the responses.

Question 3.1 Do you think the Crossville community would benefit from a Greenway?

(1 = Not much at all to 5 = A great deal)

90% of responses rated the benefit a 5 or a 4.



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Question 3.2 How do you feel about a Greenway system of connected walking and biking trails in Crossville?

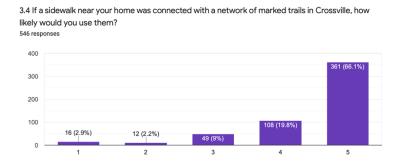
86.9% said it was a good idea and would promote more walking and biking around Crossville.

81.1% said they are a safe way to get exercise, either walking or biking.

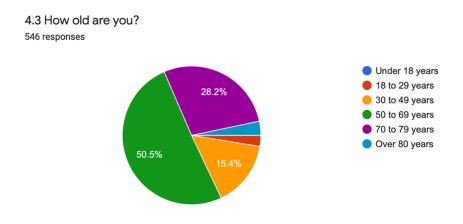
76.7% said they are a great way to allow families to get out together and be safe from street traffic.

However, 7.7% said they have concerns that it may be used for antisocial purposes.

Question 3.4 If a sidewalk near your home was connected with a network of marked trails in Crossville, how likely would you use them? (1 = Not Likely to 5 = Very Likely) 66.1% said it is very likely they would use a network of trails near their home.



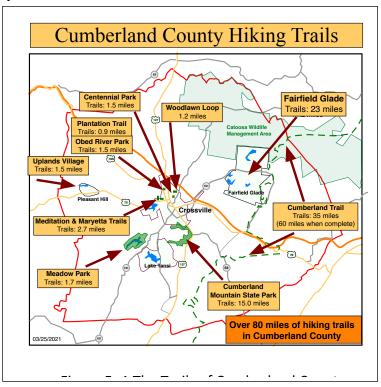
It should be noted that this was not a scientific survey of a random sample of residents but just an indication of the community support for the project. Many of the respondents are hikers (73% often participate in outdoor activities, 52% walk/run more than 5 miles each week) and many are older (69% are over 50 years old).



Overall we think this a very positive expression of support for the Crossville Greenway project.

5 The Trails of Cumberland County

There are over 80 miles of hiking trails in Cumberland County, up from about 30 miles ten years ago, and these trails are well used by residents and visitors. These trails can be considered to be in five distinct categories based on their geographical location, history and purpose.



5.1 The Justin P. Wilson Cumberland Trail State Park

The Cumberland Trail is an ambitious hiking trail project under development in East Tennessee. This extensive trail is being constructed and maintained largely by volunteers from Tennessee and across the nation. Efforts are organized and managed by the Tennessee Department of Environment and Conservation (TDEC) as the Cumberland Trail State Park.

Building the Cumberland Trail is a grassroots effort, driven by communities along the trail, government agencies, hiking clubs and a broad network of individuals. This successful private/public partnership is a model often cited to demonstrate the power of volunteerism and public/private partnerships.

When completed, the Cumberland Trail (CT) will extend more than 300 miles from its northern terminus in Cumberland Gap National Historical Park in Kentucky to its southern terminus at the Chickamauga-Chattanooga National Military Park located on Signal Mountain just outside Chattanooga, Tennessee.

Over 210 miles of the trail are open for hiking, and trail construction continues. There are 35 miles of trail open in Cumberland County, including the segment across the Catoosa Wildlife Management Area which is open to hikers year-round with special instructions to mitigate any dangers from hunters.

Estimated completion date for all trail segments on currently owned state land is late 2021. When complete over 60 miles of the trail will be within Cumberland County.

The jewel in the crown of the Cumberland Trail in Cumberland County is no doubt the Black Mountain section which provides stunning views over Grassy Cove.

More information is available at:

Cumberland Trail Conference https://www.cumberlandtrail.org

5.2 Cumberland Mountain State Park

Cumberland Mountain State Park is situated on the Cumberland Plateau, a segment of the great upland, which extends from Western New York to Central Alabama. It is said to be the largest timbered plateau in America. Cumberland Mountain State Park began as part of the greater Cumberland Homesteads Project, a New Deal-era initiative by the Resettlement Administration that helped relocate poverty-stricken families on the Cumberland Plateau to small farms centered on what is now the Cumberland Homestead community. This 1,720-acre park was acquired in 1938 to provide a recreational area for some 250 families selected to homestead on the Cumberland Plateau.

15 miles of trail meander around Byrd lake, and through the woods. Hikes range from easy to moderate day hikes, to overnight hiking adventures. Historic trails built by the Civilian Conversation Corps(CCC) and the Works Progress Administration (WPA) can still be found in Cumberland Mountain Park especially the Pioneer Loop Trail that travels along Byrd Creek.

More information is available at: https://tnstateparks.com/parks/cumberland-mountain

5.3 Fairfield Glade

Over the last ten years, a great deal of hiking trail construction has occurred in the retirement community of Fairfield Glade. The work has largely been done by a large enthusiastic group of resident volunteers with help from trail specialist contractors. The Fairfield Glade Community Club, the developer (Fairfield Homes) and the Friends of the Trails have successfully partnered to harness the volunteer power and energy with some financial along assistance to create over 20 miles of well-designed hiking trails in some of the most beautiful terrain on the plateau. The volunteers meet nearly every Saturday morning to work on the latest trail Fairfield Glade

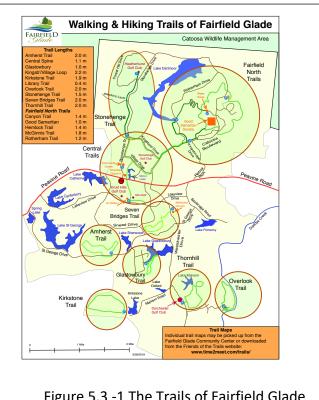


Figure 5.3 -1 The Trails of Fairfield Glade

become a hiking destination in the area and trails are one of the top reasons given by new residents for choosing a home in Fairfield Glade for their retirement years.

More information is available at: https://gladetrails.com

5.4 Cumberland County Trails

In addition to the Cumberland Trail, there are a few other hiking trails scattered throughout the county. These include the Lake Alice Trail (1.5 miles) in the Pleasant Hill Community, the 1.5 mile paved trail in the Obed River Park, Maryetta Trail (1.7 miles) and the Soldier's Beach Trail (1.7 miles) providing sweeping views of the lake in the city-owned Meadow Lake Park. There are other trails on private property, such as Camp Nakanawa, but this document only addresses trails that are open to the public.

5.5 **Bike Trails**

5.5.1 Cumberland Mountain State park

There are a number of miles of Mountain Bike trails in CMSP and there are plans to add more.

5.5.2 Meadow Park

The City is keen to add amenities at Meadow Park to use more of the undeveloped acres around the lake. Traditionally the park was used exclusively for fishing and camping but in 2015 the Soldier's Beach Trail was opened and hiking became a popular amenity. There are plans to add a disc golf course and a bridge is under construction below the dam to give access to miles of proposed bike and horse trail.

6 The Crossville Greenway Concept

6.1 Introduction to the Greenway

While most people are familiar with city or county parks, a new type of park, called Greenways, have been developed across the nation over the past several decades.

Greenways are corridors of land recognized for their ability to connect people and places together. These ribbons of open space are located within linear corridors that are either natural, such as rivers and streams, or manmade, such as abandoned railroad beds and utility corridors.

Greenways, as vegetated buffers protect natural habitats, improve water quality and reduce the impacts of flooding in floodplain areas. Most greenways contain trails, which enhance existing recreational opportunities, provide routes for alternative transportation, and improve the overall quality of life in an area.

Greenway trails can be paved or unpaved, and can be designed to accommodate a variety of trail users, including bicyclists, walkers, hikers, joggers, skaters, horseback riders, and those confined to wheelchairs.

Trails are used more when they are constructed near population centers and that is why the Friends of the Trails is concentrating its efforts on building the Greenway within the Crossville City limits.

The number of miles of natural surfaced trails are increasing in Crossville due to the efforts of the Friends of the Trails non-profit volunteer group working in partnership with the city. This is part of a vision for a Crossville Greenway. In the past 8 years, 7 miles of trails have been constructed primarily adjacent to the Obed and Little Obed rivers, generally on city owned properties. Later sections of this documents give much more detail about the Greenway.

A great resource on the topic of greenways is the TDEC document "General Advice for the Development of a Hard-Surfaced Greenway Project" by the Commissioner's Council on Greenways and Trails Development Committee

6.2 Trail Building Milestones Around Crossville

The Friends of the Trails has been involved in trail-building activities in Crossville since 2014.

- 2014 The City gave permission to build the Soldier's Beach Trail
- 2015 Completed the Soldier's Beach Trail (1.7miles)
- 2015 First Hiking Marathon 300 registrations
- 2015 Created the Friends of the Trails, a non-profit corporation
- 2017 Completed the Woodlawn Loop (1.2 miles)
- 2017 Completed the Meditation Trail (1.0 miles)
- 2017 First briefing to the City Council on the Greenway Concept
- 2018 Completed the Plantation Trail extension (0.9 miles) to the Obed River Park trails
- 2020 Completed the Maryetta Trail (1.7 miles)
- 2020 Completed the Little Obed Trail to Old Jamestown Highway (0.8 miles)
- 2020 Sixth Hiking Marathon 2,050 registrations

6.3 Connections to Downtown Businesses

We are beginning to explore ways to involve retail businesses in the downtown area in the Greenway Project. The Greenway concept is essentially a beltway around the city. We are looking for ways to connect users of the Greenway with restaurants and shops in Historic Downtown Crossville to increase the economic benefit of the project. We would also like to introduce hikers to some of the history of the downtown area by highlighting historic buildings and other landmarks.

Because the historic downtown area is some distance from the Greenway trail-heads we are investigating a "village" concept where we identify retail businesses and items of historical interest on routes in a number of "villages" – each one being near a Greenway trail-head.

The city is well aware of the benefits of sidewalks to the community and invests each year in the construction of more sidewalks. Some of these sidewalks may be used as urban trails to connect the Greenway to local businesses, especially in the historic downtown area.

6.4 2014 City of Crossville Recreation Master Plan

In 2014 the city of Crossville published a comprehensive Parks and Recreation Master Plan prepared by Lose & Associates. This plan addressed the need for a Greenway and made some recommendations. The greenway is addressed in pages 5.25 through 5.33.

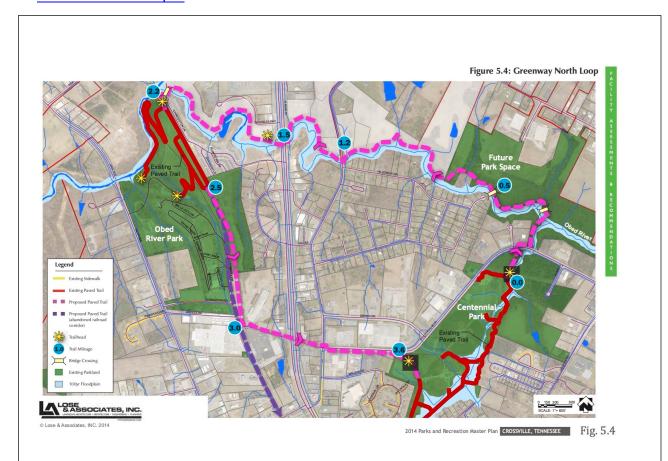
"The planning team recommends the development of greenway trails, sidewalk improvements and bicycle lanes as a priority item for Crossville."

"the planning team recommends utilizing the abandon railroad line running through Crossville."

"Figure 5.4 also illustrates opportunities for a greenway loop trails connecting Centennial Park to Obed River Park."

This maps shows the route we have adopted with our segments of the Greenway: Woodlawn Loop, Little Obed River Trail and the Plantation Trail.

http://www.crossvilletn.gov/ccgov_documents/recreation/Parks%20&%20Rec%20Master%20Plan%202014.pdf



Map from 2014 Parks Recreation Master Plan

6.5 Benefits of the greenway

Trails and greenways provide a variety of benefits that ultimately affect the sustainability of a region's economic, environmental, and social health. Greenways Inc provides very good descriptions of these befits on their website at www.greenways.com/benefits-of-greenways. These benefits include:

- Creating Value and Generating Economic Activity
- Improving Bicycle and Pedestrian Transportation
- Improving Health through Active Living
- Clear Skies, Clean Rivers, and Protected Wildlife
- Protecting People and Property from Flood Damage
- Enhancing Cultural Awareness and Community Identity

Numerous studies have made the positive link between trails and their benefits abundantly clear. The degree to which a particular type of benefit is realized depends largely upon the nature of the greenway and trail system being implemented.

6.5.1 Creating Value and Generating Economic Activity

There are many examples, both nationally and locally, that affirm the positive connection between greenspace and property values (1). Residential properties will realize a greater gain in value the closer they are located to trails and greenspace. According to a 2002 survey of recent homebuyers by the National Association of Home Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices (2). Additionally, the study found that 'trail availability' outranked 16 other options including security, ball fields, golf courses, parks, and access to shopping or business centers. Findings from the Trust for Public Land's Economic Benefits of Parks and Open Space, and the Rails-to-Trails Conservancy's Economic Benefits of Trails and Greenways (listed below) illustrate how this value is realized in property value across the country.

6.5.2 Trails and Greenways Increase Real Property Values

- Apex, NC: The Shepard's Vineyard housing development added \$5,000 to the price of 40 homes adjacent to the regional greenway – and those homes were still the first to sell (3).
- Front Royal, VA: A developer who donated a 50-foot-wide, sevenmile-long easement along a popular trail sold all 50 parcels bordering the trail in only four months.

- Salem, OR: land adjacent to a greenbelt was found to be worth about \$1,200 an acre more than land only 1000 feet away.
- Oakland, CA: A three-mile greenbelt around Lake Merritt, near the city center, was found to add \$41 million to surrounding property values.
- Seattle, WA: Homes bordering the 12-mile Burke-Gilman trail sold for 6 percent more than other houses of comparable size.
- Brown County, WI: Lots adjacent to the Mountain Bay Trail sold faster for an average of 9 percent more than similar property not located next to the trail.
- Dayton, OH: Five percent of the selling price of homes near the Cox Arboretum and park was attributable to the proximity of that open space.

6.5.3 Trail Tourism Creates Economic Impacts

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

- 1. The Outer Banks, NC: Bicycling is estimated to have an annual economic impact of \$60 million and 1,407 jobs supported from the 40,800 visitors for whom bicycling was an important reason for choosing to vacation in the area. The annual return on bicycle facility development in the Outer Banks is approximately nine times higher than the initial investment (4).
- 2. Damascus, VA: At the Virginia Creeper Trail, a 34-mile trail in southwestern Virginia, locals and non-locals spend approximately \$2.5 million annually related to their recreation visits. Of this amount, non-local visitors spend about \$1.2 million directly in the Washington and Grayson County economies (5).
- 3. Morgantown, WV: The 45-mile Mon River trail system is credited by the Convention and Visitors Bureau for revitalizing an entire district of the city, with a reported \$200 million in private investment as a direct result of the trail $_{(6)}$.

- 4. Tallahassee, FL: The Florida Department of Environmental Protection Office of Greenways & Trails estimate an economic benefit of \$2.2 million annually from the 16-mile St. Marks Trail (8).
- 5. San Antonio, TX: Riverwalk Park, created for \$425,000, has surpassed the Alamo as the most popular attraction for the city's \$3.5-billion tourism industry (7).
- 6. Pittsburgh, PA: Mayor Tom Murphy credits trail construction for contributing significantly to a dramatic downtown revitalization.
- 7. Allegheny Passage, PA: The direct economic impact of the trail exceeded \$14 million a year, encouraging the development of several new businesses and a rise in property values in the first trailhead town.
- 8. Leadville, CO: In the months following the opening of the Mineral Belt Trail, the city reported a 19 percent increase in sales tax revenues.
- 9. Dallas, TX: The 20-mile Mineral Wells to Weatherford Trail attracts 300,000 people annually and generates local tax revenues of \$2 million.

6.5.4 Improving Bicycle and Pedestrian Transportation

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

Trail networks can provide alternative transportation links that are currently unavailable. Residents who live in subdivisions outside of downtown areas are able to walk or bike downtown for work, or simply for recreation. Residents are able to circulate through urban areas in a safe, efficient, and fun way: walking or biking. Residents are able to move freely along trail corridors without paying increasingly high gas prices and sitting in ever-growing automobile traffic. Last but not least, regional connectivity through alternative transportation could be achieved once adjacent trail networks are completed and combined.

6.5.5 Improving Health through Active Living

A region's trail network will contribute to the overall health of residents by offering people attractive, safe, accessible places to bike, walk, hike, jog, skate, and possibly places to enjoy water-based trails. In short, trail networks create better opportunities for active lifestyles.

The design of our communities—including towns, subdivisions, transportation systems, parks, trails and other public recreational facilities—affects people's ability to reach the recommended 30 minutes each day of moderately intense physical activity (60 minutes for youth). According to the Centers for Disease Control and Prevention (CDC), "Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic" (9).

In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week $_{(10)}$. This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits $_{(11)}$. Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community.

Many public agencies are teaming up with foundations, universities, and private companies to launch a new kind of health campaign that focuses on improving people's options instead of reforming their behavior. A 2005 Newsweek Magazine feature, Designing Heart-Healthy Communities, cites the goals of such programs: "The goals range from updating restaurant menus to restoring mass transit, but the most visible efforts focus on making the built environment more conducive to walking and cycling." (12) Clearly, the connection between health and trails is becoming common knowledge. The Rails-to-Trails Conservancy puts it simply: "Individuals must choose to exercise, but communities can make that choice easier."

6.5.6 Clear Skies, Clean Rivers, and Protected Wildlife

There are a multitude of environmental benefits from trails, greenways, and open spaces that help to protect the essential functions performed by natural ecosystems. Greenways protect and link fragmented habitat and provide opportunities for protecting plant and animal species. Trails and greenways reduce air pollution by two significant means: first, they provide enjoyable and safe alternatives to the automobile, which reduces the burning of fossil fuels; second, they protect large areas of plants that create oxygen and filter air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metal. Greenways improve water quality by creating a natural buffer zone that protects streams, rivers and lakes, preventing soil erosion and filtering pollution caused by agricultural and road runoff.

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

Note: References cited in this section may be found in the appendix of this document.

6.6 Examples of Local Greenways

For all the reasons given in the previous section greenways are becoming more popular in cities and towns. Some local examples are:

Maryville. https://www.blountchamber.com/community/greenway
 Alcoa https://www.cityofalcoa-tn.gov/446/Parks-Greenways
 Athens https://www.alltrails.com/trail/us/tennessee/eureka-trail
 Murfreesboro https://www.murfreesborotn.gov/185/Murfreesboro-

Greenway-System

7 The Crossville Greenway Plan

7.1 Introduction

This is a concept for a network of trails across the city of Crossville following various rivers and creeks. We would like to emphasize that it is just a concept and there is no agreement with of the property many owners along the route that a trail may be built on their property. The initial concept, for the foreseeable future is that all the trails will be natural surface with a longterm goal of becoming multiuse paved trails.

The Proposed Greenway is divided into six segments for administration purposes.

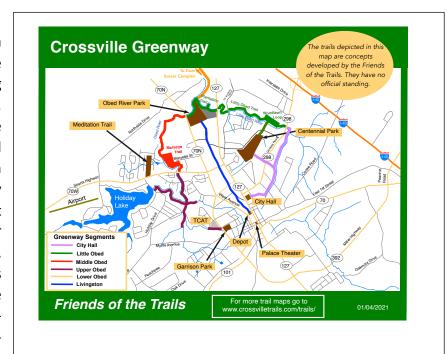


Figure 7.1-1 Overall Greenway Concept

Rather than attempting one major project to construct a typical Greenway of wide paved trails at considerable cost, the Friends of the Trails has adopted an incremental approach. We have been building one or two miles of natural trails each year with the expectation that with increased public use there will be growing community support to upgrade these initial trails to full Greenway standards despite the significant cost involved.

7.2 The Greenway Segments

7.2.1 Little Obed Segment

This segment along the Little Obed River will connect Centennial Park to the Obed River Park on Route 70 N, West Avenue, a distance of approximately 4.3 miles. This is the most advanced segment with approximately 3.3 miles of trail completed. The completed trails are the Woodlawn Loop, the Little Obed Trail, the Plantation Trail and the paved trails in the Obed River Park.

Centennial Park and the Obed River Park will be



Figure 7.2.1-1 Little Obed Segment

the trail-heads for this segment. Both parks have adequate parking, restrooms, etc.

There are four tasks that remain to be done to complete this segment:

- 1) We need to obtain permission for a trail between Old Jamestown Highway and Route 127 Main Street on the north or south bank of the river.
- We need to construct a bridge over the Little Obed River near the Woodlawn Loop Trail.
- 3) We need to connect the new bridge to Centennial park with a safe crossing of Industrial Boulevard. FOTT is beginning to look at the cost associated with constructing a bridge and possible funding sources.
- 4) We need to work with the City and State to construct a short section of trail under Route 127. Fortunately, the road bridge was constructed with plenty of room for a trail along the river bank.

7.2.2 Middle Obed Segment

This segment will connect the Obed River Park on Route 70N, to Sparta Highway along the Obed River: а distance of approximately 3.8 miles of which 2.7 miles has been completed. The Maryetta Trail has been constructed and is 1.7 miles long of which 0.5 miles is along the Obed River and is part of the Greenway. The trail has a trail-head

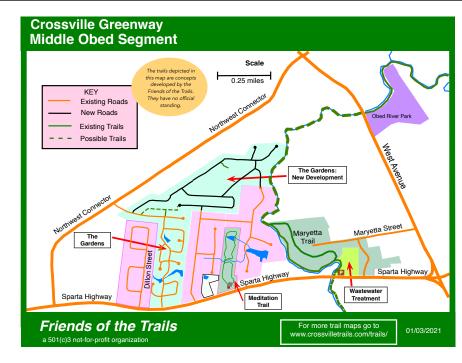


Figure 7.2.2-1 Middle Obed Segment

on Sparta Highway with parking for about a dozen vehicles.

Although not directly connected to the Greenway a one-mile trail known as the Meditation Trail was constructed behind St Raphael Church on Sparta Highway. The trail is open to the public.

The Gardens is a very successful Recreation Vehicle Community that is rapidly expanding along the river. The residents are very interested in having access to hiking trails.

The main task to be done in this segment is to identify a viable route for the trail and obtain permission for its construction between West Avenue and the Maryetta Trail. The West Avenue road bridge was constructed with plenty of room for a trail on either river bank.

7.2.3 Upper Obed Segment

The Upper Obed Segment will connect Sparta Highway to the Tennessee College of Applied Technology, (TCAT), and Garrison Park with a side-spur to the Holliday Hills Lake: a distance of approximately 2.5 miles. None of this segment has been constructed but we expect to start construction in 2021 on city-owned and TCAT-owned property.

The Sparta Highway road bridge has plenty of room for a trail along the river bank.

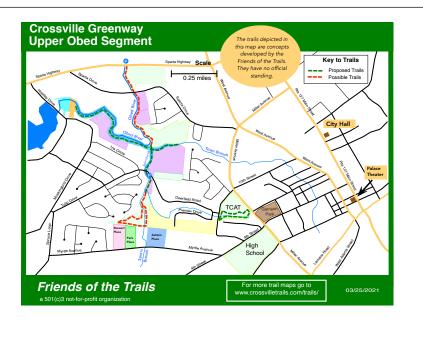
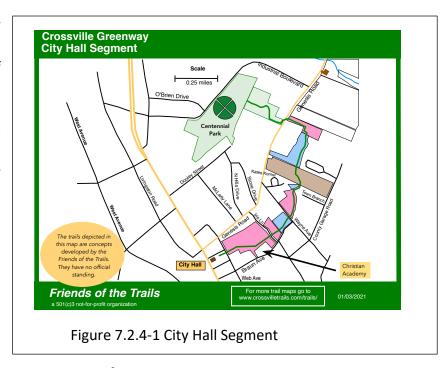


Figure 7.2.3-1 Upper Obed Segment

7.2.4 City Hall Segment

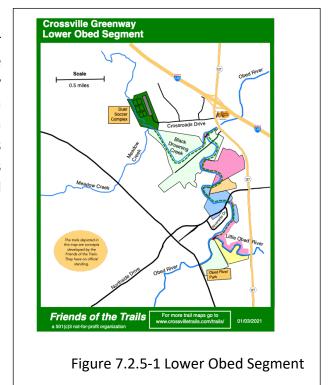
This segment will connect City Hall on Main Street to Centennial Park: a distance of about 1.3 miles. None of this segment has been constructed and no permissions have been obtained yet from property owners.



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7.2.5 Lower Obed Segment

This segment will connect the Obed River Park to the Duer Soccer Complex along the Obed River: a distance of approximately 3.0 miles. None of this segment has been constructed and no permissions have been obtained yet from property owners. It has a lower priority than other segments because it is further away from residential areas.



7.2.6 Livingston Rail Segment

As part of our desire to connect the historic downtown area to the Greenway we are investigating the possibility of constructing a new trail, about 1.5 miles, along the route of an old rail line. This trail would connect the Crossville Depot to the Cumberland County Community Complex and the Obed River Park along the side of Livingston Road. There are many property owners abutting the proposed route but initial contacts with them have been generally positive. The proposed trail would cross Miller Avenue and Elmore Road. Because of its location, the intention is, to make this a 12ft-wide, multipurpose paved trail suitable for cyclists as well as pedestrians.

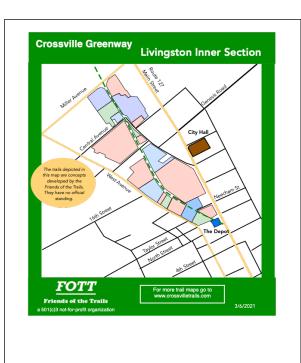


Figure 7.2.6-1 Livingston Inner Segment

8 Trail Construction Costs

It is always difficult to discuss trail costs because the ground rules used to develop any estimates can vary wildly between different projects. However we think it important that we at least discuss costs in the broadest terms to provide some context for this plan. We use average trail costs in our discussions. Average trails costs are determined by taking the cost of a trail and dividing it by its length, even though parts of the trail may already exist and may require no construction.

Approximate average trail costs are:

Natural Trails \$2- \$3 per foot (\$10,000 to \$15,000 per mile) based on FOTT

experience building the Greenway trails.

Paved 6ft Wide Trails \$20 - \$25 per foot (\$100,000 to \$125,000 per mile) based on

experience of paved trails in Fairfield Glade.

Paved 12ft Wide Trails About \$50 per foot (about \$250,000 per mile) based on

reading trail literature. (1) This is a very rough estimate as the

cost can vary tremendously based on terrain, drainage

requirements, etc.

Bridges Small wooden bridges are included in the above costs but

major steel bridges, when required, are expensive. \$100,000

or \$200,000 for a steel bridge is not unusual.

(1) Construction and Maintenance Costs for Trails From Draft Milwaukee County Trails Network Plan, 2007 Milwaukee County Dept. of Parks, Recreation, and Culture

https://www.americantrails.org/resources/construction-and-maintenance-costs-for-trails

9 Recommendations

The Crossville Greenway project is well advanced. When completed it will consist of over 15 miles of natural trails within the city limits. A number of components of the project (Marietta, Woodlawn and Plantation trails) have already been completed and are regularly used by residents and visitors.

The public interest in hiking in general and in the trails within Crossville in particular is rising quickly, as evidenced by the rapid increase in participation in the Hiking Marathon. With approximately 1.5 miles of trail being completed each year steady progress is being made on completing this project.

We make the following recommendations:

- 1) Make the negotiation of permissions to build trails along the proposed route of the Greenway a high priority.
- 2) Continue FOTT construction of natural trails as soon as permission is obtained from property owners
- 3) Invite City and County Governments to adopt the Crossville Greenway Concept to achieve two primary goals
 - i. Accelerate property acquisition and construction of natural trails.
 - ii.Rapid conversion of segments of the Greenway natural trails into 12ft-wide paved multi-use trails.
- 4) Increase the FOTT construction rate of natural trails from the current rate of 1.5 miles each year.
- 5) Create a coalition of supporting organizations and retail businesses throughout the community.
- 6) Continue to raise public awareness of the Greenway and continue to collect public input on the project.
- 7) Review property maps to identify any potential expansion of the current Greenway routes.
- 8) Identify specific ways to connect Greenway users with retail businesses particularly in the historic downtown area.

Appendix: References

Footnotes for Section 6.5 Benefits of Greenways

Footnotes from Greenways Inc, www.greenways.com:

- 1. American Planning Association. (2002). How Cities Use Parks for Economic Development.
- 2. National Association of Realtors and National Association of Home Builders. (2002). Consumer's Survey on Smart Choices for Home Buyers.
- 3. Rails to Trails Conservancy. (2005). Economic Benefits of Trails and Greenways.
- 4. NCDOT and ITRE. (2006). Bikeways to Prosperity: Assessing the Economic Impact of Bicycle Facilities.
- 5. Virginia Department of Conservation. (2004). The Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics.
- 6. Rails to Trails. (Danzer, 2006). Trails and Tourism.
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- 9. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (1996). Physical Activity and Health: A Report of the Surgeon General.
- 10. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (2002). Guide to Community Preventive Services.
- 11. Rails-to-Trails Conservancy. (2006) Health and Wellness Benefits.
- 12. Newsweek Magazine. (10/3/2005). Designing Heart-Healthy Communities.
- 13. Federal Emergency Management Agency. (2005) Building Stronger: State and Local Mitigation Planning.

General Advice for the Development of a Hard-Surfaced Greenway Project

by the Commissioner's Council on Greenways and Trails Development Committee, Tennessee Department of Environment and Conservation (2014)

https://www.tn.gov/content/dam/tn/environment/documents/greenways-101.pdf