Pedestrian & Bicycle Circulation Plan

2003

COOKEVILLE, TENNESSEE

PEDESTRIAN AND BICYCLE CIRCULATION PLAN

COOKEVILLE, TENNESSEE

2003 – 2020

ADOPTED BY THE

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TABLE OF CONTENTS

INTRODUCTION

A comprehensive transportation system should consist of more than just streets and highways. Facilities for pedestrian, bicycle and other non-motorized forms of circulation are vital, but often overlooked, elements in a transportation network. These facilities are also important facets in community livability or the quality of life in a municipality. A well planned, designed and developed pedestrian and bicycle circulation system can offer many benefits to a community and can serve a host of functions providing health, recreation, transportation, and community development benefits:

- A pedestrian and bicycle circulation system provides a place for citizens to exercise, relax, and experience nature. By contributing to physical fitness, a pedestrian and bicycle circulation system can offer citizens important health benefits.
- A pedestrian and bicycle circulation system will expand transportation options by offering a more flexible and environmentally sound means of travel to work or other destinations.
- As use of the pedestrian and bicycle circulation system increases, it can help to reduce traffic congestion and air pollution.
- Greenways can be natural buffers between different land uses, separating residential and commercial areas, or highways and residential neighborhoods.
- Where they provide significant green mass, greenways can help to sustain the biological diversity of plant and animal habitats; their trees and vegetation can refresh the air and even filter runoff into streams and rivers.
- A pedestrian and bicycle circulation system can offer modest economic benefits, raising the value of property adjacent to once idle land, and spurring small private enterprises including bicycle repair and rental shops, food establishments, and other services.
- Connecting neighborhood to neighborhood, residential areas to recreational areas, and city to suburb, these linear commons can offer a special kind of public place, bringing together the young and old, rich and poor, and people from diverse cultural backgrounds.

At the writing of this plan, regional gasoline prices hover at $1.40 per gallon. Studies also show that the average American spends 443 hours per year behind the wheel of an automobile and that 25 percent of all trips are less than 1 mile in length. Given these facts it is increasing likely that Cookeville and other Tennessee communities may soon reach a threshold that encourages non-motorized travel. The City of Cookeville must be prepared with a comprehensive pedestrian and bicycle circulation plan to accommodate and encourage such a change to everyday life.

The development of this plan stems from the efforts of the Cookeville Greenways/Bike Trail/Pedestrian Circulation Task Force. The Cookeville City Council appointed this task force in November of 2002 to serve as a citizen advisory committee for the Cookeville Planning Commission. The task force was charged with the responsibility of identifying the location of new greenways, bike trails, and pedestrian forms of circulation and to establish priorities for their completion. Once completed these recommendations were submitted to the Planning Commission and City Council as an amendment to the Future Transportation Plan Element of the Cookeville Comprehensive Future Land Use Plan.

PURPOSE AND INTENT

The purpose of this Pedestrian and Bicycle Circulation Plan is to provide a guide for the development of a comprehensive transportation network for pedestrians and non-motorized vehicles throughout the City of Cookeville and its Planning Region. The primary purpose of this plan is to identify locations for an efficient and functional circulation system designed for the mobility of individuals by means other than vehicular. Priorities for the development of the different components of this system and a recommended schedule for their completion are also included in this plan.

For the purposes of this plan the term pedestrian and bicycle circulation system consists of several components including sidewalks, greenways, paths and trails, bike lanes, and bike routes. In some instances the elements are multi-purpose. The system is envisioned to accommodate the broad array of non-motorized users: walkers, joggers, cyclists, strollers, people in wheelchairs, and skaters.

This strategic plan is intended as a supplement to the Cookeville Comprehensive Future Land Use Plan 1999-2020. As a supplement it is meant to cover a planning period through the year 2020. The completion of a Sidewalk Improvement Plan is identified as an Implementation Strategy for achieving certain objectives and implementing related policies established in the Comprehensive Plan. In addition to completing this implementation strategy this Pedestrian and Bicycle Circulation Plan also directly addresses several of the specific development goals identified in the Future Land Use Plan including the following:

> *To preserve, protect and enhance the quality of life in Cookeville while encouraging a more harmonious and higher standard of development.*
>
> *To maintain the environment and preserve the natural beauty of the Cookeville area.*
>
> *To provide adequate and efficient public facilities and services, and to provide a diversity of cultural and recreational opportunities.*
>
> *To provide an efficient and effective transportation system with appropriate linkages and capacities.*

BACKGROUND

Nationally in the past decade there has been significant movement towards the development of transportation systems for bicyclists and pedestrians. Two acts passed by the United States Congress in the 1990s, the Intermodal Surface Transportation Efficiency Act (1991) and the Transportation Equity Act for the 21st Century (1998), have been very influential in this movement. The Transportation Equity Act for the 21st Century (TEA-21) includes an overall goal of fully integrating bicyclists and pedestrians into the national transportation system.

For many years the pedestrian and bicycle circulation system in the City of Cookeville consisted of a few miles of sidewalks located primarily in the central part of the municipality. Since the early 1990's there have been significant efforts to enhance this system. Some of the more significant events include the following:

- *Completion of the Tommy Thomas Memorial Bike Trail in 1995*

  This bike trail was the first dedicated bike facility in the City of Cookeville. It is located along West Jackson Street from South Willow Avenue west to State Highway 70N (West Broad Street). It consists of asphalt surfaced bike lanes located primarily adjacent to West Jackson Street.

  This project was funded through a Bike Trail Grant from the Tennessee Department of Transportation. Total cost for the project was just under $120,000.

- *Creation of Cookeville Greenways Task Force in 1997*

  The establishment of this citizen task force marked the city's first effort to comprehensively plan for the development of pedestrian circulation facilities.

- *Preparation of Cookeville Greenway General Design Standards in 1997*

  In 1997 the Department of Leisure Services received a $4,000 grant from the Tennessee Department of Environment and Conservation's Bicentennial Greenways and Trail Planning Grant program to plan for the development of greenways in Cookeville. Lose & Associates, Inc., Land Planners and Landscape Architects, was hired to work with the Greenways Task Force and city officials to develop conceptual plans and general design standards for a greenway system.

  A significant result of this planning effort was the development of a Preliminary Overall Routing for a greenway system. It included a routing plan for a greenway along the railroad from North Maple Avenue to Cane Creek Park and related spurs with a total estimated length of 41,200 feet, and a trail along Pigeon Roost Creek with a length of approximately 16,000 feet.

- *Completion of Phase 1 of the Cookeville Greenway in 1999*

  This greenway was designed to be located primarily within railroad right-of-way. Originally Phase 1 of the Cookeville Greenway was to extend from the Cookeville Depot north to East 8th Street at Tennessee Technological University's quadrangle. Due to problems with the Nashville and Eastern Railroad authority the actual greenway was constructed primarily along Mahler Avenue from 1st Street to 7th Street.

  Funding for this project was provided by a $140,000 grant from the Tennessee Department of Transportation's Transportation Enhancement Fund.

- *Adoption of Cookeville Comprehensive Future Land Use Plan 1999 –2020*

  This plan, which was the first comprehensive plan for the city in 30 years, included as an element the city's first Pedestrian Circulation Plan. As a part of this planning effort an inventory and assessment of the existing pedestrian system was completed and the locations of several new pedestrian facilities were identified.

- *Amendments to Land Use Codes requiring construction of pedestrian facilities*

  In 2000 the City of Cookeville Zoning Code and Subdivision Regulations were amended to require the installation of sidewalks or other forms of pedestrian circulation for new developments.

- *Funding for Sidewalk Construction*

  During the period from 1999 to 2002 the Cookeville City Council allocated more than $400,000 for the construction of sidewalks in the city. Approximately 15,000 feet, or just less than 3 miles of sidewalks were constructed by the Cookeville Public Works Department during this time period. The Public Works Department also purchased a power curber and sidewalk machine in late 1999 at a cost of $140,000.

- *Creation of Greenways/Bike Trail/Pedestrian Circulation Task Force in 2002*

  In November of 2002 the City Council created the Cookeville Greenways/Bike Trail/Pedestrian Circulation Task Force. The 11-member task force consists of 10 citizens appointed by the City Council and a representative of the City Council. The directors of the Leisure Services, Public Works and Planning Departments serve as ex-officio members. This Plan is a direct result of the establishment of this task force.

VISION, GOALS, AND OBJECTIVES

The overall vision of this plan is: *To develop a comprehensive circulation network, including both on and off-street routes, that makes pedestrian and bicycle travel a feasible, safe and enjoyable mode of transportation and form of recreation, while preserving and enhancing the area's environment*. To achieve this vision the following goals and objectives have been identified:

GOAL 1: Connectivity

The Pedestrian and Bicycle Circulation System should be designed so that it connects to places people want to go.

Objectives:

- Include links with Tennessee Technological University, Cookeville Regional Medical Center, Cane Creek Park and other existing recreational facilities, schools and other public facilities, natural areas, shopping areas, and employment centers
- Locate components of the network to be within a reasonable distance of every residence with the City of Cookeville
- Promote interconnection for different elements of the pedestrian circulation system
- Coordinate components of the network with parks and recreation plans, and other relevant land use and development plans
- Provide linkages to any regional or state bike or trail systems

GOAL 2: Functionality and Accessibility

The Pedestrian and Bicycle Circulation System should be functional and accessible to all citizens.

Objectives:

- Design and locate the pedestrian circulation system to incorporate the needs of all potential users, including children, senior adults, and people with disabilities.
- Retrofit existing components of the network to meet ADA and other applicable standards
- Provide multiple access points to the network
- Design the system so that it will serve many types of users including walkers, runners, bicyclists, and persons in wheelchairs
- Provide appropriate signage for each component of the network and for both pedestrian and vehicular traffic
- Produce, regularly update and distribute maps of the circulation network

GOAL 3: Variety and Appearance

The Pedestrian and Bicycle Circulation System should be attractive and provide a variety in design.

Objectives:

- Design and locate the pedestrian circulation system to take advantage of natural or unique areas
- Provide a variety of surface types to suit the environment
- Provide buffering and screening between components of the system and adjacent lands, when necessary to minimize impacts
- Provide amenities such as lighting, landscaping, and street furniture to enhance the appearance of the system

GOAL 4: Environmental Protection and Enhancement

The Pedestrian and Bicycle Circulation System should protect and enhance the environment.

Objectives:

- Design and locate pedestrian and bicycle facilities to protect and enhance the environment
- Acquire environmentally sensitive areas, including waterways, and floodplain and sinkhole retention areas, in the development of the circulation system
- Utilize the development of the circulation network to provide corridors of quality open space
- Promote environmental education along greenways, trails and other network facilities

GOAL 5: Safety

The users of the Pedestrian and Bicycle Circulation System should feel safe.

Objectives:

- Minimize the number of conflict points between pedestrian and vehicular traffic
- Design new and improve existing intersections to provide safer crossings for pedestrians and bicyclists
- Utilize pedestrian- and bicycle-friendly design
- Repair damaged segments of the system in a timely manner
- Educate pedestrians, bicyclists, and motorists about safety rules
- Consistently enforce bicycle and pedestrian safety laws among motorists, bicyclists and pedestrians
- Provide police presence

GOAL 6: Cost Efficiency

The Pedestrian and Bicycle Circulation System should be designed, developed and maintained in a cost efficient manner

Objectives:

- Design the system to utilize existing right-of-ways, easements, and city properties whenever feasible
- Seek local, state, federal, private individual and corporate financial assistance for the development of the various elements of the circulation system
- Coordinate development of system with planned street improvements and new street construction projects
- Through zoning code and subdivision regulations, continue to require the installation of pedestrian circulation system elements as part of new developments

GOAL 7: Promotion

Pedestrian, bicycle, and other non-motorized based recreational activities should be promoted in the City of Cookeville.

Objectives:

- Develop a promotional campaign to educate the city's residents about the benefits of walking and bicycling
- Encourage employers in the city to promote biking and walking as commuting options
- Develop programs and special events through the Leisure Services Department which incorporate the use and appreciation of the pedestrian circulation system
- Keep the public informed of progress and activities

GOAL 8: Maintenance and Management

Elements of the Pedestrian and Bicycle Circulation System should be well maintained and managed.

Objectives:

- Develop and implement a scheduled maintenance program through appropriate city departments
- Provide adequate funding for repairs and maintenance
- Solicit participation from local business, industry, neighborhood, and civic organizations
- Communicate and enforce applicable municipal codes

FACILITY TYPES

A comprehensive pedestrian and bicycle circulation network should consist of several different components, which can accommodate a wide range of users. The facility types considered in this Plan include the following:

Sidewalks – A paved or concrete path, generally of widths between 4 and 6 feet, designed for preferential or exclusive use by pedestrians.

Paths or Trails – A path, either paved or unpaved, that may be designed for exclusive use by pedestrians, bicyclists, or may be multi-use.

Greenway – A linear open space that usually includes multi-use paths generally separated from a roadway

Bike Lane – A designated division of roadway for the preferential or sole use of bicyclists designated through the use of pavement markings, striping, and special signing.

Bike Route/Shared Lane – A bikeway with no designated separate lane for bicycle traffic that it identified only by signage. Bicyclists are required to travel within a standard motor vehicle lane. Generally intended for more experienced bicyclists.

EXISTING FACILITIES

Before new facilities can be determined existing facilities must be identified and evaluated. Illustration 1 depicts the location of existing pedestrian and bicycle circulation elements. The existing pedestrian and bicycle network within the Cookeville Planning Region consists of the following facilities:

Sidewalks

There are approximately 264,435 linear feet, or 50.1 miles, of sidewalks located within the corporate limits of Cookeville. A significant portion of this footage includes sidewalks that are located on both sides of a street. Approximately 200,895 feet or 38 miles of city streets have sidewalks on at least one side. With an estimated 240 miles of streets located within the city, excluding Interstate 40 and State Highway 111, this indicates that only approximately 16 percent of city streets have sidewalks. The existing sidewalks range in widths of 3 to 5 feet and are primarily concrete construction.

Trails

The City of Cookeville has approximately 17,180 linear feet of trails within its corporate limits. The trail at the city owned City Lake Park, which is located outside the city, adds another 1,540 feet to the total length of trails maintained by the city. A description of each of these trials is presented in the following.

The Cane Creek Park Bike Path is a multi-use facility located in Cane Creek Park. This trail has an 8 foot wide paved surface and has a length of 7,595 feet. Most of this facility was built in 1985 when Cane Creek Park was developed. A number of extensions and improvements have been added to this facility since its original construction. This last of which included the construction of a bridge to the north side of the lake in 2001, which was partially funded through a Local Parks and Recreation Fund grant.

The Cane Creek Trail is a multi-use facility located in Cane Creek Park. This trail has a mulched surface 8 feet in width and has a length of 3,460 feet. This trail has been developed in stages with the most recent addition completed in 2001. The trail was constructed by city workers and by volunteers.

The Ensor Sink Trail is a pedestrian only facility located within Ensor Sink Park. It is a mulched trail with a width of 8 feet and a length of 2,566 feet. This trail was constructed in 2001 as a part of the development of Ensor Sink Park, which was partially funded through a Local Parks and Recreation Fund grant.

The Tommy Thomas Memorial Bike Trail is located to the south of West Jackson Street and has a total length of 3,562 feet. This trail is physically separated from West Jackson Street and has a paved surface with a width of 10 feet. It is a multi-use facility that connects Cane Creek Elementary School with the Cane Creek Sportsplex.

NORTH

ALGOOD

STATE 111 HWY.

STATE 136 HWY.

STATE 284 HWY.

STATE 111 HWY.

STATE 111 HWY.

STATE 111 HWY.

STATE 111 HWY.

STATE 111 HWY.

CITY

LIMITS

N & E RAILROAD

Legend

- EXISTING SIDEWALK
- EXISTING BIKE ROUTE
- EXISTING BIKE LANE
- EXISTING GREENWAY
- EXISTING MULTI - USE TRAIL
- EXISTING WALKING TRAIL

4500 0 4500

Graphic Scale in Feet

ILLUSTRATION 1

Existing Facilities

COOKEVILLE, TENNESSEE

Map Prepared by Cookeville Planning Department (G. I. S.) 5 - 22 - 03

The City Lake Trail is a multi-use facility located in City Lake Park and has a total length of 1,540 feet. Approximately 1,000 feet of the trail has a paved surface with a width of 8 feet and the remaining 540 feet has a mulched surface. The trail was constructed as a part of the development of City Lake Park, which was partially funded through a Land and Water Conservation Fund grant. The cost of the trail construction was approximately $14,000.

Greenways

The Cookeville Greenway is the only greenway facility located within the Cookeville Planning Region. This greenway, which is located along Mahler Avenue from 1st Street to 7th Street, connects the Cookeville Downtown area with the Tennessee Tech University Campus. It has a length of approximately 2,380 feet, which consists of 1,795 feet of concrete sidewalk 8 feet in width and 585 feet of asphalt trail 8 feet in width. The Cookeville Farmer's Market was constructed along this greenway in 2002.

Bike Lanes

The only bike lanes currently located within the City of Cookeville are located along West Jackson Street from South Willow Avenue to West Broad Street (Highway 70N). These bike lanes, which have an approximate length of 12,250 on either side of West Jackson Street, consist of pave shoulders 5 feet in width separated from the roadway by a rumble strip.

Bike Routes

The only designated bike route within the Cookeville Planning Region is located along State Highway 290. This bike route begins just inside the corporate limits approximately at Sherwood Drive and extends westward along both sides of Highway 290.

Deficiencies

In the evaluation of the existing circulation system a number of deficiencies were identified and include the following:

- General lack of facilities
- Fragmentation of existing network
- Unsafe and insufficient crossing along major streets
- Poor maintenance of existing facilities
- Deterioration of existing facilities
- Lack of crosswalks
- Obstructions of facilities, such as electric poles, street lights, and mailboxes
- Inadequate accessibility for persons with disabilities

RECOMMENDED IMPROVEMENTS

The plan formulated by the Task Force recommends the development of approximately 195 miles or over 1,000,000 linear feet of pedestrian and bicycle facilities. Illustration II depicts the location of the proposed pedestrian and bicycle network for the Cookeville Planning Region. The envisioned plan consists of three (3) primary components composed of a mixture of facilities. The three (3) primary components are an outer ring, an inner ring, and spoke routes. These components with the various facilities and a summary of the total facilities are presented in the following:

Outer Ring

A major component of the circulation network envisioned in this plan is a circumferential route located along the perimeter of the city and the Planning Region. This outer ring would consist primarily of multi-purpose facilities serving both pedestrians and bicyclists. The outer ring has a total estimated length of approximately 180,000 linear feet or 34 miles.

Beginning from the northeast and continuing in a clockwise manner, the outer ring as envisioned, would consists of the following segments:

- Dry Valley Road Multi-Use Trail in Algood to Highway 70N (East Spring Street)
- Highway 70N Multi-Use Trail across Interstate 40 to the Falling Water River Greenway
- Falling Water River Greenway to Old Sparta Road
- Old Sparta Road Multi-Use Trail to Lovelady Road
- Lovelady Road Multi-Use Trail across Highway 111 to Bunker Hill Road
- Bunker Hill Road Multi-Use Trail to Essex Road
- Essex Road Multi-Use Trail to Winston Drive
- Winston Drive Multi-Use Trail to Gould Drive
- Gould Drive Sidewalk and Bike Lanes to Holladay Road
- Holladay Road Multi-Use Trail to Lee Seminary Road
- Lee Seminary Road Multi-Use Trail to Cane Creek Greenway
- Cane Creek Greenway to Cane Creek Park and Cane Creek Multi-Use Trail
- Cane Creek Multi-Use Trail to West Jackson Street
- West Jackson Street Multi-Use Trail to Pippin Road
- Pippin Road/County Farm Road Multi-Use Trails to Highway 290
- Highway 290 Bike Lanes and Walking Trail to Shipley School Road
- Shipley School Road/Allen Road/Highway 135 Multi-Use Trails to Kinnard Road
- Kinnard Road/Freehill Road Multi-Use Trails to Dale Road
- Dale Road/ Whiteaker Road/ Bowser Road/ Gibbons Road Multi-Use Trails to Algood and Dry Valley Road

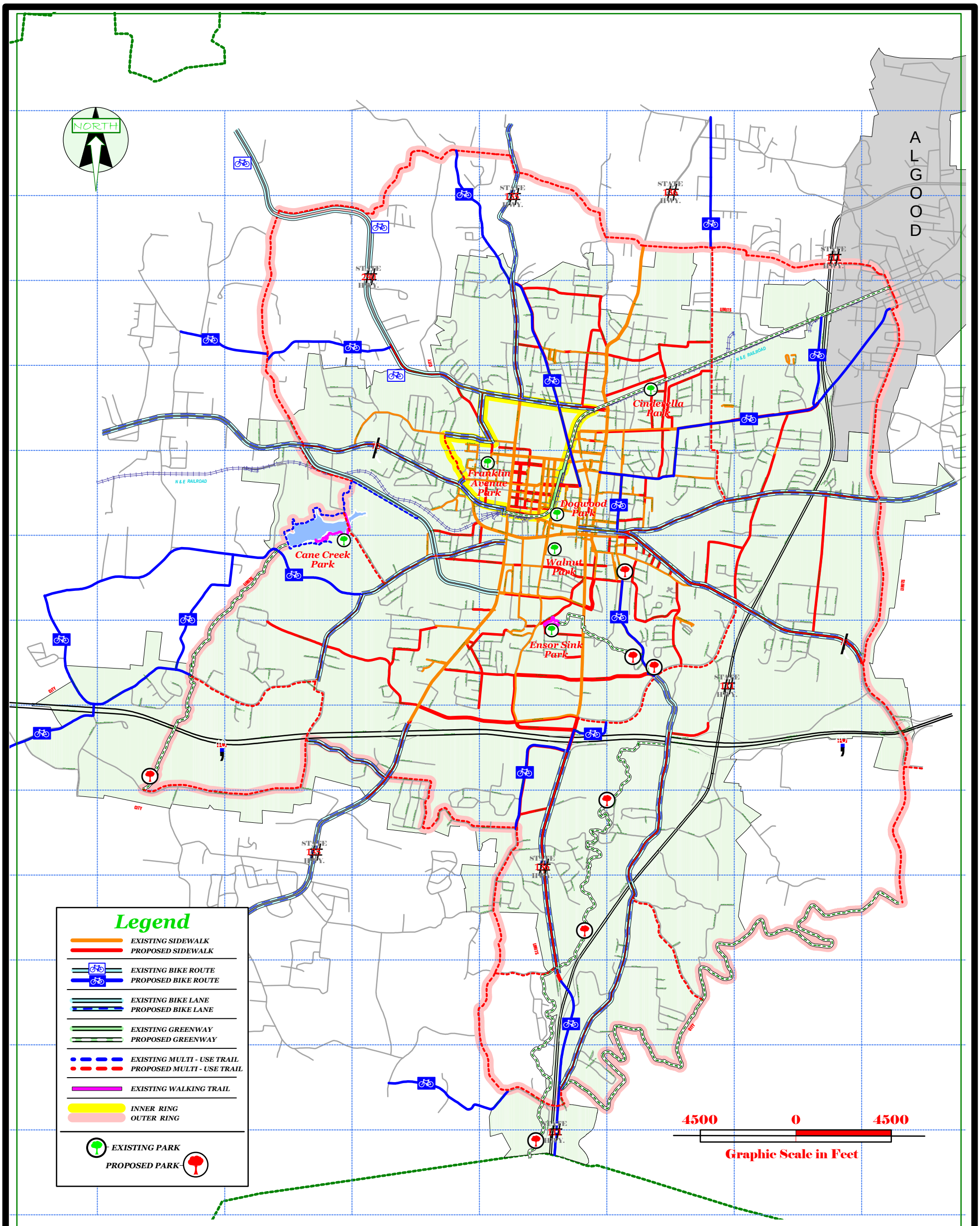

ILLUSTRATION 2

Pedestrian & Bicycle Circulation Plan

COOKEVILLE, TENNESSEE

Map Prepared by Cookeville Planning Department (G. I. S.) 5 - 22 - 03

Inner Ring

A second major component of this plan is an inner ring. Like the outer ring, the inner ring would be composed of mostly multi-use facilities. It has a total distance of approximately 23,000 linear feet or 4.3 miles. The inner ring would have as its center the campus of Tennessee Technological University. The University is an important part of the City of Cookeville and it is the location of many potential users of the pedestrian and bicycle circulation network. Also located within or connected to this inner ring would be the Cookeville Regional Medical Center area and the Cookeville Downtown area. Beginning from the northeast and continuing in a clockwise manner, the inner ring as envisioned, would consist of the following segments:

- Cookeville Greenway (along Nashville and Eastern Railroad Right-of-Way) from East 12th Street across South Willow Avenue via overpass to West Broad Street (partially existing facility)
- West Broad Street Sidewalks and Bike Lanes to West 4th Street
- West 4th Street Sidewalks and Bike Lanes to Buck Avenue
- Buck Avenue Sidewalk and Bike Lanes to Buck Avenue Multi-Use Trail
- Buck Avenue Multi-Use Trail to West 9th Street
- West 9th Street Sidewalks and Bike Lanes to North Franklin Avenue
- North Franklin Avenue Sidewalk and Bike Lanes to Pine Avenue
- Pine Avenue Sidewalk and Bike Lanes to West 12th Street
- West 12th Street Sidewalks and Bike Lanes to Cookeville Greenway

Spoke Routes

The third major component of the proposed network is a series of spoke routes, which would link the outer and inner rings and connect to routes leading out of the city. These spoke routes consists of multi-use facilities, and facilities designed exclusively either for pedestrian or bicycle use. A summary of the proposed spoke routes by category of use is as follows:

Multi-use Facilities

- Tommy Thomas Memorial Trail (existing facility)
- Pigeon Roost Creek Greenway
- Pigeon Roost Creek Road Multi-Use Trail
- Old Bridge Road Multi Use Trail
- Ensor Sink to South Maple Avenue Greenway
- Neal Street Multi-Use Trail
- Mine Lick Creek Road Multi-Use Trail
- Holladay Road Multi-Use Trail from Gould Drive to Mine Lick Creek Road
- C. C. Camp Road Multi-Use Trail
- Fisk Road Multi-Use Trail
- Cookeville Railroad Greenway from West 12th Street to Algood

Bicycle and Pedestrian Facilities

- South Maple Avenue, Sidewalk and Bike Lanes, from East Veterans Drive to Highway 111
- Holladay Road, Sidewalk and Bike Lanes, from Buffalo Valley Road to Gould Drive
- Bunker Hill Road, Sidewalk and Bike Lanes, from South Jefferson Avenue to West Cemetery Road
- Buffalo Valley Road, Sidewalk and Bike Lanes, from South Willow Avenue to Holladay Road
- North Dixie Avenue, Sidewalk and Bike Route, from West 4th Street to North Willow Avenue
- West Broad Street, Sidewalks and Bike Lanes, from Franklin Avenue to city limits

Bicycle Only Facilities

- West Jackson Street Bike Lanes (existing facility)
- Fisk Road Bike Route
- Highway 290/West 12th Street Bike Route
- North Dixie Avenue Bike Route
- Shipley Road Bike Route
- Pippin Road Bike Route
- Mine Lick Creek Road Bike Route from Cane Creek Greenway west
- Buffalo Valley Road Bike Route from Holladay Road west
- Hawkins Crawford Road Bike Route from Mine Lick Creek Road north
- Reeser Lane Bike Route
- Benton Young Road Bike Route

Pedestrian Only Facilities

- South Jefferson Avenue, both sides from Interstate Drive to Pigeon Roost Creek Road
- South Willow Avenue, both sides from Interstate 40 to city limits
- North Willow Avenue, both sides from West 12th to city limits
- East Broad Street, from South Maple Avenue to Old Kentucky Road
- Interstate Drive, both sides
- South Walnut Avenue, both sides from East Veterans Drive to South Jefferson Avenue
- East Veterans Drive, both sides
- Fairground Street
- North and South Old Kentucky Road
- West Stevens Street from Buffalo Valley Road to South Willow Avenue
- East Stevens Street from South Walnut Avenue to South Maple Avenue
- Whitson Chapel Road

- Bill Smith Road/Foreman Drive
- West Oak Drive/Spring Valley Drive/Lone Oak Drive
- Southwood Drive/Southgate Drive/ Ashwood Drive
- Greenland Avenue/Orchard Street
- East Jackson Street, both sides
- Maxwell Street/Carr Avenue
- South Lowe Avenue, both sides
- England Drive
- Old Walton Road
- Russell Strauss/Nash Avenue/ South Elm Avenue
- Foutch Drive
- Chote Street
- Ensor Drive/Clover Hill Drive
- Cavalier Drive
- Brown Avenue
- Mitchell Avenue
- Park Drive
- East Jere Whitson Road/East 20th Street/Volunteer Drive
- East 15th Street from North Washington Avenue to Brown Avenue
- North Ferguson Avenue
- Freeze Street
- East 4th Street, both sides, from North Washington Avenue to North Cedar Avenue
- Kenway Street/Freehill Road
- Proffitt Street
- North Whitney Avenue, both sides
- West 2nd Street
- West 3rd Street
- West 6th Street from North Willow Avenue to North Cedar Avenue
- West 8th Street
- West Jere Whitson Road
- North Franklin Avenue
- South Franklin Avenue
- Mississippi Avenue

Summary of Total Facilities

Upon completion the Pedestrian and Bicycle Circulation System proposed in this plan would consist of approximately 260.6 miles or 1,375,875 linear feet of facilities, of which approximately 195 miles or 1,029,540 linear feet are new facilities. The proposed facilities consist of the following:

Sidewalks

Sidewalks make up the largest portion, in terms of length, of the proposed facilities. A total of approximately 66.2 miles or 264,435 linear feet of sidewalks are proposed. This length includes a number of miles of sidewalks on both sides of several streets. All of the proposed sidewalks are located within the corporate limits.

Trails

The proposed system includes approximately 31.1 miles or 164,371 linear feet of multi-use trails. A majority of the recommended trails are proposed for areas located outside the current corporate limits and comprise much of the outer ring.

Greenways

Over 20 miles or 107,033 linear feet of greenways are recommended for completion. This includes the completion of the Cookeville Greenway along the Nashville and Eastern Railroad right-of-way, the Pigeon Roost Greenway, the Cane Creek Greenway and the Falling Water River Greenway.

Bike Lanes

In terms of length, bike lanes make up the second largest portion of new facilities. A total of 53.2 miles or 280,903 linear feet of bike lanes are proposed.

Bike Routes

A total of 24.2 miles or 127,897 linear feet of bike routes are included in the proposed system. Most of these bike routes, approximately 23 miles or 121,075 linear feet, are located outside the current corporate limits.

PRIORITIES FOR IMPROVEMENTS AND SCHEDULE FOR COMPLETION

To identify priorities for the completion of the recommended improvements, the Task Force utilized a point system to rank each of the individual sections or facilities based on developed criteria. The criteria included the following:

- Land uses/Persons served: a higher priority was assigned for facilities that serve more intensive land uses and a greater density of persons
- Demand: a higher priority was assigned for facilities which are more likely to be used
- Connectivity: a higher priority was assigned for facilities which connect to existing facilities
- Ease of implementation: a higher priority was assigned for facilities that will be relatively easy to implement (funding obtainable, right-of-way available, signage only, etc.)
- Overcoming Constraints: a higher priority was assigned for facilities which include elements that overcome constraints to connectivity of the network
- Increased Safety: a higher priority was assigned for facilities that address public safety issues
- Community Livability: a higher priority was assigned for facilities which preserve or enhance scenic, cultural, and/or historic places
- Environmental Protection/Enhancement: a higher priority was assigned to facilities that preserve environmentally sensitive areas

For each of the eight criteria the Task Force assigned a value reflecting its significance toward achieving the overall goals and objectives of the plan. Connectivity and ease of implementation were allocated the highest value at 7, followed by demand at 6, land uses served at 5, community livability at 4, safety and environmental protection/enhancement at 3, and overcoming restraints at 2. The Task Force evaluated each individual segment or facility by assigning a value of 1, 5, or 10 for each of criteria, with 1 indicating that the segment or facility does not or slightly addresses the criteria, 5 indicating that it moderately addresses the criteria, and 10 indicating that it greatly addresses the criteria. The criteria value was then multiplied by the segment or facility value and the totals for each of the criteria were summed to arrive a total score or point value for each segment or facility.

By utilizing the total score or point value for each individual section or facility, priorities for completion and a schedule for completion were developed. While the schedule for completion is based on a 20-year implementation time frame, it is recognized, due to the broad scope of this plan, that many of the recommended improvements most likely cannot be completed within 20 years. The schedule is divided into three time frames. Projects with the highest scores (200 or more points) should be completed within 5 years, those receiving the next highest scores (less than 200 points but more that 149 points) should be completed within 5 to 10 years, and those receiving the lowest scores (149 points or less) should be completed within 10 to 20 years.

The priorities for completion and the recommended 20-year schedule for completion is as follows:

Projects to be completed within 5 years

Total Points	Segment or Facility	Component
254	Ensor Sink Greenway to S. Maple Ave	spoke route
252	Cookeville Greenway from 12th St to E. Broad St	inner ring
243	N. and S. Old Kentucky Rd Sidewalk	spoke route
237	Cane Creek Multi-Use Trail to W. Jackson St	outer ring
230	Buck Ave Multi-Use Trail to W. 9th St	inner ring
225	E. Stevens St Sidewalk	spoke route
222	N. Dixie Ave Sidewalk and Bike Lanes	spoke route
219	W. 12th St Sidewalks and Bike Lanes	inner ring
207	Pigeon Roost Creek Greenway	spoke route
203	N. Dixie Ave Bike Route	spoke route
200	Cane Creek Greenway	outer ring

Projects to be completed within 5 to 10 years

Total Points	Segment or Facility	Component
197	Cavalier Dr Sidewalk	spoke route
194	Dry Valley Rd Multi-Use Trail	outer ring
189	Freeze St Sidewalk	spoke route
189	Highway 290/West 12th St Bike Route	spoke route
186	E. Jere Whitson Rd/E. 20th St/Volunteer Dr Sidewalk	spoke route
185	W. Jackson St Multi-Use Trail to Pippin Road	outer ring
179	Neal St Multi-Use Trail	spoke route
179	C. C. Camp Rd Multi-Use Trail	spoke route
174	Interstate Dr Sidewalks, both sides	spoke route
174	Fairground St Sidewalk	spoke route
173	Mississippi Ave Sidewalk	spoke route
173	Old Walton Rd Sidewalk	spoke route

Projects to be completed within 5 to 10 years (continued)

Total Points	Segment or Facility	Component
169	Gould Dr Sidewalk and Bike Lanes	outer ring
167	Pine Ave Sidewalk and Bike Lanes	inner ring
164	Cookeville Greenway from E 12th St to Algood	spoke route
163	N. Franklin Ave Sidewalk and Bike Lanes	inner ring
163	E. Veterans Dr Sidewalk, both sides	spoke route
163	S. Jefferson Ave Sidewalks, both sides to Pigeon Roost	spoke route
161	W. Broad St Sidewalks and Bike Lanes	spoke route
161	Fisk Rd Bike Route	spoke route
160	Falling Water River Greenway	outer ring
160	N. Ferguson Ave Sidewalk	spoke route
160	W. Stevens St Sidewalk	spoke route
159	S. Lowe Ave Sidewalks, both sides	spoke route
158	Proffitt St Sidewalk	spoke route
157	Mitchell Ave Sidewalk	spoke route
156	W. 4th St Sidewalks and Bike Lanes	inner ring
154	E. 4th St Sidewalks, both sides, Washington to Cedar	spoke route
154	W. Oak Dr/Spring Valley Rd/Lone Oak Dr Sidewalk	spoke route
153	Southwood Dr/Southgate Dr/Ashwood Dr Sidewalk	spoke route
152	Ensor Dr/Clover Hill Dr Sidewalk	spoke route
152	Buffalo Valley Rd Sidewalk and Bike Lanes	spoke route
150	Brown Ave Sidewalk	spoke route
150	N. Willow Ave Sidewalks, both sides	spoke route

Projects to be completed within 10 to 20 years

Total Points	Segment or Facility	Component
148	Park Dr Sidewalk	spoke route
147	Winston Dr Multi-Use Trail	outer ring
147	N. Franklin Ave Sidewalk	spoke route
147	Bill Smith Rd/Foreman Dr	spoke route
145	Benton Young Rd Bike Route	spoke route
144	Holladay Rd Sidewalk and Bike Lanes	spoke route
144	Greenland Ave/Orchard St Sidewalk	spoke route
143	Russell Strauss/Nash Ave/Elm Ave Sidewalk	spoke route
143	W. 9th St Sidewalks and Bike Lanes	inner ring
142	Buck Ave Sidewalk and Bike Lanes	inner ring
142	Mine Lick Creek Rd Bike Route	spoke route
142	W. Jere Whitson Rd Sidewalk	spoke route
140	E. Broad St Sidewalk	spoke route
137	Shipley Rd Bike Route	spoke route

Projects to be completed within 10 to 20 years (continued)

Total Points	Segment or Facility	Component
136	N. Whitney Ave Sidewalks, both sides	spoke route
135	Essex Rd Multi-Use Trail	outer ring
135	Fisk Rd Multi-Use Trail	spoke route
133	E. Jackson St Sidewalks, both sides	spoke route
133	W. Broad St Sidewalks and Bike Lanes	inner ring
131	Bunker Hill Rd Multi-Use Trail	outer ring
130	Pippin Rd/County Farm Rd Multi-Use Trails	outer ring
130	Kenway St/Freehill Rd Sidewalk	spoke route
128	S. Willow Ave Sidewalks, both sides	spoke route
128	W. 3rd St Sidewalk	spoke route
128	Buffalo Valley Rd Bike Route	spoke route
127	Resser Ln Bike Route	spoke route
127	W. 6th St Sidewalk	spoke route
127	Old Sparta Rd Multi-Use Trail	outer ring
126	Dale Rd/Whiteaker Rd/Gibbons Rd Multi-Use Trail	outer ring
126	S. Walnut Ave Sidewalks, both sides	spoke route
123	Mine Lick Creek Rd Multi-Use Trail	spoke route
123	Pippin Rd Bike Route	spoke route
121	Old Bridge Rd Multi-Use Trail	spoke route
118	S. Maple Ave Sidewalk and Bike Lanes	spoke route
117	S. Franklin Ave Sidewalk	spoke route
116	W. 2nd St Sidewalk	spoke route
116	Hawkins Crawford Rd Bike Route	spoke route
115	Highway 70N Multi-Use Trail	outer ring
113	W. 8th St Sidewalk	spoke route
112	Lovelady Rd Multi-Use Trail	outer ring
112	Highway 290 Bike Lanes and Walking Trail	outer ring
111	Bunker Hill Rd Sidewalk and Bike Lanes	spoke route
109	Foutch Dr Sidewalk	spoke route
108	Maxwell St/Carr Ave Sidewalk	spoke route
105	Shipley School Rd/Allen Rd/Hwy 135 Multi-Use Trails	outer ring
104	Holladay Rd Multi-Use Trail from Gould Dr north	spoke route
103	Lee Seminary Rd Multi-Use Trail	outer ring
100	Holladay Rd Multi-Use Trail to Lee Seminary Rd	outer ring
98	Chote St Sidewalk	spoke route
94	Whitson Chapel Rd Sidewalk	spoke route
86	Pigeon Roost Creek Rd Multi-Use Trail	spoke route
83	E. 15th St Sidewalk	spoke route
79	Kinnard Rd/Freehill Rd Multi-Use Trails	outer ring
74	England Dr Sidewalk	spoke route

DESIGN GUIDELINES

As the improvements recommended in this Pedestrian and Bicycle Circulation Plan are designed and constructed the following design guidelines should be followed:

General Guidelines

- The applicable design guidelines and standards of American Association of State Highway and Transportations Officials (AASHTO) should be followed, including the *Guide for the Development of Bicycle Facilities* and *A Policy on the Geometric Design of Highways and Streets*
- The applicable standards of the United States Department of Transportation's *Manual of Uniform Traffic Control Devises* (MUTCD) should be followed
- The applicable standards of the American's with Disabilities Act (ADA) should be followed
- No obstructions, including electrical and telephone poles, guy wires, street name signs, traffic control signs, and mail boxes should be located on or overhanging any pedestrian or bicycle facility
- Bollards or planting medians should be used to keep unwanted vehicles off facilities
- Facilities located adjacent to streams should be setback a minimum of 25 feet from the top of the stream bank
- Install trees along facilities to provide shade

Guidelines for Sidewalks

- The construction standards specified in the Cookeville Subdivision Regulations should be followed
- Minimum surface widths of 4 feet in low density residential areas, 5 feet in high density residential areas, and 6 feet in commercial areas should be provided
- Physical separation of at least 3 feet should be provided from the adjoining roadway if possible
- Maintain a minimum clear zone vertical distance of 10 feet

Guidelines for Trails

- Physical separation of at least 3 feet should be provided from the adjoining roadway
- A minimum surface width of 5 feet should be provided for single use trails
- A minimum surface width of 10 feet should be provided for multi-use trails
- A minimum clear zone width of 2 to 4 feet should be provided on either side of the trail
- Maintain a minimum clear zone vertical distance of 10 feet

Guidelines for Greenways

- A minimum greenway corridor width of 50 feet should be provided
- A minimum surface width of 10 feet for trails should be provided
- A minimum clear zone width of 2 to 4 feet should be provided on either side of the greenway
- Maintain a minimum clear zone vertical distance of 10 feet
- Create well-defined trailheads
- Provide well located, signed access points
- Natural, scenic or historic areas should be incorporated whenever possible
- Obtain environmentally sensitive areas whenever possible

Guidelines for Bike Lanes

- Bike lanes should be one-way facilities with bicycle traffic flowing in the same direction as adjacent motor vehicle traffic
- Bike lanes should be provided on both sides of two-way streets
- A minimum surface width of 4 to 6 feet should provided
- Bike lanes should be clearly marked with 4 to 8 inch stripes delineating the lane
- Appropriate signage and street markings should be provided
- A minimum clear zone width of 2 to 4 feet should be provided to the outside of the land

Guidelines for Bike Paths

- Physical separation of at least 3 feet should be provided from the adjoining roadway
- A minimum surface width of 4 feet should be provided for one-way bicycle traffic
- A minimum surface width of 10 feet should be provided for two-way bicycle traffic
- A minimum clear zone width of 2 to 4 feet should be provided on either side of the path

Guidelines for Shared Lanes

- Locate on streets with less than 3,000 Average Daily Traffic (ADT) counts
- Locate on streets with motor vehicle lanes with a minimum width of 24 feet (12 feet for one-way traffic)
- Routes should be clearly marked and posted with signs or symbols. “Share the Road” signs should be utilized.

Guidelines for Bike Routes

- Appropriate signage should be provided
- Seek federal and state approval when necessary

IMPLEMENTATION

No plan can be successful unless it is implemented. In this section the major obstacles to implementation are examined and potential strategies for implementation are identified. The implementation of the recommendations presented in this plan will require more than actions by the Cookeville City government. To achieve the identified goals and objectives citizen involvement is essential.

Obstacles to Implementation

Support of Elected Officials

The support of local legislative bodies is critical to implementation. An important indication of the support for this plan is its adoption by the Cookeville City Council. The completion of the improvements recommended in this plan during the approximate 20-year planning period is dependent upon maintaining the support of future city councils.

Public Perception/Endorsement

Whether there will be public opposition to the implementation of the various elements of the pedestrian circulation network is not known, however, based on events in other cities it should be anticipated. Maintaining continuous public support may be more important than overcoming any opposition to a specific facility.

Physical Barriers

There are numerous physical barriers to the implementation of the proposed circulation plan including topographic barriers, stream crossings, and major thoroughfare crossings (primarily Interstate 40, State Highway 290, State Highway 111, Jefferson Avenue and Willow Avenue). Achieving many of the objectives of this plan is dependent upon overcoming these physical barriers.

Funding

Continuous funding, for both construction and maintenance, is key to the completion of improvements recommended in this plan. This may be difficult in lean budget years; however, there are numerous sources of funding available, including national and state grants and private donations, which must be sought for the successful implementation of this plan.

Implementation Strategies

General

The following general strategies should be considered in the implementation of the improvements recommended in this plan:

- Update and revise the Pedestrian and Bicycle Circulation Plan as necessary
- Maintain an active Greenways/Bike Trails/Pedestrian Circulation Task Force
- Provide early notification of landowners affected by construction of elements
- Include improvements in the Capital Budgeting process for continuous funding

Property Acquisition

The following strategies should be considered for acquiring the property necessary to complete the construction of the improvements recommended in this plan:

- Fee simple purchase
- Easement purchase
- Conservation and Preservation Easements
- Donations
- Regulatory options, including zoning and subdivision regulations
- Tax foreclosure
- Condemnation (should only be used as a last resort)

Construction of Improvements

The following strategies should be considered for the construction of the improvements recommended in this plan:

- Utilize the requirements of the Zoning Code and Subdivision Regulations to provide facilities
- Reduce width of existing travel lanes or remove travel lanes on streets to provide facilities
- Remove on-street parking to provide facilities
- Widen or pave shoulders to provide facilities
- Increase width of street pavement when resurfacing existing streets to provide facilities
- Construct facilities as stand-alone projects
- Include pedestrian and bicycle facilities in bridge construction projects
- Include pedestrian and bicycle facilities in Tennessee Department of Transportation construction projects

Safety

To increase the safety of the users of the pedestrian and bicycle circulation system the following safety strategies should be considered:

- Construct signalized pedestrian crossings at high volume intersections
- Provide bicycle-sensitive loop detector systems at key locations
- Provide high visibility crosswalks
- Install rumble strips near crosswalks
- Minimize crossing distances
- Provide street lighting, especially at crossings
- Require and enforce the use of helmets for bicyclists on municipal facilities
- Design and orient drainage grates to be pedestrian and bicycle friendly
- Raise motorists awareness of their responsibility to "Share the Road" with bicyclists
- Re-establish the use of bicycle police to patrol system

Maintenance of Improvements

The following strategies should be considered for the maintenance of improvements recommended in this plan:

- Continuously include funds for maintenance in annual city budget
- Provide routine inspections of facilities
- Establish "Adopt-a-Greenway, Bike Trail or Sidewalk" programs
- Adequately enforce applicable sections of Municipal Code including Section 16-607 prohibiting littering and obstructing sidewalks and Section 16-609 requiring occupants of property abutting a sidewalk to keep the sidewalk clean
- Create a citizen "hotline" to report maintenance problems

Promotion

The following strategies should be considered in promoting the use of the improvements recommended in the plan:

- Develop special programs and events through Leisure Services Department
- Coordinate events such as 5K runs, sprint adventure races, organized walks, etc. to increase the awareness and use of system facilities
- Utilize local media to inform public on the status of the completion of facilities and to promote the use of the system
- Create a greenway and/or bikeway publication and web site

FUNDING

There are numerous sources for funding the improvements recommended in this plan. A common method used in many locations is to combine local and private funds with State and Federal monies. The availability of State and Federal monies for pedestrian and bicycle facilities has increased in the past decade. The funding sources listed below have been utilized in other locations and should be considered in the implementation of the recommended improvements:

Federal Programs

Transportation Equity Act for the 21st Century (TEA-21)

National Highway Safety Program

National Highway System Funds

Congestion Mitigation and Air Quality Improvement Program

Recreational Trails Program

Federal Lands Program

National Scenic Byways Program

Surface Transportation Program – Transportation Enhancement

Land and Water Conservation Fund

Rivers and Trails Conservation Assistance Program

Resource and Conservation and Development Funds

Community Development Block Grants

Rails to Trails Conservancy

State Funding Sources

General Fund

Special Appropriations

Local Parks and Recreation Fund

Local Funding Sources

Cookeville City General Fund

Putnam County General Fund

In-kind labor from city or county departments

Donations from users of system including bicycle, hiking, walking and running clubs or organizations

Private Donations from Individuals or Corporations

Volunteer labor

Special fund raising events