

SPARTANBURG

BICYCLE & PEDESTRIAN MASTER PLAN



ACKNOWLEDGEMENTS

SPARTANBURG AREA RESIDENTS

To-date, more than 1000 Spartanburg area residents have contributed to this plan through comment forms, meetings, and workshops.

KEY PARTNERS

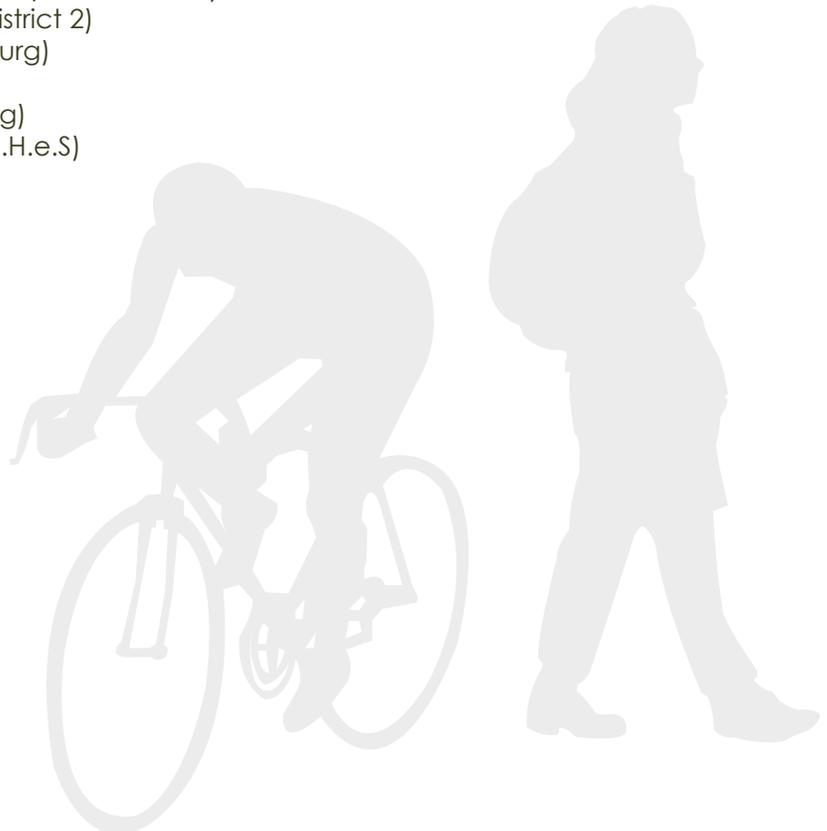
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CHAPTER ONE OUTLINE:

Introduction
 Vision Statement
 Measureable Goals
 The Planning Process
 The Value of Bicycle & Ped. Transportation
 Plan Components

CHAPTER ONE: INTRODUCTION

INTRODUCTION

In January 2009, the Spartanburg Area Transportation Study (SPATS), Spartanburg County and the City of Spartanburg began developing a countywide comprehensive bicycle and pedestrian plan. The planning effort was funded by the Mary Black Foundation, SPATS, Spartanburg County, and the City of Spartanburg. This Bicycle and Pedestrian Master Plan, hereafter called the Plan, represents a continuation of the bicycle and pedestrian planning, programming, and development efforts that have occurred over the past five years. SPATS, Spartanburg County and the City of Spartanburg have addressed some bicycle and pedestrian issues in the 2004 Enhancement Master Plan and the Active Living Assessment (2005). The Mary Black Foundation, Partners for Active Living and others have advanced numerous programs like Bike Town, leading to a bronze-level Bicycle Friendly Community designation for the City of Spartanburg. In 2006-2007, both the City and County of Spartanburg passed Complete Streets resolutions, but these policies have not been fully implemented. This Plan seeks to build upon what has already been accomplished and create action towards implementation, project, program, and policy development. The plan addresses the entire county, including incorporated areas and non-incorporated areas.



The City of Spartanburg earned a bronze-level 'Bicycle Friendly Community' designation from the League of American Bicyclists.

Nationally, such issues as rising gas prices, environmental concerns, and a growing interest in health and wellness are demonstrating the need for bicycle and pedestrian-friendly communities. On a local level, this Bicycle and Pedestrian Master Plan aims to take on such issues, translating them into affordable personal mobility, carbon-free transportation, and healthy, active lifestyles for Spartanburg County residents.

The development of this Plan included an open, participatory process, with residents of Spartanburg County providing input through public workshops, focus group meetings, municipality meetings, the project Steering Committee, and an online comment form.



Left and below: Spartanburg County residents participate in the planning process by completing comment forms and marking up maps designed for public input.



One of the goals of this process was to be action-oriented, beginning implementation during the development of this Plan. Therefore, the planning process served as a starting point for implementation that will occur in the future. Specific implementation goals of the Committee for this planning process and plan include:

- Successfully involve the public with recommendations and policies that are publicly-driven.
- Provide ready-to-go, action-oriented tasks and project packages.
- Develop bicycle and pedestrian facilities during this process as part of planned roadway reconstruction and/or resurfacing projects.
- Provide bicycle and pedestrian design and development education to engineering, planning, and public works staff.
- Receive institutional support, staffing, and resources for plan implementation and maintenance.
- Bridge communication gaps between departments and within departments involving bicycle and pedestrian facility implementation.
- Shift the perspective of planners and engineers from serving cars to serving all forms of transportation.

VISION STATEMENT

Vision statements and project goals were collected through public workshops, project steering committee meetings, municipality interviews, input from City staff, and an online survey of local residents. These were combined, condensed, and crafted into the vision statement for this Plan. The statement (presented below) expresses the desired outcome of the plan, rather than the current conditions.

SPARTANBURG COUNTY BICYCLE AND PEDESTRIAN MASTER PLAN VISION STATEMENT

More people will **choose to walk or bicycle** to their destination instead of driving.

Bicycle and pedestrian **connectivity** (through sidewalks, crosswalks, bicycle lanes, multi-use paths, etc.) **will be improved** by removing gaps in the current system and connecting neighborhoods, parks, shopping centers, schools, employment centers, bus stops, greenways and regional destinations throughout the Spartanburg area.

Bicycle and pedestrian routes will connect and be more comprehensive, thereby **reducing overall motor vehicle traffic congestion and improving air quality**.

Spartanburg area citizens will **connect with the outdoors and live healthier, more active lifestyles**.

A more walkable and bikable Spartanburg area will help **connect people and build community**.

Bicycle and pedestrian facilities will not simply be built, but built properly with **safety as a priority** in all cases, providing adequate and safe separation of space for bicyclists and pedestrians.

Further bicycle and pedestrian accommodations will **support users of all types including recreational, utilitarian, and commuter users**.

The Spartanburg area will achieve **greater economic vitality** through walkable and bikable spaces.

Bicycle and pedestrian policy will be integrated into City and County codes, and a bicycle and pedestrian culture will be integrated into Spartanburg area life.

Education programs will **increase safety and build courtesy between drivers and cyclists**.

MEASUREABLE GOALS

The purpose of this Bicycle and Pedestrian Master Plan is to make this vision a reality. Measurable goals, derived from this vision, are listed below. While SPATS, Spartanburg County, and the City of Spartanburg must lead this effort, overall success will also require continued, active participation and encouragement from local residents and community organizations. The ultimate goal is for this Plan to be fully implemented within a 20-year time frame.

SPATS should conduct an annual meeting for the evaluation of progress on each of the following goals, including an official plan update in 2012. During each evaluation, SPATS staff and members of a citizens advisory board should identify steps to be taken before the next evaluation.

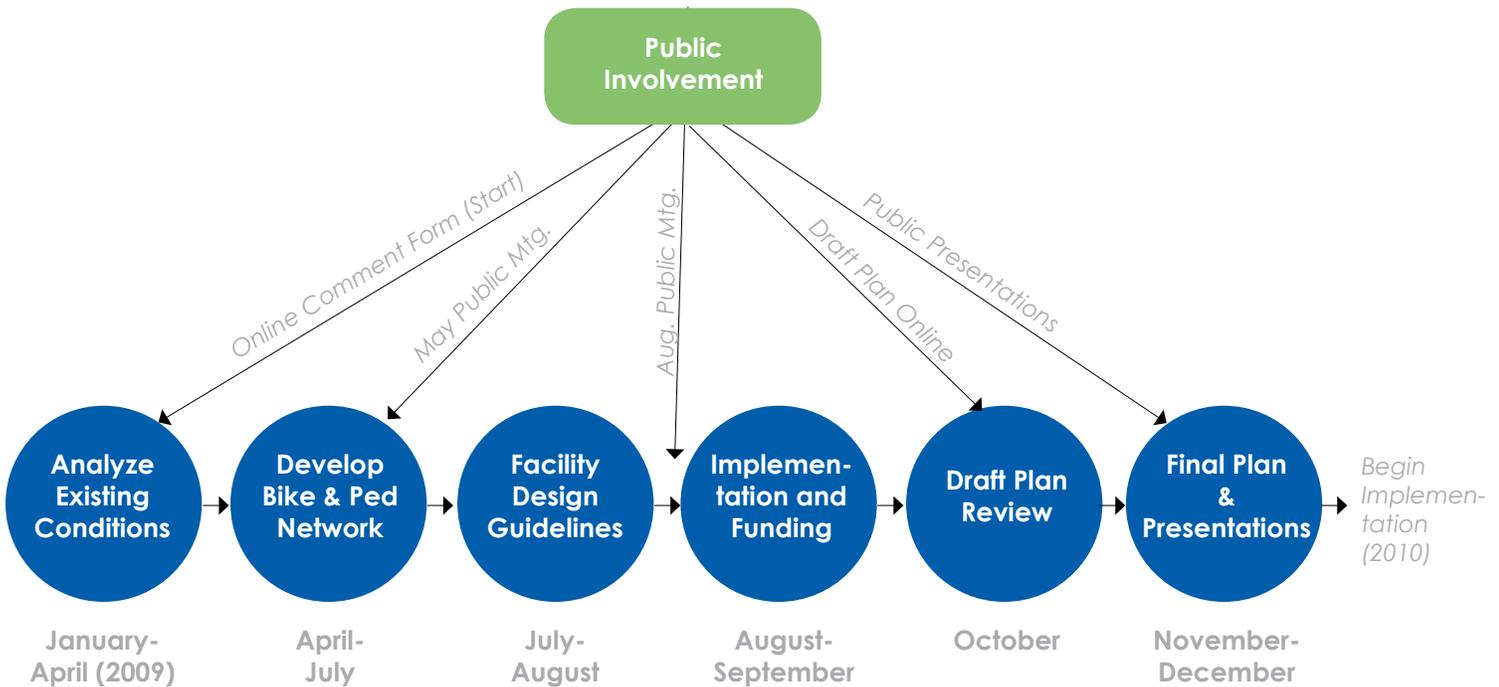
1. Triple both the 2000 Census bicycle and pedestrian commute rates by 2015.
2. Complete five of the top priority bicycle and pedestrian projects by 2011 and complete ten of the priority bicycle and pedestrian projects by 2015.
3. Increase 'Bicycle-Friendly Community' designation by the League of American Bicyclists from bronze by 2011.
4. Launch/participate in three new programs in three years (see Chapters 7 and 8 for details):
 - A) Bicycle Education and Encouragement Program
 - Create a countywide citizens Bicycle and Pedestrian Advisory Commission to meet on a regular basis and support implementation of this plan.
 - Produce online and hardcopy bicycle and walking maps and obtain a variety of educational materials for distribution that cover bicycle and pedestrian safety, etiquette, and rules and regulations.
 - B) Bicyclist and Motorist Enforcement Program
 - Establish an easy-to-use and well publicized bicycle and pedestrian enforcement hot line.
 - Training for law enforcement and law enforcement programs that focus on bicycling and pedestrian-related issues

C) Bicycle Facility Development Program

- Establish regular Capital Improvement Program (CIP) funding for roadway retrofits and restriping.
- Integrate bicycle-related improvements with scheduled roadway maintenance and restriping projects.
- Initiate programs aimed at developing regional and countywide connections.

THE PLANNING PROCESS

The planning process began in January 2009 and concluded at the end of 2009. This figure illustrates the main steps taken throughout the planning process. Public participation (through workshops, steering committee meetings, and the online survey) played a key role in plan development.



THE VALUE OF BICYCLE & PEDESTRIAN TRANSPORTATION

Given the extensive commitment of time and resources needed to fulfill the goals of this plan, it is also important to assess the immense value of bicycle and pedestrian transportation. As stated in comments from more than 700 Spartanburg County residents and from the goals of this Plan, bicycling and walking will help to improve people's health and fitness, enhance environmental conditions, decrease traffic congestion, and contribute to a greater sense of community.

Scores of studies from experts in the fields of public health, urban planning, urban ecology, real estate, transportation, sociology, and economics have supported such claims and affirm the substantial value of supporting bicycling as it relates to active living and alternative transportation. Communities across the United States and throughout the world are implementing strategies for serving the bicycle needs of their residents, and have been doing so for many years. They do this because of their obligations to promote health, safety, and welfare, and also because of the growing awareness of the many benefits of bicycling.

INCREASED HEALTH AND PHYSICAL ACTIVITY

A growing number of studies show that the design of our communities—including neighborhoods, towns, transportation systems, parks, trails and other public recreational facilities—affects people's abilities to reach the recommended daily 30 minutes 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." ¹ The increased rate of disease associated



Bicycle and pedestrian facilities like Spartanburg's Rail-Trail provides a great option for residents to be physically active.

with inactivity reduces quality of life for individuals and increases medical costs for families, companies, and local governments.

The CDC determined that creating and improving places to be active could result in a 25 percent increase in the number of people who exercise at least three times a week.² This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits. Establishing a safer, more reliable bicycle and pedestrian network in Spartanburg County will positively impact the health of local residents. The Rails-to-Trails Conservancy puts it simply: “Individuals must choose to exercise, but communities can make that choice easier.”³

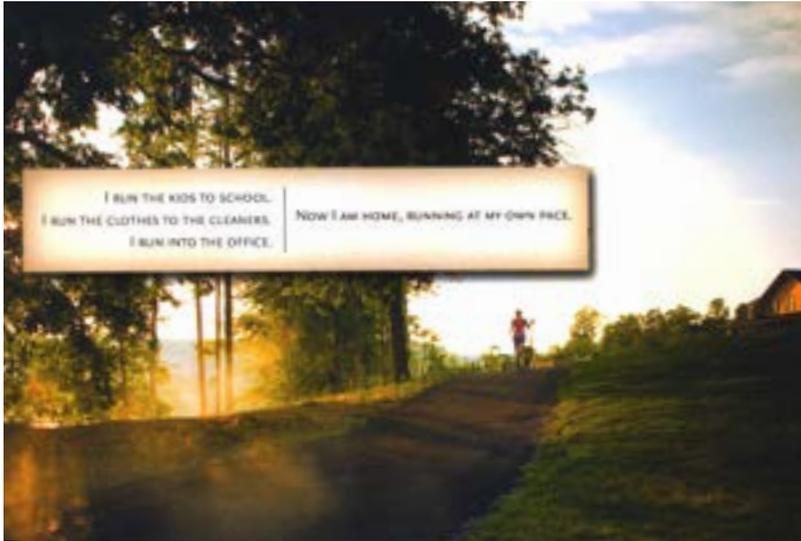
ECONOMIC BENEFITS

Bicycling and walking are affordable means of transportation. According to the Pedestrian and Bicycle Information Center (PBIC), of Chapel Hill, NC, the cost of operating a bicycle for a year is approximately \$120, compared to \$7,800 for operating a car over the same time period.⁴ Bicycling and walking become even more attractive from an economic standpoint when the price of oil rises, as it recently did in the summer of 2008. Furthermore, gasoline prices are generally forecast to continue to increase.⁵ The rising cost of fuel reinforces the idea that local communities should be built to accommodate people-powered transportation, such as walking and biking.



A residential development in North Carolina advertises the “Last Greenway Sites Available”

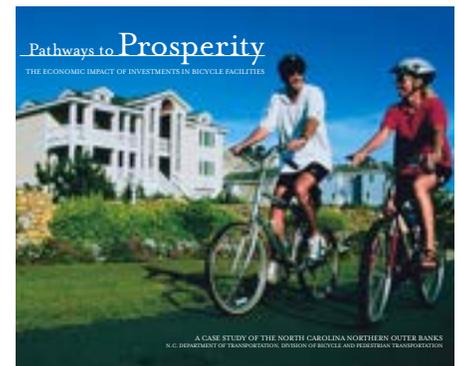
From a real estate standpoint, consider the positive impact of trails and greenways, which are essential components of a complete bicycle and pedestrian network. According to a 2002 survey of recent homebuyers by the National Association of Home Realtors and the National Association of Home Builders, trails ranked as the second most important community amenity out of a list of 18 choices.⁶ 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 American Planning Association (How Cities Use Parks for Economic Development, 2002), the Rails-to-Trails Conservancy (Economic Benefits of Trails and Greenways, 2005), and the Trust for Public Land (Economic Benefits of Parks and Open Space, 1999) further substantiate the positive connection between trails and property values across the country.



The real estate industry understands the value of trails, biking, and walking; left and below are examples of two magazine advertisements from developers that focus their marketing on bicycling and walking amenities.



Finally, from a tourism perspective, cyclists and pedestrians can add real value to local economies. For example, in the Outer Banks, NC, bicycling is estimated to have an annual economic impact of \$60 million; 1,407 jobs are supported by 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.⁷ Similarly, Damascus, VA, the self-proclaimed 'Friendliest Trail Town', features 34-miles of trail where approximately \$2.5 million is spent annually related to recreation visits. Of this amount, non-local visitors spend about \$1.2 million directly into the economies of Washington and Grayson counties.⁸ While these examples feature beach and mountain destinations, Spartanburg County also has key advantages, such as the Palmetto Trail and a large population of hikers and bicyclists.



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

ENVIRONMENTAL IMPROVEMENTS

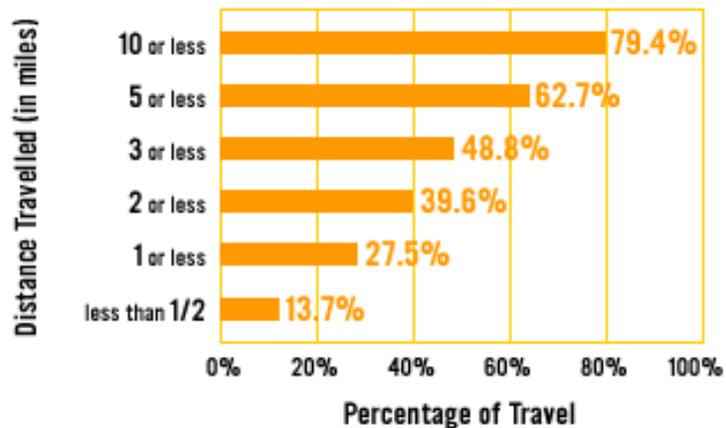
As demonstrated by the Southern Resource Center of the Federal Highway Administration, when people get out of their cars and onto their bicycles or on their feet, they reduce measurable volumes of pollutants.⁹ Other environmental impacts include a reduction in overall neighborhood noise levels and improvements in local water quality as fewer automobile-related discharges wind up in the local rivers, streams, and lakes.

Trails and greenways are also part of any bicycle and pedestrian network, conveying unique environmental benefits. Greenways protect and link fragmented habitat and provide opportunities for protecting plant and animal species. Aside from connecting places without the use of air-polluting automobiles, trails and greenways also reduce air pollution by protecting large areas of plants that create oxygen and filter air pollutants such as ozone, sulfur dioxide, carbon monoxide and airborne particles of heavy metal. Finally, 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 paved-surface runoff.

TRANSPORTATION BENEFITS

In 2001, the National Household Travel Survey (NHTS) found that roughly 40% of all trips taken by car are less than 2 miles. By taking these short trips on a bicycle or by foot, rather than in a car, citizens can substantially impact local traffic and congestion. Additionally, many people do not have access to a vehicle or are not able to drive. According to the NHTS, one in 12 U.S. households does not own an automobile and approximately 12 percent of persons 15 or older do not drive.¹⁰ An improved bicycle network provides greater and safer mobility for these residents.

Daily Trip Distances



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

Traffic congestion is often a major problem in fast-growing areas such as the Upstate. Congestion reduces mobility, increases auto-operating costs, adds to air pollution, and causes stress. Bicycle and pedestrian users can help alleviate overall congestion because each cyclist and pedestrian is one less car on the road. Incidentally, cyclists and pedestrians take up significantly less space on the road. While some may argue over the degree to which overall congestion is alleviated by cyclists and pedestrians, one aspect of the argument is particularly difficult to challenge: for the individuals who choose to ride a bike or walk rather than drive, the negative impacts of congestion (stress, operating costs, and sometimes even mobility) are greatly reduced.

QUALITY OF LIFE

Many factors go into determining quality of life for the citizens of a community: the local education system, prevalence of quality employment opportunities, and affordability of housing are all items that are commonly cited. Increasingly though, citizens claim that access to alternative means of transportation and access to quality recreational opportunities such as parks, trails, greenways, and bicycle routes are important factors for them in determining their overall pleasure within their community. Communities with such amenities can attract new businesses, industries, and in turn, new residents. Furthermore, quality of life is positively impacted by bicycling and walking through the increased social connections that take place by residents being active, talking to one another, and spending more time outdoors and in their communities.

According to the Brookings Institution, the number of older Americans is expected to double over the next 25 years.¹¹ All but the most fortunate seniors will confront an array of constraints on their mobility, even as they continue to seek an active community life and the ability to age in place. Trails built as part of the bicycle and pedestrian transportation network generally do not allow for motor vehicles. However, they do accommodate motorized wheelchairs, which is an important asset for the growing number of senior citizens who deserve access to independent mobility.

Children under 16 are another important subset of our society who deserve access to safe mobility and a higher quality of life. According to the U.S. Environmental Protection Agency, fewer children walk or bike to school than did so a generation ago. In 1969, 48 percent of students walked or biked to school, but by 2001, less than 16 percent of students between 5 and 15 walked or biked to or from school.¹²



Above: By walking or biking for our trips that are less than two miles, we could eliminate 40% of local car trips.

According to the National Center for Safe Routes to School, “Walking or biking to school gives children time for physical activity and a sense of responsibility and independence, allows them to enjoy being outside, and provides them with time to socialize with their parents and friends and to get to know their neighborhoods.”¹³ In a 2004 CDC survey, 1,588 adults answered questions about barriers to walking to school for their youngest child aged 5 to 18 years.¹⁴ The main reasons cited by parents included distance to school, at 62%, and traffic-related danger, at 30%. Strategic additions to Spartanburg County’s bicycle and pedestrian system could shorten the distance from homes to schools, and overall bicycle improvements can improve the safety of our roadways.

PLAN COMPONENTS

This Plan document includes the following major components:

- This Introduction presents the background, visions and goals, planning process, and the benefits of a bikable and walkable County (Chapter 1).
- An assessment of Existing Conditions that overviews existing pedestrian and bicycle conditions, land use, trip attractors, and also summarizes existing related plans of Spartanburg County (Chapter 2).
- A Demand and Needs Analysis that examines mode-share, models bicycle and pedestrian activity, and presents key findings from the public input process (Chapter 3).
- A recommended Bicycle Network and maps that put forward a framework of connected, recommended facilities (bicycle lanes, paved shoulders, multi-use trails, wide outside lanes, and sharrows) (Chapter 4).
- A recommended Pedestrian Network that puts forward a framework of connected, recommended facilities (pedestrian corridors, intersection improvement projects, and multi-use trails) (Chapter 5).
- Recommended project pages, photos, and bike/pedestrian network maps for Spartanburg County municipalities (Chapter 6)
- Recommended policy updates and additions to ensure future development accommodates bicyclists and pedestrians (Chapter 7).

- Program Recommendations for education, encouragement, and enforcement (Chapter 8).
- Implementation recommendations that outline specific steps for achieving the plan's key elements including phasing and prioritization of the Bicycle and Pedestrian Network (Chapter 9).
- Design Guidelines to guide Spartanburg County and its municipalities in current facility design and standards (Chapter 10).
- Appendices that provide a summary of public input, the prioritization matrix, recommended project cutsheets with cost estimates for the metro Spartanburg area, the bicycle network segment table, funding recommendations, and municipality meeting summaries.

Footnotes from, "The Value of Bicycle and Pedestrian Transportation":

1. U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention. (1996). *Physical Activity and Health: A Report of the Surgeon General*.
2. U.S. Dept. of Health and Human Services, Centers for Disease Control and Prevention. (2002). *Guide to Community Preventive Services*.
3. Rails-to-Trails Conservancy. (2006) *Health and Wellness Benefits*.
4. Pedestrian and Bicycle Information Center. (2008). *Economic Benefits: Money Facts*. Retrieved 8/8/2008 from www.bicyclinginfo.org/why/benefits_economic.cfm
5. King, Neil. *The Wall Street Journal: Another Peek at the Plateau*. (2/27/08): In February 2008, the *Wall Street Journal* quoted industry experts, stating, "supply constraints could push the price of oil to \$150 a barrel by 2010".
6. National Assn. of Realtors and National Assn. of Home Builders. (2002). *Consumer's Survey on Smart Choices for Home Buyers*.
7. NCDOT and ITRE. (2006). *Bikeways to Prosperity: Assessing the Economic Impact of Bicycle Facilities*.
8. Virginia Dept. of Conservation. (2004). *Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics*.
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10. U.S. Dept. of Transportation (DOT), Bureau of Transportation Statistics (BTS) and the Federal Highway Administration (FHWA). (2002). *National Household Travel Survey*.
11. Brookings Institution. 2003. *The Mobility Needs of Older Americans: Implications for Transportation Reauthorization*.
12. US EPA. (2003). *Travel and Environmental Implications of School Siting*.
13. National Center for Safe Routes to School. (2006). *National Center for Safe Routes to School Talking Points*.
14. Centers for Disease Control and Prevention. *The Importance of Regular Physical Activity for Children*. Accessed 9/16/05 at http://www.cdc.gov/nccdphp/dnpa/kidswalk/health_benefits.htm.

CHAPTER TWO OUTLINE:

- Overview
- Existing Bicycle Conditions
- Bicycle Crashes
- Bicycle Level of Service Model
- Existing Pedestrian Conditions
- Pedestrian Crashes
- Trip Attractors
- Intersection Inventory Tables

CHAPTER TWO: EXISTING CONDITIONS

OVERVIEW

In order to propose a comprehensive bicycle and pedestrian system for Spartanburg County, it is critical to examine the existing environment. The area's geographic characteristics, existing roadway configurations, and existing bicycle and pedestrian facilities significantly affect transportation, the environment, and everyday decisions by bicyclists, pedestrians, and motorists.

A comprehensive approach consisting of intensive research, analysis, fieldwork, GIS analysis, existing plan review, one-on-one interviews, Committee meetings, and an entire public input process was conducted to examine existing conditions. Some of the specific accomplishments include:

- Over four hundred miles of sidewalks and crosswalks were mapped in GIS.
- Nearly 90 intersections were inventoried for pedestrian crossing facilities.
- Arterial, collector, and subcollector roads were analyzed and measured for possible on-road bicycle facilities.
- Photo inventory was developed for existing bicycle and pedestrian conditions.
- Over 200 bicycle and pedestrian crash sites were mapped.
- Bicycle level of service (BLOS) was established for major roadways.
- Municipality meetings were held to understand local needs and priorities.
- Phone interviews with key state, county, and local staff were conducted.
- Existing relevant plans were reviewed.

This work lays the foundation for the recommendations found later in this Plan. The findings are presented on the following pages.

EXISTING BICYCLE CONDITIONS

The majority of Spartanburg County is not bicycle-friendly with the exception of a few areas, primarily in the City of Spartanburg. On-road options are limited with minimal, if any, separated space. There are about 12 miles of bicycle lanes and

shared-lane markings throughout Spartanburg County, mostly in the City of Spartanburg, with more planned in near-term projects. Highlights of conditions are presented below with recommendations in Chapters 4 and 6.

BICYCLE CONDITIONS: METRO SPARTANBURG (MAP 2.1)

The City of Spartanburg has taken several proactive steps to make the City more bicycle-friendly by installing bicycle lanes, shared-lane markings, and bicycle racks around the downtown area. Spartanburg also has provided a number of trails and sidepaths throughout the city for recreation and transportation. These facilities provide a good foundation for a bicycle facility network throughout the city. However, a majority of the roads in the study area pose numerous dangers to bicyclists as they travel to and from destinations. Some of these hazards include commercial corridors that are designed solely for motorized transportation, multiple-lane high-speed roadways, narrow roadways with little or no shoulders, and dangerous railroad and driveway crossings. Furthermore, it was observed that few bicyclists wear helmets while riding and often ride in the wrong direction.

STRENGTHS OF EXISTING BICYCLE FACILITIES:

- *Existing on-road bicycle facilities:* There are currently 12 miles of bicycle lanes and shared-lane markings in close proximity to Downtown Spartanburg, such as those found on North Forest Street, Spring Street, and Marion Avenue.
- *Side paths:* There are also several side paths along busy roads such as Southport Road and the Willis Road (Wadsworth Trail).
- *Multi-use paths:* Greenways and trails, such as the Mary Black Trail and other trails associated with parks, provide bicycling opportunities for both recreation and transportation.
- *Ancillary facilities:* Additional facilities such as bicycle racks on buses and bicycle parking can be found throughout the study area, especially in Downtown Spartanburg.

DEFICIENCIES OF EXISTING BICYCLE FACILITIES:

- *Lack of connectivity:* As a whole, the existing bicycle facilities are often disconnected which makes it difficult to find adequate routes to destinations.
- *Design issues:* Some existing bicycle facilities do not follow widely used guidelines. For example, the shared-lane markings on Spring Street are placed too close to parked cars offering a potentially dangerous situation for bicyclists and people exiting their vehicles.
- *Bicycle lane-gutter pan:* The total width for bicycle lanes often includes the gutter pan of the road (where there are uneven surfaces and debris).

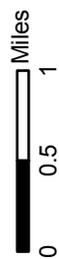


Above, from top: Sidepath on Southport Road (SC 295); the Pride Rail-Trail adjacent to Pine St.; and a bicycle hitch on Main Street.

Below: An example of a shared-lane marking that was placed too close to parked cars.



MAP 2.1 METRO SPARTANBURG: EXISTING BICYCLE CONDITIONS

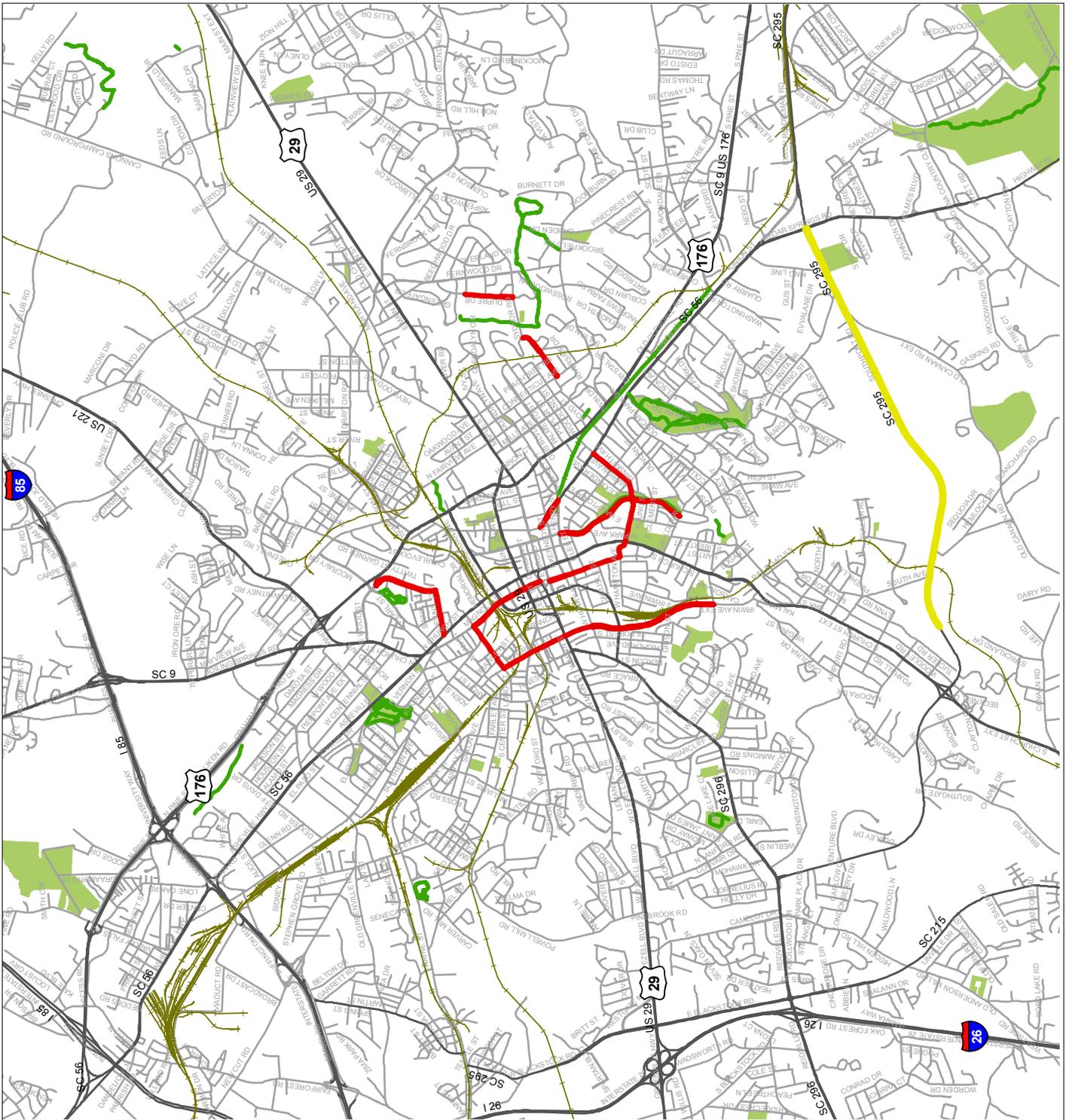


Legend

Existing Bicycle Facilities

- Road
- Bike Lane, Existing
- Side Path, Existing
- Existing Trails
- Rail Road
- Parks

Data Source: SPATS



- *Bicycle parking not widespread:* Adequate and secure bike parking facilities need to be located throughout the study area through the usage of inverted U-racks.
- *Bicyclist behavior:* Bicyclists were observed not wearing helmets, riding in the wrong direction, riding on sidewalks, and crossing roads randomly at mid-block.

STRENGTHS OF EXISTING ROAD NETWORK:

- *Downtown grid network:* Streets within the downtown area of Spartanburg are on a good grid system for all transportation modes and many have low automobile speeds.
- *Roadway/lane widths:* Many roadways throughout the city are wide enough to offer bicycle lanes or other bicycle facilities.

DEFICIENCIES OF EXISTING ROAD NETWORK:

- *Connectivity issues:* There is a lack of connectivity between existing facilities and destinations.
- *High-volume, high-speed roadways:* There are many wide high-volume commercial roadways throughout the City with high speeds and little shoulder where bicyclists are not safe. Some of these roads include East/West Main Street, Asheville Highway, and John B. White Sr. Blvd.
- *Narrow roadways and lanes:* There are also many roadways throughout the city that are too narrow for bicyclists to travel safely on them. These roads have little or no shoulder and have relatively high vehicle travel speeds which pose multiple hazards for bicyclists.
- *Railroad crossing access issues:* There is poor access across railroad tracks. At-grade crossings are the most common type of crossing throughout Spartanburg and many of these are dangerous for bicyclists because of the uneven surfaces with the roadway and tracks (not to mention the hazards they cause for people with strollers, wheelchairs, or walkers). Tunnels and bridges throughout the city also often pose problems to bicyclists because of their narrow widths.
- *Driveway access management:* High frequency of driveways and parking lot curb-cuts present repeated hazards to cyclists as the automobile crosses the cyclists' path of travel.
- *Roadways currently designed for automobile only:* Many roads were designed around the automobile and need to be redesigned or re-stripped to become more bicycle friendly. Narrowing existing lanes and adding planted medians, sidewalks, and shade trees could also help reduce speeding and the hazards that speeding presents to cyclists, pedestrians, and drivers.



Above, from top: Bicyclist riding on sidewalk along Main Street; a wide roadway example on Collins Avenue; an unsafe bicycling environment example on Asheville Highway; and an example of a roadway currently designed for the automobile, Main Street.

BICYCLE CONDITIONS: SPARTANBURG COUNTY AND MUNICIPALITIES (MAP 2.2)

There are very limited bicycle facilities outside the City of Spartanburg. The only identified bicycle lanes are along Main Street in the Town of Reidville, Reidville Rd, and 221 in Chesnee.



Above, from top: Bicycle lane on Main Street in Reidville, and wide shoulders in Lyman.

DEFICIENCIES OF EXISTING BICYCLE FACILITIES:

There are very limited bicycle facilities outside the City of Spartanburg.

STRENGTHS OF EXISTING ROAD NETWORK:

- *Roadway/lane widths:* Many main roadways within municipality downtowns have wide outside lanes providing opportunity for bicycle lanes. Some rural road sections have minimal to wide shoulders.

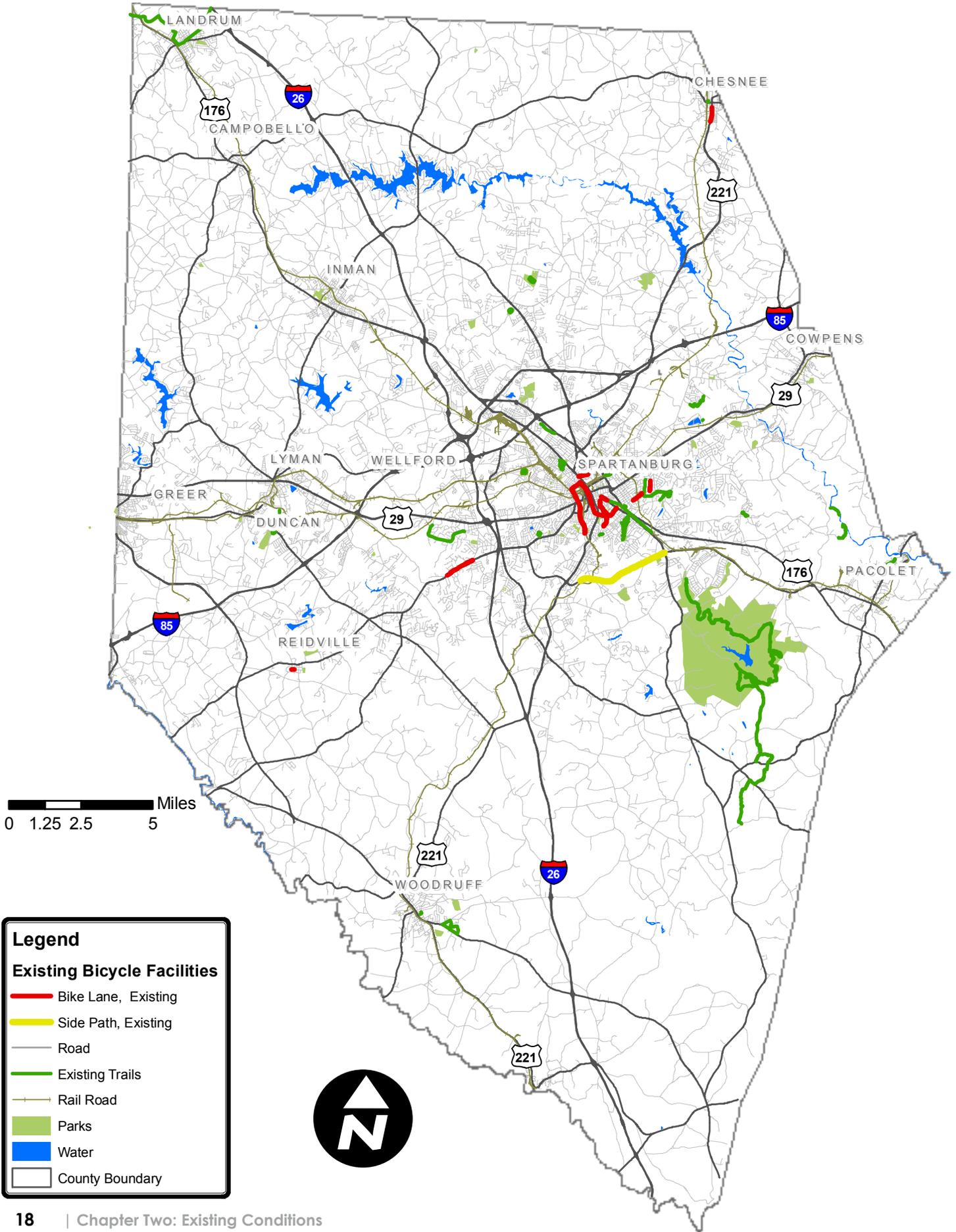
DEFICIENCIES OF EXISTING ROAD NETWORK:

- *High-volume, high-speed roadways:* There are many wide high-volume commercial roadways throughout the County with high speeds and little shoulder where bicyclists are not safe. Some of these roads include US 29, SC 9, US 176, Reidville Road, and Country Club Road.
- *Narrow roadways and lanes:* There are also many roadways throughout the county that are too narrow for bicyclists to travel safely on them. These roads have little or no shoulder and have relatively high vehicle travel speeds which pose multiple hazards for bicyclists.
- *Driveway access management:* High frequency of driveways and parking lot curb-cuts in municipality commercial areas present repeated hazards to cyclists as the automobile crosses the cyclists' path of travel.
- *Roadways currently designed for automobile only:* Many roads were designed around the automobile and need to be redesigned or re-striped to become more bicycle friendly. Narrowing existing lanes could also help reduce speeding and the hazards that speeding presents to cyclists, pedestrians, and drivers.
- *Railroad crossing access issues:* There is poor access across railroad tracks. At-grade crossings are the most common type of crossing throughout Spartanburg County and many of these are dangerous for bicyclists because of the uneven surfaces with the roadway and tracks (not to mention the hazards they cause for people with strollers, wheelchairs, or walkers).

Below: Poor conditions for bicyclists in Chesnee, and railroad track crossing in Pacolet.



MAP 2.2 SPARTANBURG COUNTY AND MUNICIPALITIES: EXISTING BICYCLE CONDITIONS



BICYCLE CRASHES (MAPS 2.3 AND 2.4)

Bicycle crash data from 2003-2008 was provided by SCDOT and geocoded by Greenways Incorporated. Seventy-five accidents were mapped and can be seen in the following bicycle crash density maps. The majority of crashes took place in the metro Spartanburg area with clusters in other locations, especially Greer. When focused on the City of Spartanburg map, a distinct north-south corridor of bicycle crash density can be seen in the Downtown area, along Church Street and over to Howard Street. Another dense area of incidences occurred along E. Main Street near the Fernwood Drive and Fernwood Glendale Road intersections.

TABLE 2.1 BICYCLE CRASH CLUSTERS IN SPARTANBURG, 2003-2008 (SCDOT)

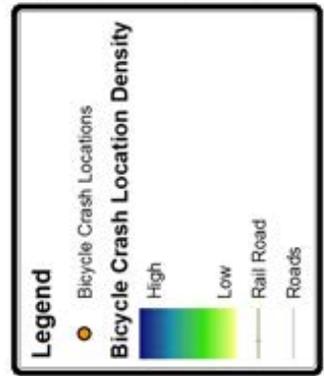
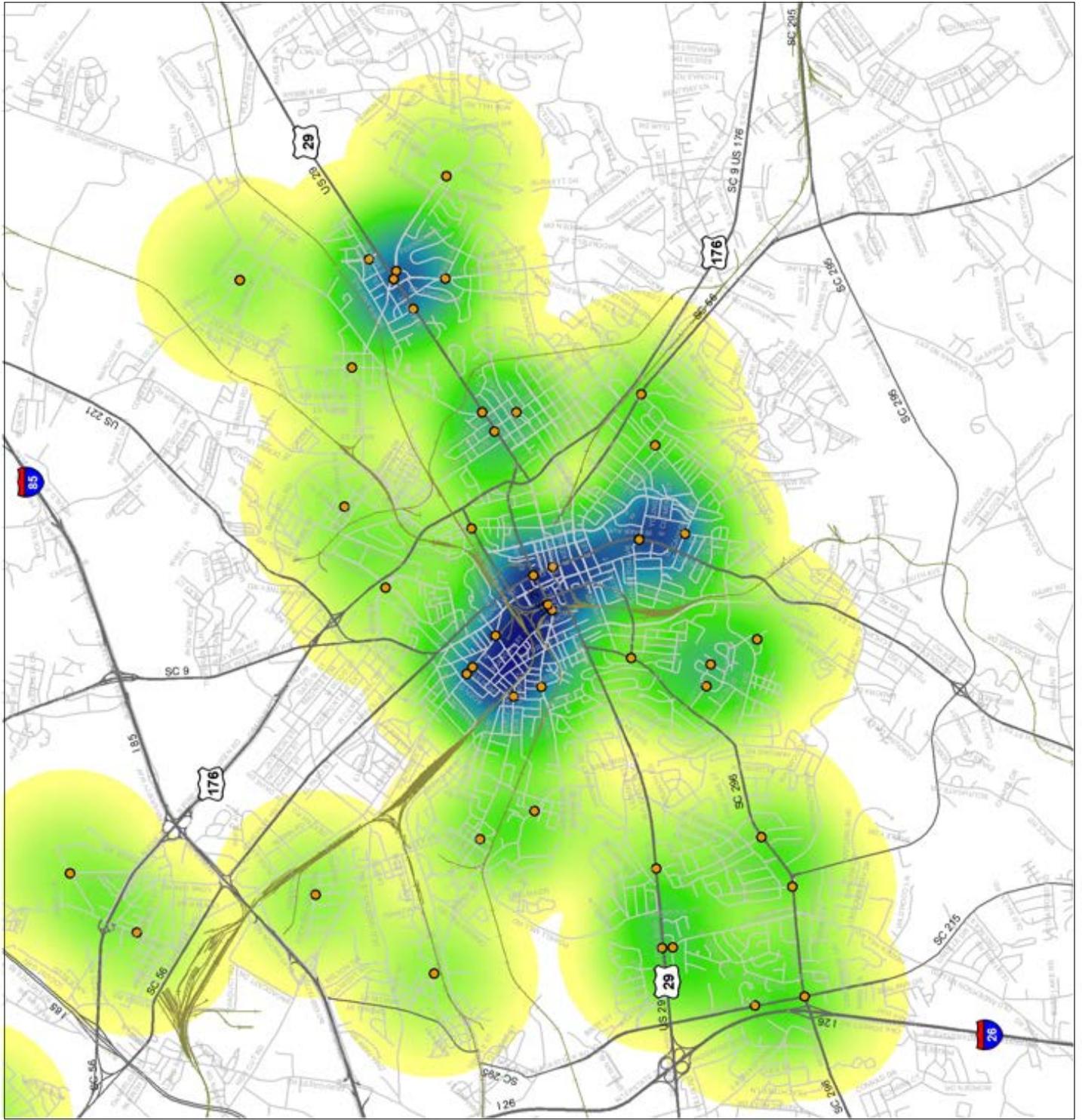
<i>Bicycle Accident Locations</i>	<i>Number of Accidents</i>
Main Street and Church Street	3
Church Street and Marion Avenue	3

<i>Bicycle Accident Corridors</i>	<i>Number of Accidents</i>
Main Street	7
Church Street	6
Reidville Road	5
Saint John Street/Wofford Street	4
Howard Street	3

Please note that there were 75 recorded bicycle accidents. The chart above only lists the accident clusters.

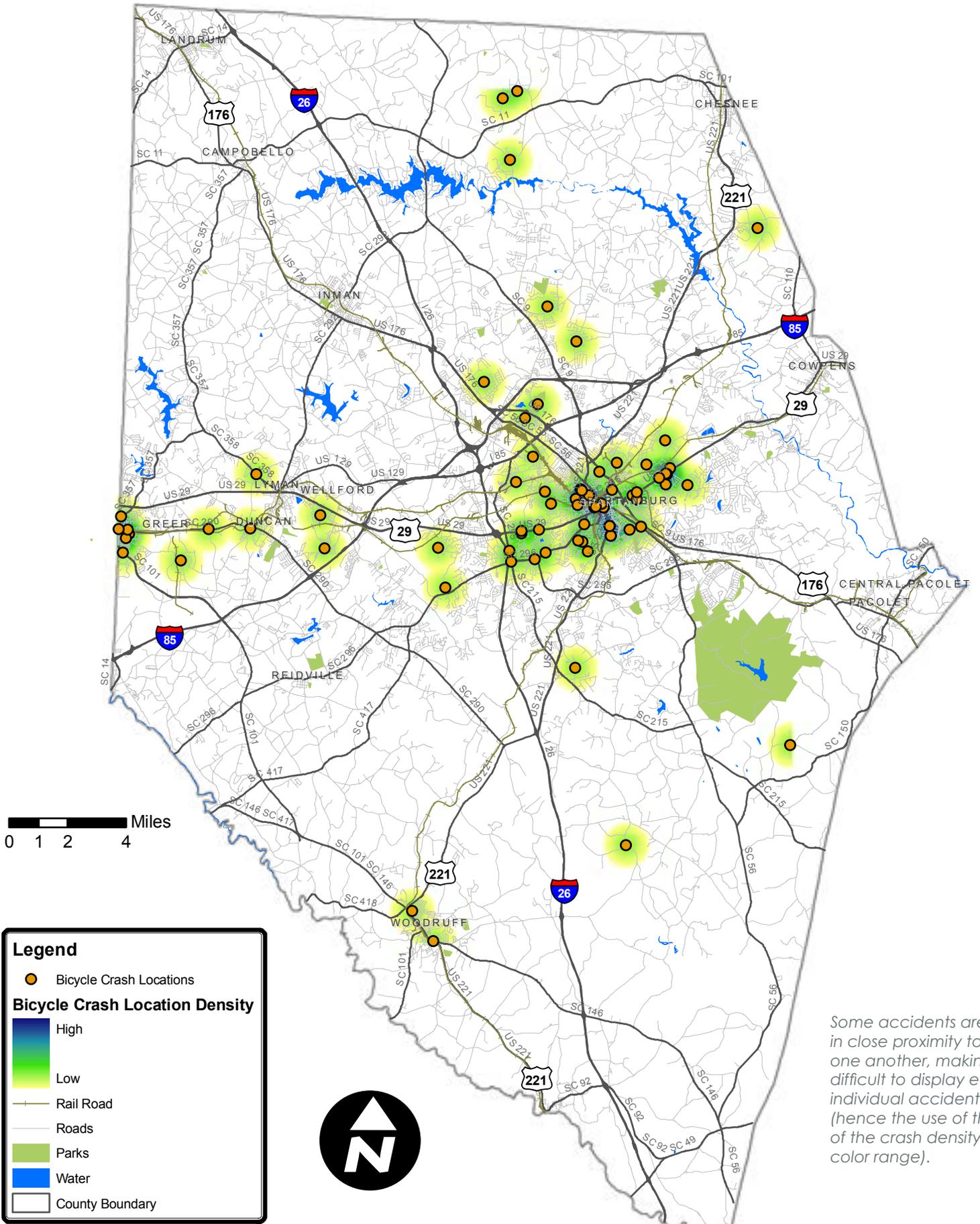
MAP 2.3 METRO SPARTANBURG: BICYCLE CRASHES

Some accidents are in close proximity to one another, making it difficult to display each individual accident (hence the use of the of the crash density color range).



Data Sources: SPATS and SCDOT

MAP 2.4 SPARTANBURG COUNTY AND MUNICIPALITIES: BICYCLE CRASHES



Some accidents are in close proximity to one another, making it difficult to display each individual accident (hence the use of the of the crash density color range).

Data Sources: SPATS and SCDOT

THE BICYCLE LEVEL OF SERVICE MODEL (BLOS)

(MAPS 2.5 AND 2.6)

The BLOS Model was used to evaluate bicycle suitability on roadways in Spartanburg County. The BLOS is a scientifically-calibrated method of evaluating the comfort level of bicyclists on a roadway segment, given existing bicycling conditions in relation to motor vehicle traffic. It uses objective, quantitative data to produce a measure of the level of service perceived by a typical bicyclist. Model inputs include measurable traffic and standard roadway factors such as:

- Lateral separation between bicyclists and adjacent motor vehicle traffic
- Presence and width of a paved shoulder or bicycle lane
- Volume and speed of motor vehicle traffic
- Percentage of heavy trucks
- Number of travel lanes
- Presence of on-street parking
- Pavement condition

The BLOS model should be used with the following considerations in mind:

- BLOS grades represent the perceived level of comfort experienced by a typical bicyclist.
- BLOS grades are not associated with safety or reported crashes.
- The BLOS model is a roadway segment analysis; it does not apply to intersections.
- Errors are inherent with data inputs and changing roadway and traffic characteristics.

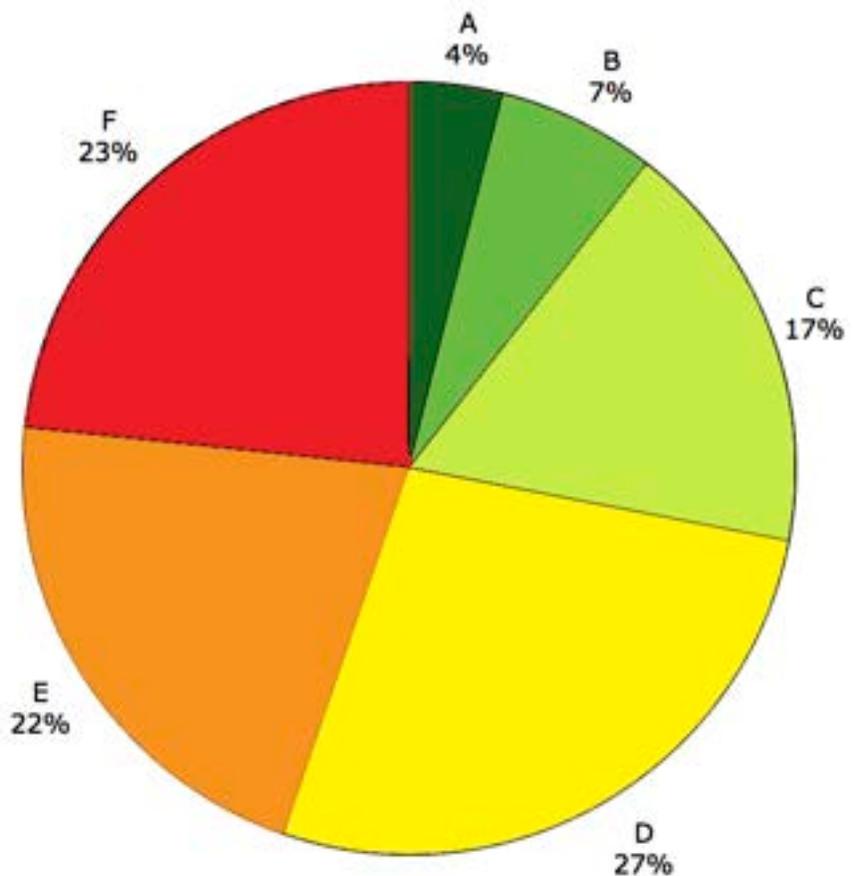
For Spartanburg County, the BLOS model was used for most major arterial and collector roadways and encompassed 813 miles. These roadways were chosen because they serve the most traffic and provide the best connectivity between neighborhoods and destinations such as shopping centers, offices, and schools. Many of the minor roadways, including residential streets, that were not included in the analysis are more conducive to bicycling (and would likely have higher BLOS grades) because of lighter traffic volumes and speeds. Also, controlled access highways and interstates were not included because bicycling is illegal on these roadways. Appendix C provides a detailed description of the BLOS model used for Spartanburg County. The existing data and new measurements for the model are described in Appendix C.

The BLOS model uses letter grades to describe existing conditions. Level “A” reflects the best conditions for bicyclists. This was a rare case for roadways in Spartanburg County. Level “F” represents the worst conditions. The most common letter grade for Spartanburg County’s arterials and major collectors was a “D.” 72% of the measured roadways received a BLOS score of “D” or below. Only 3.9% received a score of “A.” See Maps 2.5 and 2.6 for the BLOS mapping and Table 2.2/ Chart 2.1 for the BLOS summary.

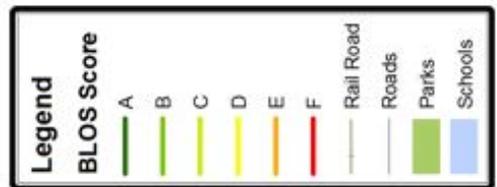
TABLE 2.2 SPARTANBURG COUNTY BICYCLE LEVEL OF SERVICE (BLOS) SUMMARY FOR STUDY NETWORK ROADWAYS

<i>BLOS Grade</i>	<i>Miles</i>	<i>% Measured Miles</i>
A	32.1	3.9
B	55.3	6.7
C	142.1	17.4
D	221.1	27.2
E	175.1	21.5
F	188.3	23.2
<i>Totals</i>	<i>813</i>	<i>100.0</i>

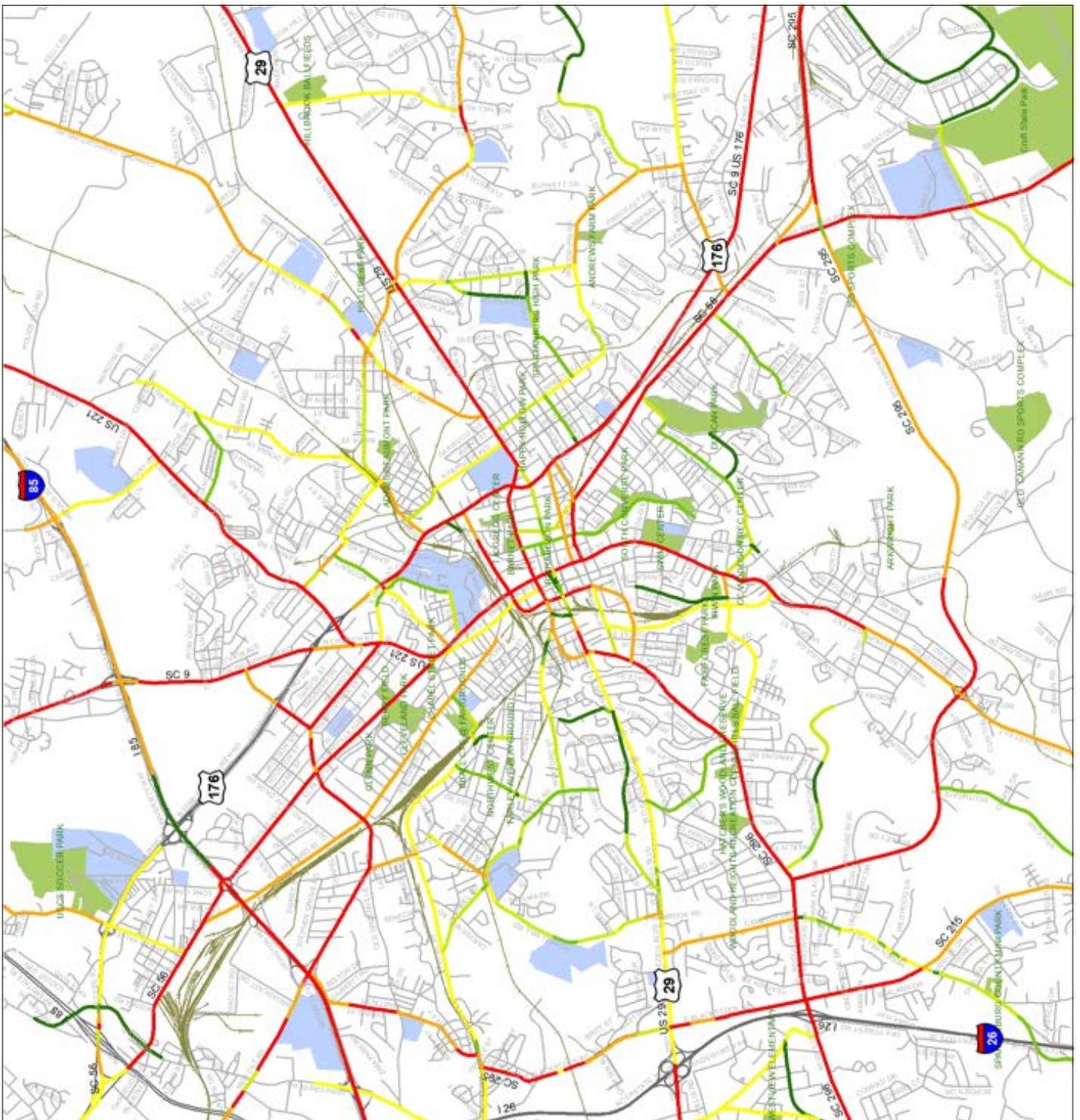
**CHART 2.1
SPARTANBURG COUNTY
BICYCLE LEVEL OF
SERVICE (BLOS)
SUMMARY FOR STUDY
NETWORK ROADWAYS**



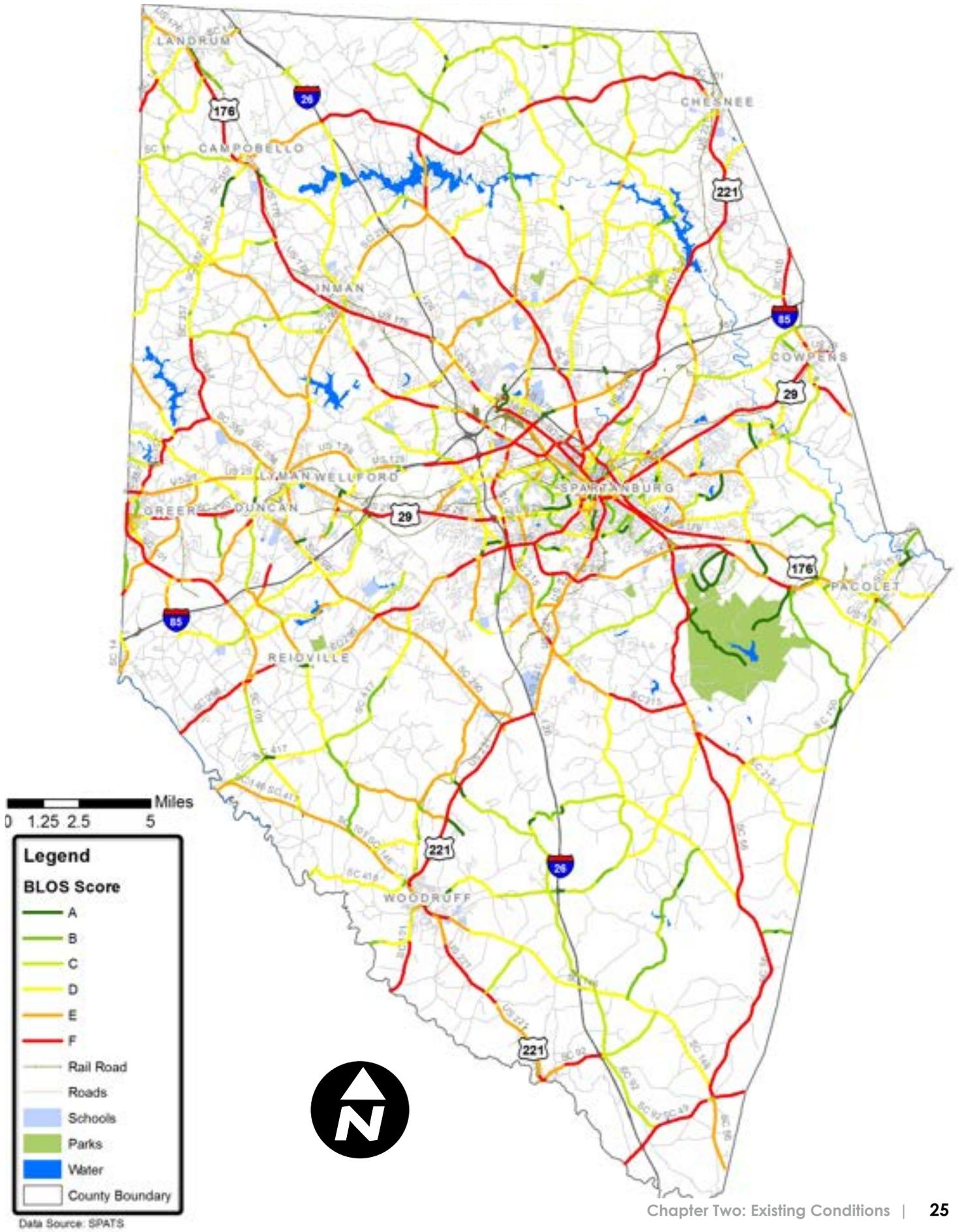
MAP 2.5 METRO SPARTANBURG: BICYCLE LEVEL OF SERVICE (BLOS)



Data Source: SPATS



MAP 2.6 SPARTANBURG COUNTY AND MUNICIPALITIES: BICYCLE LEVEL OF SERVICE (BLOS)



EXISTING PEDESTRIAN CONDITIONS

The municipalities of Spartanburg County feature some areas that are pedestrian-friendly, and other areas that are not pedestrian-friendly. There are 400 miles of sidewalks in the county, mostly confined within municipality borders. On any given day, hundreds of pedestrians can be observed throughout the metro Spartanburg area, especially near Downtown and in lower-income neighborhoods. Sidewalks and crosswalks have existed in the Downtown areas in many cases since the early history of the city. While some neighborhoods surrounding the Downtown areas have adequate pedestrian facilities, others, unfortunately contain none.

Highlights of conditions are presented below with recommendations in Chapters 5 and 6.

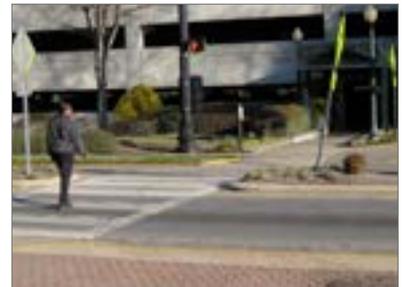
PEDESTRIAN CONDITIONS: METRO SPARTANBURG

(MAP 2.7)

In recent years, the City of Spartanburg has taken proactive steps to make the City more pedestrian friendly by installing dozens of countdown signals, new sidewalks, enhancement beautification projects, along with other intersection accommodations. In addition, metro Spartanburg also has a number of trails and sidepaths throughout the city for recreation and transportation. These facilities provide a good foundation for a more comprehensive pedestrian network throughout the region. However, there are still key gaps in the existing pedestrian network. Also, the majority of intersections, despite having pedestrian accommodations, lack complete pedestrian solutions (see the Intersection Inventory Tables at the end of this chapter).

STRENGTHS OF EXISTING PEDESTRIAN FACILITIES

- *Some intersection crossing facilities in place:* Many intersections already containing functional pedestrian elements including pedestrian-activated countdown signals at most intersections. See Table 2.3 Intersection Inventory for more information.
- *Downtown:* Downtown Spartanburg has excellent pedestrian facilities within and extending away from Downtown.
- *Multi-use paths:* Sidepaths (such as Southport Road) and greenways (such as the Mary Black Rail Trail and Duncan Park trails) provide transportation and recreation options for areas of existing and future development.
- *Hospital area:* Pedestrian facilities around the Spartanburg Regional Medical Center campus are excellent.
- *Mary Black Rail Trail:* The Mary Black Rail Trail is a great off-road facility with accessible and well-designed trailheads.



Above, from top: Good examples of existing pedestrian facilities: crosswalks and pedestrian refuge islands, the downtown streetscape, Cottonwood Trail (near Fernwood Dr.), and crossing facilities at the hospital (on E. Wood Street).

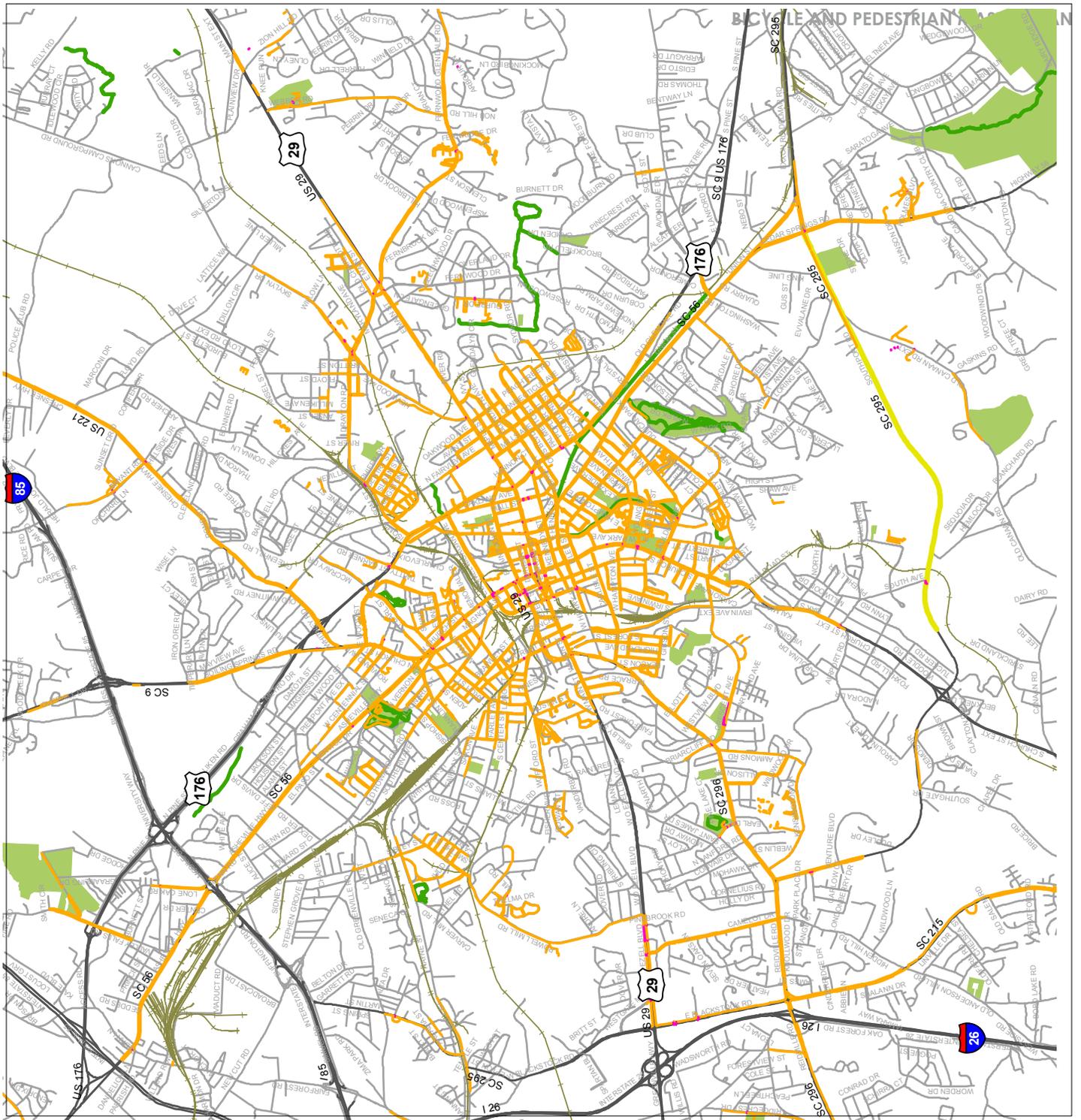
MAP 2.7 METRO SPARTANBURG: EXISTING PEDESTRIAN CONDITIONS



Legend

- Existing Pedestrian Facilities
- Existing Crosswalks
- Existing Sidewalk
- Existing Sidewalk
- Existing Trails
- Rail Road
- Parks

Data Source: SPATS



- *Wofford College:* Pedestrian and bicycling conditions around Wofford are superb with sidewalks, effective crosswalks, low traffic speeds, and bicycle lanes.

DEFICIENCIES OF EXISTING PEDESTRIAN FACILITIES

- *Lack of overall connectivity:* Numerous gaps in the sidewalk system exist, leaving some neighborhoods and destinations disconnected from other areas. In many cases, worn foot paths may be observed where there is no sidewalk, indicating use and need.
- *Inadequate crossing facilities:*
 1. Most intersections have a single curb ramp at each corner with existing marked crosswalks leading partly into rising curb. Some intersections have countdown signals without marked crosswalks.
 2. A number of midblock crossings are present without curb ramps that would allow better access and safety for those who are mobility-impaired and/or pushing baby strollers.
 3. A number of marked crosswalks at midblock locations and intersections are not highly-visible; they are faded and in need of re-painting.
 4. Median refuge islands are not commonplace although there are opportunities for their provision to make crossing distances shorter. In some cases, median beautification projects are located near a midblock crossing. It would be more ideal to utilize these median spaces as refuge islands as well.
 5. In-roadway pedestrian crossing signs are lacking and would be useful, especially around heavy pedestrian activity such as downtown intersections and schools.



Above, from top: Examples of inadequate crossing facilities: Single curb ramp at Hayne & Sibley; countdown signal without crosswalk at Pine & Twitty; crossing w/o curb ramps at Cleveland Elementary; and a worn crosswalk at Union & Andrews.

Left: Opportunity for combining a beautification project with pedestrian refuge areas (example shown on Church Street).



Above, from top: Pedestrians crossing Church St and undefined pedestrian space with multiple driveways on Howard St.

Below, from top: Crosswalk in Downtown Woodruff; no sidewalk near school at New Cut Rd; poor crossing facilities at 290 & Danzler; sidewalk in need of repair in Lyman.



- *Sidewalk condition:* Existing sidewalk, in many locations, is cracking and in need of repair.
- *Pedestrian behavior:* Pedestrians were often seen crossing roads not in the designated crosswalk.
- *Driveway access management:* There are numerous locations along commercial corridors that feature long, wide, and multiple driveway entrances for parking. This creates a situation in which a pedestrian must cross entrances too often.

PEDESTRIAN CONDITIONS: SPARTANBURG COUNTY AND MUNICIPALITIES (MAP 2.8)

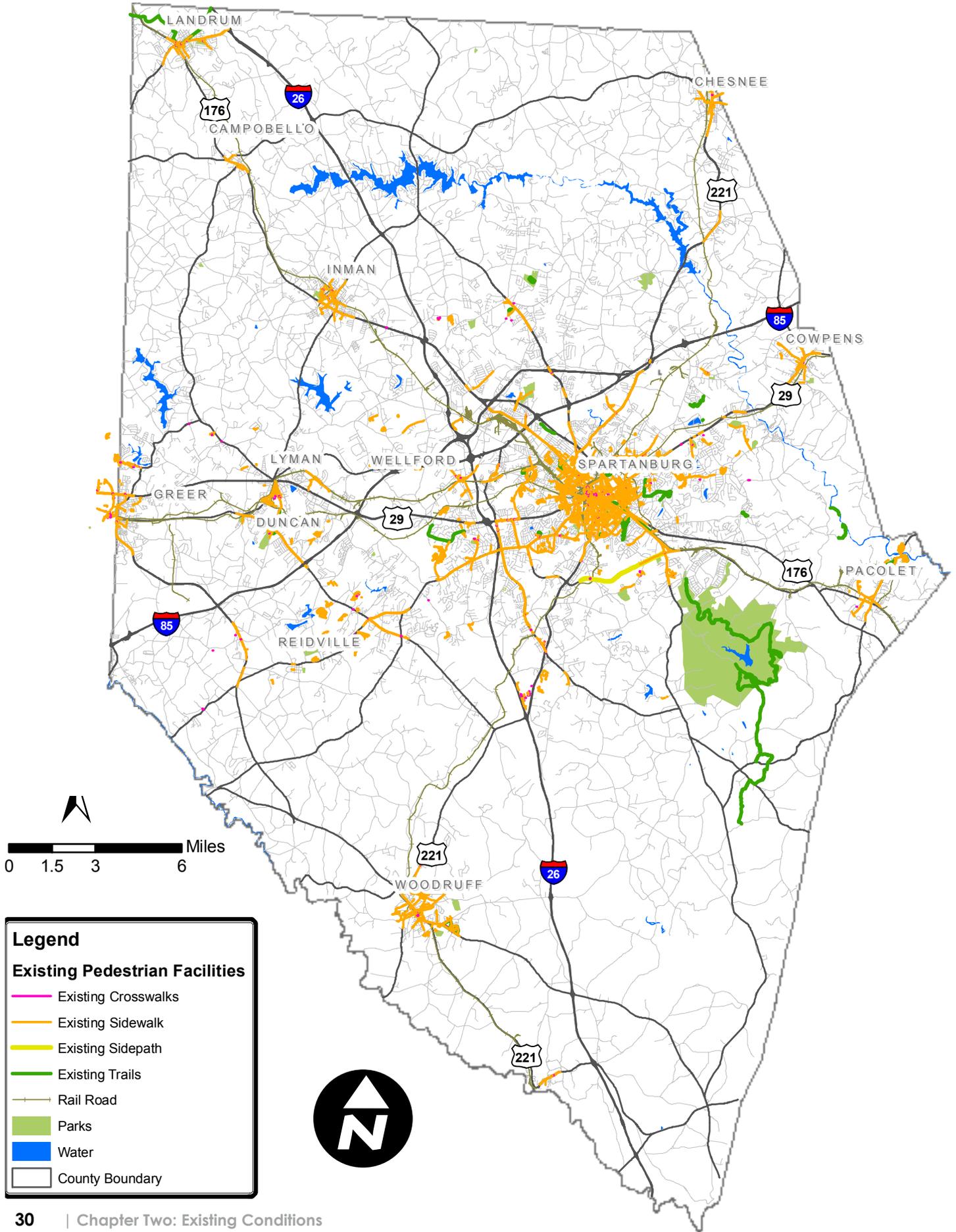
STRENGTHS OF EXISTING PEDESTRIAN FACILITIES

- *Downtowns:* Many towns have excellent pedestrian facilities within the immediate downtown including sidewalks and crosswalks.
- *New pedestrian projects:* A number of new sidewalk, side-path, and trail projects have been recently completed or are underway. For example, the new pedestrian bridge in Lyman is an attractive feature.
- *Palmetto Trail:* Sections of the existing Palmetto Trail provide recreational options.

DEFICIENCIES OF EXISTING PEDESTRIAN FACILITIES

- *Lack of overall connectivity:* Numerous gaps in the sidewalk system exist, especially extending away from downtown areas. This leaves some neighborhoods and destinations disconnected from other areas. Many school areas are lacking pedestrian infrastructure.
- *Inadequate crossing facilities:* Incomplete crossing facilities are commonplace lacking high-visibility crosswalks, adequate curb ramps, and countdown signals. See Table 2.2 Intersection Inventory for more information.
- *Sidewalk condition:* Existing sidewalk, in many locations, is cracking and in need of repair.
- *Driveway access management:* There are numerous locations along commercial corridors that feature long, wide, and multiple driveway entrances for parking. This creates a situation in which a pedestrian must cross entrances too often.

MAP 2.8 SPARTANBURG COUNTY AND MUNICIPALITIES: EXISTING PEDESTRIAN CONDITIONS



PEDESTRIAN CRASHES (MAPS 2.9 AND 2.10)

Pedestrian crash data from 2003-2008 was provided by SCDOT and geocoded by Greenways Incorporated. Pedestrian crashes were more numerous than bicycle crashes and 136 accidents were mapped. These can be seen in the following pedestrian crash density maps. The majority of crashes took place in the metro Spartanburg area with clusters in other locations, especially Woodruff. When focused on the City of Spartanburg map, a distinct cluster of pedestrian crash density can be seen in the Downtown area, primarily north of Henry Street along Church Street, Wofford Street, Howard Street, and Asheville Highway to Cleveland Park. Another cluster can be found south of Downtown between John B. White Sr. Blvd./Reidville Road and Church Street.

PEDESTRIAN CRASH CLUSTERS IN SPARTANBURG COUNTY , 2003-2008 (SCDOT)

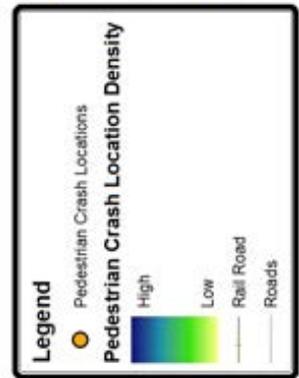
<i>Pedestrian Accident Locations</i>	<i>Number of Accidents</i>
Pine Street and Cleveland Street	3
Church Street and St. John Street	2

<i>Pedestrian Accident Corridors</i>	<i>Number of Accidents</i>
Main Street	16
Church Street	13
Pine Street	7
Saint John Street/Wofford Street	6
Reidville Road	5
Howard Street	4
Arch Street	3
Crescent Avenue	3
Asheville Highway	3
Parris Bridge	3

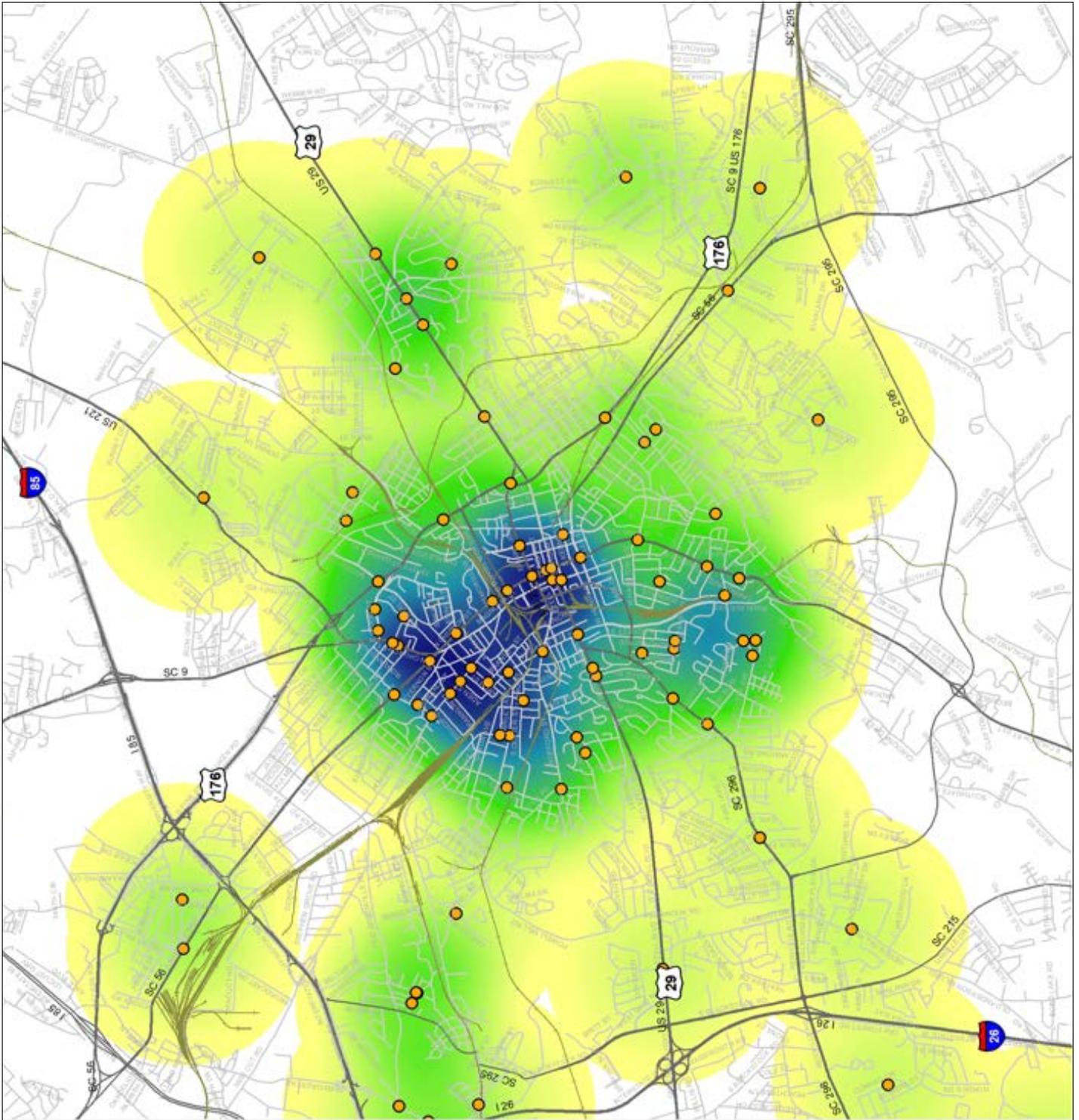
Please note that there were 136 recorded pedestrian accidents. The chart above only lists the accident clusters.

MAP 2.9 METRO SPARTANBURG: PEDESTRIAN CRASHES

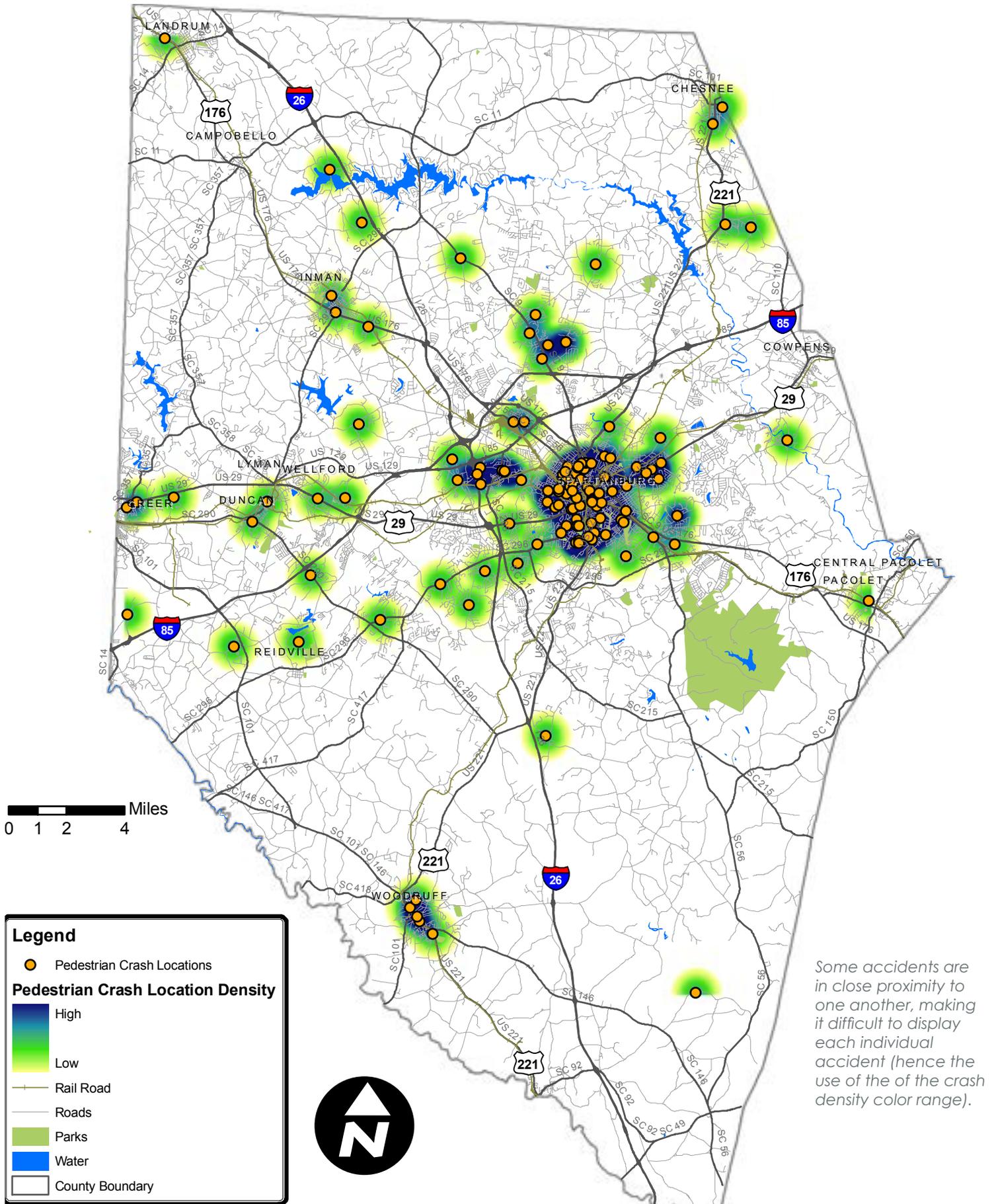
Some accidents are in close proximity to one another, making it difficult to display each individual accident (hence the use of the of the crash density color range).



Data Sources: SPATS and SCDOT



MAP 2.10 SPARTANBURG COUNTY AND MUNICIPALITIES: PEDESTRIAN CRASHES



TRIP ATTRACTORS (MAPS 2.11 AND 2.12)

People currently drive, walk, or bike to a variety of destinations across Spartanburg County for various purposes. These destination points are referred to in this document as trip attractors. The most common categories of trip attractors are:

- Downtowns
- Colleges (Wofford College, USC-Upstate, Converse College, Spartanburg Methodist College, Spartanburg Community College)
- Public destinations (schools, post offices, libraries, etc.)
- Shopping locations (grocery stores, shopping centers, restaurants, drug stores, banks, etc.)
- Parks and Greenways
- Community and recreation centers
- Historic and other points of interest
- Places of employment (office centers, hospitals, retail areas, colleges, Downtowns)

Each of these categories of bicycle and pedestrian trip attractors was considered when determining locations for the physical bicycle and pedestrian improvements recommended in Chapters 4, 5, and 6. They represent important starting and ending points for bicycle and pedestrian travel and provide a good basis for planning ideal routes.



Above, from top: Examples of trip attractors: Barnet Park, Cleveland Park and Wofford College.

Below: Downtown Spartanburg.



MAP 2.11 METRO SPARTANBURG: TRIP ATTRACTORS

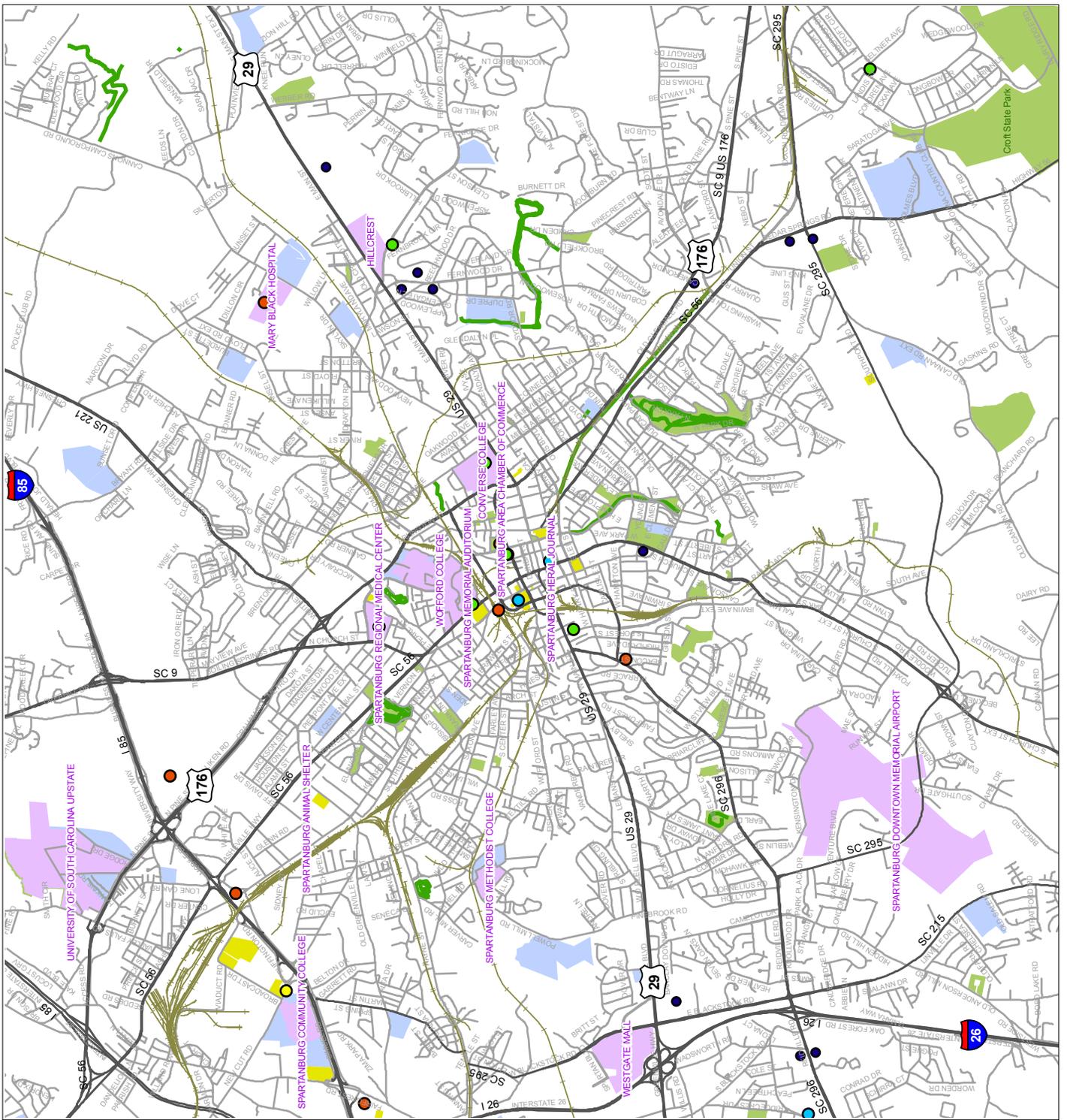


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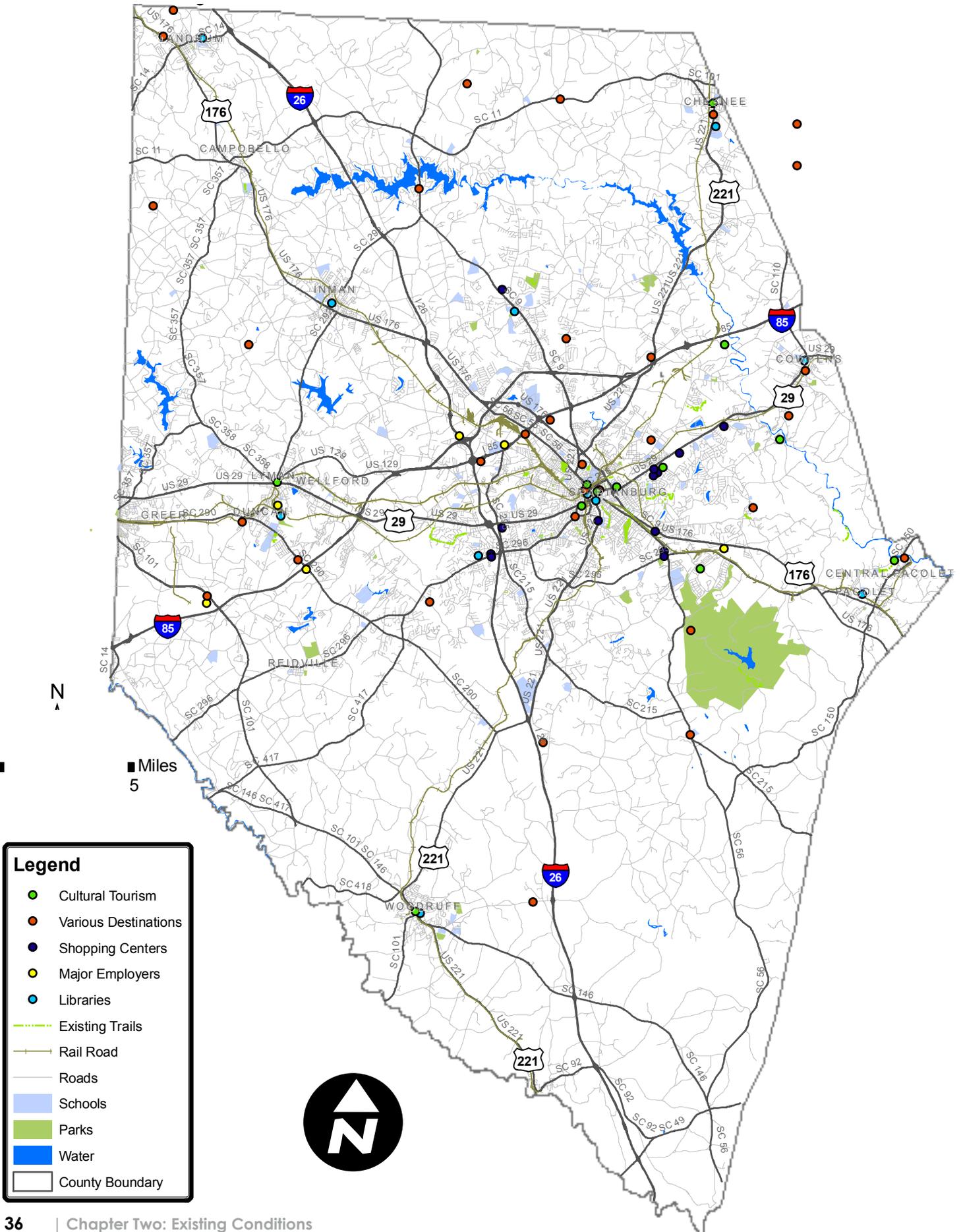
Legend

- Cultural Tourism
- Various Destinations
- Shopping Centers
- Major Employers
- Libraries
- Rail Road
- Roads
- Existing Trails
- Landmarks/Colleges
- Government Facilities
- Parks
- Schools

Data Source: SPATS



MAP 2.12 SPARTANBURG COUNTY AND MUNICIPALITIES: TRIP ATTRACTORS



INTERSECTION INVENTORY TABLES

BICYCLE AND PEDESTRIAN MASTER PLAN

ID	Road 1	Road 2	Reason	Sight Distance	Signage	Controlled/Uncontrolled	Stop Sign/Stop	Curb Ramp	Curb Radius	Marked Crosswalk	Number and Location of Crosswalks Adequate	Highly Visible Condition	Pedestrian King Signal	Type of Signal (Regular Countdown)	Curb Extension	Sidewalk	Sidewalk Complete/Incomplete	Median Island	Median Island Condition and Width	Estimated Traffic Volume	Speed Limit	Advance Stop Line
1	Church	Pine	Residential/Commercial	Fair	N	C	SL	Y	Very Wide	Y	Y	Good	Y	Regular/Flash button	N	Y	Complete	N	Port Chop	Medium	25	n/a
2	Church	Whitney	Dangerous: Commercial/Industrial	Fair	N	C	SL	N	Very Wide	N	-	-	N	-	N	Y	Complete	N	Port Chop	Medium	25	n/a
3	Church	Wood	Commercial/Industrial	Fair	N	C	SL	N	Not Wide	Y	Y	Poor	Y	Resistor/Flash button	N	Y	Complete	N	Narrow Painted Stop	High	45	n/a
4	Wood	Parson Ln	Commercial	Fair	N	C	SL for road	Y	Wide	Y	Y	Poor	Y	Resistor/Flash button	N	Y	Complete	N	-	High	45	n/a
5	Wood	Pearl	Hospital/Commercial	Fair	N	C	SL	N	Wide	N	-	Good	Y	Countdown/Flash	N	Y	Complete	N	2 foot concrete	Medium	25	n/a
6	Church	Cathedral	Hospital/Commercial	Good	N	C	SL	Y	Wide	Y	Y	Good	Y	Countdown/Flash	N	Y	Complete	N	-	Medium	25	n/a
7	Church	Caribou	Hospital parking	Good	Y	C	SL	Y	Not Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	5 foot painted	High	35	n/a
8	Church	Adrienne Highway	Major intersection: Commercial/Industrial	Poor	N	C	SL	N	Very Wide	N	-	-	N	-	N	Y	Complete	Y	3 foot painted	High	35	n/a
9	Church	Pearl	Commercial/Industrial	Poor	N	C	SL	Y	Wide	Y	N	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot painted	High	35	n/a
10	Church	Eris	Commercial/Industrial	Good	N	C	SL	Y	Very Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot painted	High	35	n/a
11	Church	College	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y (incomplete)	N	Fair	Y	Countdown/Flash	N	Y	Complete	Y	-	High	35	n/a
12	Church	Memorial	Commercial/Industrial	Good	N	C	SL	Y	Not Wide	Y (incomplete)	N	Poor	Y	Countdown/Flash	N	Y	Complete	N	-	High	35	n/a
13	Church	Daniel Morgan	Commercial/Industrial	Good	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete (cross	High	35	n/a
14	Church	St. Johns	Commercial/Industrial	Good	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete (cross	High	35	n/a
15	Church	Kennedy	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	2 foot painted	High	30	n/a
16	Church	Henry	Commercial/Industrial	Poor	N	C	SL	Y	Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	30	n/a
17	Church	Morton	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	N	-	Medium	30	n/a
18	Church	Hudson-Borwick	Commercial/Industrial	Poor	N	C	SL	Y	Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	30	n/a
19	Church	Gardner	Commercial/Industrial	Poor	N	C	SL	Y	Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	High	25	n/a
20	Church	Garrett	Commercial/Industrial	Good	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	N	-	Medium	25	n/a
21	Main	Converse	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	4 foot painted	Medium	35	n/a
22	Converse	Dunbar	Commercial/Industrial	Fair	Y	C	SS	Y	Not Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	-	High	35	n/a
23	Converse	St. Johns	Commercial/Industrial	Good	N	C	SL	Y	Not Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	N	-	High	35	n/a
24	St. Johns	Don	Commercial/Industrial	Fair	N	C	SL	Y	Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	High	25	n/a
25	Dunbar	Liberty	Commercial/Industrial	Good	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	-	L	25	n/a
26	Church	Dunbar	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	25	n/a
27	Main	Daniel Morgan	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	Poor	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	25	n/a
28	Broad	Soma	Commercial/Industrial	Fair	N	C	SL	Y	Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	-	Medium	25	n/a
29	Magnolia	St. Johns	Commercial/Industrial	Good	N	C	SL	Y	Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete (St. Johns)	Medium	25	n/a
30	Magnolia	Daniel Morgan	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	Fair	Y	Countdown/Flash	N	Y	Complete	Y	-	Medium	25	n/a
31	Pearl	Howard	Commercial/Industrial	Fair	N	C	SL	Y	Not Wide	Y	Y	G	Y	Countdown/Flash	N	Y	Complete	N	-	Medium	25	n/a
32	Adrienne Highway	California	Commercial/Industrial	Poor	N	C	SL	Y	Wide	N	-	-	N	-	N	Y	Complete	Y	2 foot concrete (3/8" wide	High	45	n/a

INTERSECTION INVENTORY TABLES

SPARTANBURG, SOUTH CAROLINA

ID	Road 1	Road 2	Reason	Sight Distance	Signage	Controlled/Light/Stop Sign	Stop Sign	Curb Ramp	Curb Radius	Marked Crosswalk	Number and Location of Crosswalks Adequate	Highly Visible	Crosswalk Condition	Pedestrian Xing Signal	Type of Signal (Regulor. Countdown)	Curb Extension	Sidewalk	Stewalk Complete/Incomplete	Median Island	Median Island Condition and Width	Estimated Traffic Volume	Speed Limit	Advance Stop Line
33	Athensville Highway	Chapel	Commercial/ Major roadway	Fair	N	C	SL	Y	Wide	N	-	-	-	N	Countdown/No Push Button	N	Y	Complete	Y	3 foot barriers (Athensville Hwy)	High	55	n/a
34	Converse	Broad	Downtown	Fair	N	C	SL	Y	Not Wide	Y	Y	Y	Fair	Y (Incomplete)	Countdown/No Push Button	N	Y	Complete	N	2 foot concrete (Pine)	Medium	25	n/a
35	Main	Pine	Downtown/Commercial	Poor	N	C	SL	Y	Not Wide	Y	Y	Y	Fair	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete (Pine)	High	35	n/a
36	Main	St. Johns	Downtown/Commercial/Converse/Carolina	Poor	Y	C	SL	Y	Very Wide	Y	N	N	Poor	Y (Incomplete)	Countdown/No Push Button	N	Y	Complete	Y	2 foot barriers (Main)	High	35	n/a
37	Pine	St. Johns	Converse College/Converse College	Poor	N	C	SL	Y	Wide	Y	Y	N	Fair	N	-	N	Y	Complete	Y	2 foot concrete	High	35	n/a
38	Main	Mills	Converse College/Converse College	Good	N	C	SL	Y	Not Wide	Y	Y	N	Fair	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	High	35	n/a
39	Main	Ashey	Commercial/Residential	Good	N	C	SL	Y	Not Wide	Y	N	N	Poor	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	High	35	n/a
40	Main	Fernwood	Commercial/Residential/High school nearby	Good	N	C	SL	Y	Not Wide	Y	Y	N	Poor	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	High	35	n/a
41	Main	Fernwood/Gerrard	Commercial/Residential/High School nearby	Fair	N	C	SL	Y	Very Wide (Right hand side turn lane)	Y	Y	N	Poor	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	High	35	n/a
42	Cherokee	Droyton	Commercial/Residential	Fair	N	C	SL	Y	Wide	Y	Y	N	Fair	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	Medium	35	n/a
43	Main	Hilzert	Shopping center/ Grocery	Good	N	C	SL	Y	Not Wide	Y	Y	N	Fair	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	High	35	n/a
44	Skynn	Doctor Park	Shopping center/ Grocery Hospital	Good	N	C	SL	Y	Wide	Y	N	N	Fair	Y	Regular/Flash Button	N	Y	Complete	Y	2 foot concrete and park chaps	Medium	35	n/a
45	Skynn	Droyton	Major intersection	Fair	N	C	SL	Y	Very Wide (Right hand side turn)	Y	Y	N	Fair	N	-	N	Y	Complete	Y	2 foot concrete and park chaps	High	35	n/a
46	Pine	County Club	Major intersection/ Commercial/Real Estate	Fair	N	C	SL	Y	Very Wide	N	-	-	-	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	Medium	45	n/a
47	Union	County Club	Major intersection/ Commercial/Real Estate	Fair	N	C	SL	N	Wide	N	-	-	-	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	Medium	35	n/a
48	Cedar Springs	Southport	Major intersection/ Commercial	Fair	N	C	SL	Y (new frunctional drive)	Wide	Y	Y	Y	G	Y	Countdown/No Push Button	N	Y	Complete	Y	2 foot concrete	Medium	35	n/a
49	Pine	Garner	Major road/ Commercial	Fair	N	C	SL	Y	Very Wide	Y	Y	N	Fair	Y	Countdown/No Push Button	N	Y	Complete	Y (Pine)	3 foot barriers	High	45	n/a
50	Pine	Isom	Major road/ Residential/ Commercial/Real Estate	Poor	N	C	SL	Y	Wide	Y	N	N	Fair	Y	Countdown/No Push Button	N	Y	Complete	Y	4 foot barriers	High	35	n/a
51	Pine	Cleveland	Major Road/ Downtown	Fair	N	C	SL	N	Wide	N	-	-	-	Y	Countdown/No Push Button	N	Y	Complete	Y	3 foot barriers	High	35	n/a
52	Pine	Daniel Morgan	Major Road/ Near Downtown	Poor	N	C	SL	Y	Very Wide (Right hand side turn)	N	-	-	-	Y	Countdown/No Push Button	N	Y	Complete	Y	3 foot barriers	High	35	n/a
53	Pine	Kennedy	Major Road/ Commercial	Fair	N	C	SL	Y	Not Wide	Y	N	N	Fair	N	-	N	Y	Complete	Y	2 foot barrier and park chaps	High	35	n/a
54	Pine	Henry	Major Road/ Commercial	Good	N	C	SL	Y	Not Wide	Y	N	N	Fair	N	-	N	Y	Complete	Y	2 foot barrier and park chaps	High	35	n/a

INTERSECTION INVENTORY TABLES

BICYCLE AND PEDESTRIAN MASTER PLAN

ID	Road 1	Road 2	Reason	Sight Distance	Storage	Controlled/Uncontrolled	Stop Light/Stop Sign	Curb Ramp	Curb Kerf	Curb Radius	Marked Crosswalk	Number and Location of Crosswalks Adequate	Highly Visible	Crosswalk Condition	Pedestrian Xing Signal	Type of Signal (Regular, Countdown)	Curb Extension	Sidewalk	Sidewalk Complete/Incomplete	Median	Median Condition and Width	Estimated Traffic Volume	Speed Limit	Advance Stop Line
55	Pine	Boyd/ St. Andrews	Major Road; Residential; Right of Way	Far	Y	C	SL	Y	Complete	Not Wide	Y	Y	N	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	35	n/a
56	Pine	Forest	Major Road; Residential; Right of Way	Far	N	C	SL	N	Complete	Not Wide	N	-	-	-	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	35	n/a
57	Henry	Union	Right of Way; Major Road; Connections	Far	N	C	SL	Y	Complete	Very Wide	N	-	-	P	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	40	n/a
58	Henry	Converse	Connections	Far	N	C	SL	Y	Complete	Not Wide	N	-	-	P	N	-	N	Y	Complete	Y	2 foot concrete	Medium	30	n/a
59	Henry	Spring	Downtown; Residential; Commercial	Far	N	C	SL	Y	Complete	Not Wide	Y	N	N	P	N	-	N	Y	Complete	Y	2 foot barriers	Medium	25	n/a
60	Henry	Daniel Morgan	Downtown; Residential; Commercial	Good	N	C	SL	Y	Complete	Wide	Y	Y	N	Fair	N	-	N	Y	Complete	Y	2 foot concrete/barrier	Medium	25	n/a
61	Union	Madison	Residential; Commercial	Good	N	C	SL	Y	Complete	Wide	Y	Y	N	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	30	n/a
62	Union	St. Andrews	Residential; Commercial	Good	Y (School)	C	SL	N	-	Wide	Y	N	N	P	Y	Countdown/Flash	N	Y	Complete	Y	2 foot painted space	Medium	30	n/a
63	Union	Duncannon	Duncannon; Residential	Far	N	C	SL	Y	Complete	Wide	Y	N	N	Fair	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	30	n/a
64	Union	Forest	Right of Way	Far	N	C	SL	Y	Complete	Not Wide	N	-	-	-	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	30	n/a
65	Union	Lucerna	Right of Way; Residential	Far	N	C	SL	Y	Complete	Wide	Y	Y	N	-	Y	Countdown/Flash	N	Y	Complete	Y	2 foot concrete	Medium	40	n/a
66	Southern	Arno	Future Development	Good	N	C	SL	Y	Complete	Wide	Y	Y	N	G	Y	Countdown/Flash	N	Y	Complete	Y	2 foot painted space	Medium	45	n/a
67	Southern	Hwy 296	Major intersection; Commercial	Good	N	C	SL	Y	Complete	Very Wide (Right hand slip turn lane)	Y	Y	N	G	Y	Regular/Flash	N	Y	Complete	Y	2 foot painted space and painted right hand slip turn lane for pedestrians	High	40	n/a
68	Danzon	SC 290	Stop; School; Right of Way	Good	Y	C	SL	Y	Complete	Wide	N	-	-	-	Y	Regular/Flash	N	Y	Complete	Y	2 foot concrete	High	35	n/a
69	SC 290	SC 296	Major roads; Commercial; Grocery; School; Heavy Commercial	Far	N	C	SL	Y	Complete	Very Wide	Y	Y	N	Good	Y	Regular/Flash	N	Y	Complete	Y	2 foot concrete	High	35/45	n/a
70	SC 296 (Reserve Road)	Anderson Mill	Major road; Commercial; Commercial	Far	N	C	SL	Y	Complete	Wide	Y	Y	N	Good	Y	Regular/Flash	N	Y	Complete	Y	2 foot concrete (on Boroiff street)	High	35	n/a
71	SC 296 (Reserve Road)	Blacklock	Major road; Commercial	Far	N	C	SL	Y	Complete	Wide	Y	Y	N	Good	Y	Regular/Flash	N	Y	Complete	Y	2 foot concrete and 2ft painted	High	35/45	n/a
72	SC 296 (Reserve Road)	I26	Major road; Commercial; Commercial; major roadway	Far	N	C	SL	Y	Complete	Wide	Y	N	N	Poor	N	-	N	Y	Complete	Y	2ft concrete/mgt; 2ft painted	High	35/45	n/a
73	John B. White	Hidden Hill	Commercial; major roadway	Far	N	C	SL	Y	Complete	Wide	Y	Y	N	Fair	Y	Regular/Flash	N	Y	Complete	Y	2ft concrete/mgt; 2ft painted	High	35	n/a
74	John B. White	Crescent	School nearby; residential	Far	N	C	SL	Y	Complete	Not wide	Y	N	N	Poor	N	-	N	Y	Complete (diverby) (access) (pedestrian)	Y	2ft concrete (on Boroiff street)	High	35	n/a
75	John B. White	Daniel Morgan	Residential; Commercial	Far	N	C	SL	Y	Complete	Wide	N	-	-	-	Y	Push for green light	N	Y	Complete	N	-	Medium	35	n/a
76	John B. White	Madison	Residential; Commercial	Far	N	C	SL	Y	Complete	Wide	Y	Y	N	Fair	Y	Push for green light	N	Y	Complete	N	-	Medium	35	n/a

INTERSECTION INVENTORY TABLES

SPARTANBURG, SOUTH CAROLINA

ID	Road 1	Road 2	Reason	Sight Distance	Signage	Controlled/Uncontrolled	Stop Light/Stop Sign	Curb Ramp	Curb Ramp	Curb Radius	Marked Crosswalk	Number and Location of Crosswalks Adequate	Highly Visible	Crosswalk Condition	Pedestrian Crossing Signal	Type of Signal (Regular, Countdown)	Curb Extension	Sidewalk	Sidewalk Complete/Incomplete	Median Island	Median Island Condition and Width	Estimated Traffic Volume	Speed Limit	Advance Stop Line	
Peckel	SC 9	Church St.	Major intersection with connectivity to Recreation Center, shopping, dining, etc.	Good	Yes - pedestrian signs on all approaches	C	Light	Yes - all 4 quadrants	Complete; minor drainage issues	Not wide	N	N	n/a	n/a	No	n/a	N	Both sides of SC 9; west side of Church	Good condition; needs maintenance on SC 9	No	n/a	High	35	Yes	
Compass	US 29	Old Foccler Rd./Martin St.	Connectivity between residential and downtown, shopping, dining, etc.	Good	No	U	Stop sign on Old Foccler	No	n/a	Wide	N	N	n/a	n/a	No	n/a	N	29' on Old Foccler	Some disjoint	Yes	4'-0" no ramps	High	45	Yes on Old Foccler; no on Martin St.	
Chesnee	US 221	Morning St.	Major intersection with connectivity to Senior Center, downtown, shopping, dining, etc.	Good	No	C	Light	No	n/a	Wide	N	N	n/a	n/a	No	n/a	N	Both sides of US 221; east side of Morning	Complete where present	No	n/a	High	35	Yes	
Woodruff	N Main	Peachtree St.	Connectivity between residential and commercial downtown, etc.	Good	No	U	Stop sign on Peachtree	Yes	Incomplete	Not wide	N	N	n/a	n/a	No	n/a	N	Y	Missing on east side of Main; existing sidewalks one in sidewalk	Missing on east side of Main; existing sidewalks one in sidewalk	No	n/a	High	35	No
Redlie	Reveille Rd.	Duncan Bridge Rd.	Major signalized intersection	Good	No	C	Light	No	n/a	Wide	Y	Y	Good	No	Occupied bulb-out present	n/a	N	N	None present	None present	Yes	20-25' grass	High	50	Yes
Waldorf	US 29	Tuccaou Rd.	Major signalized intersection	Good	No	C	Light	No	n/a	Very wide	N	N	n/a	n/a	No	n/a	N	N	None present	None present	Yes	Center turn lane but no island	High	40	Yes
Belling Springs	SC 9	Rainbow Lake Rd.	Major intersection with connectivity to shopping, dining, etc.	Good	No	C	Light	No	n/a	Wide	N	N	n/a	n/a	N	n/a	N	Yes; SC 9; missing sidewalk on east side of Rainbow Lake; none on Rainbow	Complete where present	Center turn lane but no island	16'-0"	High	40	Yes	
Immon	Athens Hwy	S. Main St./Lynn Rd.	Major intersection connecting Main Veterans, downtown, etc.	Good	No	C	Light	Yes	Angled and not flush with pavement	Wide	N	N	n/a	n/a	Yes	Countdown but not working	N	Missing one side of Lynn Road	Needs maintenance	Yes	4'-0"	High	40	Yes	
Landon	SC 14 Kutherford Street	US 172 Howard Ave	Major intersection connecting downtown to residential areas; close proximity.	Good	No	C	Light	No	n/a	Wide	Y	Y	For	No	n/a	n/a	N	No sidewalks; Kutherford Street stop was there	Incomplete	No	n/a	Medium	25 & 35	Yes	
Greer	SC 290 Forest Street	SC 10 (Lurie Street)	Major intersection connecting downtown and residential areas; close proximity.	Good	No	C	Light	Yes - 5 of 8 directions	Incomplete	Wide	N	N	n/a	n/a	No	n/a	N	Both sides; sidewalks	Incomplete	Signal raised island on Line St	3'-0"	High	25	No	
Immon	Grace Road	Spartanburg Road	Major intersection connecting downtown with residential	Good (view obscured by corner)	No	C	Light	n/a	n/a	Very wide	Only one	N	Y	Good	No	n/a	N	Y	Complete	Yes	4'-0" x 70' x 70'	Medium	25	Yes	

CHAPTER THREE OUTLINE:

Overview
Demand Analysis
Demand Models
Demographic Analysis
Public Input

CHAPTER THREE: DEMAND ANALYSIS

OVERVIEW

The need and demand for a more accessible, safe and functional bicycle, pedestrian and greenway system is paramount throughout the Spartanburg County region. This is clearly demonstrated through demographic analyses and user demand models and articulated by community residents who completed comment forms and attended public workshops.

User demand and service area analyses serve as the basis for developing a system of pedestrian and bicycle facilities and the policies that should guide Spartanburg County. It is important to consider a number of factors that impact the overall pedestrian and bicycling environment. The service area and user demand analysis consider demographic characteristics, demand models of non-motorized travel, and public input.

DEMAND ANALYSIS

A variety of demand models are often used to quantify usage of existing bicycle and pedestrian facilities, and to estimate potential usage of new facilities. The purpose of these models is to provide an overview of the demand for bicycling and walking in Spartanburg County. As with all models, the results show a range of accuracy that can vary based on a number of assumptions and available data. The models used for this study incorporate information from existing publications as well as data from the U.S. Census. All data assumptions and sources are noted in the tables following each section of the analysis.

U.S. Census data provides a useful baseline for quantifying demand. Overall, across the State of South Carolina and the Upstate region, walking and bicycling to work has decreased over the past 20 years.

TABLE 3.1 STATE & REGIONAL BIKE- AND WALK-TO-WORK DATA

State of South Carolina

	1990	2000	2005
Bike to Work	0.3%	0.2%	0.2%
Walk to Work	3.1%	2.3%	1.5%

Source: US Census

Upstate Region*

	1990	2000	2005
Bike to Work	0.1%	0.1%	0.1%
Walk to Work	2.5%	1.8%	1.1%

Source: US Census

*Greenville-Spartanburg-Anderson

The 1990-2000 Census trend data for Spartanburg County is shown in the table below:

TABLE 3.2 SPARTANBURG COUNTY MODE SHARE

Characteristics (Universe: All Workers)	1990		2000		Change 1990 to 2000	
	Number	%	Number	%	Number	%
Workers 16 years or over	109,230	100.0	117,095	100.0	7,865	7.2
Sex						
Male	59,014	54.0	62,525	53.4	3,511	5.9
Female	50,216	46.0	54,575	46.6	4,359	8.7
Mode to work						
Drove alone	87,576	80.2	96,278	82.2	8,702	9.9
Carpooled	16,070	14.7	15,538	13.3	-532	-3.3
Public transportation (inc. taxi)	800	0.7	637	0.5	-163	-20.4
Bicycle or walked	2,345	2.1	1,648	1.4	-697	-29.7
Motorcycle or other means	957	0.9	699	0.6	-258	-27.0
Worked at home	1,482	1.4	2,296	2.0	814	54.9

Census Transportation Planning Package (CTPP 2000)

Geographic Area: Working In Spartanburg County, South Carolina

Source: http://ctpp.transportation.org/home/sc/Spartanburg_County/Spartanburg_County.htm

Data Sources: <http://ctpp.transportation.org/home/residence.htm>

Bicycling and walking mode share (portion of working population that bikes and walks to work) also decreased in the City of Spartanburg between 1990 and 2000. Bicycle mode share dropped from 0.29% to 0.13 % and walking mode share decreased from 4.5% to 3.5%. The 1990 – 2000 US Census trend data is shown in the table below.

TABLE 3.4 CITY OF SPARTANBURG MODE SHARE

2000		
Total:	15,895	
Drove alone	11,994	75.46%
Carpooled	2,384	15.00%
Bus or trolley bus	334	2.10%
Streetcar/trolley car	5	0.03%
Railroad	0	0.00%
Taxicab	90	0.57%
Motorcycle	23	0.14%
Bicycle	21	0.13%
Walked	560	3.52%
Other Means	108	0.68%
Worked at Home	376	2.37%
1990		
Total:	18,680	
Drove alone	13,804	73.90%
Carpooled	3,012	16.12%
Bus or trolley bus	434	2.32%
Streetcar/trolley car	0	0.00%
Railroad	0	0.00%
Taxicab	118	0.63%
Motorcycle	13	0.07%
Bicycle	54	0.29%
Walked	846	4.53%
Other Means	156	0.84%
Worked at Home	243	1.30%

Source: American Fact Finder, US Census 2000.

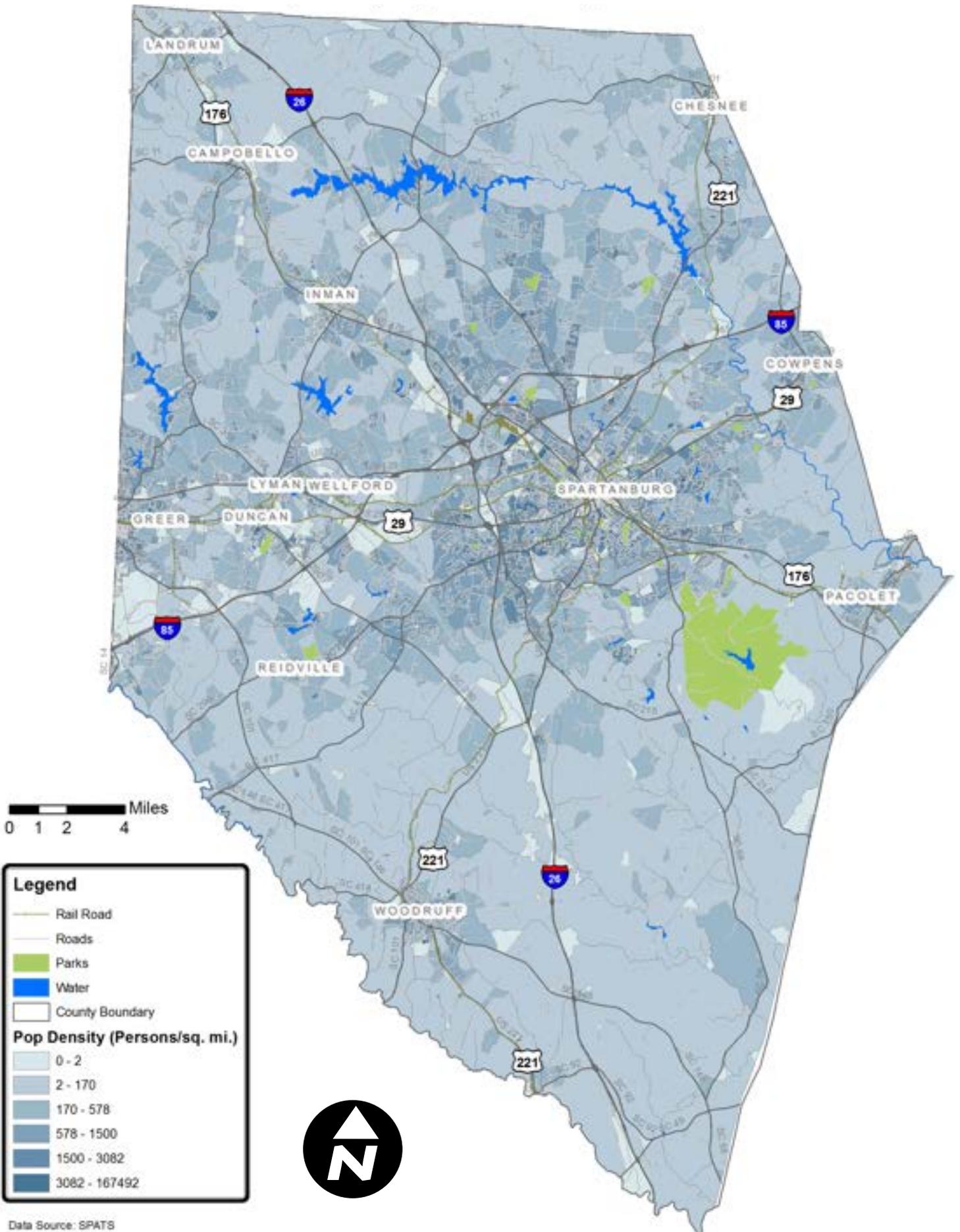
It is important to note that the Census and American Community Survey (ACS) data only counts trips to work, and does not capture Spartanburg County's significant amount of utilitarian travel and recreational trips by bicycle. The model in the following section uses Census data as a baseline, along with documented sources to incorporate the full range of bicycle and pedestrian mobility in Spartanburg.

DEMAND MODELS (MAPS 3.1 AND 3.2)

The Spartanburg County bicycle and pedestrian demand models consist of several variables including commuting patterns of working adults, and predicted travel behaviors of area college students and school children. For modeling purposes, the study area included all residents within Spartanburg County in 2000 (See following maps for population density). The information was ultimately aggregated to estimate the total existing demand for bicycle and pedestrian facilities in the county. Tables identify the variables used in the model. Data regarding the existing labor force (including number of workers and percentage of bicycle and pedestrian commuters) was obtained from the 2000 U.S. Census. The 2000 Census was also used to estimate the number of children in Spartanburg County. This figure was combined with data from National Safe Routes to School surveys to estimate the proportion of children riding bicycles or walking to and from school. College students constituted a third variable in the model due to the presence of numerous higher education institutions (the University of South Carolina Upstate, Converse College, Spartanburg Methodist College, Spartanburg Community College, and Wofford College). Data from the Federal Highway Administration regarding bicycle mode share in university communities was used to estimate the number of students bicycling to and from campus. It was assumed that 100% of college students are pedestrians at some point each day. Finally, data regarding non-commute trips was obtained from the 2001 National Household Transportation Survey to estimate bicycle and pedestrian trips not associated with traveling to and from school or work.

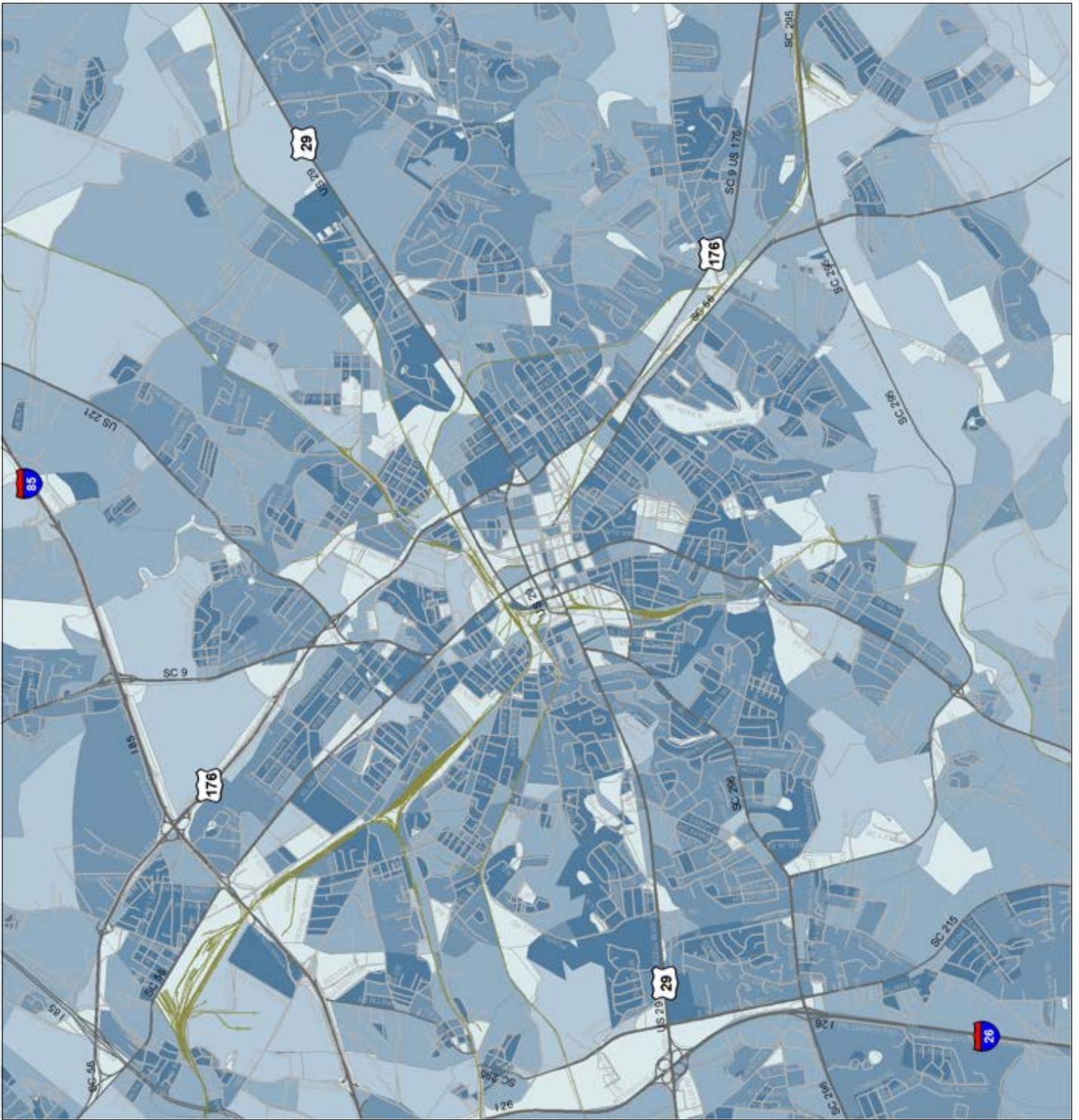
When the 2010 Census data becomes available, these tables and maps could be updated by entering the new figures into GIS for the maps, and by using the figures and calculations described in Tables 3.5 and 3.6.

MAP 3.1 SPARTANBURG COUNTY POPULATION DENSITY



MAP 3.2

METRO SPARTANBURG POPULATION DENSITY



Legend

- Rail Road
- Roads

Pop Density (Persons/sq. mi.)

0 - 2
2 - 232
232 - 945
945 - 2576
2576 - 167492

Data Source: SPATS

EXISTING PEDESTRIAN DEMAND

Pedestrian demand can best be understood by knowing each person is a pedestrian at some point during their day. This can involve a walk through a parking lot or walk to a bus stop. The following table estimates daily pedestrian activity in Spartanburg County. Potentially over 129,000 walking trips occur each day with non-commuting trips making up the majority of existing pedestrian demand.

TABLE 3.5 AGGREGATE ESTIMATE OF EXISTING DAILY PEDESTRIAN ACTIVITY IN SPARTANBURG COUNTY

<i>Variable</i>	<i>Figure</i>	<i>Calculations</i>
<i>Employed Adults, 16 Years and Older</i>		
a. Study Area Population (1)	253,791	
b. Employed Persons (2)	117,096	
c. Pedestrian Commute Percentage (2)	1.4%	
d. Pedestrian Commuters	1,639	(b*c)
<i>School Children</i>		
e. Population, ages 6-14 (3)	32,809	
f. Estimated School Ped. Commute Share (4)	11%	
g. School Pedestrian Commuters	3,609	(e*f)
<i>College Students</i>		
h. Full-Time College Students (5)	12,133	
i. Pedestrian Commute Percentage (6)	100%	
j. College Pedestrian Commuters	12,133	(h*i)
<i>Work and School Commute Trips Sub-Total</i>		
k. Daily Commuters Sub-Total	17,381	(d+g+j)
l. Daily Commute Trips Sub-Total	34,762	(k*2)
<i>Other Utilitarian and Discretionary Trips</i>		
m. Ratio of 'Other' Trips in Relation to Commute Trips (7)	2.73	ratio
n. Estimated Non-Commute Trips	94,900	(l*m)
<i>Total Estimated Pedestrian Trips</i>	129,662	(l+n)

Notes:

Census data collected from 2000 U.S. Census for Spartanburg County.

(1) 2000 U.S. Census, STF3, P1.

(2) 2000 U.S. Census, STF3, P30.

(3) 2000 U.S. Census, STF3, P8.

(4) Estimated share of school children who commute by bicycle or foot, as of 2000 (source: National Safe Routes to School Surveys, 2003).

(5) Source: Wikipedia for City of Spartanburg (University of South Carolina Upstate, Converse College, Spartanburg Methodist College, Spartanburg Community College, and Wofford College).

(6) Assuming all college students are pedestrians at some point each day.

(7) 27% of all trips are commute trips (source: National Household Transportation Survey, 2001).

EXISTING BICYCLE DEMAND

The table below summarizes estimated existing daily bicycle trips in Spartanburg County. The table indicates that over 22,872 trips are made on a daily basis. The model also shows that non-commuting trips comprise the vast majority of existing bicycle demand.

TABLE 3.6 AGGREGATE ESTIMATE OF EXISTING DAILY BICYCLING ACTIVITY IN SPARTANBURG COUNTY

Variable	Figure	Calculations
<i>Employed Adults, 16 Years and Older</i>		
a. Study Area Population (1)	253,791	
b. Employed Persons (2)	117,096	
c. Bicycle Commute Percentage (2)	0.04%	
d. Bicycle Commuters	47	(b*c)
<i>School Children</i>		
e. Population, ages 6-14 (3)	32,809	
f. Estimated School Ped. Commute Share (4)	2%	
g. School Bicycle Commuters	656	(e*f)
<i>College Students</i>		
h. Full-Time College Students (5)	12,133	
i. Bicycle Commute Percentage (6)	10%	
j. College Bicycle Commuters	1,213	(h*i)
<i>Work and School Commute Trips Sub-Total</i>		
k. Daily Commuters Sub-Total	3,066	(d+g+j)
l. Daily Commute Trips Sub-Total	6,132	(k*2)
<i>Other Utilitarian and Discretionary Trips</i>		
m. Ratio of 'Other' Trips in Relation to Commute Trips (7)	2.73	ratio
n. Estimated Non-Commute Trips	16,740	(l*m)
Total Estimated Bicycle Trips	22,872	(l+n)

Notes:

Census data collected from 2000 U.S. Census for Spartanburg County.

(1) 2000 U.S. Census, STF3, P1.

(2) 2000 U.S. Census, STF3, P30.

(3) 2000 U.S. Census, STF3, P8.

(4) Estimated share of school children who commute by bicycle, as of 2000 (source: National Safe Routes to School Surveys, 2003).

(5) Source: Wikipedia for City of Spartanburg (University of South Carolina Upstate, Converse College, Spartanburg Methodist College, Spartanburg Community College, and Wofford College).

(6) Review of bicycle commute share in 7 university communities (source: National Bicycling & Walking Study, FHWA, Case Study #1, 1995).

27% of all trips are commute trips (source: National Household Transportation Survey, 2001).

(7) 27% of all trips are commute trips (source: National Household Transportation Survey, 2001).

DEMOGRAPHIC ANALYSIS (MAPS 3.3 - 3.10)

Through analyses of demographic information, user need and demand can be better understood. Regardless of the availability or condition of existing bicycle and pedestrian facilities, a number of residents walk throughout Spartanburg County to destinations such as work, shopping centers, parks, and neighbors' homes. During fieldwork, pedestrians and bicyclists were observed throughout different areas of Spartanburg County. US Census demographic data provides geographic information regarding the means of transportation to work and percent of population not owning a vehicle.

When considering Spartanburg County as a whole, 5% of the working population did not own a vehicle in 2000 while 1.4% of workers walked to work.

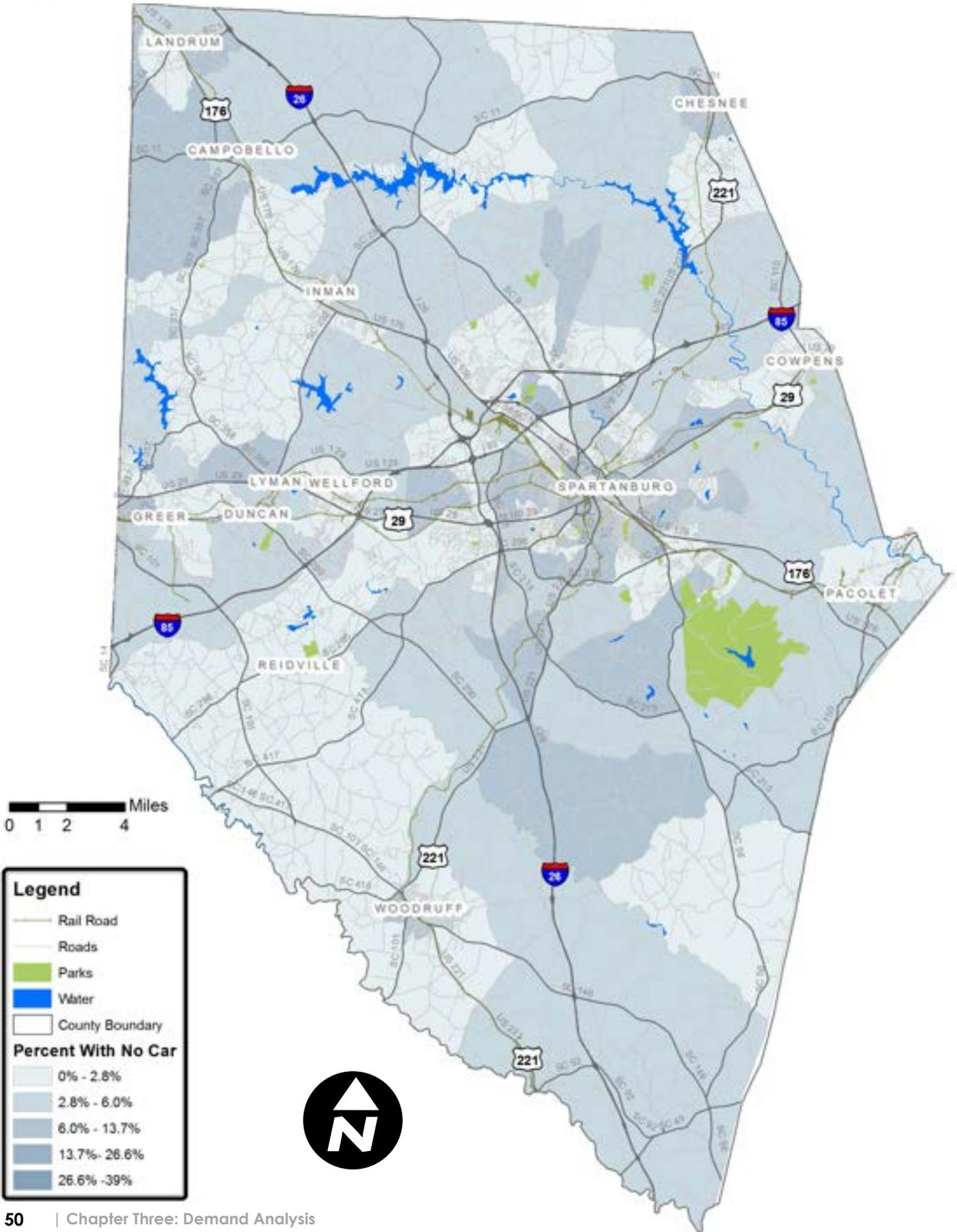
A more detailed investigation of US census data provides a further understanding of need. The next map (Spartanburg County Percent Working Population With No Car 2000) presents a geographic view of the percentage of workers that do not own a vehicle and would thus be more dependent on alternative means of transportation. The darker shades of blue show areas where higher percentages of the working population do not own a vehicle. The highest percentages are found within the City of Spartanburg with upwards of 37% not owning a vehicle in the Pine Street/Cummings Street and Cleveland Park areas.

Spartanburg County Percent Working Population Biking and Walking to Work maps present a geographic view of the percentage of pedestrian and bicycle commuters by block group. The darker shades of blue show areas in which higher numbers of people are already walking or biking to work.

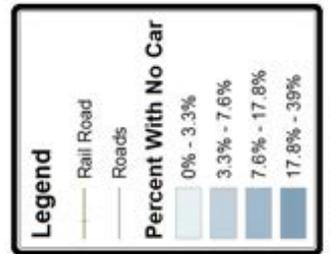
The highest percentages of those walking to work can be found in the Downtown Spartanburg area. 15-30% of workers walk to work, especially on the north side of Main Street, Wofford College area, Converse College area, Pine Street/Cummings Street area, and Cleveland Park area. Other pockets of relatively high walking commuters can be found in Woodruff, Greer, Inman, and Chesnee.

The higher percentages of those biking to work is more geographically sporadic. The highest block group percentage is 3.3% found along and north of Pine Street in the southeastern stretches of Downtown Spartanburg. The next highest percentage is 2.8% found at the county border in Greer.

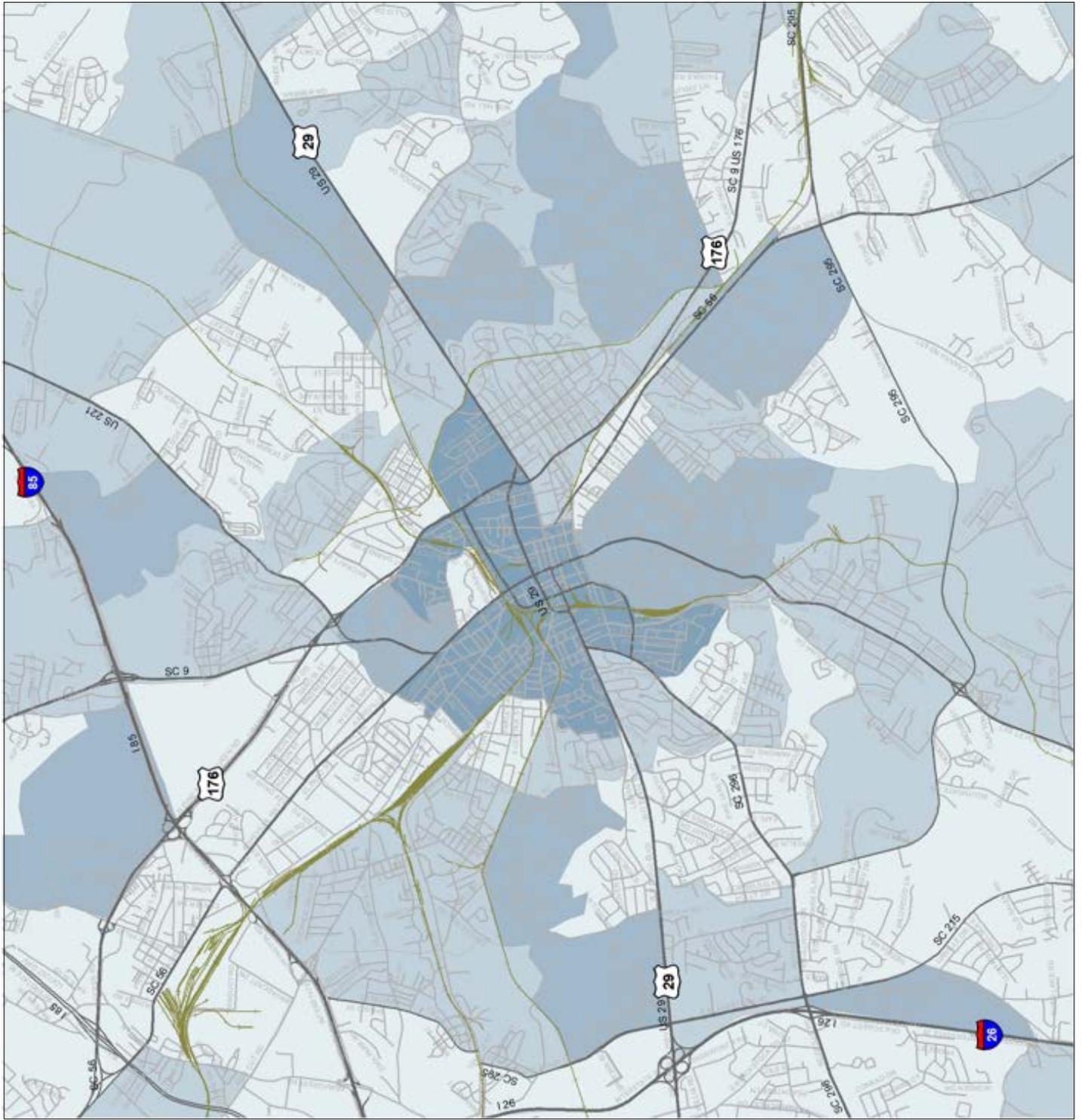
MAP 3.3 SPARTANBURG COUNTY: % WORKING POPULATION WITH NO VEHICLE



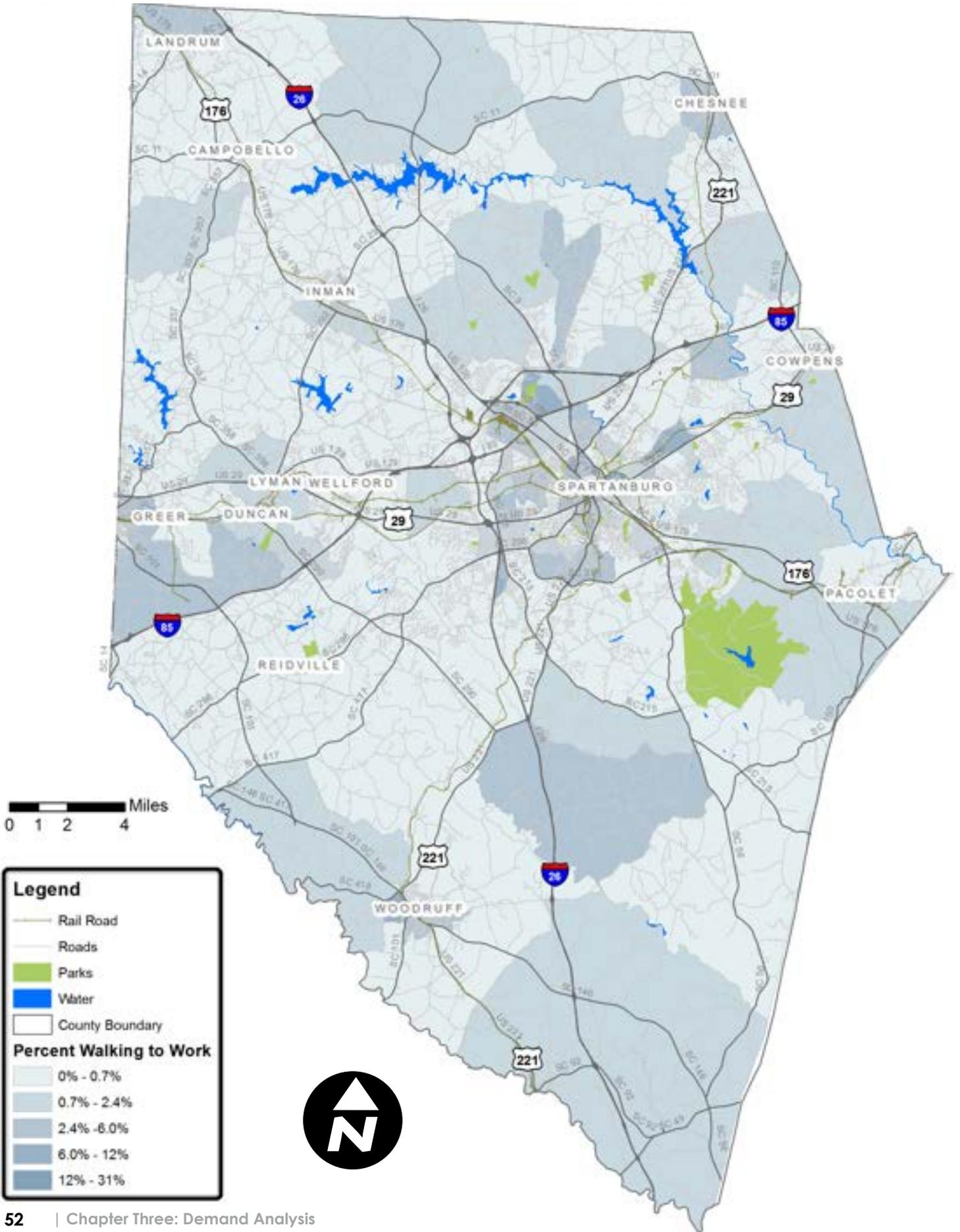
MAP 3.4
METRO
SPARTANBURG:
% WORKING
POPULATION
WITH NO
VEHICLE



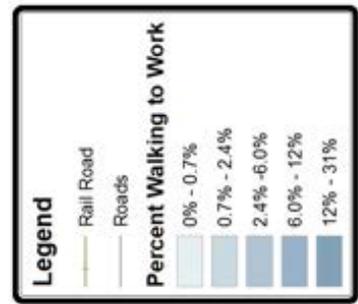
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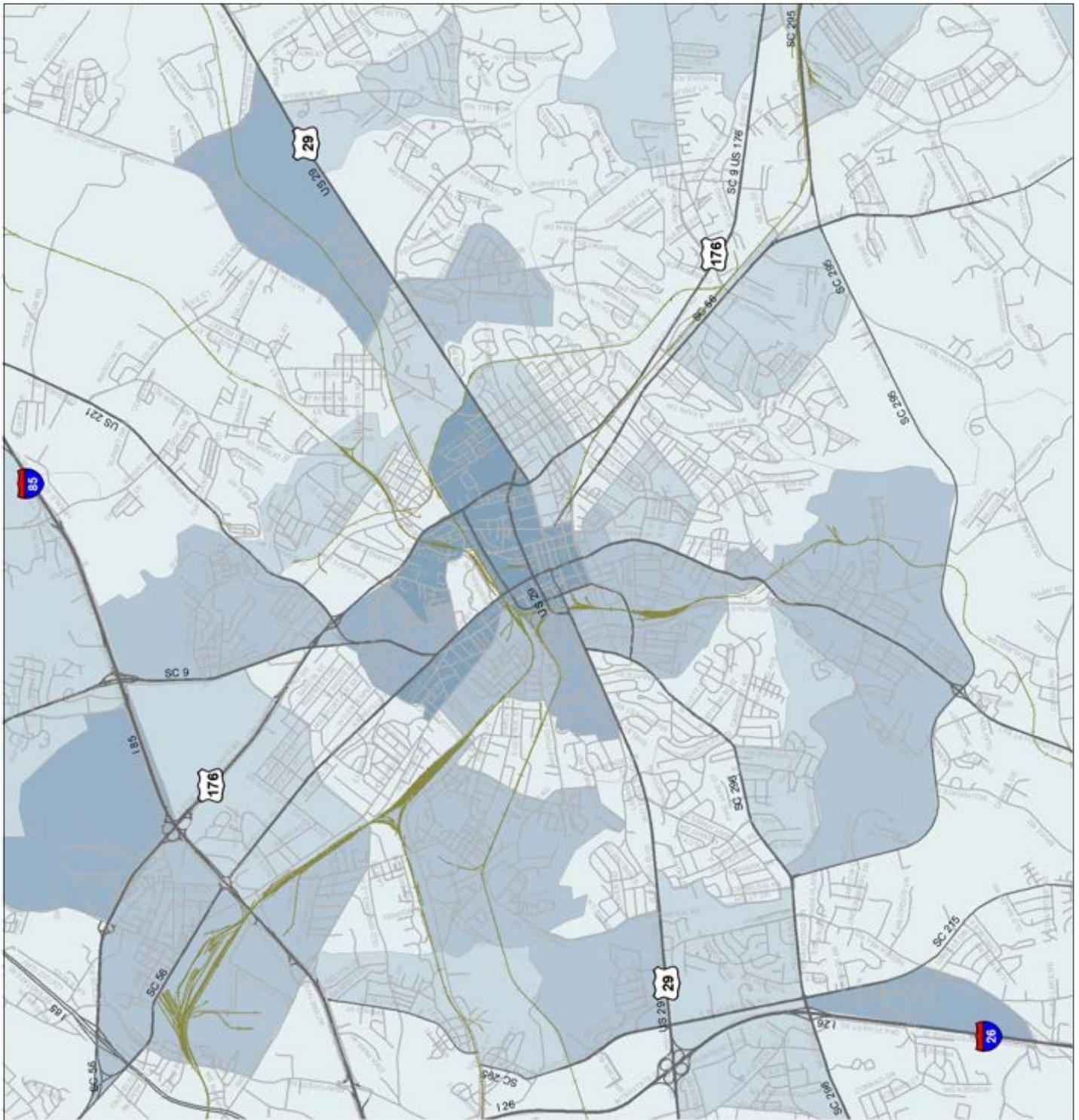
MAP 3.5 SPARTANBURG COUNTY: % WORKING POPULATION WALKING TO WORK



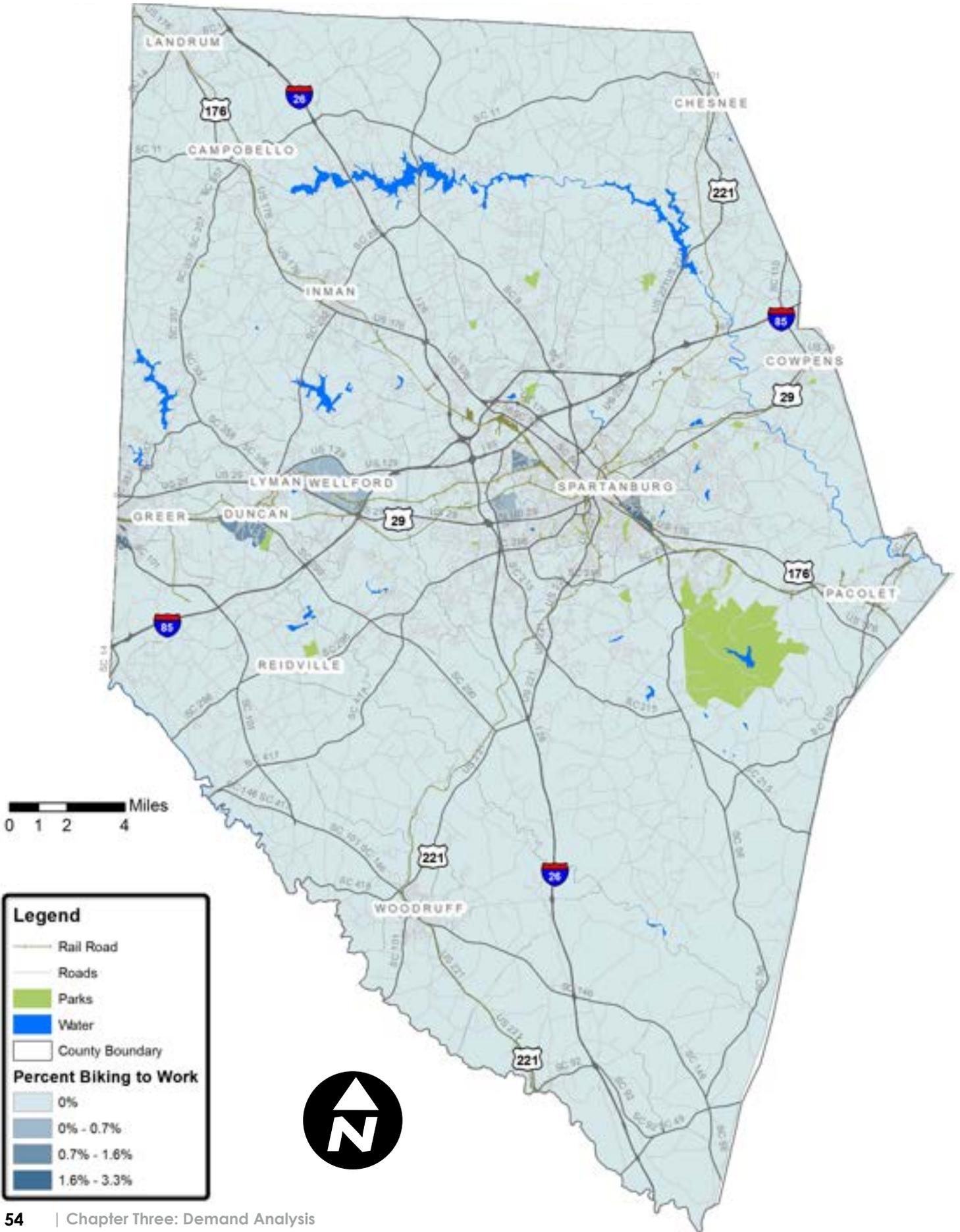
MAP 3.6
METRO
SPARTANBURG:
% WORKING
POPULATION
WALKING TO
WORK



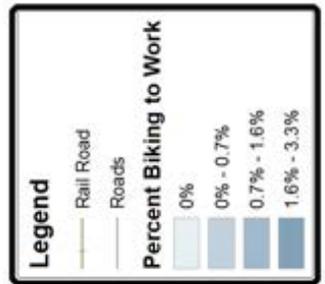
Data Source: SPATS



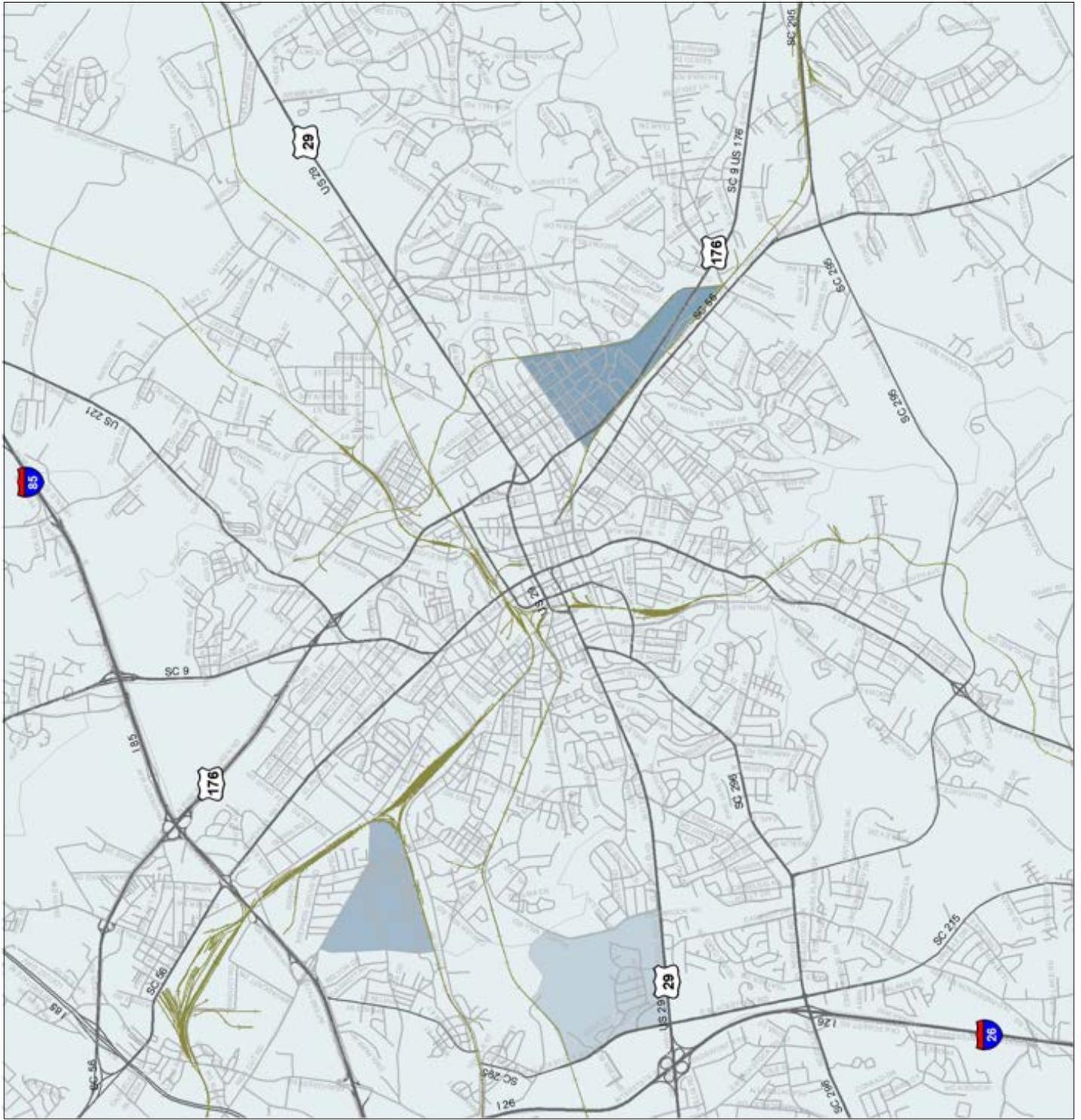
MAP 3.7 SPARTANBURG COUNTY: % WORKING POPULATION BICYCLING TO WORK



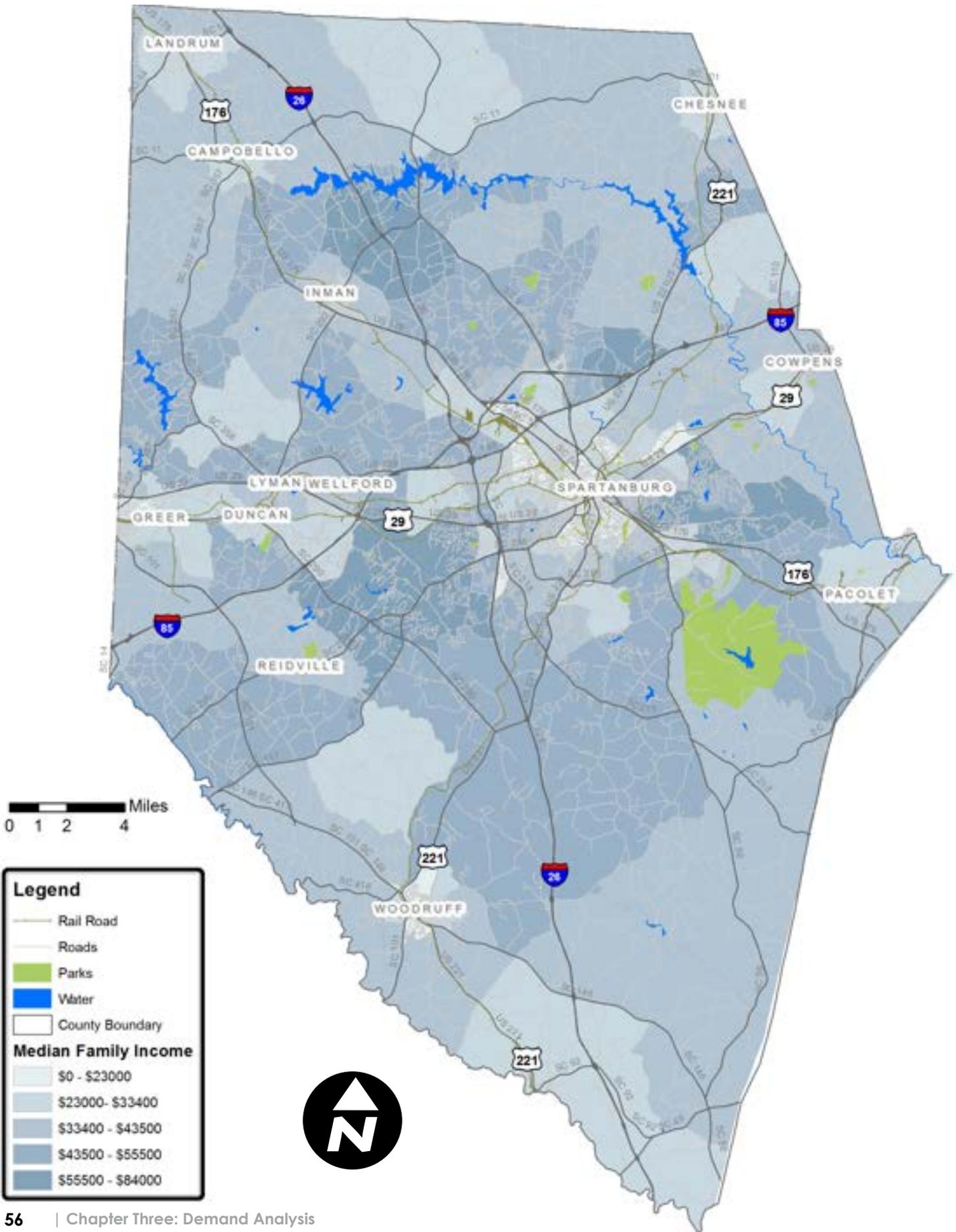
MAP 3.8
METRO
SPARTANBURG:
% WORKING
POPULATION
BICYCLING TO
WORK



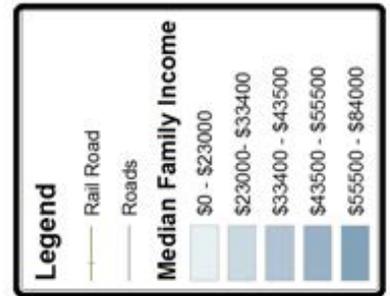
Data Source: SPATS



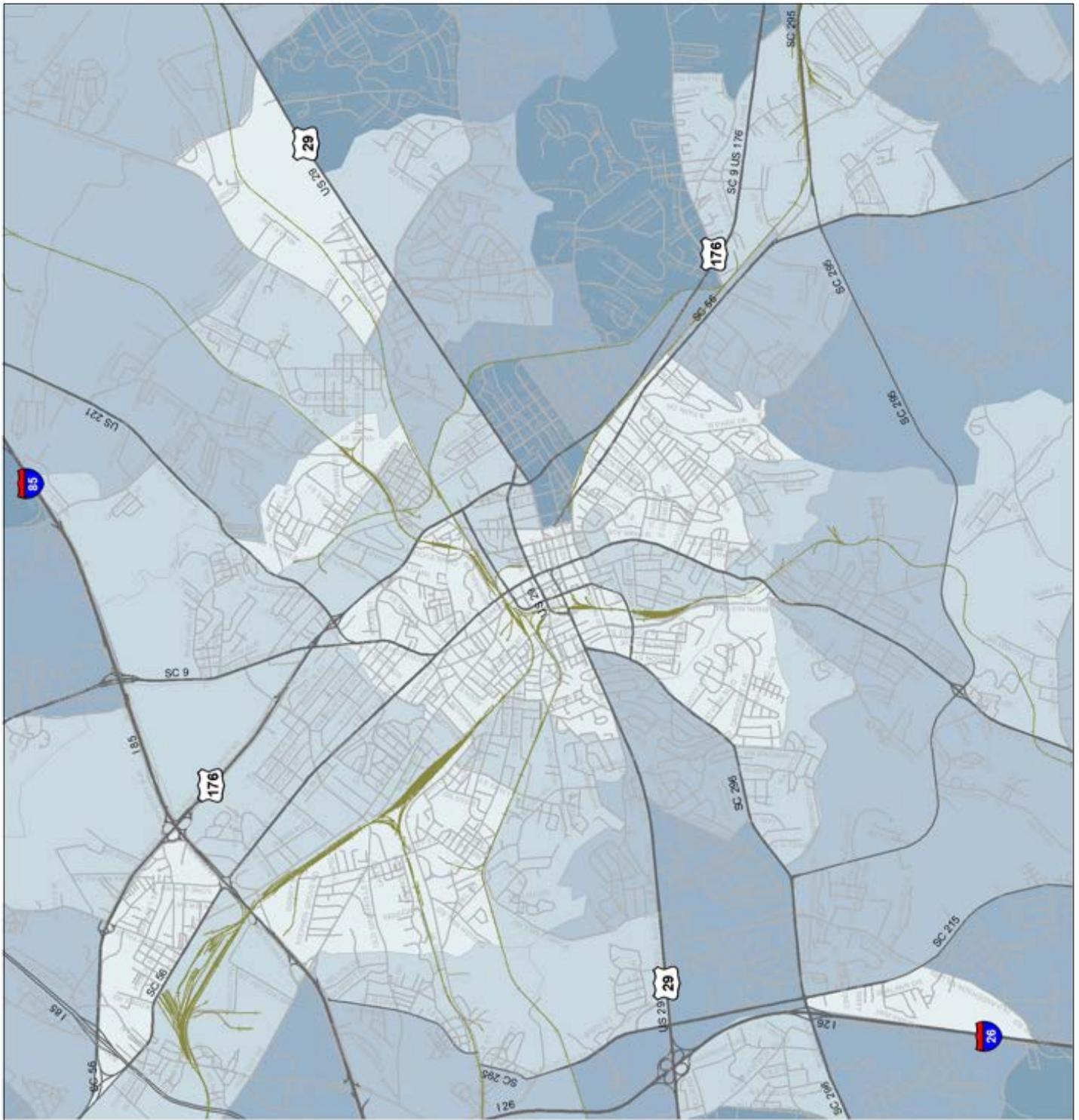
MAP 3.9 SPARTANBURG COUNTY: MEDIAN FAMILY INCOME



MAP 3.10
METRO
SPARTANBURG:
MEDIAN FAMILY
INCOME



Data Source: SPATS



The Spartanburg County Median Family Income map (Map 3.9) presents income levels at the block group level. While this is not a direct representation of bicycle and pedestrian use, it does indicate higher potential need for walkable and bikable spaces. As gas prices rise in the future, there may be increased need for bicycle and pedestrian travel, especially among lower-income groups. Lower-income areas are most commonly found in and around Downtown Spartanburg.

PUBLIC INPUT

Another expression of need and demand came from public input throughout this planning process. During the planning process, public input was gathered through several means and is described in more detail in Appendix A. Steering Committee meetings, public workshops, and stakeholder meetings all provided significant input into this process.

COMMENT FORM RESULTS

Comment forms were made available online and in hard-copy form throughout the planning process. 1,059 responses were recorded thus providing very significant input into this plan. The comment forms were intended to help understand bicycle and pedestrian needs across Spartanburg County.

Key points from the comment form results include:

- 91.5% of respondents said pedestrian conditions were fair or poor.
- 93.4% of respondents said bicycle conditions were fair or poor.
- 75.6% of respondents said that it is very important to improve walking and biking conditions; only 4% said it was not important.
- 88.7% of respondents said they would walk more if more sidewalks, trails, and safe roadway crossings were provided for pedestrians.
- 78.3% of respondents said they would bike more if bicycle lanes, trails, and safe roadway crossings were provided for bicyclists.
- The top three walking and bicycling destination types of the respondents were 1) trails and greenways, 2) parks, and 3) libraries/recreation centers.

- The top three factors that discouraged walking among respondents were: 1) lack of sidewalks and trails, 2) automobile traffic and speed, and 3) pedestrian unfriendly streets and land uses.
- The top three factors that discouraged bicycling among respondents were: 1) lack of bicycle facilities, 2) high-speed traffic, and 3) inconsiderate motorists.

When asked which corridor was most in need of bicycle and pedestrian improvements, the top responses were:

<i>Roadway Corridor</i>	<i># of responses</i>
Main Street/WO Ezell/US 29	167
Pine Street	91
Reidville Road/John B. White Sr. Blvd.	68
Church Street	57
SC 9 (Spartanburg to Boiling Springs)	50
US 290/Reidville Road	31
US 221	26
Asheville Highway	25
Blackstock Road (not differentiated)	22
Woodburn Road	22
Fernwood Drive	20
Country Club Road	19
Fernwood Glendale Avenue	14

When asked which intersections were most in need of bicycle and pedestrian improvements, the top responses were:

<i>Intersection</i>	<i># of responses</i>
Main Street & Pine Street	73
Hwy 29 (WO Ezell Blvd) & Blackstock Road (not differentiated)	30
Pine Street & Country Club Road	25
Main Street & Fernwood-Glendale Road	24
Union Street & Henry Street	20
Main Street and Church Street	15
Henry Street & Church Street	14
Reidville Road & Blackstock Road (not differentiated)	14
Saint John Street and Main Street	14
All intersections	13
Saint John Street and Pine Street	13

A graphic summary of all questions from the comment form is provided in Appendix A.

CHAPTER FOUR OUTLINE:

- Overview
- Methodology for Network Design
- Recommended Facility Types
- Bicycle Stations and Parking
- Bicycle Facility Network Maps
- Public Transit Access
- Regional Connections

CHAPTER FOUR: BICYCLE NETWORK

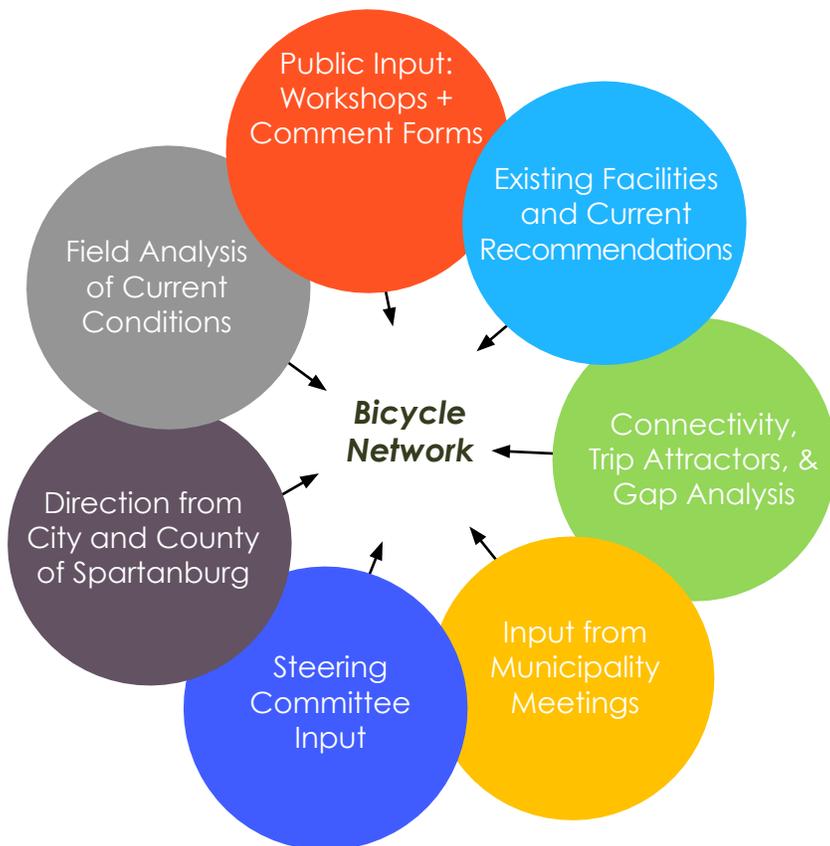
OVERVIEW

Spartanburg County's Bicycle Facility Network represents a comprehensive set of existing and proposed bicycle transportation facilities. The network includes paved shoulders, shared lane markings, bicycle lanes, side paths and greenways. In total, there are approximately 747 miles of recommended bicycle facilities, all of which are shown in Map 4.1

The following sections of this chapter include 1) how the network was designed; 2) brief descriptions of the types of facilities that make up the network; and 3) Spartanburg County and City network maps. Project pages and recommended network maps for Spartanburg County municipalities may be found in Chapter 6. Priority projects and strategies for implementation may be found in Chapter 9: Implementation.

INPUTS FOR NETWORK DEVELOPMENT

The diagram below illustrates the inputs used to design the Bicycle Network.



METHODOLOGY FOR NETWORK DESIGN

The bicycle facility network was designed by first assembling all existing bicycle-related recommendations and information from current plans and studies. Secondly, a thorough analysis with geographic information systems (GIS) and fieldwork was conducted to examine roadways for recommendations. The assembled information was then presented to the public, local government staff, the Steering Committee, and various project stakeholders. Together, the input from these groups helped to inform the overall network design; through writing and drawing on input maps, filling-out comment forms, direct dialogue, and e-mailed comments. These and other key inputs are shown in the diagram (at left).

RECOMMENDED FACILITY TYPES (MAPS 4.1 AND 4.2)

A variety of bicycle facilities are recommended due to 1) the range of skill and comfort levels involved in bicycling, and 2) the range of conditions for bicycling on different roadway environments. These recommendations are at a planning level only and will require further analysis before implementation.

The recommended bicycle network is made up of six core types of bicycle facilities. Descriptions and standards for each type are described in Chapter 10: Design Guidelines. The images and descriptions below are provided for a quick reference when viewing the Bicycle Facility Network Maps (Maps 4.1 and 4.2, at the end of this chapter).

BICYCLE LANE

A bicycle lane is a portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential and exclusive use of bicyclists. Bicycle lanes are always located on both sides of the road (except one way streets), and carry bicyclists in the same direction as adjacent motor vehicle traffic. The minimum width for a bicycle lane is four feet; five- and six-foot bike lanes are typical for collector and arterial roads.



Above: example bicycle lane.

SHARED LANE MARKINGS ("SHARROWS")

It is recommended that bicycle shared lane markings (or 'sharrows') be approached incrementally as a new facility treatment. Shared lane markings are used on roadways where dedicated bicycle lanes are desirable but are not possible due to physical or other constraints. Placed in a linear pattern along a corridor (typically every 100-250 feet), shared lane markings make motorists more aware of the potential presence of cyclists; direct cyclists to ride in the proper direction; and remind cyclists to ride further from parked cars to avoid 'dooring' collisions.



Above: example shared lane marking.

WIDE OUTSIDE LANE

A wide outside lane refers to the through lane closest to the curb and gutter of a roadway. The American Association of State Highway and Transportation Officials (AASHTO) standard lane width to accommodate both motorists and bicyclists is 14'. This facility type allows motorists to more safely pass slower moving bicyclists without changing lanes. Wide outside lanes are intended for bicyclists with traffic-handling skills.



Above: example wide outside lane.



Above: paved shoulder examples.

PAVED SHOULDERS

Paved shoulders are the part of a roadway which is contiguous and on the same level as the regularly traveled portion of the roadway. There is no minimum width for paved shoulders, however a width of at least four feet is preferred. Ideally, paved shoulders should be included in the construction of new roadways and/or the upgrade of existing roadways, especially where there is a need to more safely accommodate bicycles. Paved shoulders make up the majority of recommendations in this Plan because of the substantial mileage of rural roadways. When development occurs, roadways are reconstructed, and/or curb and gutter are added in the future, bicycle lanes should be considered for some of these roadways.



Above: example side path.

SIDEPATHS

Multi-use paths located within the roadway corridor right-of-way, or adjacent to roads, are called 'Sidepaths'. Sidepaths are most appropriate in corridors with few driveways and intersections. Bicycle routes where side paths are recommended should also have adequate on-road bicycle facilities (such as paved shoulders or bicycle lanes) wherever possible.



Above: example signed route.

SIGNED BICYCLE ROUTE

These routes are recommended in locations that serve as alternate routes for dangerous roadways. They were chosen as part of the network because of the importance of overall system connectivity and connectivity to destinations such as parks and schools. This designation includes signage but not necessarily any on-road facility or marking because the routes follow less busy, residential roads.



Above: example multi-use trail/
greenway.

MULTI-USE PATHS OR GREENWAYS

Multi-use paths are completely separated from motorized vehicular traffic and are constructed in their own corridor, often within an open-space area. Multi-use paths include greenway trails, rail-trails and other facilities built exclusively for bicycle and pedestrian traffic. In this plan, the greenway recommendations were generated from the Enhancement Master Plan and are amended with further recommendations. In total, there are over 200 miles in the recommended off-road greenway system.

TABLE 4.1 SPARTANBURG COUNTY ON-ROAD BICYCLE FACILITY RECOMMENDATIONS

<i>Recommended Facility</i>	<i>Method</i>	<i>Mileage</i>
Bicycle Lane	Stripe	16
Bicycle Lane	Restripe	60.5
Bicycle Lane	Road diet	7
Bicycle Lane	New construction	36
Shared lane markings	Stripe	20.5
Paved shoulder	New construction	518.7
Wide outside lane	Stripe	72.8
Signed bicycle route	Signage	4.9
Sidepath	New construction	10.7
<i>TOTAL Recommended</i>		<i>746.6 miles</i>

TABLE 4.2 CITY OF SPARTANBURG ON-ROAD BICYCLE FACILITY RECOMMENDATIONS

<i>Recommended Facility</i>	<i>Method</i>	<i>Mileage</i>
Bicycle Lane	Stripe	6.6
Bicycle Lane	Restripe	32.4
Bicycle Lane	Road diet	4.8
Bicycle Lane	New construction	3.8
Shared lane markings	Stripe	17.4
Paved shoulder	New construction	7.3
Wide outside lane	Stripe	15.7
Signed bicycle route	Signage	3.2
Sidepath	New construction	3.4
<i>TOTAL Recommended</i>		<i>94.6 miles</i>

NETWORK MAP SUBCATEGORY DEFINITIONS

As indicated in the legend of the bicycle network maps, some facilities are broken down into sub-categories for method of development. Those for bicycle lanes are explained below:

- *Bicycle Lane - Road Diet:*
Road diets typically involve reducing the number of travel lanes (from a four-lane road to a two-lane road with center turn lane, for example) allowing adequate space for bicycle lanes. Road diets also have traffic calming benefits. These projects can occur during roadway resurfacing projects.
- *Bicycle Lane - Stripe:*
Refers to projects that require only the striping of a bicycle lane, with no other changes needed to the roadway or existing roadway striping.
- *Bicycle Lane - Restripe:*
Refers to projects that require restriping travel lanes (often to a more narrow width) allowing adequate space for bicycle lanes. Narrowing the widths of travel lanes has been demonstrated to have no affect on overall roadway capacity (for more on this topic, refer to the following section on 'lane narrowing'). These projects can occur during roadway resurfacing projects.
- *Bicycle Lane - New Construction and Paved Shoulder – New Construction:*
Refers to projects that require adding additional pavement width to the roadway to allow adequate space for bicycle lanes or shoulders. It is likely that these bicycle facilities will be implemented to coincide with future roadway construction projects.

BICYCLE LANE DEVELOPMENT & TRAVEL LANE NARROWING

One means of developing bicycle lanes is through restriping or travel lane narrowing. In laying out the bicycle network facility recommendations and methods, it was determined that 10' travel lanes were acceptable in order to fit bicycle lanes into the existing roadway environment. For example, an existing five lane cross section with 12' lanes (Total roadway width of 60') could be altered to 10' lanes with 5' bicycle lanes (Total roadway width of 60'). This methodology used in developing recommendations is supported by research in both automobile traffic safety and bicycle level of service improvements.

Current AASHTO literature, research, and precedent examples support the notion of reducing 12' travel lanes to 10' lanes. The 2004 AASHTO Green Book states that travel lanes between 10 and 12 feet are adequate for urban collectors and urban arterials. (1) "On interrupted-flow operating conditions at low speeds (45 mph or less), narrow lane widths are normally adequate and have some advantages." At the 2007 TRB Annual Meeting, a research paper using advanced statistical analysis, supported the AASHTO Green Book in providing flexibility for use of lane widths narrower than 12 feet on urban and suburban arterials. The paper indicates there is no difference in safety on streets with lanes ranging from 10 to 12 feet. "The research found no general indication that the use of lanes narrower than 12 feet on urban and suburban arterials increases crash frequencies. This finding suggests that geometric design policies should provide substantial flexibility for use of lane widths narrower than 12 feet." The research paper goes on to say "There are situations in which use of narrower lanes may provide benefits in traffic operations, pedestrian safety, and/or reduced interference with surrounding development, and may provide space for geometric features that enhance safety such as medians or turn lanes. The analysis results indicate narrow lanes can generally be used to obtain these benefits without compromising safety." and "Use of narrower lanes in appropriate locations can provide other benefits to users and the surrounding community including shorter pedestrian crossing distances and space for additional through lanes, auxiliary and turning lanes, bicycle lanes, buffer areas between travel lanes and sidewalks, and placement of roadside hardware." (2)

Precedent examples also show the large number of communities around the United States that have narrowed travel lanes to enable the development of bicycle lanes. The Misoula Institute for Sustainable Transportation accumulated a list of these communities through information provided by members of the Association of Pedestrian and Bicycle Professionals. The webpage titled "Accommodating Bike Lanes in Constrained Rights-of-Way (<http://www.strans.org/travellannessurvey.htm>) lists the community, their methods, and contact information. Cities such as Arlington, VA, Cincinnati, OH, Charlotte, NC, Houston, TX, and Portland, OR have regularly narrowed travel lanes to 10' or even commonly use them in new roadway development. Arlington, VA has been installing bicycle lanes on streets when they are repaved and have a number of streets with 10' lanes and bicycle lanes that have been functioning well without operational issues and complaints. Cincinnati, OH uses a policy that 10 foot lanes on collectors and arterials are always permitted. New installations



Above, example bicycle lane 'road diet' opportunity on Drayton Street.



Above, example bicycle lane 'stripe' opportunity on Drayton Street.

Sources for Bicycle Lane Development & Travel Lane Narrowing:

- 1) American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Washington, DC 2004.
- 2) *Relationship of Lane Width to Safety for Urban and Suburban Arterials*, Ingrid B. Potts, Harwood, D., Richard, K, TRB 2007 Annual Meeting

For more information on these resources and studies please see:

Dan Burden (2000a), *Traffic Calming, Traditional Neighborhood Streets and Emergency Responders*, Center for Livable Communities, (http://www.lgc.org/freepub/docs/community_design/fact_sheets/er_street_design.pdf)

LGC (2007), *Emergency Response and Traditional Neighborhood Street Design*, Local Government Commission (www.lgc.org); at http://www.lgc.org/freepub/community_design/factsheets/er_streetdesign.html

of 10 foot travel lanes with bicycle lanes require a speed limit of 35mph or under. By restriping 12 foot lanes to 10 feet, the City of Houston, TX has converted 30 miles of arterial streets.

Lane narrowing and the addition of bicycle lanes will require consultation with SCDOT and further analysis beyond this planning effort. Changing the roadway design may also require a reduction in speed limit and consideration of traffic calming designs such as median islands. For roadways with higher speed limits and traffic volumes, wider vehicular and bicycle lanes may be warranted. Further analysis of bicycle lane restriping projects is warranted to determine appropriateness of lane narrowing, bicycle lane widths, and speed limits that impact both motorists and bicyclists.

Narrowing roadways for traffic calming purposes and bicycle facilities are common occurrences now since planners and engineers are trying to not only accommodate vehicles but bicyclists and pedestrians as well. Narrowing roadways to allow for bicycle lanes or other bicycle facilities is needed in some instances where current roadway widths and traffic volume do not allow for a simple "re-stripe" to paint in a bicycle lane.

One argument against this often comes from emergency responders who are concerned about narrow roadways limiting their access for vehicles such as fire trucks. Some research on this topic comes up with several resources. In summary, the emergency responders were contacted directly about the potential roadway narrowing projects and they were asked for input on solutions and were also educated to the facts about increased safety and reduced traffic accidents by the implementation of traffic calming measures such as roadway narrowing. The per capita risk of death from residential fires is far lower than from pedestrian crashes, which suggests that traffic calming can provide net safety benefits, although exact impacts vary depending on circumstances.

In most cases, the emergency responders and the City were able to reach agreements and design standards that allowed access for both bicyclists/pedestrians and emergency equipment. In some instances, if one roadway was getting narrowed then the emergency responders were able to focus their access route on adjacent roadways without causing any increased response time delay. In other instances, if no adjacent roadway was available to use, the City and emergency responders worked together on the specific roadway designs.

BICYCLE STATIONS AND PARKING

Bicycle parking is an essential component of the bicycle network by providing increased convenience and accessibility. During this planning process, Partners for Active Living (PAL) and SPATS determined sites for “Cycle Stations.”

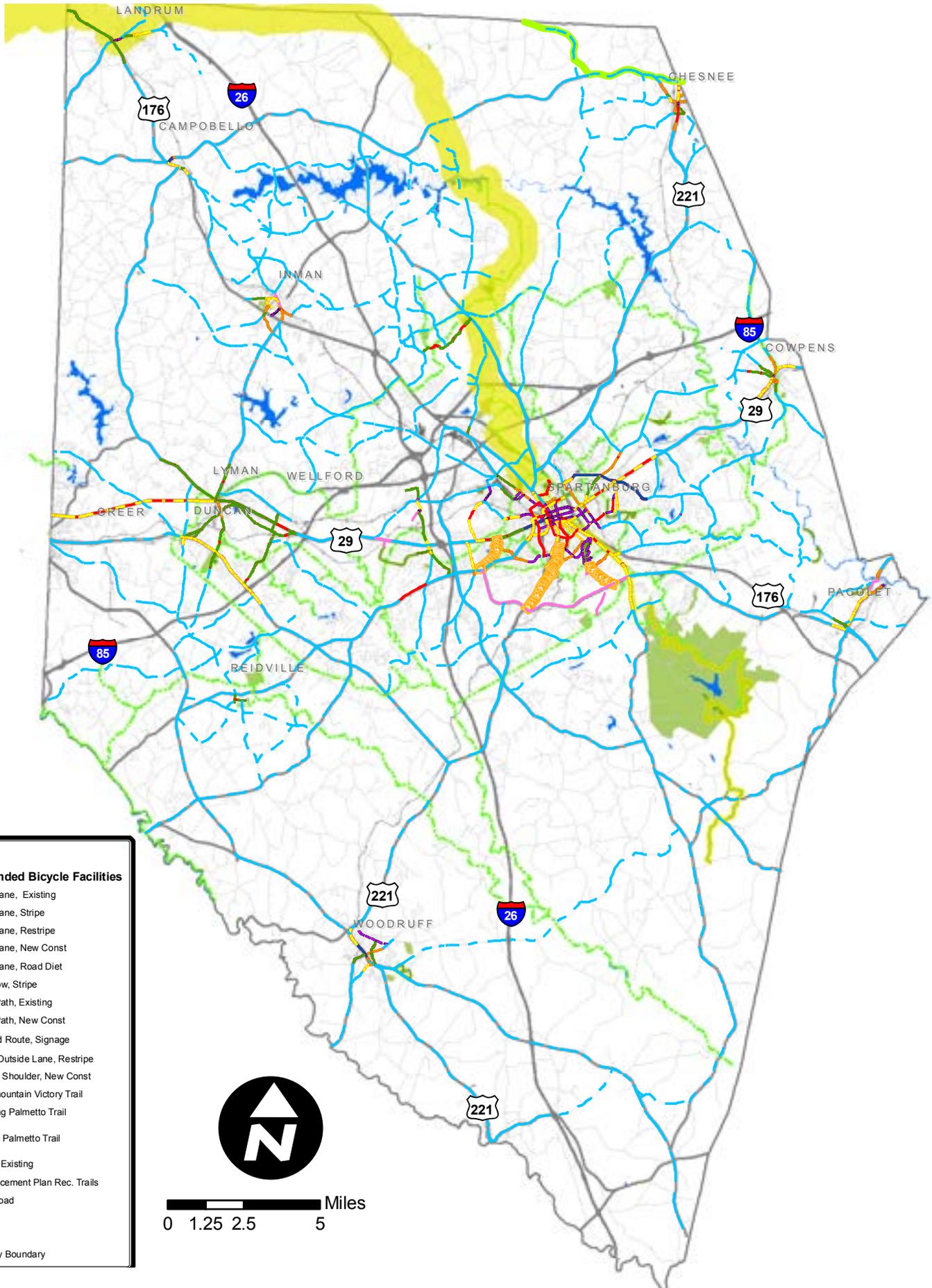
These bicycle stations are recommended at important destination hubs sited throughout the metro Spartanburg area and are displayed in the network maps. Integrating bicycle facilities with transit modes allows bicyclists to expand their range of travel through “trip chaining.” Bicycle racks are recommended at strategic locations in the downtown area such as parking garages. These locations are listed below.

Cycle Station is a project that has received a large percentage of the funding necessary, with implementation possibly starting in the Fall 2009. This project may happen in a few stages. Stations would be locations with bicycles available, making trips or portions of trips possible by bicycle. The target locations and ideas are:

- Morgan Square
- Marriott
- Wofford College
- Converse College
- Mary Black Rail Trail
- South Side Grocery
- Duncan Park
- Library

It is recommended that further analysis be conducted to place bicycle racks at key destinations such as bus stops, shopping centers, and office complexes. Bicycle parking should also be made available with new development. Further information about bicycle parking and stations can be found in Chapter 10: Design Guidelines.

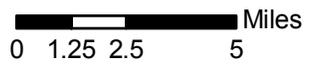
MAP 4.1 SPARTANBURG COUNTY: BICYCLE RECOMMENDATIONS



Legend

Recommended Bicycle Facilities

- Bike Lane, Existing
- Bike Lane, Stripe
- Bike Lane, Restripe
- Bike Lane, New Const
- Bike Lane, Road Diet
- Sharrow, Stripe
- Side Path, Existing
- Side Path, New Const
- Signed Route, Signage
- Wide Outside Lane, Restripe
- Paved Shoulder, New Const
- Overmountain Victory Trail
- Existing Palmetto Trail
- Future Palmetto Trail
- Trails, Existing
- Enhancement Plan Rec. Trails
- Rail Road
- Parks
- Water
- County Boundary



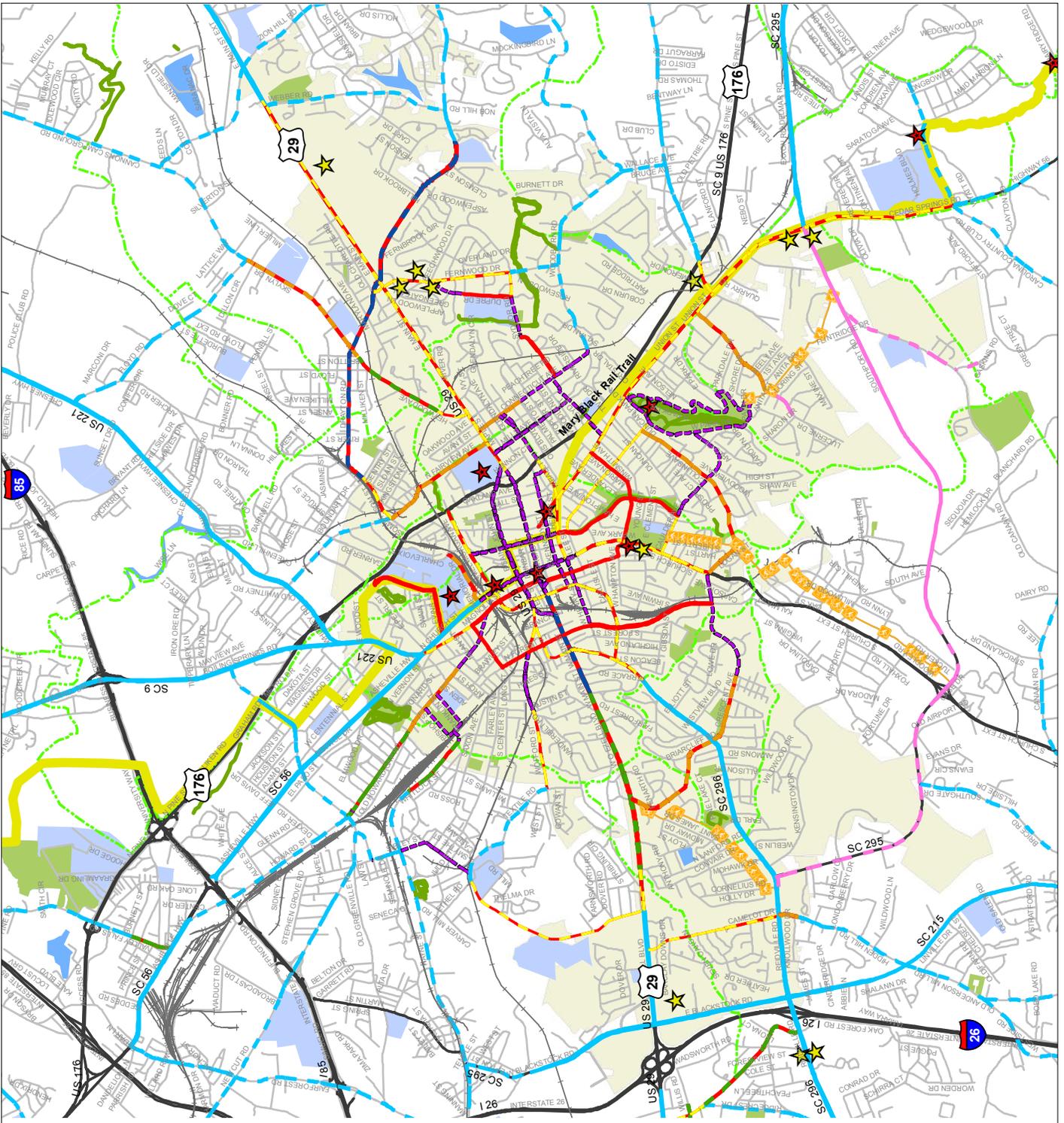
MAP 4.2 METRO SPARTANBURG: BICYCLE RECOMMENDATIONS



Legend

- Shopping Centers
- Cycle Stations
- Recommended Bicycle Facilities**
- Bike Lane, Existing
- Bike Lane, Stripe
- Bike Lane, Restripe
- Bike Lane, New Const
- Bike Lane, Road Diet
- Sharrow, Stripe
- Side Path, Existing
- Side Path, New Const
- Signed Route, Signage
- Wide Outside Lane, Restripe
- Paved Shoulder, New Const
- Road
- Palmetto Trail
- Trails, Existing
- Enhancement Plan Rec. Trails
- Rail Road
- Parks
- Water
- Schools

Data Source: SPATS



PUBLIC TRANSIT ACCESS



Above: examples of existing transit stops in Spartanburg.

It is critical that transit stops and their surrounding environments be safe and accessible for every transit user, in order to protect transit riders as well as better support and encourage transit use. Transit users need safe and convenient routes to get to and from transit. Riders will typically walk one-fourth to one-half mile (about a 5 to 10-minute walk for most people) to and from transit. Riders typically walk to a transit stop, board the bus, get off, and then walk to their final destination. Thus, the riders' needs as pedestrians extend beyond the bus stop to and from the surrounding neighborhood.

Many bus stops in the Spartanburg region area only marked with a sign and are without benches, sidewalks, safe crossings, and shelters. As a result, pedestrians must often cross busy streets and cut through parking lots to get to the bus stop or train station.

Transit agencies need to cooperate with SPATS and the City of Spartanburg to improve pedestrian access to transit. Building sidewalks will make bus stops more accessible. Safe and convenient crossings are also essential, especially for mid-block bus stops. New stops and stations can be placed with pedestrian (and bicycle) access in mind.



Above: example of a bus stop with sidewalks, shelter, area map and bicycle racks.

Providing a few amenities can make waiting for the bus or train a much more pleasant experience. Shelters with seating can offer protection from rain, snow, wind, and sun. Many transit agencies provide shelters at frequently-used bus stops and at outdoor rail stations. The shelters should be positioned so riders in wheelchairs have enough room to enter and exit the shelter. The sidewalk behind the shelter should be wide enough for two wheelchair users to pass each other and to handle the expected levels of pedestrian activity, including those who are just walking by. The best location for bus shelters is in the furniture zone, away from the walking zone.

Schedules and route maps should be placed at bus stops or in train stations to orient riders. Current technology makes it easy to have video monitors with bus arrival times in real time, displaying the number of minutes until the next bus or train and its destination.

REGIONAL CONNECTIONS

Spartanburg County should continue looking beyond its county limits and link bicycle facilities to neighboring and regional destinations. It is recommended that Spartanburg County continue to coordinate efforts with surrounding counties and communities such as Greenville County, Cherokee County, Polk County (NC), and others to create long distance connections for alternative transportation and recreation. Recently, Greenville County completed a greenway master plan. It will be critical to ensure compatibility and connectivity with these planning efforts and actual bicycle and pedestrian facilities that meet at municipality borders.

Regional greenway corridors such as the Palmetto Trail and Overmountain Victory National Historic Trail will encourage and draw users from all over the region into the area and to other locations, boosting tourism and interest in trail expansion. Long-range efforts should be made to connect to this regional network.

CHAPTER FIVE OUTLINE:

- Overview
- Methodology
- Pedestrian Network Facility Types
- Crossing Improvement Recommendations
- Regional Connections
- Pedestrian Facility Network Maps

CHAPTER FIVE: PEDESTRIAN NETWORK

OVERVIEW

The proposed pedestrian network for Spartanburg County is a series of pedestrian improvements that creates a more connected, comprehensive system. It has been developed from past planning efforts, public input, committee input, municipalities input, field analysis, and geographic information systems (GIS) mapping. This chapter presents the methodology, recommended pedestrian network facility types, intersection improvement recommendations, regional connections, and pedestrian network maps for Spartanburg County and the City of Spartanburg. Priority project pages and recommended network maps for Spartanburg County municipalities may be found in Chapter 6. Priority projects and strategies for implementation may be found in Chapter 9: Implementation.

HUB AND SPOKES DIAGRAM

The 'hubs and spokes' model conceptually illustrates how destinations are linked through various types of pedestrian facilities.

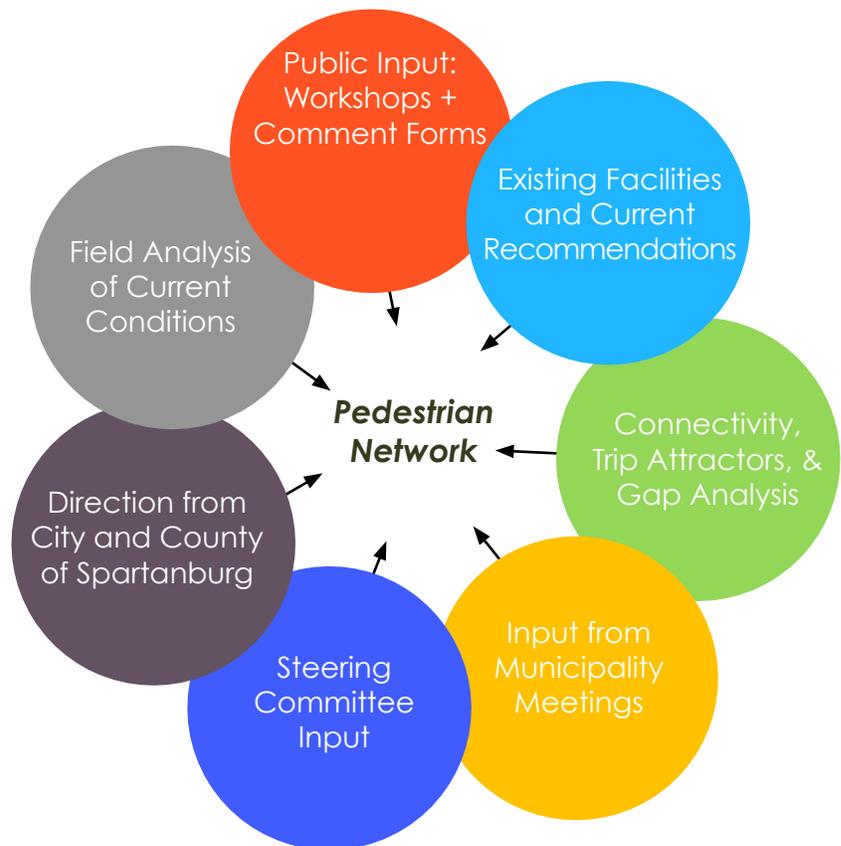


Successful development of the pedestrian network will require a long-term, cooperative effort between SCDOT, SPATS, Spartanburg County, the City of Spartanburg, and all other municipalities. Cooperative effort is important because roadways are owned and maintained by different entities.

METHODOLOGY

The guiding philosophy in devising the network is the hubs and spokes model. Pedestrian corridors (spokes) should connect to trip attractors (hubs), such as parks, schools, Downtown, shopping centers, and other pedestrian corridors. The network then becomes a practical solution for pedestrian connectivity (see diagram at left).

Fieldwork included an examination of conditions at major intersections, conditions along primary corridors, conditions at pedestrian hubs, conditions near schools, and a consideration of gap connectivity. Map discussion and analysis was conducted at steering committee meetings and public meetings to pinpoint specific areas in need of pedestrian improvements.



PEDESTRIAN NETWORK FACILITY TYPES

The Proposed Pedestrian Network for Spartanburg County (see Maps 5.1 and 5.2) consists of three types of projects:

- *Sidewalk projects* - The recommended sidewalks aim to expand upon the existing network of sidewalks to provide a more connected system that connects destinations along roadways. 253.7 miles of sidewalks are recommended for Spartanburg County.
- *Greenway projects* – The recommended greenways aim to expand upon a comprehensive off-road system that utilizes stream corridors and easements. Approximately 210 miles of greenway are recommended (developed mostly from Enhancement Plan recommendations).
- *Crossing improvements* – The crossing improvements aim to improve existing crossing facilities or create new crossing facilities at intersections and at mid-blocks. These improvements are critical in order to maintain a safe, connected system throughout the County. Pedestrians have a much greater risk of being struck by a vehicle when crossing a roadway as opposed to walking on the shoulder or sidewalk beside it. Nationally, nearly 75% of all police-reported pedestrian crashes involve pedestrians crossing roadway travel lanes.

INPUTS FOR NETWORK DEVELOPMENT

The diagram above illustrates the inputs used to design the Pedestrian Network.



Above: existing conditions on SC 9.

Right: A photo visualization of a sidewalk on SC 9.



Above: existing conditions along the North Tyger River.

Right: A photo visualization of a greenway trail along the North Tyger River.

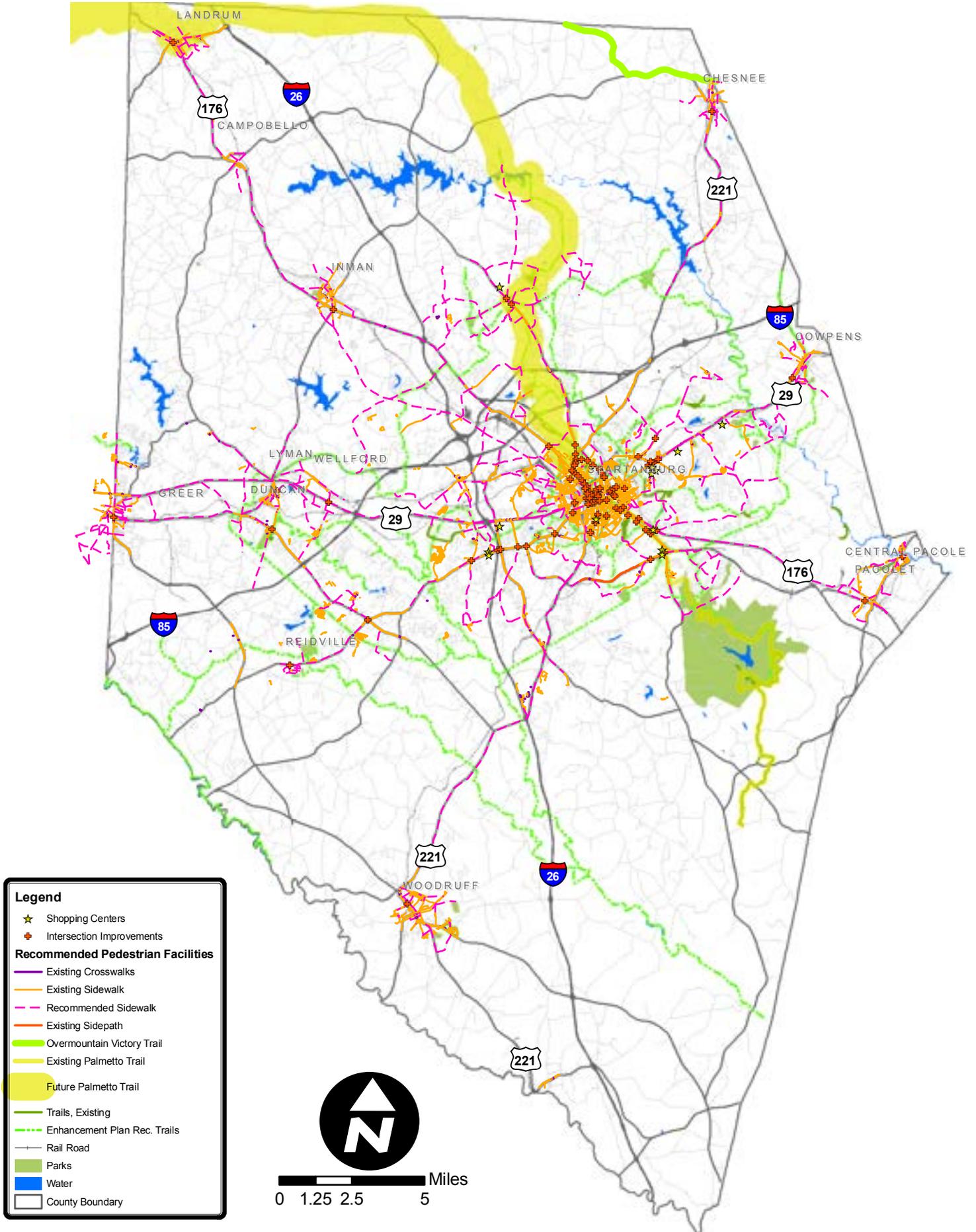


Above: existing conditions at a Church Street crossing.

Right: A photo visualization of crossing improvements on Church Street.

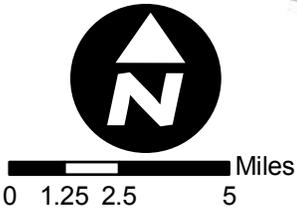


MAP 5.1 SPARTANBURG COUNTY: PEDESTRIAN RECOMMENDATIONS



Legend

- ★ Shopping Centers
- ⊕ Intersection Improvements
- Recommended Pedestrian Facilities**
- Existing Crosswalks
- Existing Sidewalk
- - - Recommended Sidewalk
- Existing Sidepath
- Overmountain Victory Trail
- Existing Palmetto Trail
- Future Palmetto Trail
- Trails, Existing
- - - Enhancement Plan Rec. Trails
- Rail Road
- Parks
- Water
- County Boundary



MAP 5.2 METRO SPARTANBURG: PEDESTRIAN RECOMMENDATIONS



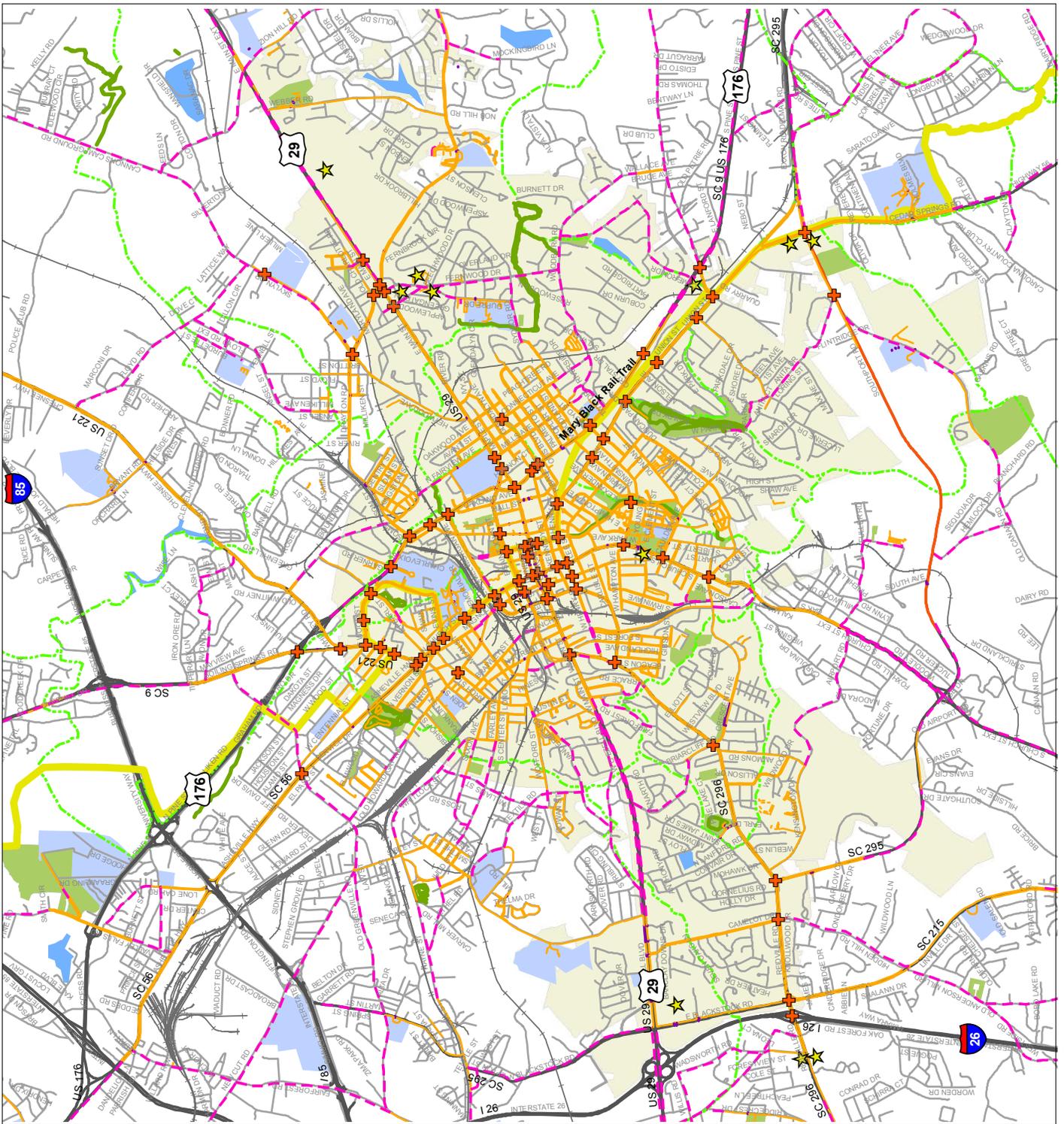
Legend

- ★ Shopping Centers
- ⊕ Intersection Improvements

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Sidepath
- Palmetto Trail
- Trails, Existing
- Enhancement Plan Rec. Trails
- Rail Road
- Parks
- Water
- Schools

Data Source: SPATS



CROSSING IMPROVEMENT RECOMMENDATIONS

Most intersections and mid-block crossings in Spartanburg County need some form of improvement. (89 intersections were analyzed in more detail with recommendations provided). Some of the treatments recommended in this chapter have been proven to reduce crashes, as shown in the 2007 FHWA Crash Reduction Factors Study (<http://safety.fhwa.dot.gov>). The table below shows some typical countermeasures and associated crash reduction factors from that study.

TABLE 5.1 PEDESTRIAN CRASH REDUCTION FACTORS

Countermeasure	Crash Reduction Factor
Install sidewalk	74%
Install pedestrian countdown signal heads	25%
Install pedestrian refuge islands	56%
Improve/install pedestrian crossings	25%

Together these proposed facilities should be developed or improved to create a safe and connected pedestrian network throughout Spartanburg County. On-road and off-road components should be integrated to provide a connected pedestrian transportation and recreation network. All pedestrian facility projects undertaken should aim to meet the highest standards possible when topography and right-of-way allows. Design guidelines in Chapter 10 provide detailed information regarding facility type, treatment, and proper placement.

All recommendations are developed at a planning level. Each of these locations will need a more detailed project-level review. The conclusions reached through more detailed review may vary from those presented herein.

INTERSECTION RECOMMENDATION TABLES

Committee input, public input, municipality input, and consultant fieldwork identified 89 key intersections in Spartanburg County in need of improvement. These are by no means the only crossing improvements needed throughout the County. All intersections should meet standards provided in Chapter 10: Design Guidelines. The following pages detail recommendations for the intersections that were inventoried in Chapter 2.

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INTERSECTION RECOMMENDATIONS

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INTERSECTION RECOMMENDATIONS

INTERSECTION RECOMMENDATIONS

ID	Road 1	Road 2	Needs Sidewalk	Stripe New Crosswalk Markings	Restripe Existing Crosswalk Markings	Advanced Stop Lines	Reconstruct Existing Curb Ramps	Construct New Curb Ramps	Median Refuge Islands	Curb Extensions	Reduce Turning Radius	Ped Countdown Signal Heads	Restrict Right turn on Red	High - Visibility Pedestrian Warning Signs	In-Roadway Pedestrian Crossing Signs	Remove Sight-Distance Obstruction	Pedestrian Underpass/Overpass	Debris and Extra Notes	
1	Church	Pine	N	-	Y (H/V)	Y	N	N	Improve park chipp	Y	Y	Y	N	Y	N	N	N	See note: Move Whitney stopline back. Make Right hand slip turn less wide	
2	Church	Whitney	N	Y	-	Y	-	Y	Y	Y	Y	Y	N	Y	N	N	N		
3	Church	Wood	N	N	Y (H/V)	N	Y	Y (across Church)	Y (across Church)	N	N	Make Countdown	N	Y	Y	N	N		
4	Wood	Parking Lot	N	N	Y (needs new paint)	Y (needs new paint)	-	Y	Y	N	N	Make Countdown	N	Y	Y	N	N	Update marked crosswalks all around	
5	Wood	Pearl	Y	Y	-	Y	-	Y	Y	N	N	Y	N	Y	Y	N	N		
6	Church	Centennial	N	N	Y (H/V)	Y (needs new paint)	N	N	Y	N	N	Already present	N	Y	Y	N	N		
7	Church	Catawba	N	N	Y (H/V)	Y (needs new paint)	Y	Y	Y	N	N	Y (across Catawba)	N	Y	Y	N	N		
8	Church	Ashville Hwy	This intersection, in its current alignment, is unsafe for pedestrians. The typical palette of pedestrian crossing facility recommendations will not improve the safety of pedestrians due to the direction of traffic flow, the diagonal orientation of the intersection, and signal timing. It is recommended that the intersection be re-aligned into a grid pattern. To accomplish a grid pattern, Church St. would cross Ashville Highway at the current location of Chapel Street. Magnolia Street would align with Dewey Avenue at the crossing of Church Street. Further analysis with SCDOT roadway and traffic engineers is warranted to address this intersection.																
9	Church	Pearl	N	Y	Y (H/V)	Y	Y	Y	Y (across Church)	N	N	Already present	N	Y	Y	N	N		
10	Church	Evns	N	Y	Y (H/V)	-	Y	Y	Y (across Church)	Y	Y	Already present	N	Y	Y	N	N		
11	Church	College	N	Y	Y (H/V)	Y	Y	-	N	N	N	Already present	N	Y	Y	N	N		
12	Church	Memorial	N	Y	Y (H/V)	Y (needs new paint)	Y	Y	N	N	N	Already present	N	Y	Y	N	N	Improve sidewalk maintenance in front of Old Krispy Kreme	
13	Church	Daniel Morgan	N	N	Y (H/V)	N	Y	N	N	N	N	Already present	N	Y	Y	N	N		
14	Church	St. Johns	N	N	Y (H/V)	N	Y	N	Y (across Church)	N	N	Already present	N	Y	Y	N	N		
15	Church	Kennedy	N	N	Y (H/V)	N	Y	N	Y (across Church)	N	N	Y	N	Y	Y	N	N		
16	Church	Henry	N	N	Y (H/V)	Y (needs new paint)	Y	Y	Y	Y	Y	Y (complete)	N	Y	Y	-	-		
17	Church	Marion	N	Y	Y	Y	Y	Y	N	Y	Y	Already present	N	N	N	-	-		
18	Marion	Hudson-Barksdale	N	N	Y (H/V)	-	Y	Y	N	N	N	Y	N	Y	Y	-	-		
19	Church	Caulder	N	N	Y (H/V)	-	Y	Y	Y	N	N	N	N	Y	Y	-	-		
20	Church	Crescent	N	Y	Y (H/V)	-	Y	Y	Y	N	N	Y	N	Y	N	-	-		
21	Church	Main	N	N	Y (H/V)	-	Y	N	N	N	N	Already present	N	N	Y	-	-		
22	Main	Converse	N	N	Y (H/V)	-	Y	Y	N	N	N	Y (complete)	N	N	Y	-	-		
23	Converse	Dunbar	N	N	Y (H/V)	-	Y	N	Y (across Converse)	N	N	N	N	N	Y	-	-		
24	Converse	St. Johns	N	N	Y (H/V)	-	Y	N	N	N	N	Already present	N	Y	Y	-	-		
25	St. Johns	Dean	N	N	Y (H/V)	Y (needs new paint)	Y	N	Y (across St. Johns)	N	N	Y	N	Y	Y	-	-		
26	Dunbar	Liberty	N	N	Y (H/V)	-	Y	N	N	N	N	Already present	N	N	N	-	-		

INTERSECTION RECOMMENDATIONS

SPARTANBURG, SOUTH CAROLINA

ID	Road 1	Road 2	Needs Sidewalk	Stripe New Crosswalk Markings	Restripe Existing Crosswalk Markings	Advanced Stop Lines	Reconstruct Existing Curb Ramps	Construct New Curb Ramps	Median Relocate Islands	Curb Extensions	Reduce Turning Radii	Ped Countdown Signal Heads	Restrict Right Turn on Red	High - Visibility Pedestrian Warning Signs	In-Roadway Pedestrian Crossing Signs	Remove Sight-Distance Obstruction	Pedestrian Underpass/O Verpass	Details and Extra Notes
27	Church	Dunbar	N	N	Y (H/V)	-	Y	N	Y (across Church)	N	N	Y	N	Y	Y	-	-	
28	Main	Daniel Morgan	N	N	Y (H/V)	Y (needs new point)	Y	Y	N	N	N	Y	N	Y	Y	-	-	
29	Broad	Spring	N	N	Y (H/V)	Y (needs new point)	Y	Y	N	N	N	Y	N	Y	Y	-	-	
30	Magnolia	St. Johns	N	N	Y (H/V)	-	Y	N	Y	N	N	Y (complete)	N	Y	Y	-	-	
31	Magnolia	Daniel Morgan	N	N	Y (H/V)	-	Y	Y	N	N	N	Y	N	Y	Y	-	-	
32	Pearl	Howard	N	N	Y (H/V)	-	Y	N	N	N	N	Y	N	N	N	-	-	
33	Asheville Hwy	California	Y	Y	-	Y	Y	Y	Y (across Asheville Hwy)	N	N	Y	N	Y	N	-	-	
34	Asheville Hwy	Chapel	N	Y	-	Y	Y	Y	Y	N	N	Y	N	Y	N	-	-	
35	Converse	Broad	N	N	Y (H/V)	-	Y	Y	N	N	N	Y (complete)	N	N	Y	-	-	
36	Main	Pine	N	N	Y	-	Y	N	Y	N	N	Y	N	Y	Y	-	-	
37	Main	St. Johns	N	Y	Y (H/V)	Y	Y	Y	Y	Y (on Converse College Street)	Y	Y (complete)	Y	Y	Y	-	-	
38	Pine	St. Johns	N	N	Y (H/V)	-	Y	Y	Y	Y	Y	Y	N	Y	Y	-	-	
39	Main	Mills	N	N	Y (H/V)	-	Y	Y	Y	N	N	Y	N	Y	Y	-	-	
40	Main	Ashley	Y	Y	Y (H/V)	Y	Y	Y	Y	N	N	Y	N	Y	N	-	-	
41	Main	Ferwood	Y (on Ferwood)	N	Y (H/V)	-	Y	N	Y	N	N	Y	N	Y	N	-	-	
42	Main	Ferwood-Glendole	N	N	Y (H/V)	-	Y	N	Y	N	N	Y	N	Y	N	-	-	Add pole chop raised island for pedestrian crossing and to slow right hand slip turn traffic.
43	Charlotte	Droyton	N	N	Y (H/V)	Y (needs new point)	Y	Y	N	Y (across Droyton)	N	Y	N	N	N	-	-	Push button signal offset and unreachble from sidewalk (fencing in way); move signal location
44	Main	Hilcrest	Y	Y	Y (H/V)	Y	Y	Y	Y	N	N	Y	N	N	N	-	-	Need sidewalk on Main here
45	SKYYN	Doctors Park	Y	Y	Y (H/V)	Y	N	Y	N	N	N	Y	N	Y	Y	-	-	
46	SKYYN	Droyton	N	N	Y (H/V)	N	Y	Y (esp. on park chops)	Y	N	N	Y	N	N	N	-	-	Enlarge pole chop to shorten crossing distance; Pole chops need better curb (smpr)
47	Pine	County Club	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	-	-	
48	Union	County Club	N	Y	N	Y	N	Y	Y	N	N	Y	N	Y	N	-	-	
49	Cedar Springs	Southport	N	N	N	N	N	N	N	N	N	Y	N	N	N	-	-	
50	Pine	Garner	N	N	Y (H/V)	Y	Y	Y	Y (extend)	N	N	Y	N	Y	N	-	-	Sidewalk needs maintenance
51	Pine	Isom	N	Y	Y (H/V)	Y	Y	Y	Y	N	N	Y	N	Y	N	-	-	
52	Pine	Cleveland	N	Y	N	Y	N	Y	Y	N	N	Y	Y	Y	N	-	-	
53	Pine	Daniel Morgan	N	Y	N	Y	Y	Y	Y	N	N	Y	N	Y	N	-	-	
54	Pine	Kennedy	N	Y	Y (H/V)	Y	Y	Y	Y	N	N	Y	N	Y	N	-	-	

INTERSECTION RECOMMENDATIONS

BICYCLE AND PEDESTRIAN MASTER PLAN

ID	Road 1	Road 2	Needs Sidewalk	Stripe New Crosswalk Markings	Restripe Existing Crosswalk Markings	Advanced Stop Lines	Reconstruct Existing Curb Ramps	Construct New Curb Ramps	Median Refuge Islands	Curb Extensions	Reduce Turning Radii	Ped Countdown Signal Heads	Restrict Right turn on Red	High - Visibility Pedestrian Warning Signs	In-Roadway Pedestrian Crossing Signs	Remove Sight-Distance Obstruction	Pedestrian Underpass/O Verpass	Details and Extra Notes
55	Pine	Henry	N	Y	Y (H/V)	N	Y	Y	Y	N	N	Y	N	Y	N	-	-	
56	Pine	Boyd/St. Andrews	N	N	Y (H/V)	N	N	N	Y	N	N	Already present	N	N	Y	-	-	
57	Pine	Forest	N	Y	N	Y	N	Y	Y	N	N	Already present	N	N	N	-	-	
58	Henry	Union	N	Y	N	Y	N	N	Y	N	Y	Already present	Y	N	N	-	-	
59	Henry	Converse	N	Y	N	Y	Y	Y	Y	N	N	Y	N	N	N	-	-	
60	Henry	Spring	N	Y	Y (H/V)	Y (needs repaint)	N	N	N	N	N	Y	N	Y	Y	-	-	
61	Henry	Daniel Morgan	N	N	Y (H/V)	Y (needs repaint)	Y	Y	N	N	N	Y	N	Y	N	-	-	
62	Union	Morton	N	N	Y (H/V)	N	Y	N	Y (extend)	N	N	Already present	N	Y	N	-	-	
63	Union	St. Andrews	N	Y	Y (H/V)	Y (needs repaint)	N	Y	Y	N	N	Already present	N	Y	Y	-	-	
64	Union	Duncan Park	N	Y	Y (H/V)	Y (needs repaint)	Y	Y	Y	N	N	Already present	N	Y	N	-	-	
65	Union	Forest	N	Y	N	Y	Y	Y	Y	N	N	Already present	N	Y	N	-	-	Need directional signage to Rail-trail
66	Union	Lucerne	N	Y	N	Y	Y	Y	Y	N	N	Already present	N	-	N	-	-	
67	Southport	Anita	Y	N	Y (H/V)	N	Y	N	Y	N	N	Already present	N	-	N	-	-	
68	Southport	Hwy 296	N	N	Y (H/V)	N	Y	N	Y	N	Y (Make countdown)	-	N	Y	N	-	-	
69	Danzler	SC 290	N	Y	-	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	-	-	Important intersection for improvement with destinations and schools nearby
70	SC 290	SC 296	Y	N	Y (H/V)	-	Y	Y	Y (and improve pork chop)	Y	Y	Y (Make countdown)	-	-	-	-	-	Pork chop island refuge needed; Median refuge very important on wide crossing. Existing signal needs repair (replace with countdown)
71	SC 296 (Reidville Rd)	Anderson Mill	N	N	Y (H/V)	Y	Y	-	Y	-	Y (Make countdown)	-	-	-	-	-	-	This intersection features one of two great pork chop island refuges in Spartanburg
72	SC 296 (Reidville Rd)	Blacklock	N	N	Y (H/V)	-	Y	-	Y	Y	Y (Make countdown)	-	-	-	-	-	-	Long crossing so median refuge islands and countdown signals critical
73	SC 296 (Reidville Rd)	I-26	N	Y	Y (H/V)	-	Y	Y	-	-	N	-	-	-	-	-	-	This is a fairly good model for an interstate crossing (stop bars are sufficient distance away; crossings are short; interstate entryways are divided creating a long island refuge and short crossings)
74	John B. White	Hidden Hill	N	-	Y (H/V)	-	Y	Y	Y	-	-	Y (Make countdown)	-	-	-	-	-	
75	John B. White	Crescent	N	Y	Y (H/V)	Y	Y	Y	-	-	-	Y	-	Y	Y	-	-	Driveway access management must be addressed at corner shopping center
76	John B. White	Daniel Morgan	N	Y	-	Y	Y	-	-	-	-	Y	-	-	-	-	-	Many people walking in area for utilitarian and transportation purposes
77	John B. White	Main	N	N	Y (H/V)	-	Y	-	Y	-	-	Y (Make countdown)	-	Y	Y	-	-	Many people walking in area for utilitarian and transportation purposes

INTERSECTION RECOMMENDATIONS

SPARTANBURG, SOUTH CAROLINA

Community	Road 1	Road 2	Needs Sidewalk	Shipe New Crosswalk Markings	Restripe Existing Crosswalk Markings	Advanced Stop Lines	Reconstruct Existing Curb Ramps	Construct New Curb Ramps	Median Refuge Islands	Curb Extensions	Reduce Turning Radius	Pedestrian Signal Heads	Countdown Signal	Restrict Right Turn on Red	High - Visibility Pedestrian Warning Signs	In-Roadway Pedestrian Crossing Signs	Remove Sight-Distance Obstruction	Pedestrian Underpass/Overpass	Details and Extra Notes
Community	Road 1	Road 2																	
Pocollet	SC 9	Church St.	Yes - east side of Church	Yes	n/a	No	No; fix minor drainage issues	No	No	No	No	Yes	Yes	No	Already present	No	No	No	
Compens	US 29	Old Pocollet Rd./Morfin St.	Yes - on Old Pocollet	Yes	n/a	Yes - on Morfin	n/a	Yes	Yes - modify existing	No	No	No - intersection is not signalized	No	No	Yes	Yes	No	No	
Chesnee	US 221	Manning St.	North side of E Manning; both sides of W Manning	Yes	n/a	No	n/a	Yes	No	No	No	Yes	Yes	No	Yes	No	No	No	
Woodruff	N. Main	Peachtree St.	Yes - new Peachtree south of Main; need to repair existing	Yes	n/a	Yes - on Morfin	Yes	No	No	No	No	Yes - need to signalize intersection for pedestrians	Yes	No	No	No	No	No	
Reidville	Reidville Rd.	Duncan Reidville Rd.	Yes	No	No	No	n/a	Yes	No	No	No	Yes	Yes	No	Yes	No	No	No	
Wellford	US 29	Tucoppau Rd.	Yes	Yes	n/a	No	n/a	Yes	Yes - modify existing	Yes - potential impact to truck movements	Yes - potential traffic impacts	Yes	Yes	No	Yes	No	No	No	
Belling Springs	SC 9	Rainbow Lake Rd.	Yes - east side of SC 9 north of Rainbow Lake; both sides of Rainbow Lake	Yes	n/a	No	n/a	Yes	No	No	No	Yes	Yes	No	Yes	Yes	No	No	
Immon	Asheville Hwy	S. Main St./Lymon Rd.	One side of Lymon; other needs maintenance	Yes	n/a	No	Yes	n/a	Yes - modify existing	No	No	Exit but not working correctly	Countdown signals exist - are not presently functioning	No	Yes	Yes	No	No	
Londum	SC 14 Rutherford St	US 176 Howard Ave	Needs sidewalk call 4 quadrants	No	Yes	No	n/a	Yes	No	No	No	Yes	Yes	No	Yes	No	Building appears to be in use	No	Dismantle overhead RR lighting system
Greer	SC 290 Poinsett St	SC 101 Line St	One side of Line and one side of Poinsett	Yes	n/a	Remove Reposition existing	Yes and increase holding area	n/a	Too narrow for holding	No	No	Yes	Yes	No	Yes	Yes - in Line St medians	n/a	No	Two operational RR crossings within 250' and 300' respectively on Line St.
Lymon	Groce Road	Spartanburg Road	Yes - Spartanburg Road east side	Yes	No	Yes	n/a	Yes	No	No	No	Yes	Yes	No	Yes	Yes - in triangular median	Building - n/a	No	

CHAPTER SIX OUTLINE:

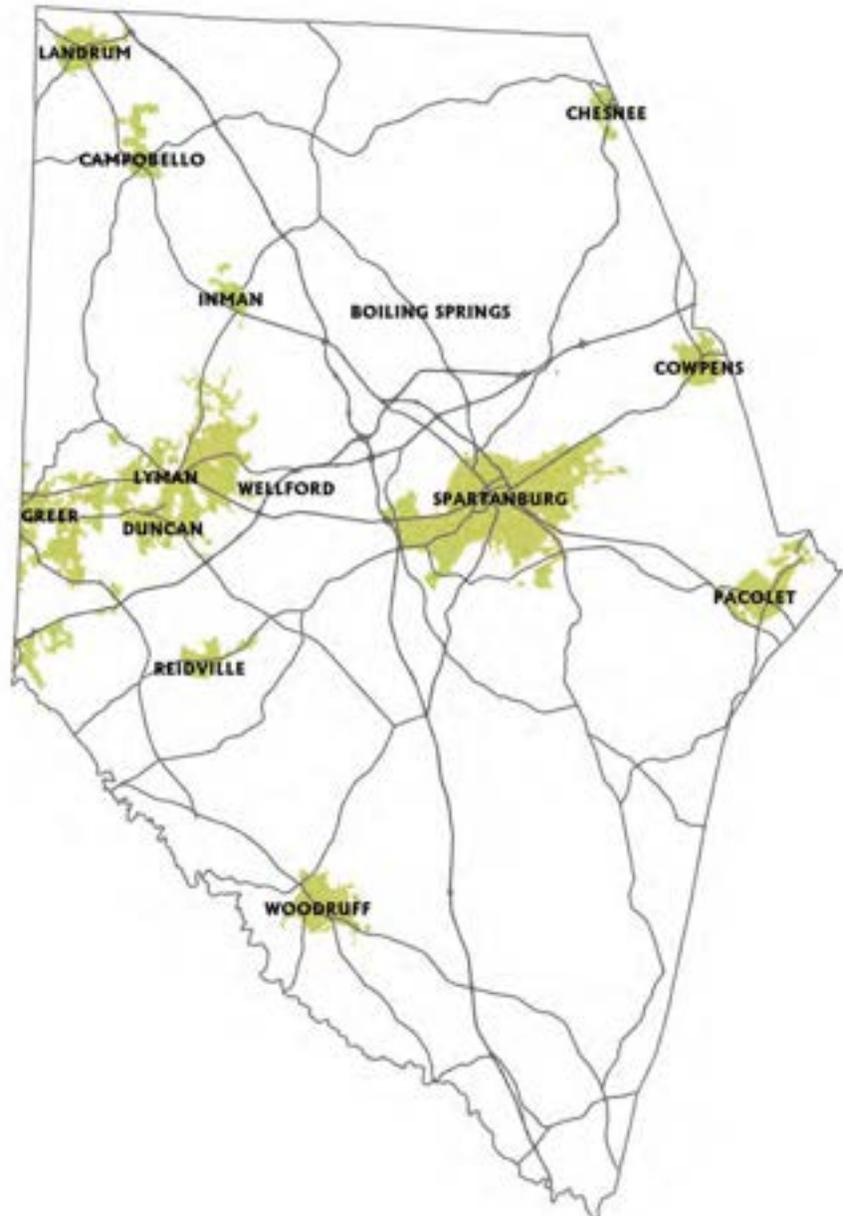
Overview
 Spartanburg
 Inman
 Pacolet
 Cowpens
 Reidville
 Chesnee
 Landrum
 Greer
 Lyman
 Boiling Springs
 Woodruff
 Wellford
 Duncan

CHAPTER SIX: MUNICIPALITY PROJECT PAGES

OVERVIEW

This chapter provides information on bicycle and pedestrian recommendations for municipalities in Spartanburg County. The main topics covered include key destinations, key issues, priority projects, and priority intersections. These recommendations were developed from site visits and meetings with community leaders. The map below shows the location of the county's municipalities.

MAP 6.1: MUNICIPALITIES OF SPARTANBURG COUNTY



BOILING SPRINGS

KEY DESTINATIONS

- Boiling Springs High School
- Boiling Springs Elementary School
- Va Du Mar Park
- New school planned at Rainbow Lake Rd. and Riveroak Rd.

KEY ISSUES

- Most important issue is schools as they are pushed out to areas that cannot handle increased traffic. It is likely future residential and commercial development will occur around schools (creating more need for pedestrian/bicycle accommodations).
- Midblock at SC9 (Boiling Springs First Baptist Church) is very dangerous. There is no signal or crossing guard at crosswalk.
- There has been much debate over bicycle/pedestrian facilities in widening of SC 9.
- Shoulders are needed along rural two-lane roads where bicyclists often ride.
- Sidewalks along SC 9 are now rarely used because of a lack of buffer between street and sidewalks (high speed traffic).

PRIORITY PROJECTS

1. Shoulders on Old Furnace Road
2. Sidewalks and Bike Lanes on Double Bridge Road
3. Sidewalks to Boiling Springs High School
4. Improve midblock crossing at SC 9.

PRIORITY INTERSECTION

SC 9 and Rainbow Lake Road

- Sidewalk needed on east side of SC9 north of Rainbow Lake; needed both sides of Rainbow Lake
- Stripe new high-visibility crosswalks.
- Construct new curb ramps.
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian crossing signs.



Above: Boiling Springs High School entrance



Above: Boiling Springs Elementary



Above: Va Du Mar Park

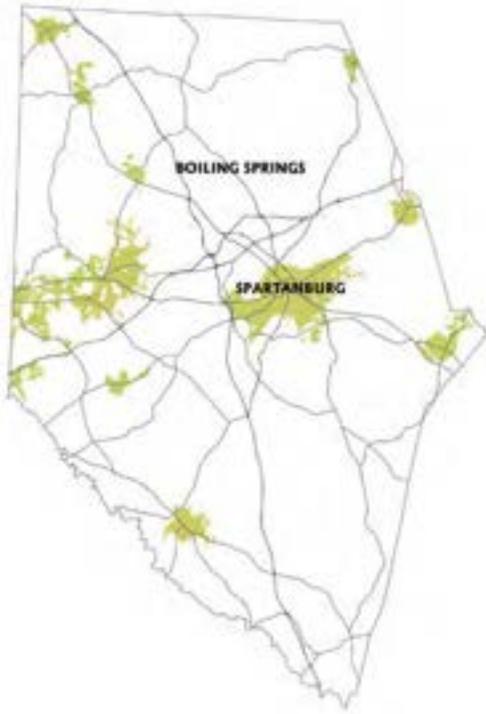


Above: Old Furnace Road



Above: Intersection of SC 9 and Rainbow Lake Road

INSET MAP: BOILING SPRINGS



Above: existing conditions on SC 9 near First Baptist Church .

Below: A photo visualization of pedestrian improvements.

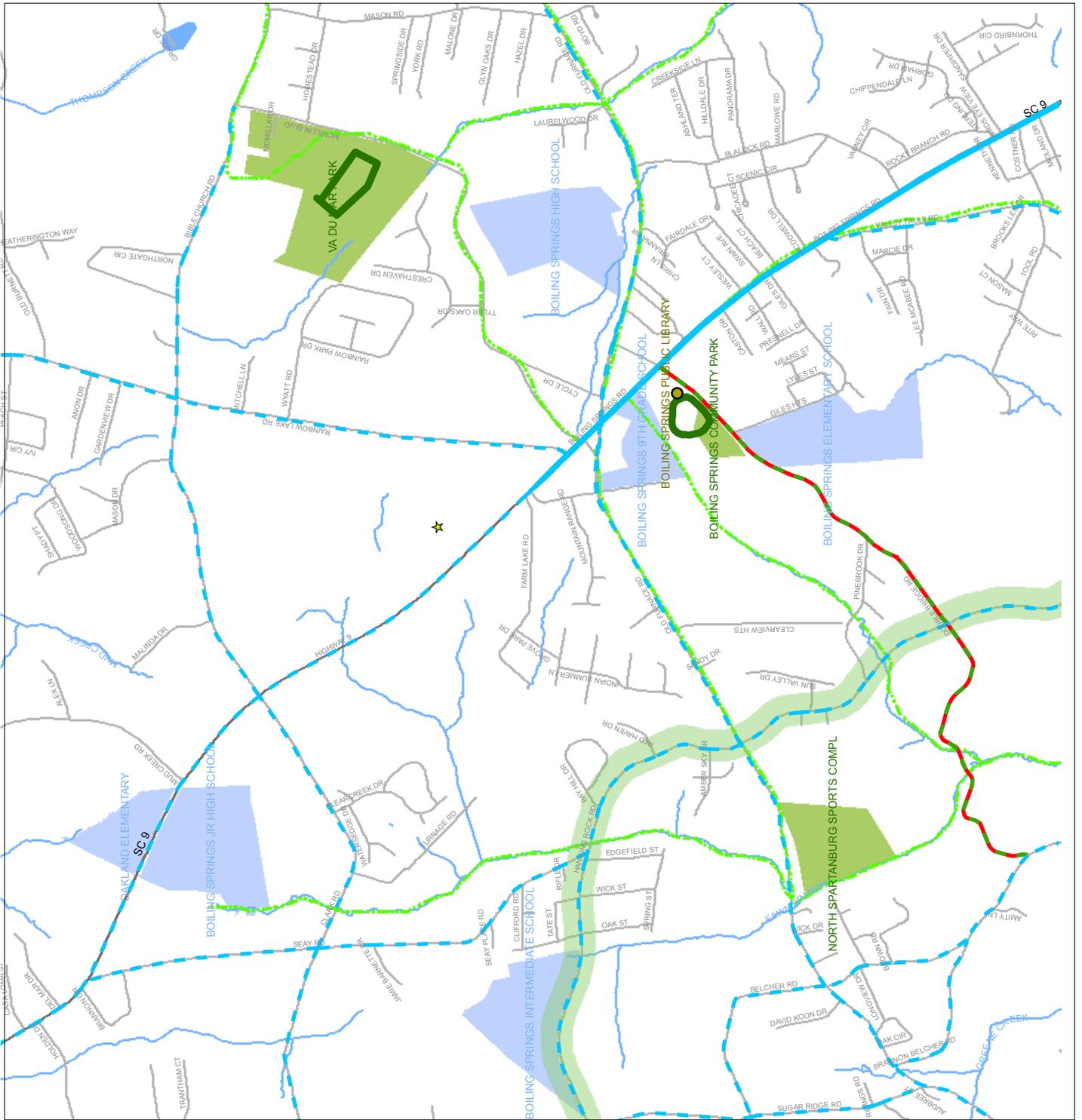


MAP 6.18 BOILING SPRINGS BICYCLE RECOMMENDATIONS

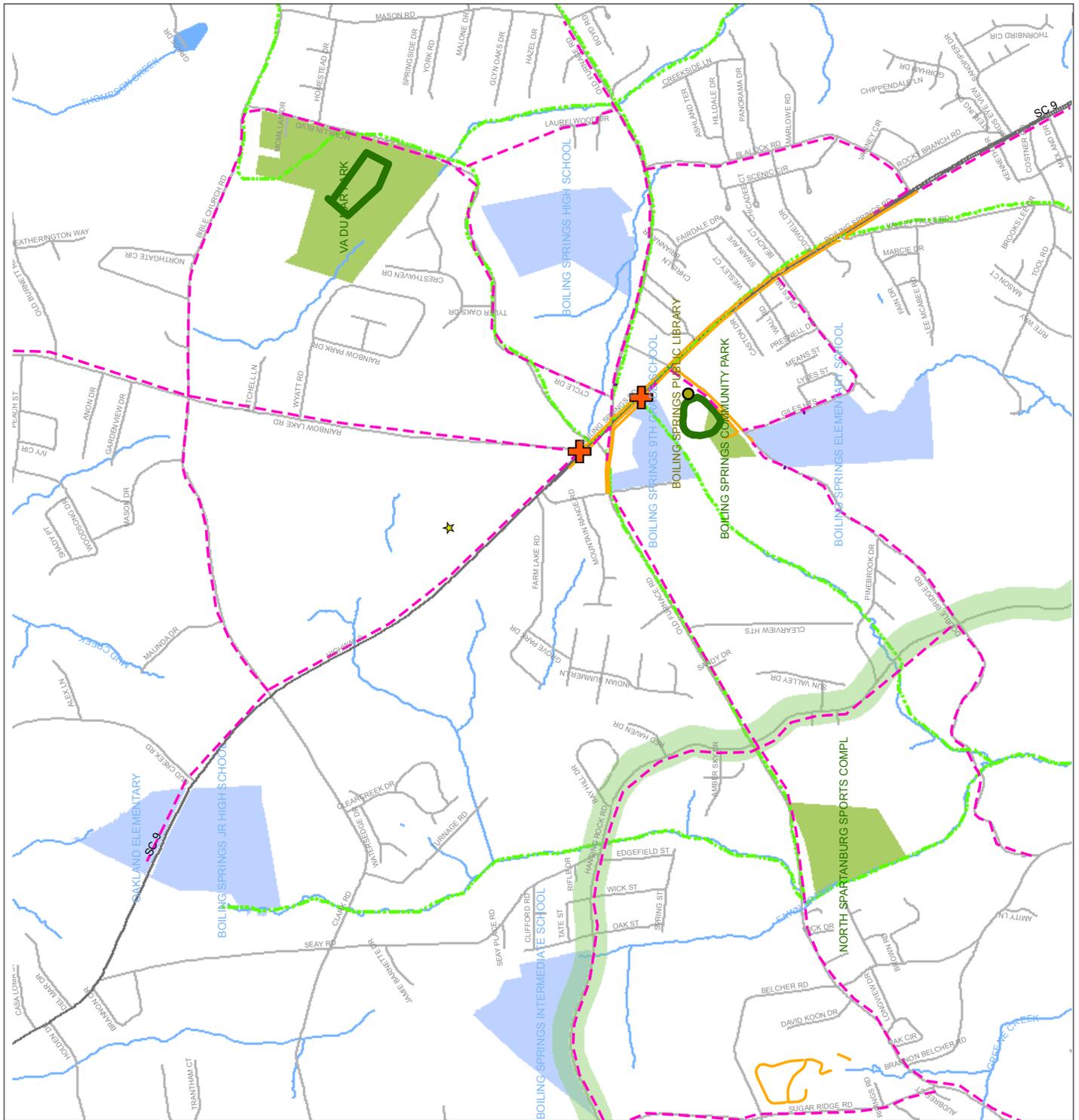


Legend	Cultural Tourism
	Various Destinations
	Shopping Centers
	Libraries
	Destinations
Recommended Bicycle Facilities	Bike Lane, New Const
	Wide Outside Lane, Restripe
	Paved Shoulder, New Const
	Road
	Existing Trails
	Future Palmetto Trail
	Enhancement Plan Rec. Trails
	Rail Road
	Streams and Lakes
	Schools
	Parks
	Water
	County Boundary

Data Source: SPATS



MAP 6.19 BOILING SPRINGS PEDESTRIAN RECOMMENDATIONS



Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations
- Shopping Centers

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- Future Palmetto Trail
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

CHESNEE

KEY DESTINATIONS

- Senior Center & Ball Fields
- BI-LO grocery
- Cash & Henderson Drug Store
- Cowpens National Battlefield
- Lake Blalock
- Chesnee Elementary
- Carolina Foothills Artisan's Center
- CADA Walking Park & Loop
- Burr's Trading Post
- Farmer's Market

KEY ISSUES

- Needs bike lanes, sidewalks, and trails to support active lifestyles of seniors and others in community
- Pedestrian mobility is essential because Chesnee is marketed as an "elder ready" community.
- No regulations in place for sidewalk interconnectivity.
- No Safe Routes to School program yet.
- Parking is an issue for community events: Walkability could help this issue.
- Bike lane already striped along good portion of US 221 through town – simply needs bike lane pavement markings and signage.
- Regional connectivity to Cowpens National Battlefield is desired.
- A number of bicyclists ride Casey Creek Road and other roads around Lake Blalock without any paved shoulder.

PRIORITY PROJECTS

1. Sidewalk to Chesnee Elementary. A sidewalk should be added along the south side of Fairfield Road connecting existing sidewalk to Chesnee Elementary School..
2. Pedestrian connections on Union St. Pedestrian connections needed between Senior Center, new Elder Housing, and ball fields.
3. Bicycle and Pedestrian connections along Ocone Street to Burr's Trading Post.
4. Sidewalks along Pickens Avenue.
5. Add bike lane pavement markings and signage to US 221 where painted separated space already exists.

PRIORITY INTERSECTION

US 221 and Manning Street

- Sidewalk needed on north side of E. Manning and both sides of W. Manning
- Stripe new high-visibility crosswalks.
- Construct new curb ramps.
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.



Above: Senior Center



Above: Cash & Henderson Drug Store



Above: Pedestrian connections needed on Union Street



Above: US 221 with unmarked bike lane

INSET MAP: CHESNEE



Above: existing conditions at US 221 and Manning St.

Below: A photo visualization of pedestrian improvements.

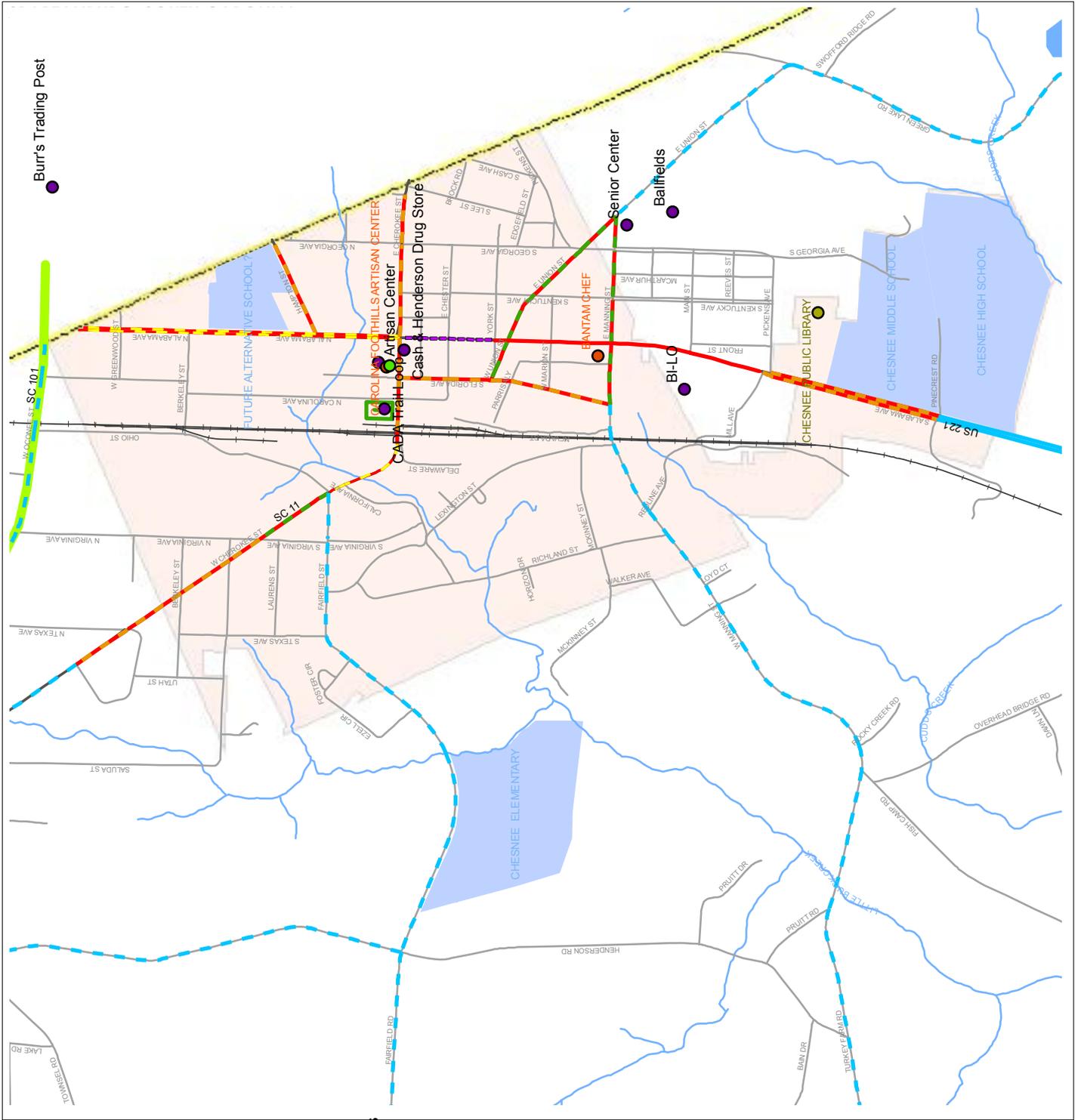


MAP 6.10 CHESNEE BICYCLE RECOMMENDATIONS



Legend	
	Cultural Tourism
	Various Destinations
	Libraries
	Destinations
Recommended Bicycle Facilities	
	Bike Lane, Existing
	Bike Lane, Stripe
	Bike Lane, Restripe
	Bike Lane, New Const
	Bike Lane, Road Diet
	Sharrow, Stripe
	Side Path, Existing
	Side Path, New Const
	Signed Route, Signage
	Wide Outside Lane, Restripe
	Paved Shoulder, New Const
	Road
	Existing Trails
	Overmountain Victory Trail
	Enhancement Plan Rec. Trails
	Rail Road
	Streams and Lakes
	Schools
	Parks
	Water
	County Boundary

Data Source: SPATS



MAP 6.11 CHESNEE PEDESTRIAN RECOMMENDATIONS



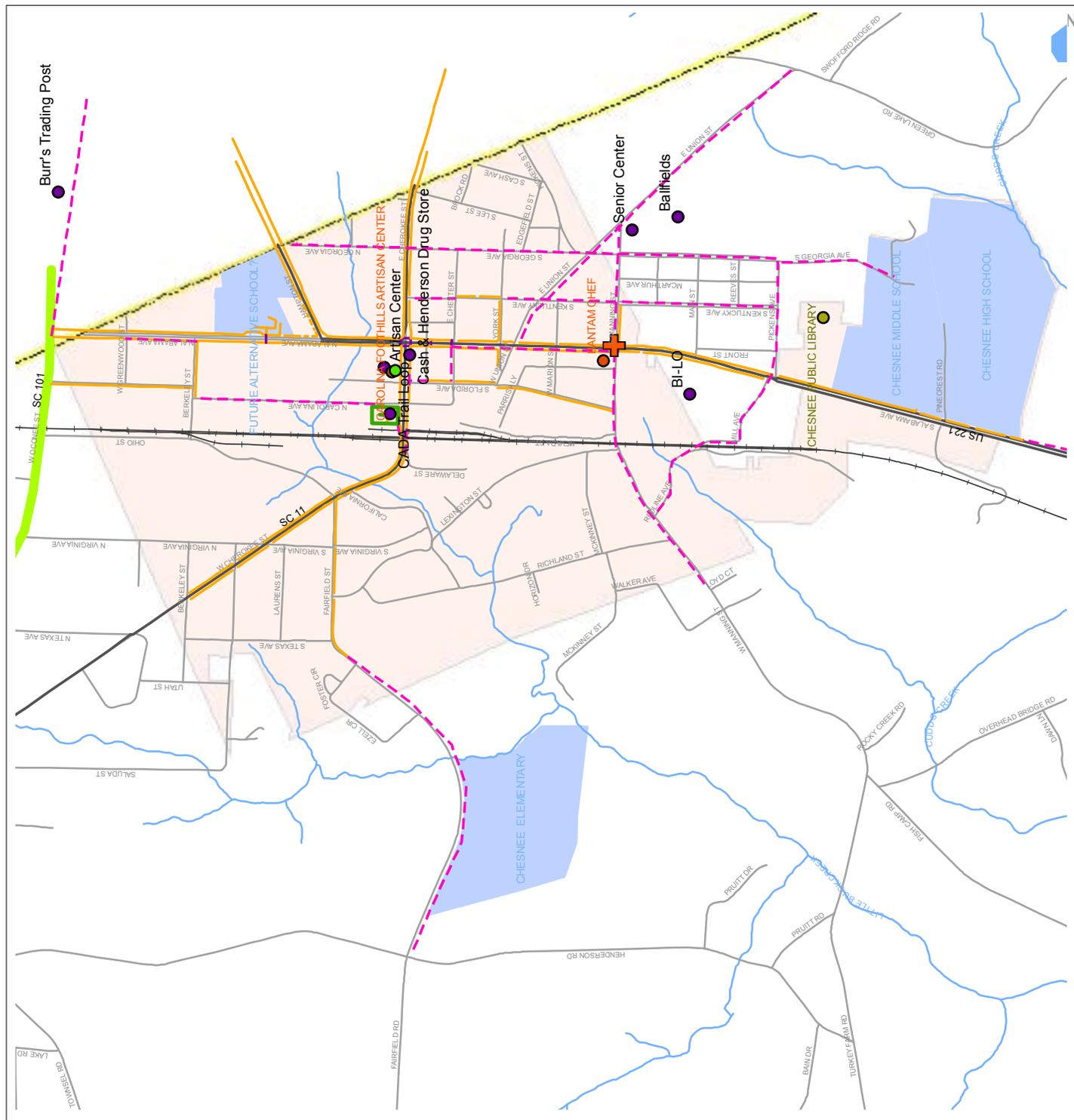
Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations
- Existing Trails

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Overmountain Victory Trail
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS



COWPENS

Key destinations

- Veterans Park & Depot/Museum
- Gordon Henry Park & Ballfields (on Linda Street)
- Downtown
- Cowpens National Battlefield
- Library, Schools
- Potters Store
- Future amphitheatre, community center, senior center, and Trail

KEY ISSUES

- Lack of connectivity.
- Intersection of Hwy 110 and US 29 has poor geometrics – difficult for pedestrians to cross.
- Mighty Moo Festival generates large amounts of pedestrian traffic near Veterans Park – better accommodations needed.
- Sidewalk maintenance, trash, yard waste, overgrowth, and parking on sidewalk are issues, especially on Maple St.
- Walkable Communities Committee is not active
- Trucks cannot turn right onto Hwy 110 when traveling south on US 29 – cut through on Moore Street posing a pedestrian safety concern
- Connect future Senior's Center with future senior housing
- Connect to Cowpens battlefield

PRIORITY PROJECTS

1. Circulator sidewalk system. This project would follow Go-forth Street, Battleground Road, Main Street, and Foster Street.
2. Maintenance of sidewalks on Maple Street.. The physical condition of sidewalk needs improvement with sidewalk cracks and vegetation. Stronger policies and enforcement are needed for yard waste, overgrowth, and parking on sidewalks.
3. Old Pacolet Highway sidewalks.
4. Trail connecting Gordon Henry Park, Depot, and Veterans Park.

PRIORITY INTERSECTION

US 29 and Old Pacolet Rd./Martin St.

- Sidewalk needed on Old Pacolet Rd.
- Stripe new high-visibility crosswalks.
- Construct new curb ramps.
- Provide median refuge islands.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian crossing signs.



Above: Veterans Park



Above: Gordon Henry Park



Above: Downtown Cowpens

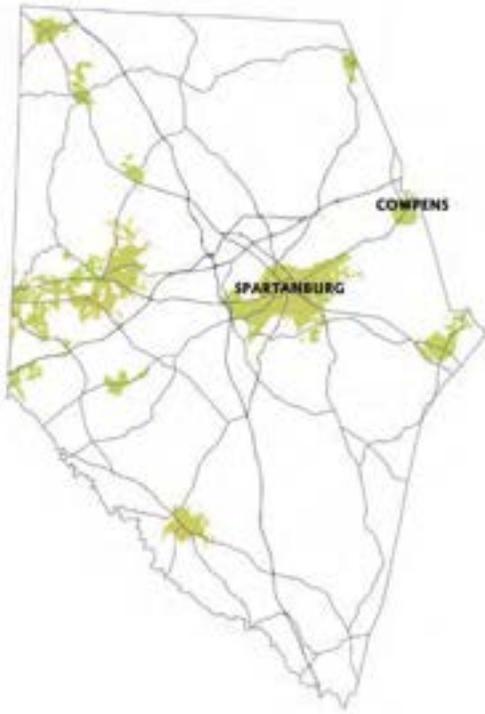


Above: Cowpens National Battlefield



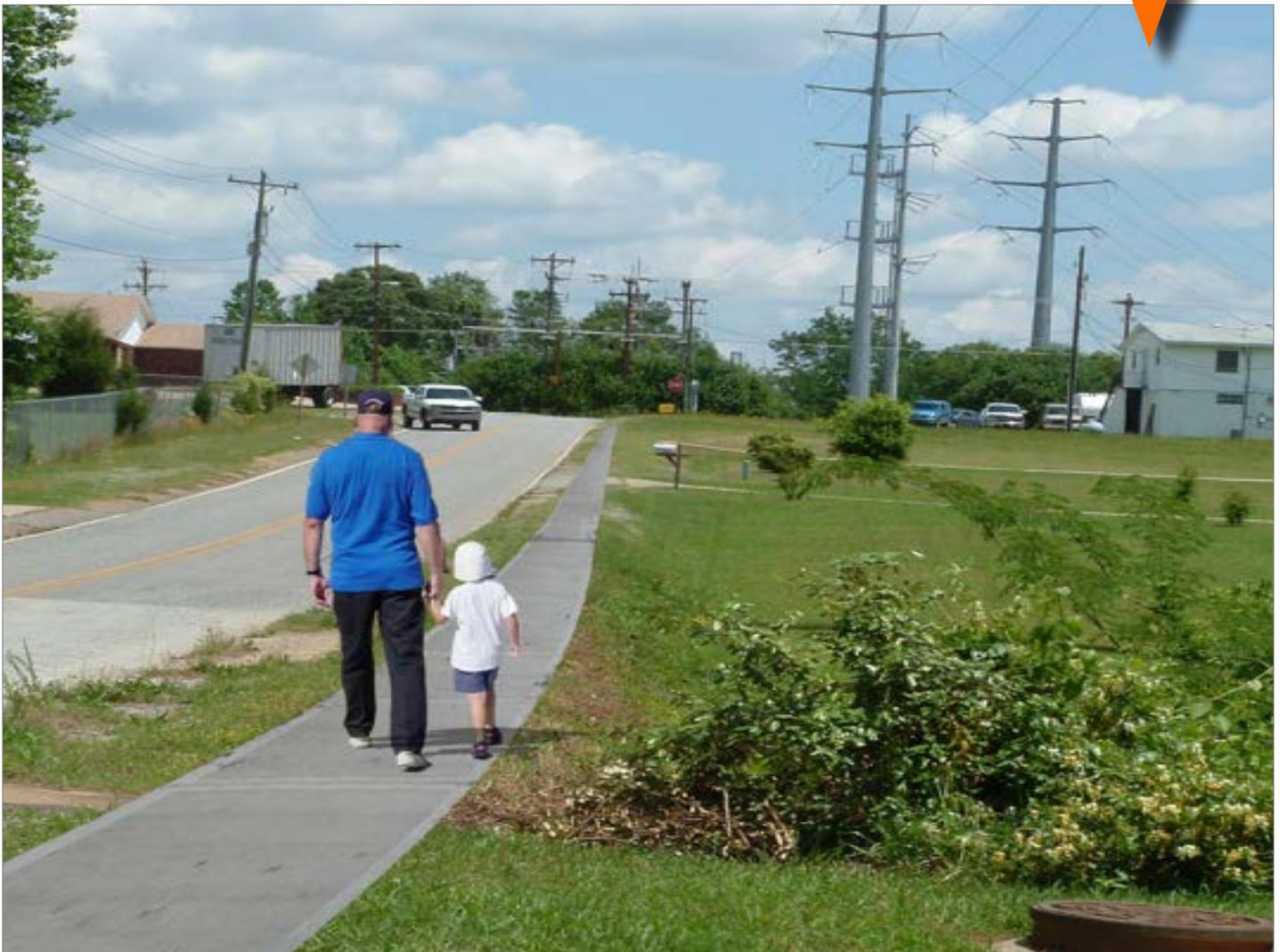
Above: Sidewalk/maintenance needed on Maple St.

INSET MAP: COWPENS



Above: existing conditions along Goforth Street.

Below: A photo visualization of pedestrian improvements.



MAP 6.6 COWPENS BICYCLE RECOMMENDATIONS



Legend

- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

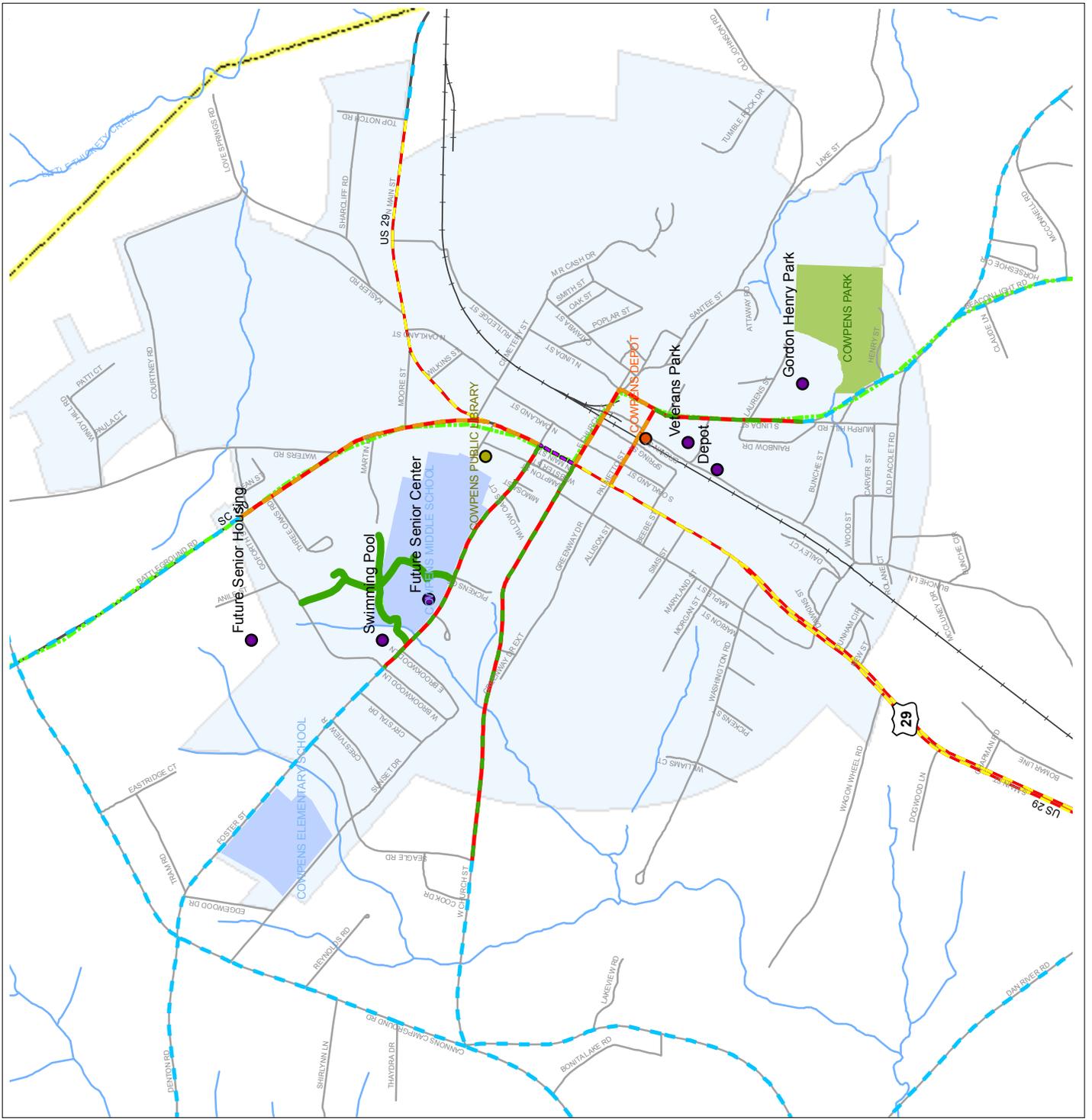
Recommended Bicycle Facilities

- Bike Lane, Stripe
- Bike Lane, Restripe
- Bike Lane, New Const
- Sharrow, Stripe
- Paved Shoulder, New Const
- Road

Project Recommended Trail

- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS



MAP 6.7 COWPENS PEDESTRIAN RECOMMENDATIONS



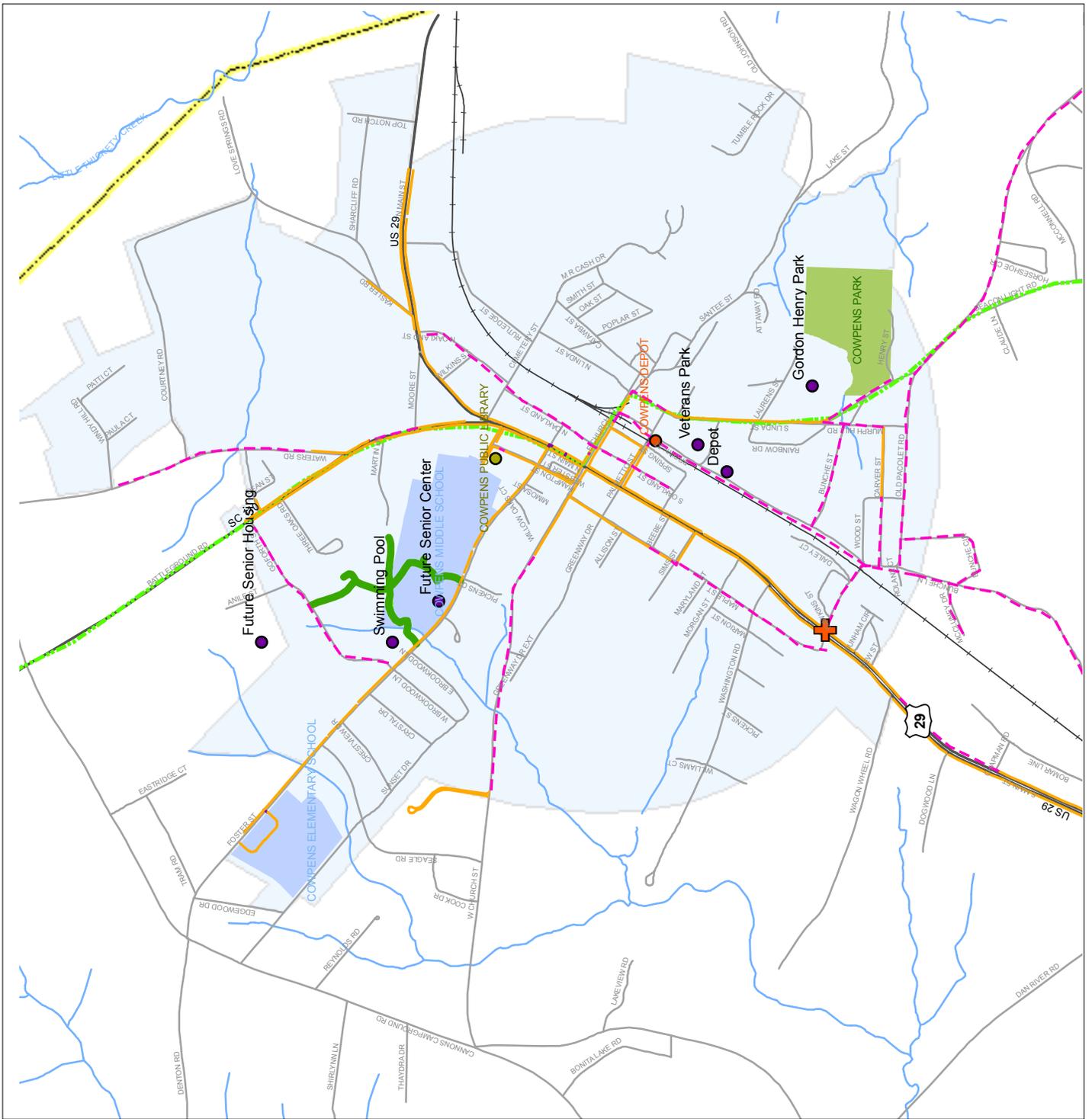
Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Project Recommended Trail
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS



DUNCAN

KEY DESTINATIONS

- SCALE Trail/Park
- James F. Byrnes High School
- Duncan Elementary School and Beech Springs Intermediate School
- Stoneledge Park
- Shipwreck Cove Water Park
- Duncan Station (residential development)

KEY ISSUES

- Many residents live below poverty line and walking/biking is a primary mode of transportation.
- Crosswalks in front of Byrnes High School are of concern for pedestrian safety.
- Lack of connectivity throughout Duncan and to adjacent towns.
- Intersection of Main Street, Spencer St., and SC 292 impossible for pedestrians.

PRIORITY PROJECTS

1. Main Street bike lane/sharrow.
2. Enhance pedestrian accommodations along Danzler/SC 290 area. A number of destinations are in this area including the school, SCALE park, new performing arts venue, and other connections across SC 290. Sidewalks should be extended. Signage and marked crosswalks should be improved with curb ramps, speed limit reduction, and traffic calming.
3. Spencer Street paved shoulder.

PRIORITY INTERSECTION

Danzler and SC 290

- Stripe new high-visibility crosswalks.
- Provide advanced stop lines.
- Reconstruct existing curb ramps.
- Provide median refuge islands.
- Reduce turning radius with curb extensions (potential impact to trucks).
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian warning signs.



Above: SCALE Trail sign.



Above: Stoneledge Park



Above: Main Street bicycle lane opportunity



Above: Intersection of Danzler and SC 290

INSET MAP: DUNCAN



Above: existing conditions between the SCALE Trail/Park and the school.

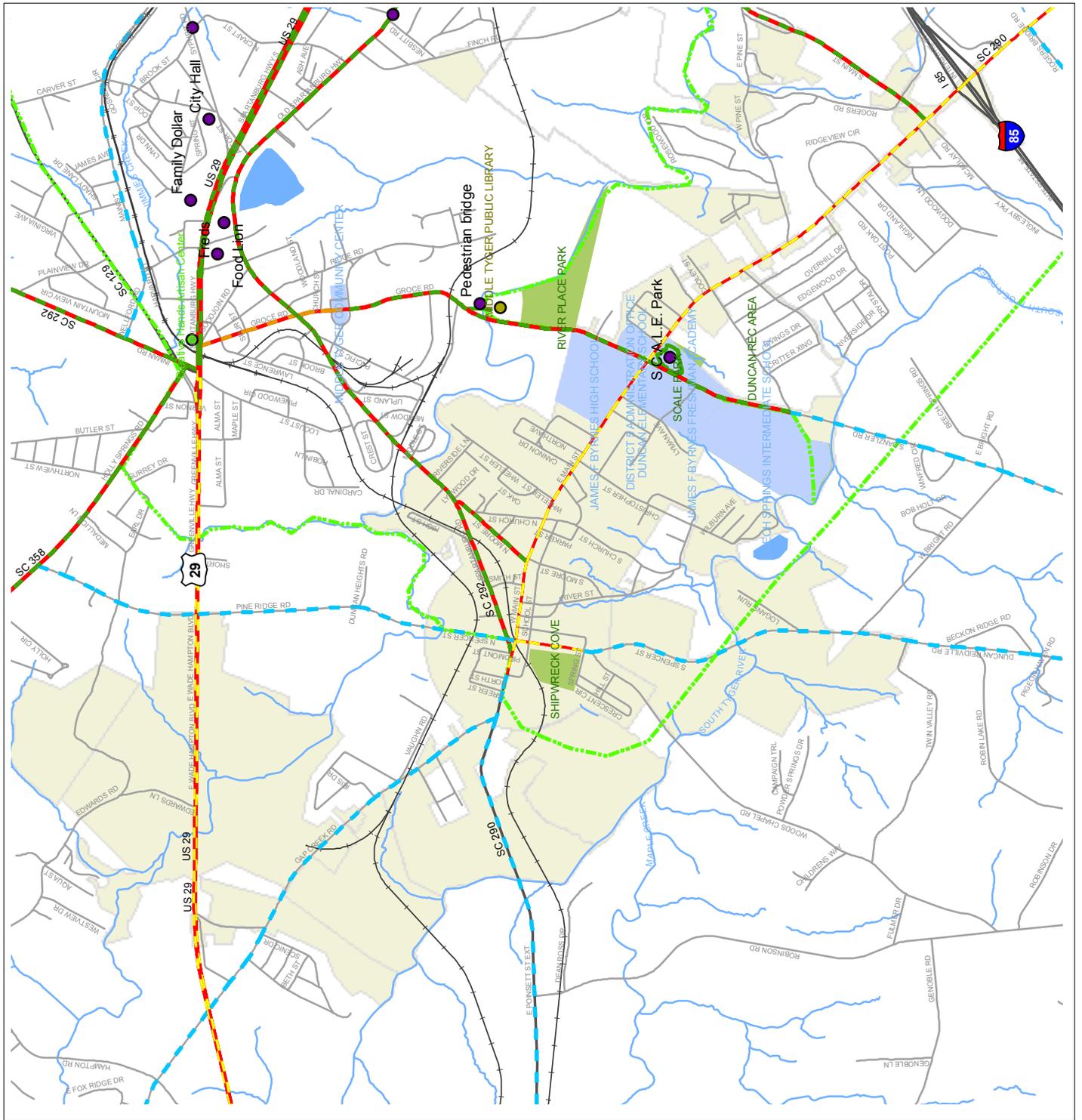
Below: A photo visualization of pedestrian improvements. (Note: As of late 2009, this crosswalk is being considered for the other entrance to SCALE; image below serves as a conceptual example only).



The intersection of SC 290 and SC 296 is very dangerous for pedestrians. Wide turning radii and long crossing distances make it difficult to navigate for pedestrians. Reducing the curb radius, adding a median refuge island, making the crosswalk more visible, and improving the pork chop island would improve this intersection dramatically.



MAP 6.24 DUNCAN BICYCLE RECOMMENDATIONS



Legend

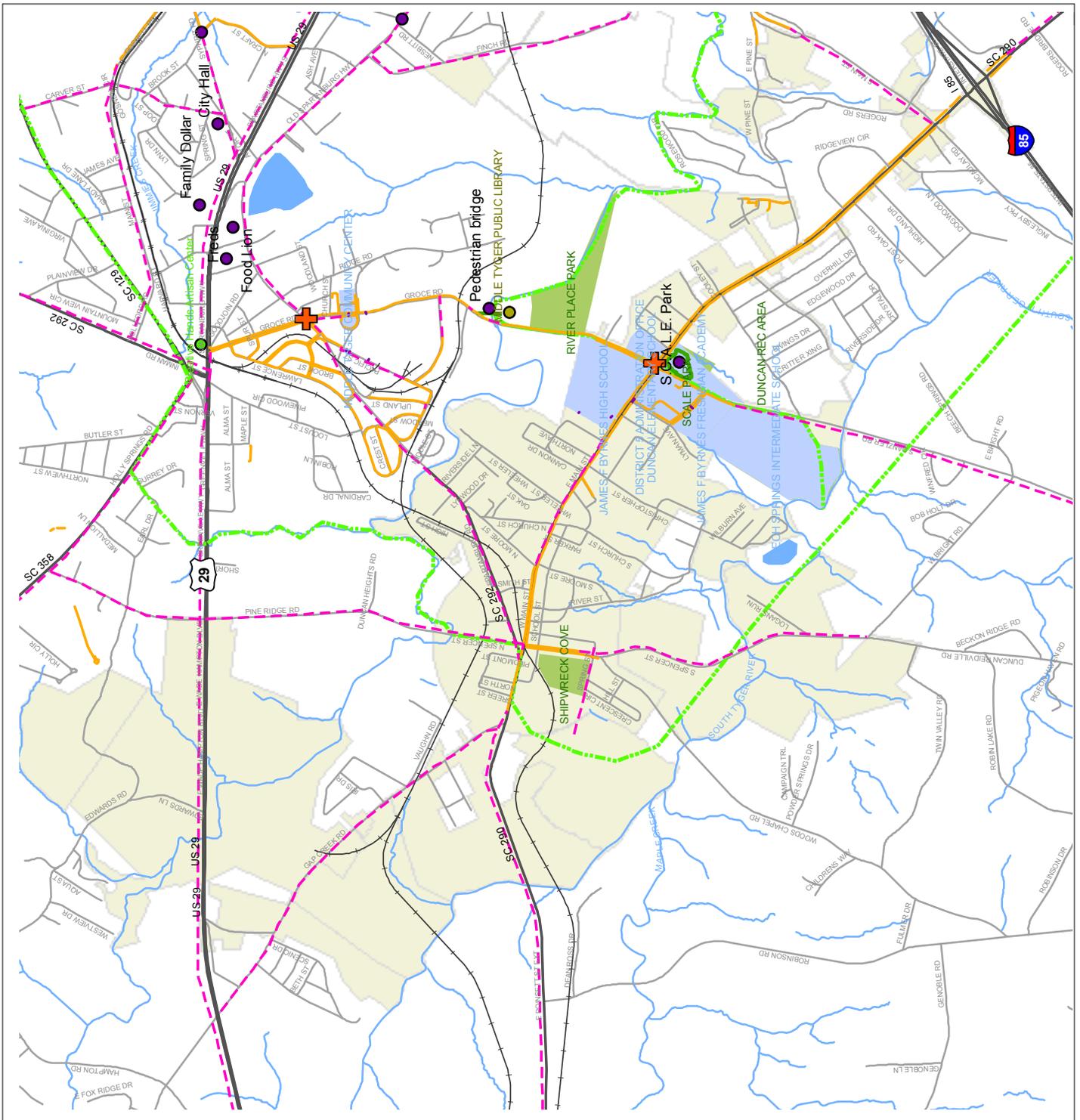
- Cultural Tourism
- Libraries
- Destinations

Recommended Bicycle Facilities

- Bike Lane, Restripe
- Bike Lane, New Const
- Paved Shoulder, New Const
- Road
- - - Existing Trails
- - - Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

MAP 6.25 DUNCAN PEDESTRIAN RECOMMENDATIONS



Legend

- Intersection Improvements
- Cultural Tourism
- Libraries
- Destinations

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

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GREER

KEY DESTINATIONS

- City Hall and Park
- Downtown
- Riverside High, Riverside Middle, Woodland Elementary
- Greer High and Middle Schools
- Lake Cunningham, Lake Robinson, Lake Lyman
- City parks
- Greer Campus of the Greenville Hospital System
- Old Victor Mill site

KEY ISSUES

- New City Hall and City Park with numerous attractions will draw increasing pedestrian traffic and need for bike/ped facilities. Currently, there is no bike parking at the park.
- Lack of connectivity throughout Greer. Key connections, sometimes short ones, are needed.
- The intersection of SC-101 and SC-290 is a priority (with two railroad tracks) because a lack of pedestrian facilities here creates a barrier into the downtown area.
- Old Victor Mill revitalization will need bike/ped improvements for connectivity.
- Pelham Street is main artery for future revitalization. Overall pedestrian environment could use improvement.
- Improve connectivity to new medical campuses.

PRIORITY PROJECTS

1. Sidewalks along Sunnyside Dr. Collector sidewalks in the lower to medium income area along the east side of Sunnyside Drive are needed.
2. Connect to City Park via Church Street. There is a need for connector sidewalks from proposed Sunnyside Dr sidewalk to the new City Park. Oak St sidewalk is an alternative and would provide sidewalk access from multifamily housing and neighborhood's Edwards Park.
3. Sidewalk from old Victor Mill village. Need to connect old mill village with Poinsett Ave to access downtown area and City Park.

PRIORITY INTERSECTION

Poinsett Street and Line Street

- Sidewalk needed on one side of Line and one side of Poinsett.
- Stripe new high-visibility crosswalks.
- Reposition new advanced stop lines.
- Re-construct new curb ramps and increase holding area.
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian crossing signs (in Line St. medians).



Above: City Park



Above: Downtown Greer



Above: Sunnyside Drive



Above: Pelham Street

INSET MAP: GREER



Above: existing conditions at Poinsett Street & Line Street.

Below: A photo visualization of pedestrian improvements.



MAP 6.14 GREER BICYCLE RECOMMENDATIONS



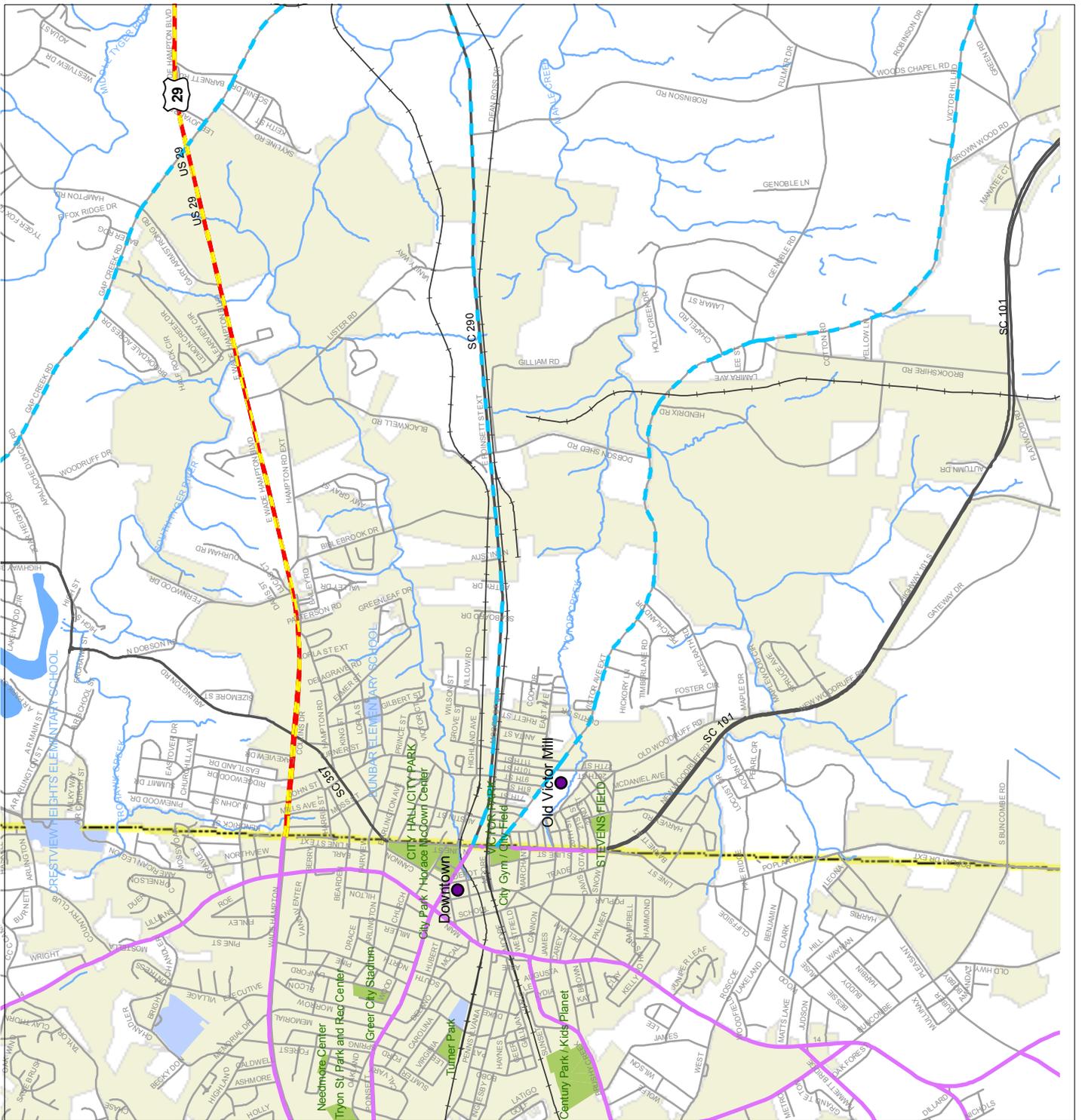
Legend

- Cultural Tourism
- Various Destinations
- Libraries
- Destinations
- GPATS Bike Plan

Recommended Bicycle Facilities

- Bike Lane, Restripe
- Paved Shoulder, New Const
- Road
- Existing Trails
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS, GPATS



INMAN

KEY DESTINATIONS

- Chapman High School
- Mabry Middle School
- Inman Intermediate School
- Downtown
- Inman Health and Fitness
- Farmer's Market

KEY ISSUES

- Need bicycle and pedestrian connections to its schools.
- Developed an "Inman Trail" plan with five links.
- Compton Bridge Rd. is dangerous to Chapman High School (no sidewalk, but children walk to school).
- Many walkers/runners along Main Street.
- Need wide facilities to accommodate multiple user types.
- Connection to Palmetto Trail.

PRIORITY PROJECTS

1. "School Link" of Inman Trail. This project runs along a former railroad bed. The tracks have been removed but right-of-way has reverted back to adjacent landowners. Acquisition or easement will be necessary. This link would be a shared-use trail and serve as a Safe Route to Schools.
2. "North Main Link" of Inman Trail. This project runs beside the existing railroad, connecting Downtown.
3. Connection to Chapman High School. Compton Bridge Road is very dangerous for pedestrians and bicyclists. A safe connection is needed from residential areas and Downtown to the high school.

PRIORITY INTERSECTION

US 176 (Asheville Highway) and SC 292 (S. Main Street/Lyman Road).

- Sidewalk needed on one side of Lyman Road. Other side needs maintenance
- Stripe new high-visibility crosswalks.
- Reconstruct existing curb ramps.
- Provide median refuge islands.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian crossing signs.
- Ensure existing countdown signals are functioning properly.



Above: Mabry Middle School



Above: Downtown Inman



Above: Chapman Rd

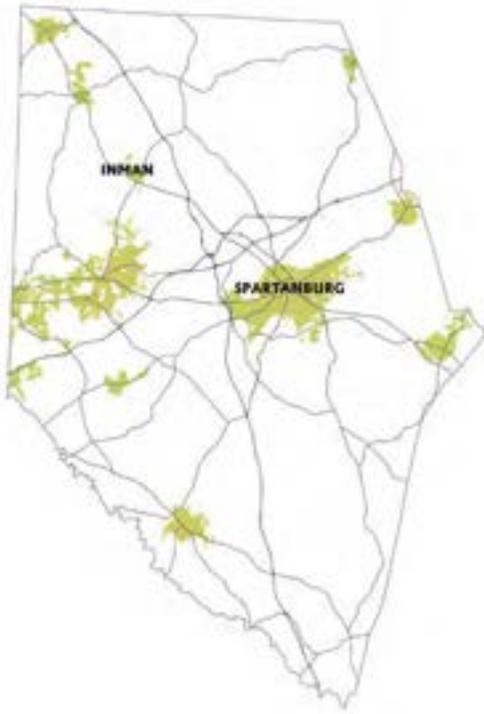


Above: Downtown: 'North Main Link'



Above: Intersection of US 176 & SC 292

INSET MAP: INMAN



Above: existing conditions on Park Road.

Below: A photo visualization of a future rail-trail to Inman Mills along Park Road (also connecting to Mabry Middle School).

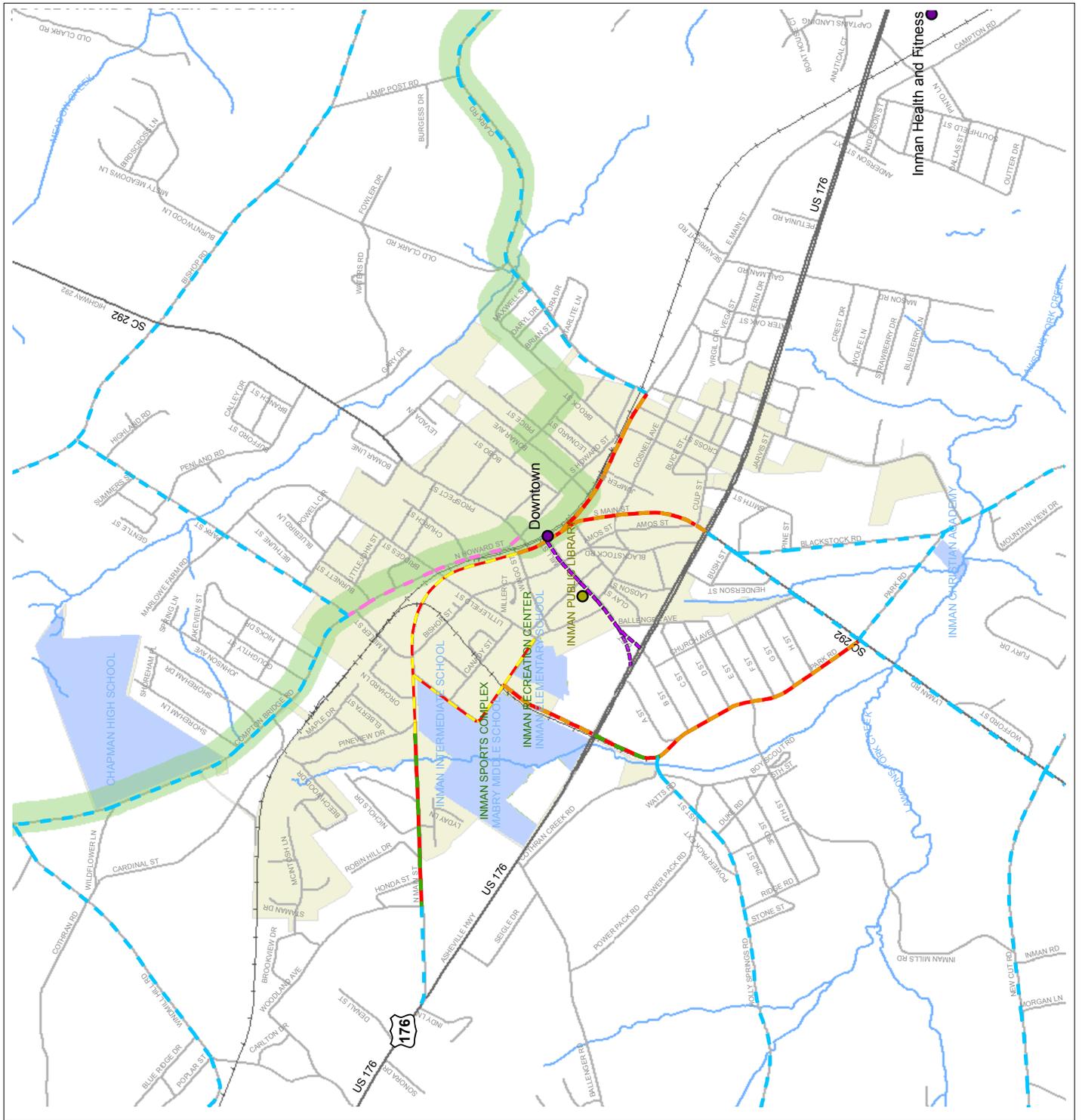


MAP 6.2 INMAN BICYCLE RECOMMENDATIONS

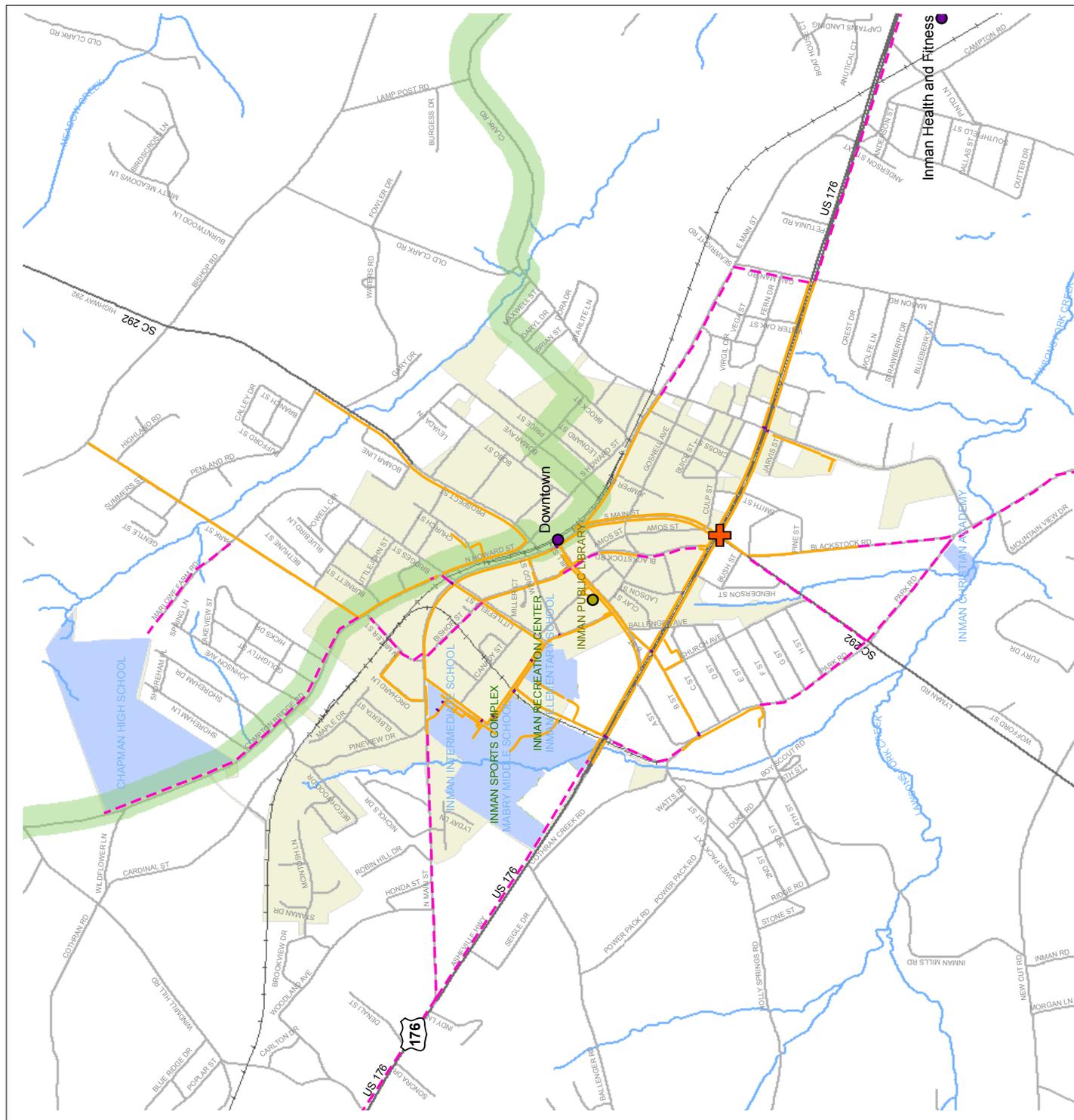


Legend	
	Cultural Tourism
	Various Destinations
	Libraries
	Destinations
Recommended Bicycle Facilities	
	Bike Lane, Stripe
	Bike Lane, Restripe
	Bike Lane, New Const
	Sharrow, Stripe
	Side Path, New Const
	Paved Shoulder, New Const
	Road
	Existing Trails
	Future Palmetto Trail
	Enhancement Plan Rec. Trails
	Rail Road
	Streams and Lakes
	Schools
	Parks
	Water
	County Boundary

Data Source: SPATS



MAP 6.3 INMAN PEDESTRIAN RECOMMENDATIONS



Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- Future Palmetto Trail
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

LANDRUM

KEY DESTINATIONS

- Ingles and BI-LO shopping centers
- Library
- Downtown
- Brookwood Park
- F.E.N.C.E. (Foothills Equestrian Nature Center)
- Polk County/Town of Tryon, NC
- Blue Wall Passage of the Palmetto Trail
- Schools and new high school
- New Cut Road Park (future)

KEY ISSUES

- Sidewalks need to be extended in places to connect key destinations.
- Downtown accessibility is issue with triple curb (steps).
- Existing sidewalks near S. Lyles Ave. require rehabilitation.
- Lighting of sidewalks near BI-LO is needed.
- US 176 between city limits and Greenwood Road sees heavy bicyclist use.
- New Cut Road also sees heavy bicyclist use and could use a facility.

PRIORITY PROJECTS

1. Sidewalks flanking Brookwood Park. A sidewalk is needed for access to Brookwood Park, along the south side of E. Brookwood Dr. and east side of S. Bomar Ave.
2. Rails to Trails. A creative reuse project for railroad right-of-way is desired from Greenwood Road to Hulon Howard Rd (near new high school site). This is an opportunity for a multi-purpose trail.
3. New bike lane towards Tryon, NC. There is a need for safer bike access along US 176 north towards Tryon, NC. A bike lane/paved shoulder is recommended to the North Carolina line as this is a popular route.
4. Connect with Isothermal Trail Plan
5. Sidewalks should be extended to library entrance and from Thrift Circle into Downtown.
6. Accessibility of downtown sidewalks needs improvement.

PRIORITY INTERSECTION

Rutherford Street and Howard Avenue

- Sidewalk needed.
- Re-stripe new high-visibility crosswalks.
- Construct new curb ramps.
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.
- Dismantle overhead railroad lighting system.



Above: Library



Above: Brookwood Park



Above: Downtown Landrum



Above: Rails to Trails



Above: Intersection of Rutherford & Howard

INSET MAP: LANDRUM

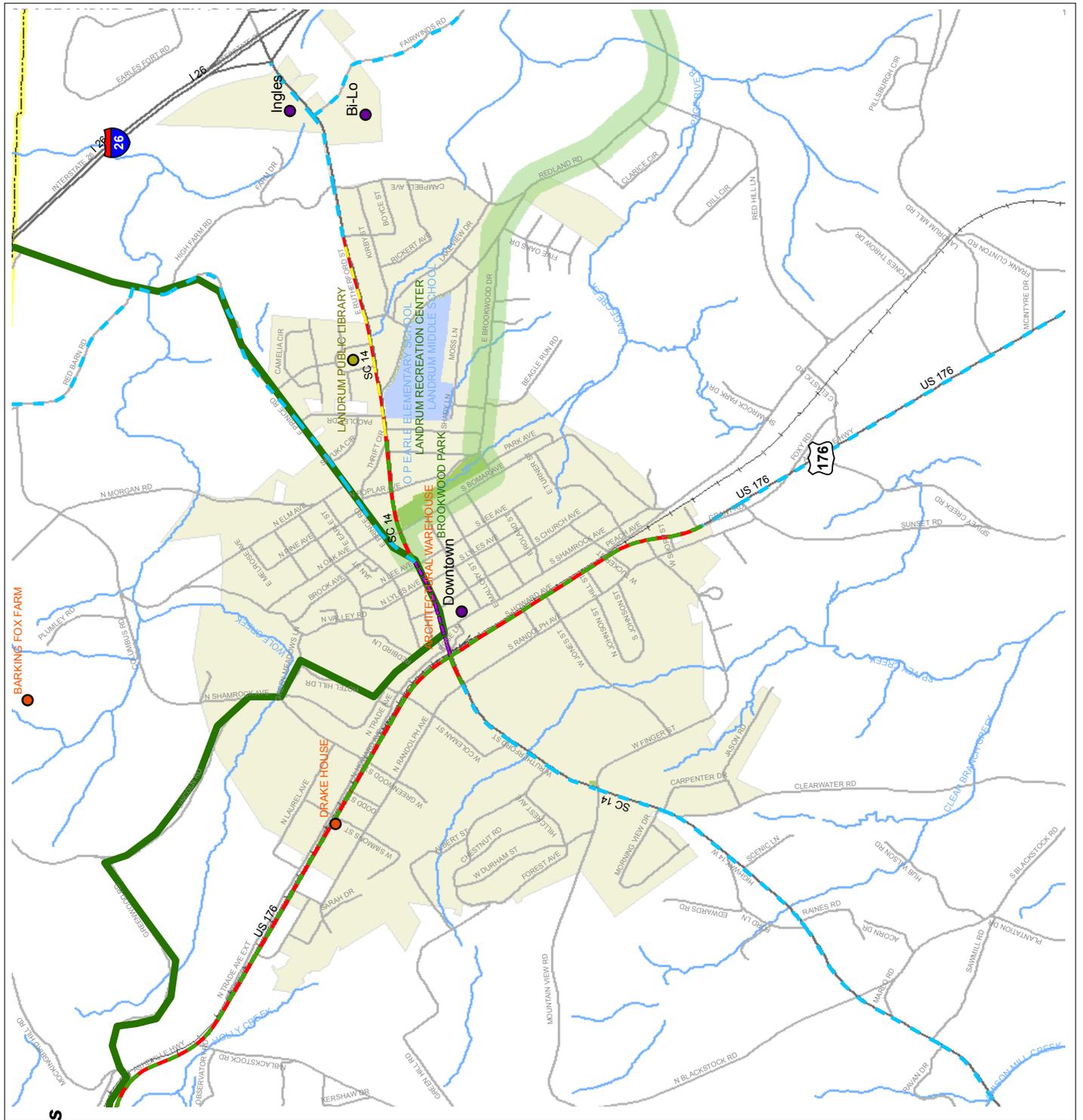


Above: existing conditions along US 176.

Below: A photo visualization of bicycle improvements.



MAP 6.12 LANDRUM BICYCLE RECOMMENDATIONS



Legend

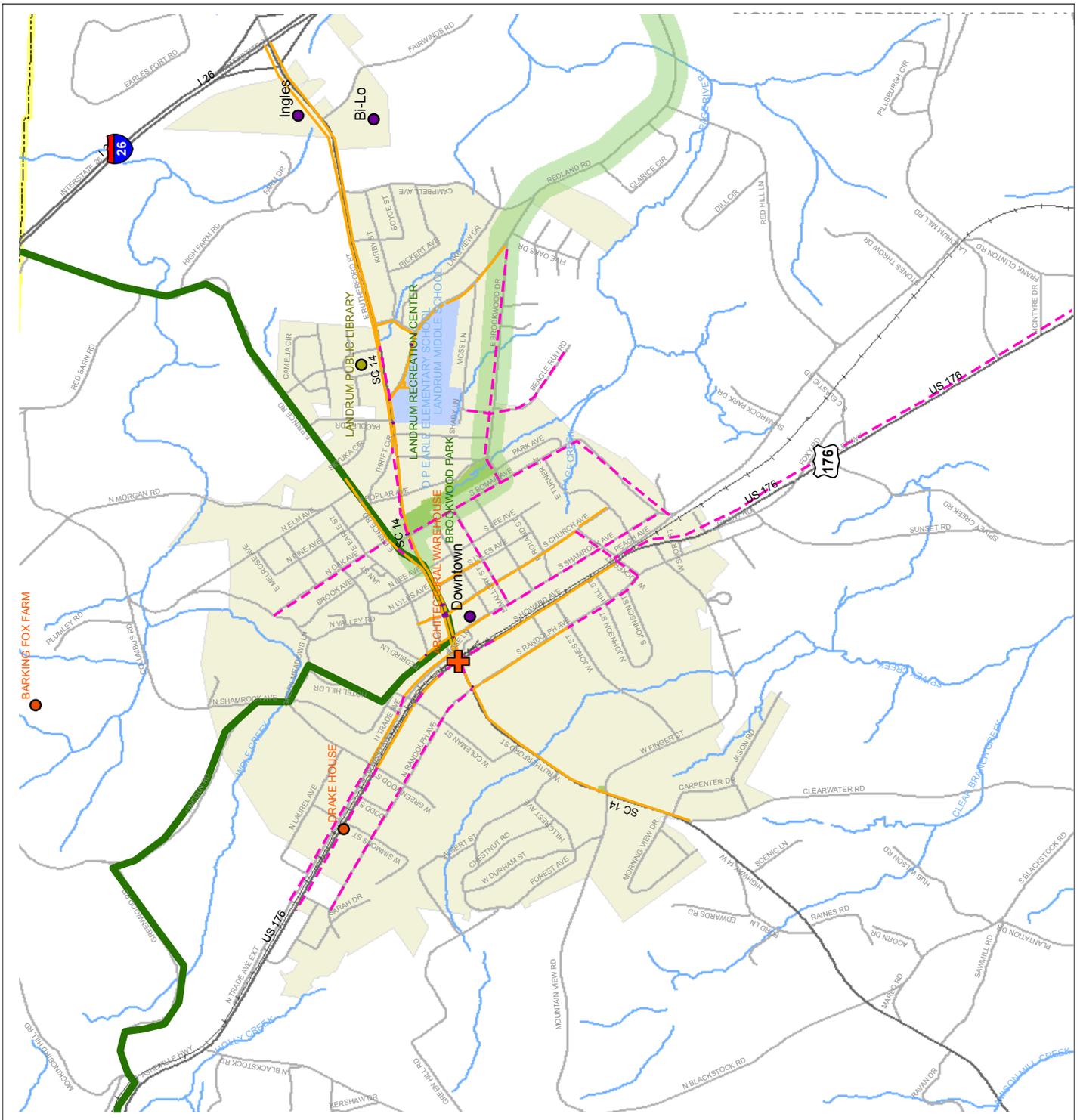
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Bicycle Facilities

- Bike Lane, Restripe
- Bike Lane, New Const
- Sharrow, Stripe
- Paved Shoulder, New Const
- Road
- Existing Trails
- Future Palmetto Trail
- Enhancement Plan Rec. Trails
- Rail Road
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

MAP 6.13 LANDRUM PEDESTRIAN RECOMMENDATIONS



Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- Future Palmetto Trail
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

LYMAN

KEY DESTINATIONS

- Middle Tyger Community Center
- Library and River Place Park
- New pedestrian bridge
- D.R. Middle School and Lyman Elementary School
- S.C.A.L.E. Park
- Duncan and Wellford

KEY ISSUES

- Lack of connectivity throughout Lyman and to surrounding municipalities.
- Many sidewalks in need of repair.
- Crosswalks, but no existing sidewalks along Holly Springs Road (in close proximity to DR Hill Middle and Lyman Elementary).
- Desire to have long distance river trail along Middle Tyger River.
- Concern about safety for trails.
- No bike/ped related policies in place concerning sidewalk or connectivity requirements within new developments.

PRIORITY PROJECTS

1. Bike/Ped route on Holly Springs Rd. The town's #1 priority is the widening of Holly Springs Rd from the new schools to Pine Ridge Rd. A bike lane or paved shoulder AND sidewalks should come as part of this widening to four lanes.
2. Replace mill village sidewalks. Sidewalks in old mill village have been destroyed by tree roots. One option is to remove trees and replace sidewalk. Another option is to retain the trees and realign sidewalk with ROW acquisition.
3. Reuse for old RR right-of-way. The Old Springs/Pacific mill RR tracks weave through the old mill village and provide an opportunity for conversion to multi-use trail.
4. Complete pedestrian bridge and park. Complete bridge approaches with sidewalk or multi-use trail connection to existing sidewalks along Groce Rd. Complete development of River Place Park with multi-use greenway trail along Middle Tyger River.

PRIORITY INTERSECTION

Groce Road and Old Spartanburg Road

- Sidewalk needed on east side of Spartanburg Road.
- Stripe new high-visibility crosswalks.
- Stripe new advanced stop lines.
- Construct new curb ramps.
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian crossing signs.



Above: Middle Tyger Community Center



Above: Library

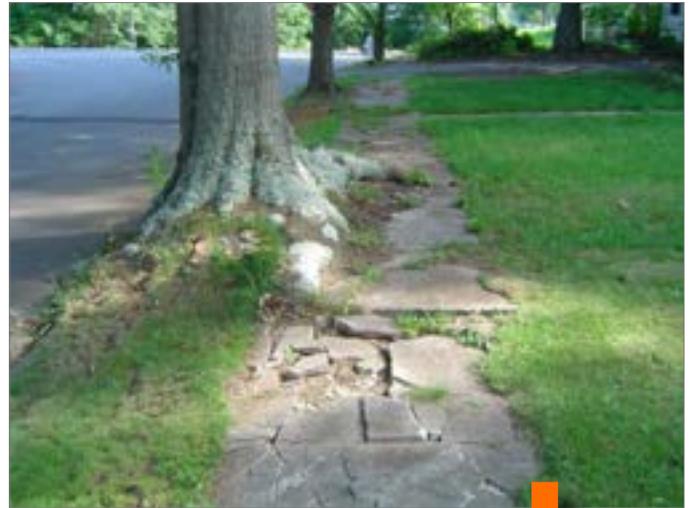


Above: New pedestrian bridge



Above: Old railroad ROW project

INSET MAP: LYMAN

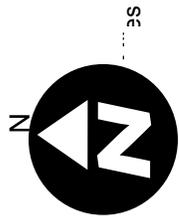
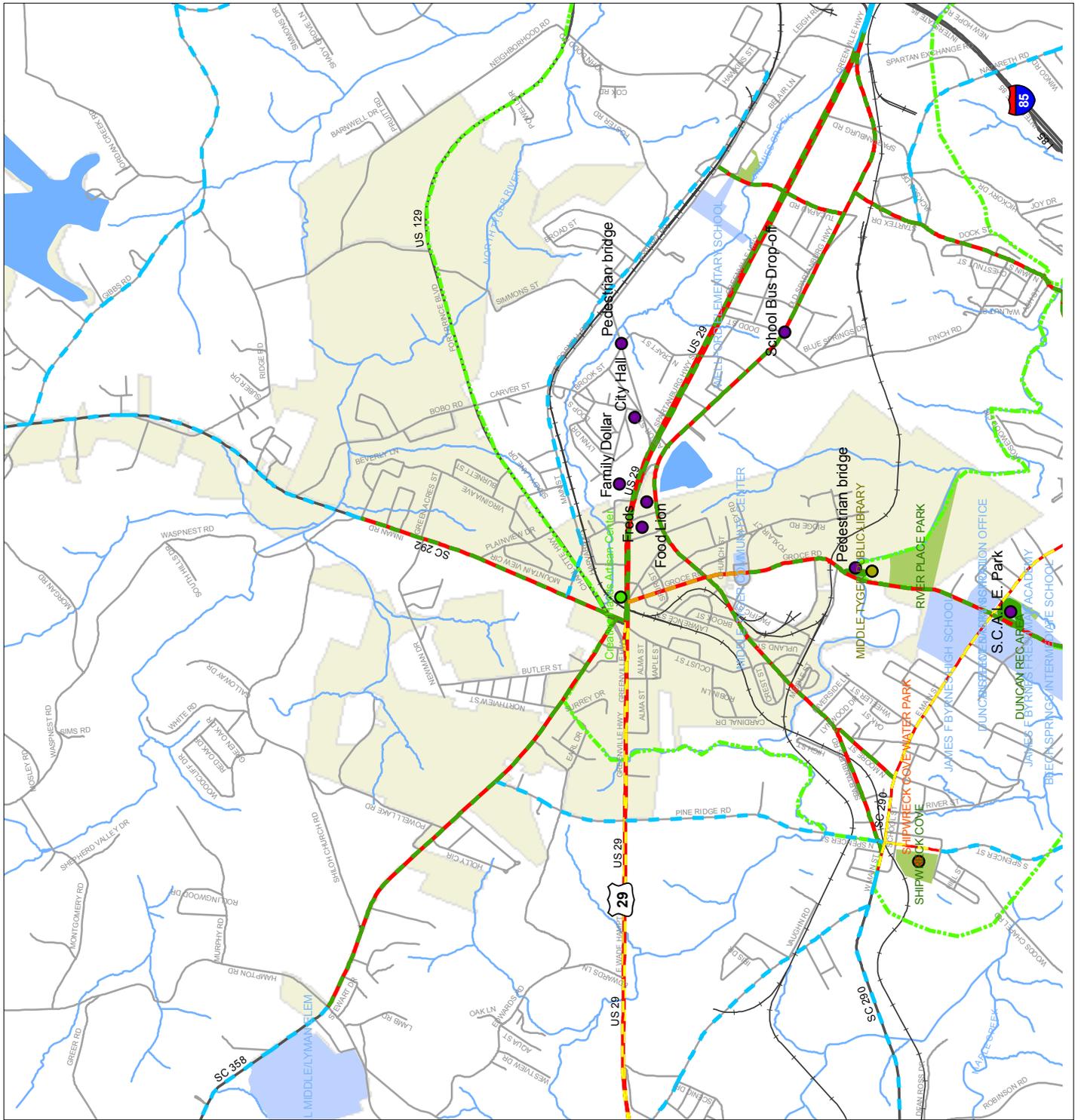


Above: existing conditions at Old Mill Village

Below: A photo visualization of pedestrian improvements.



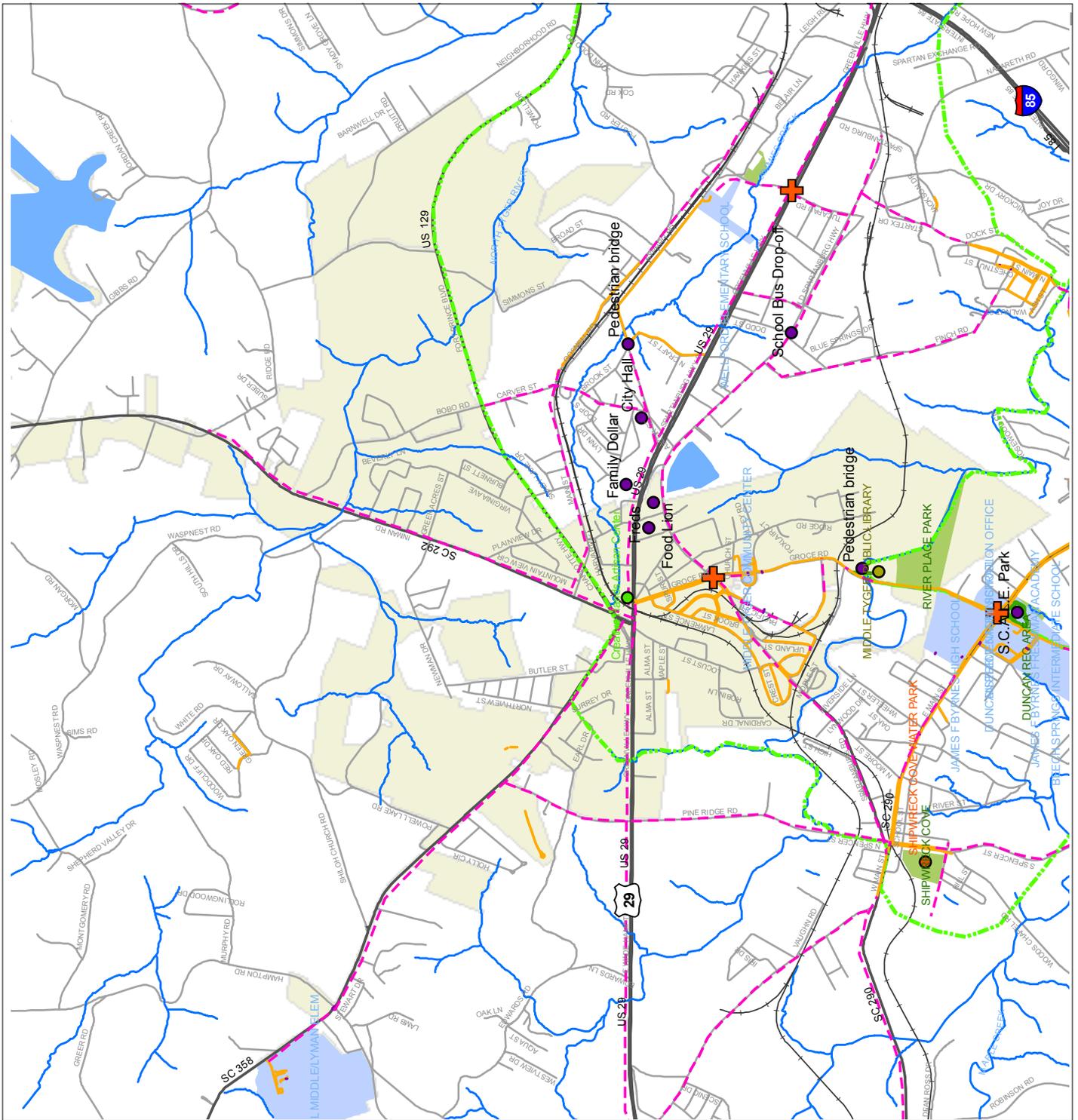
MAP 6.16 LYMAN BICYCLE RECOMMENDATIONS



	Cultural tourism
	Various Destinations
	Libraries
	Destinations
Recommended Bicycle Facilities	
	Bike Lane, Existing
	Bike Lane, Stripe
	Bike Lane, Restripe
	Bike Lane, New Const
	Bike Lane, Road Diet
	Sharrow, Stripe
	Side Path, Existing
	Side Path, New Const
	Signed Route, Signage
	Wide Outside Lane, Restripe
	Paved Shoulder, New Const
	Road
	Existing Trails
	Enhancement Plan Rec. Trails
	Rail Road
	Streams and Lakes
	Schools
	Parks
	Water
	County Boundary

Data Source: SPATS

MAP 6.17 LYMAN PEDESTRIAN RECOMMENDATIONS



Legend

- Cultural Tourism
- Various Destinations
- Libraries
- Destinations
- + Intersection Improvements

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- - - Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

PACOLET

KEY DESTINATIONS

- Historic Town Hall
- T.W. Edwards Center
- Greater Pacolet Park
- Pacolet Nature Trail
- Amphitheatre & Opry House
- Schools, Library, Churches
- Pacolet Area Sports Complex
- Pacolet Area Museum
- Victor Park (Festival Site)
- Pacolet River
- Pacolet Historic Mill District
- Vulcan Quarry
- Pacolet Heritage Preserve & Grindal Shoals

KEY ISSUES

- Want awareness that Pacolet is accessible to bicyclists and pedestrians
- Concern about drainage grate and railroad crossing bicycle hazards
- Sidewalk in disrepair at Montgomery Avenue.
- Desire a number of crosswalk linkages.
- Need sidewalks along key roadway corridors.
- Need bike parking at museum
- Need pedestrian crossing of railroad at Church Street and W. Main Street
- Extension of Hillbrook Circle sidewalk

PRIORITY PROJECTS

1. Removal of bike hazard at Main/Vulcan/Railroad. Pavement and railroad tracks are uneven creating a hazardous condition for cyclists (reported injuries and damage). This should be corrected by creating an even, smooth surface.
2. Connection between Pacolet Trail and Amphitheater. This connection is needed across Sunny Acres Road to Amphitheater. Currently it is an unsafe crossing conditions with a blind curve. A high-visibility crosswalk, curb ramps, high-visibility pedestrian crossing signs (with lights), pedestrian bridge, and speed limit reduction should be considered.
3. Church Street Pedestrian railroad crossing. A sidewalk is needed with appropriate safety equipment and pavement markings.
4. Maintenance of sidewalks on Montgomery Ave. Sidewalks are cracked w/ plant material in sidewalks, curbs, and gutters. There is severe drop-off from sidewalk to gutter.

PRIORITY INTERSECTION

SC 9 and Hillbrook Circle/Church Street

- Sidewalk needed on east side of Church Street
- Fix minor drainage issues at existing curb ramps.
- Add pedestrian countdown signals.
- Provide in-roadway pedestrian crossing signs.
- These should be updated for pedestrian safety but done so with sensitivity to the historic fabric of stone curbs.



Above: Pacolet Trail



Above: Amphitheatre



Above: Railroad tracks

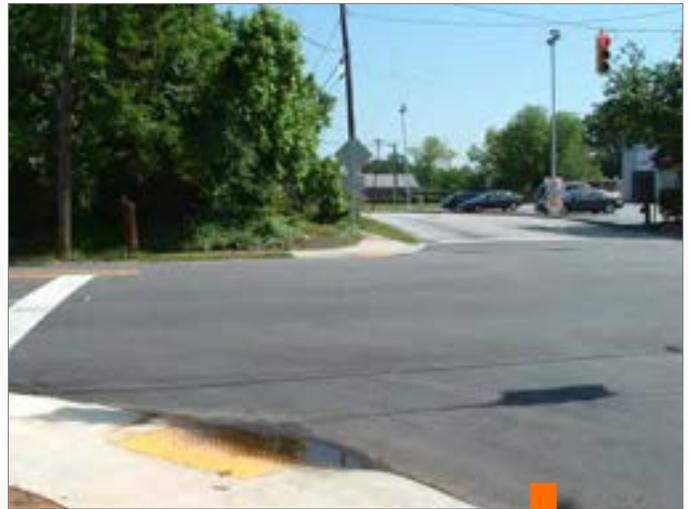


Above: Connection needed between trail and amphitheatre



Above: Sidewalk maintenance needed on Montgomery Ave

INSET MAP: PACOLET

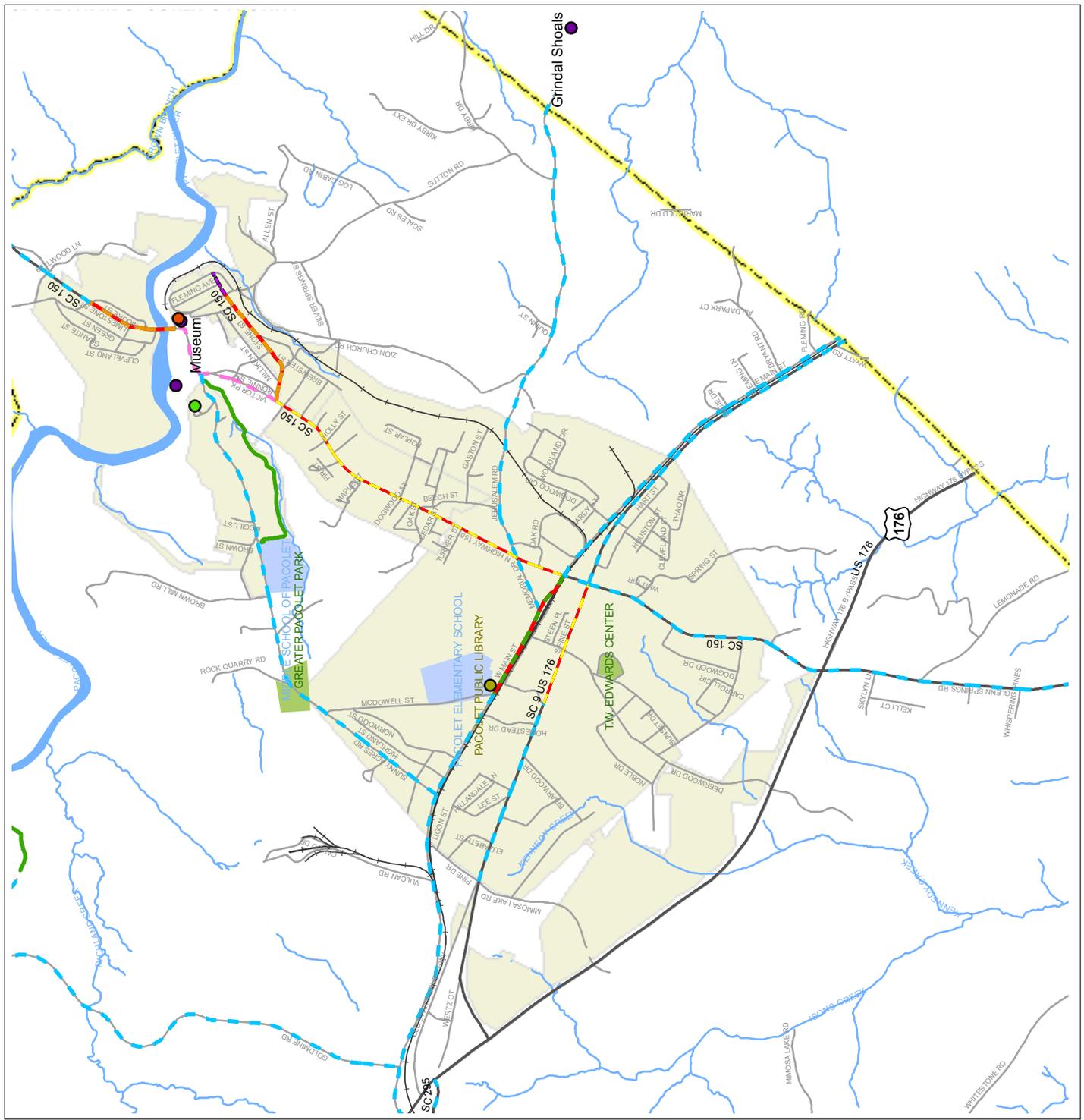


Above: existing conditions on Sunny Acres Road.

Below: A photo visualization of pedestrian crossing improvements.



MAP 6.4 PACOLET BICYCLE RECOMMENDATIONS



Legend

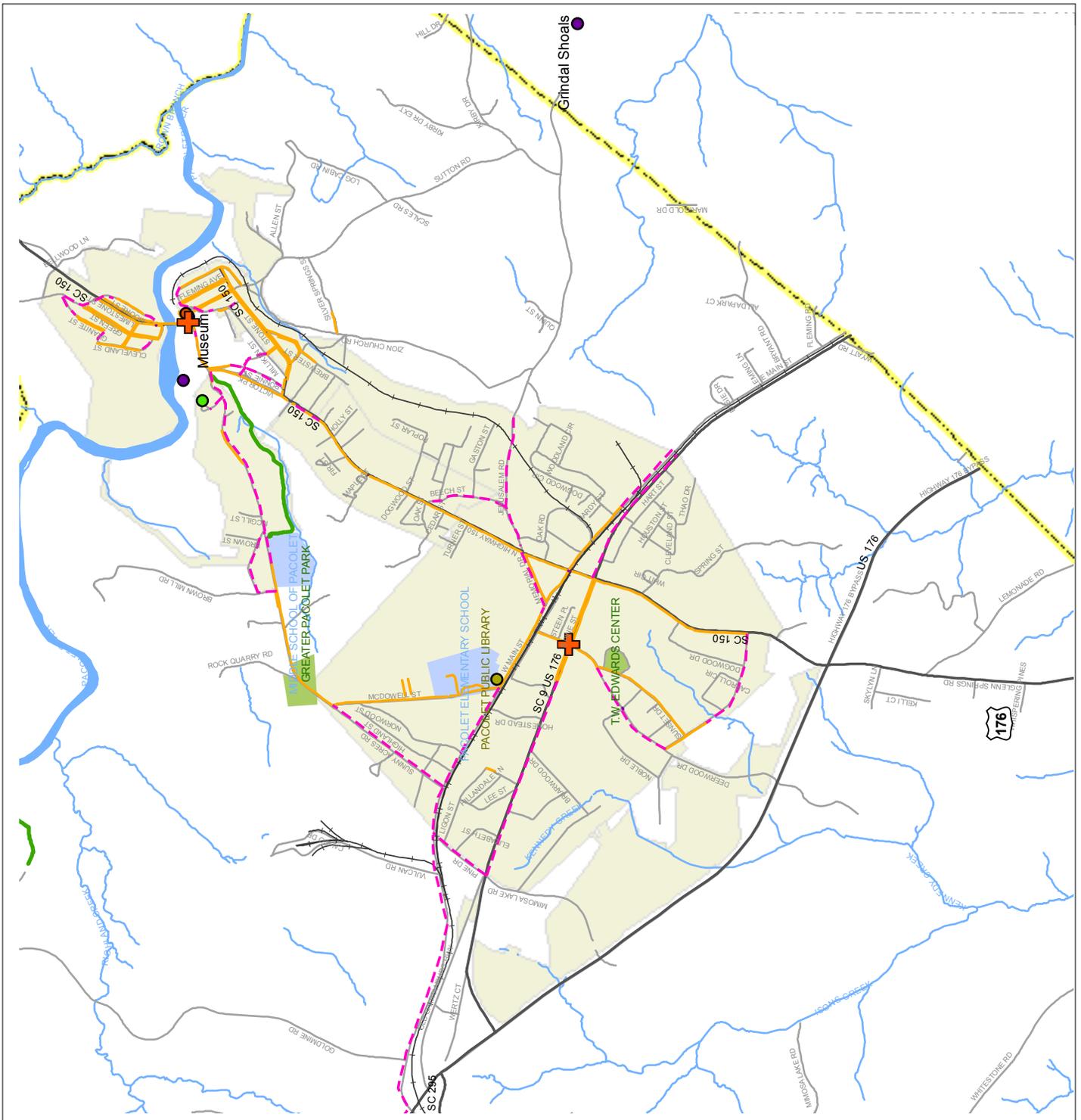
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Bicycle Facilities

- Bike Lane, Stripe
- Bike Lane, Restripe
- Bike Lane, New Const
- Sharrow, Stripe
- Side Path, New Const
- Paved Shoulder, New Const
- Road
- Existing Trails
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

MAP 6.5 PACOLET PEDESTRIAN RECOMMENDATIONS



Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

REIDVILLE

KEY DESTINATIONS

- Reidville Elementary School
- Reidville Academy Park
- Downtown

KEY ISSUES

- Many parents and children walk between residential areas south of Reidville Rd. and the elementary school – sidewalks and safe crossings needed.
- Opportunity to use old Tyger River highway bridge for part of greenway system.
- Lack of connectivity.

PRIORITY PROJECTS

1. Phase II Streetscape on Main Street. This project would extend existing sidewalks, bicycle lanes, lighting between Spring St. and Gaston Dr.
2. Sidewalks on Pine Street.
3. Sidewalk on Reidville Road.

PRIORITY INTERSECTION

Reidville Road and Duncan-Reidville Road/College Street

- Sidewalk needed.
- Make existing crosswalks high-visibility.
- Construct new curb ramps.
- Provide pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.
- Provide in-roadway pedestrian crossing signs.



Above: Reidville Elementary

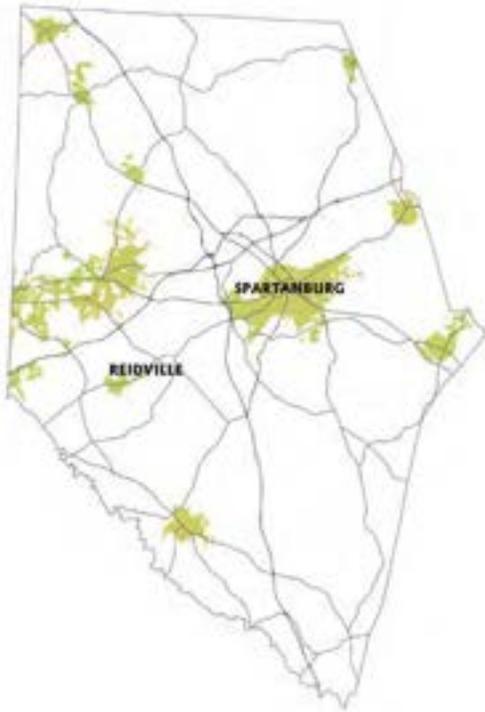


Above: Potential greenway system bridge along the old Tyger River highway



Above: Intersection of SC 9 and Hillbrook Circle/Church St.

INSET MAP: REIDVILLE

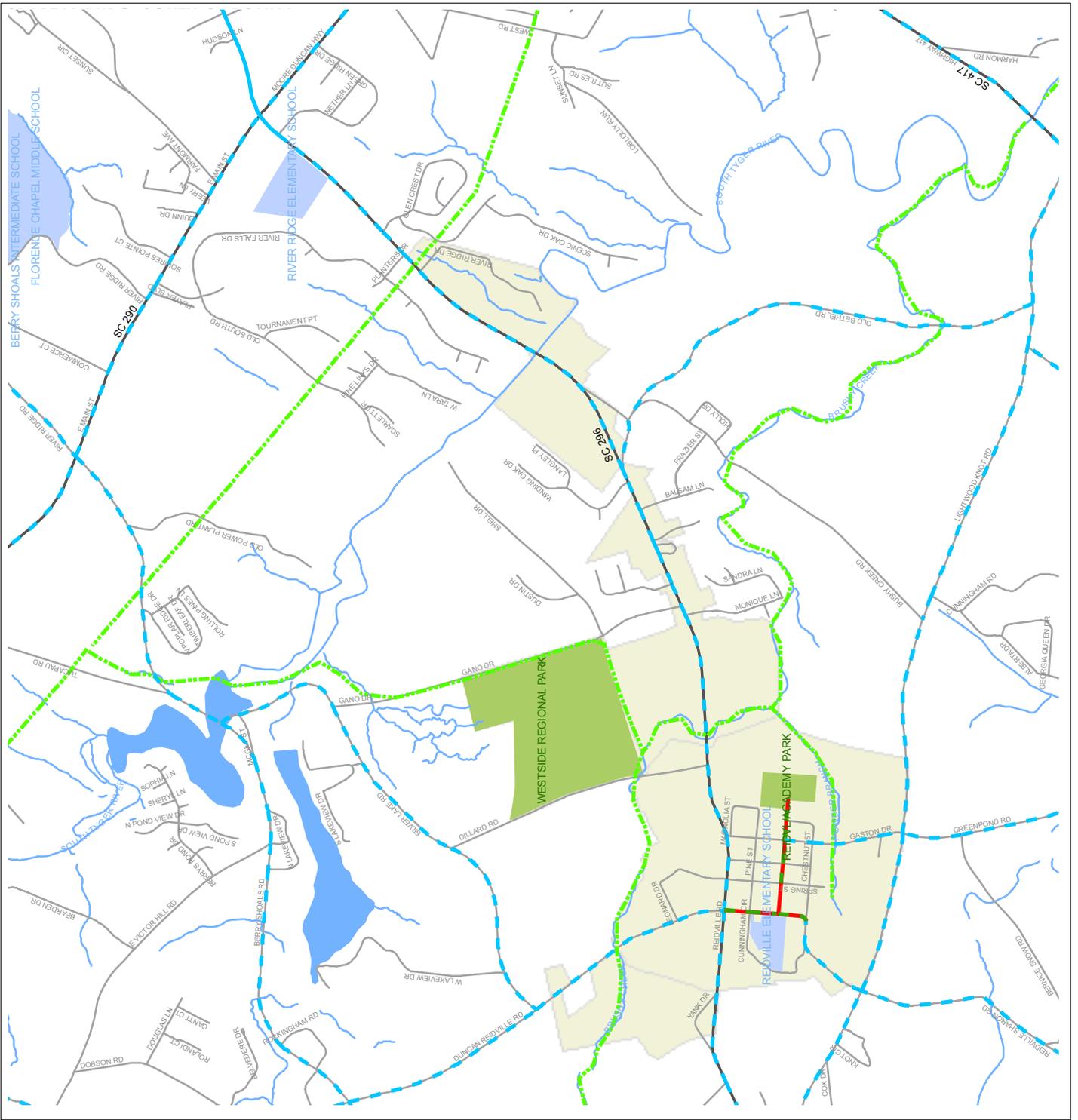


Above: existing conditions along Main Street.

Below: A photo visualization of pedestrian and bicycle improvements.



MAP 6.8 REIDVILLE BICYCLE RECOMMENDATIONS



Legend

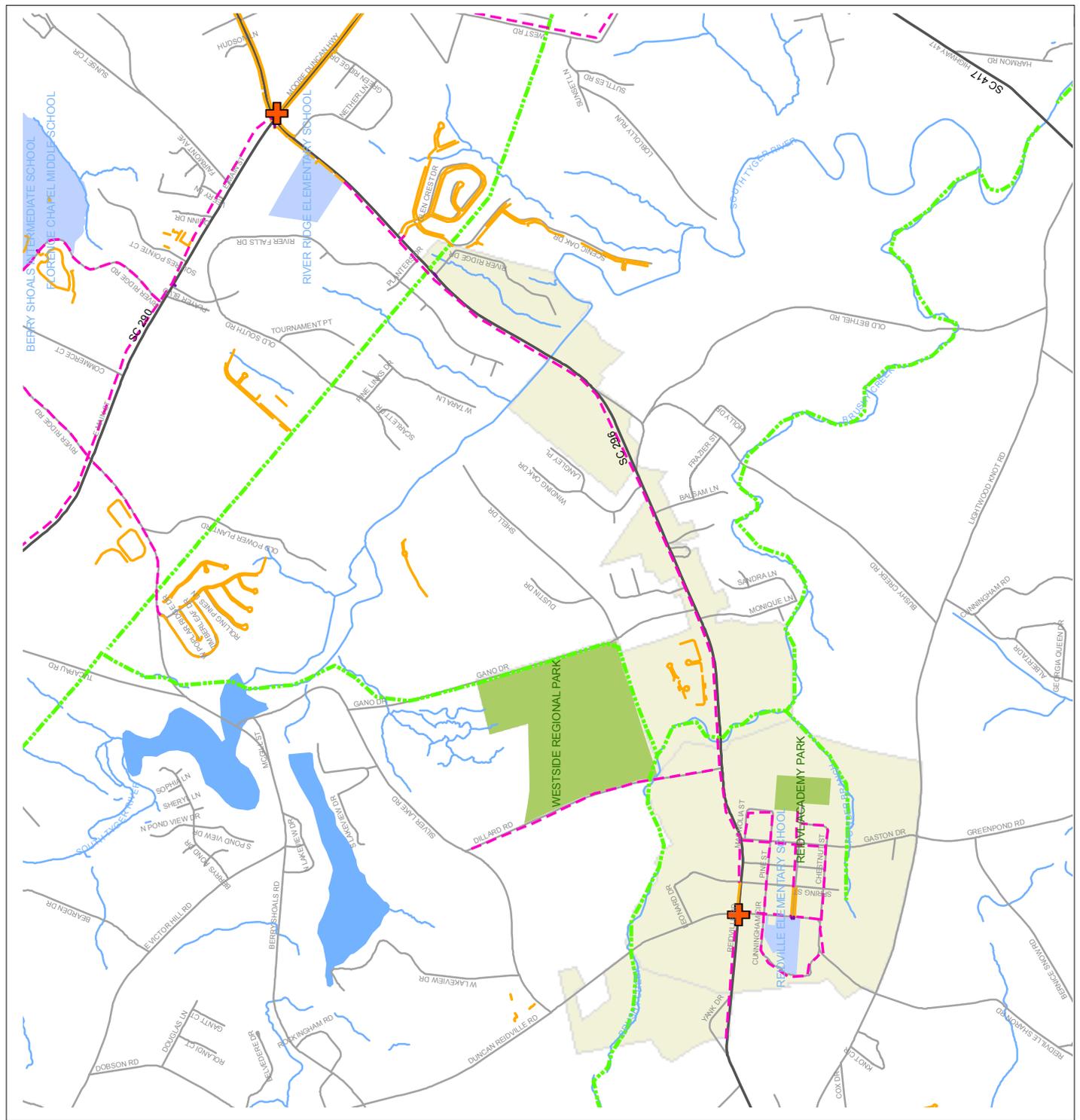
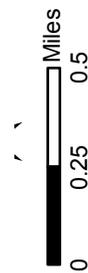
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Bicycle Facilities

- Bike Lane, Existing
- Bike Lane, New Const
- Wide Outside Lane, Restripe
- Paved Shoulder, New Const
- Road
- Enhancement Plan Rec. Trails
- Existing Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

MAP 6.9 REIDVILLE PEDESTRIAN RECOMMENDATIONS



Data Source: SPATS

SPARTANBURG

KEY DESTINATIONS

- Downtown locations (Marriot, Spartanburg Memorial Auditorium, Chapman Cultural Center, Farmer's Market at the Armory, etc.)
- All Colleges & Universities (Wofford College, Converse College, USC Upstate, Spartanburg Tech, etc.)
- All schools (Cleveland Elem., Pine Street Elem., etc.)
- All parks (Duncan Park, Barnet Park, etc.)
- Hospital
- Existing trails (Mary Black Rail-Trail, Cottonwood Trail, etc.)

KEY ISSUES

- Need to fill gaps in existing bicycle and pedestrian facilities.
- Intersection crossings need updated and additional pedestrian treatments.
- More sidewalks needed in lower-income areas.
- Opportunities for on-road bicycle facilities such as bicycle lanes and sharrows with simple striping or re-striping projects
- See Chapters 4-5 for specific issues detailed.

PRIORITY PEDESTRIAN PROJECTS

The top 25 priorities can be found in the maps on pages 88 and 89. The entire prioritization matrix may be found in Appendix B.

PRIORITY BICYCLE PROJECTS

The top 25 priorities can be found in the maps on the following pages. The entire prioritization matrix may be found in Appendix B.

PRIORITY INTERSECTIONS

All intersection crossings throughout the metro Spartanburg area should be examined and updated to include proper high visibility marked crosswalks, countdown signals, curb ramps, and other features depending upon the intersection. Almost 90 important intersections were inventoried with recommendations provided in Chapter 5. All of these are priority projects.



Above: Spartanburg hospital



Above: Bike Worx bike shop



Above: Memorial Auditorium



Above: Mary Wright Elementary



Above: Downtown transit center

INSET MAP: SPARTANBURG



Above: existing conditions on Church Street, on the south side of Downtown Spartanburg.

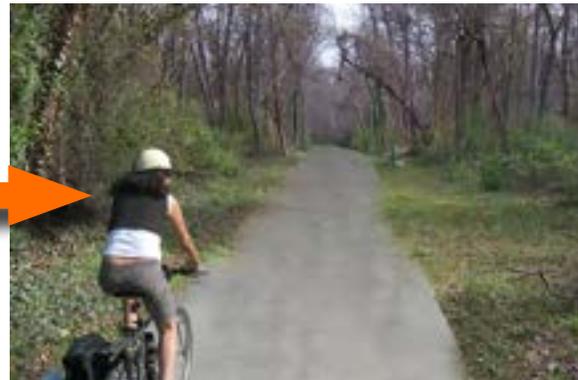
Below: A photo visualization of a midblock crossing that would dramatically improve the crosswalk.





Enough roadway width exists on Collins St. for the simple addition of paint for a bicycle lane.

Placing the sharrow outside the car door zone will protect bicyclists from one of the most common bicycle accidents (here on Spring Street).



A sewer easement off W. Main Street paralleling Vanderbilt Lane provides an excellent opportunity for a multi-use path to accommodate transportation and recreation cyclists.

Enough roadway width exists on S. Converse St. for the addition of a bicycle lane.





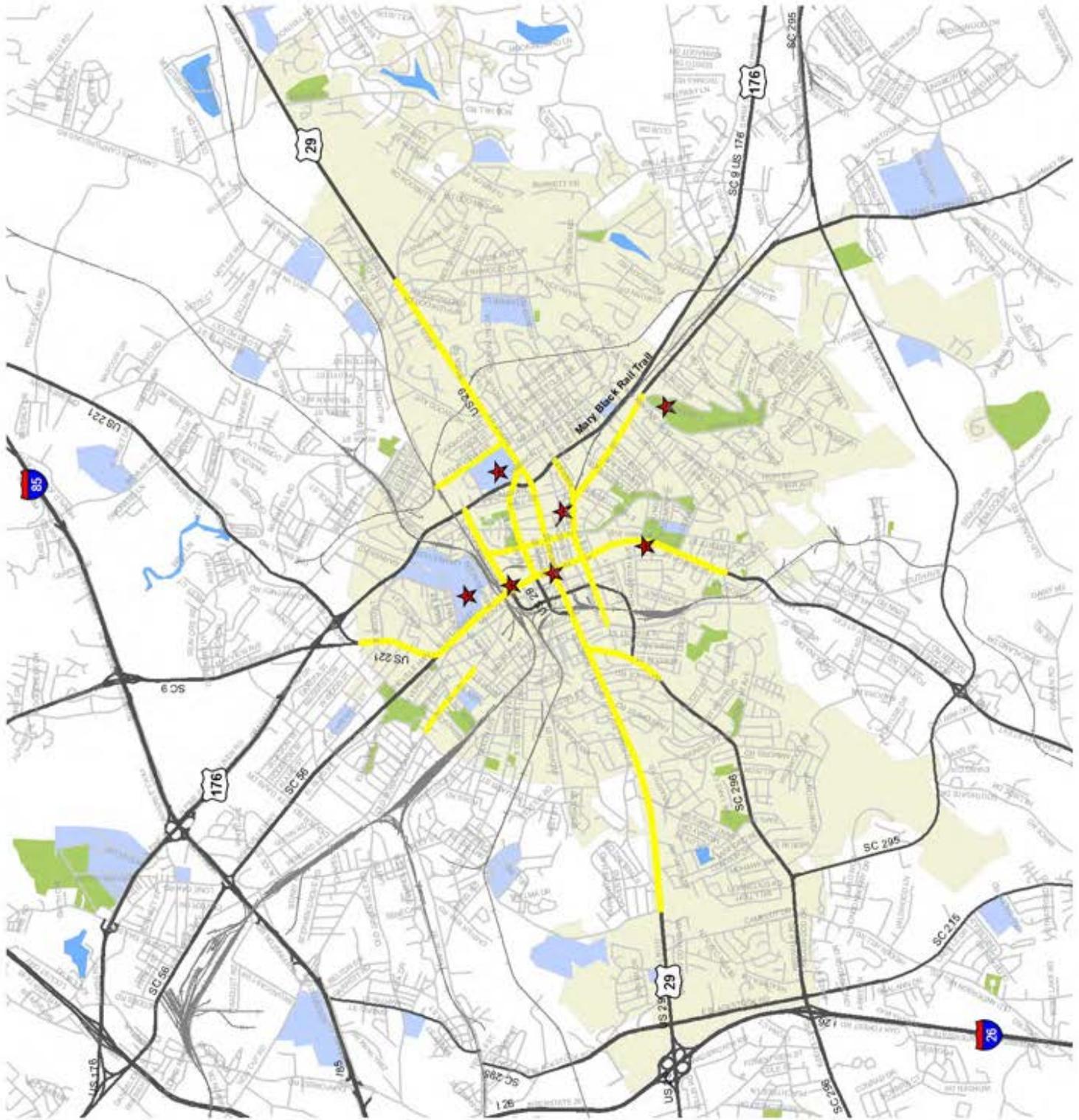
The intersection of Pine St. and Daniel Morgan Avenue currently features pedestrian countdown signals. The addition of a highly-visible marked crosswalks with refuge islands will make this long crossing safer for pedestrians.

Numerous pedestrians were observed along Howard Street. This section provides no separated space for pedestrians. The addition of a sidewalk and the reduction of driveway entrances makes it more hospitable for pedestrians.



Many intersections feature marked crosswalks in need of fresh paint. The addition of curb ramps will make this intersection along Union Street more accessible.

MAP 6.1 CITY OF SPARTANBURG TOP 25 PRIORITY BICYCLE RECOMMENDATIONS

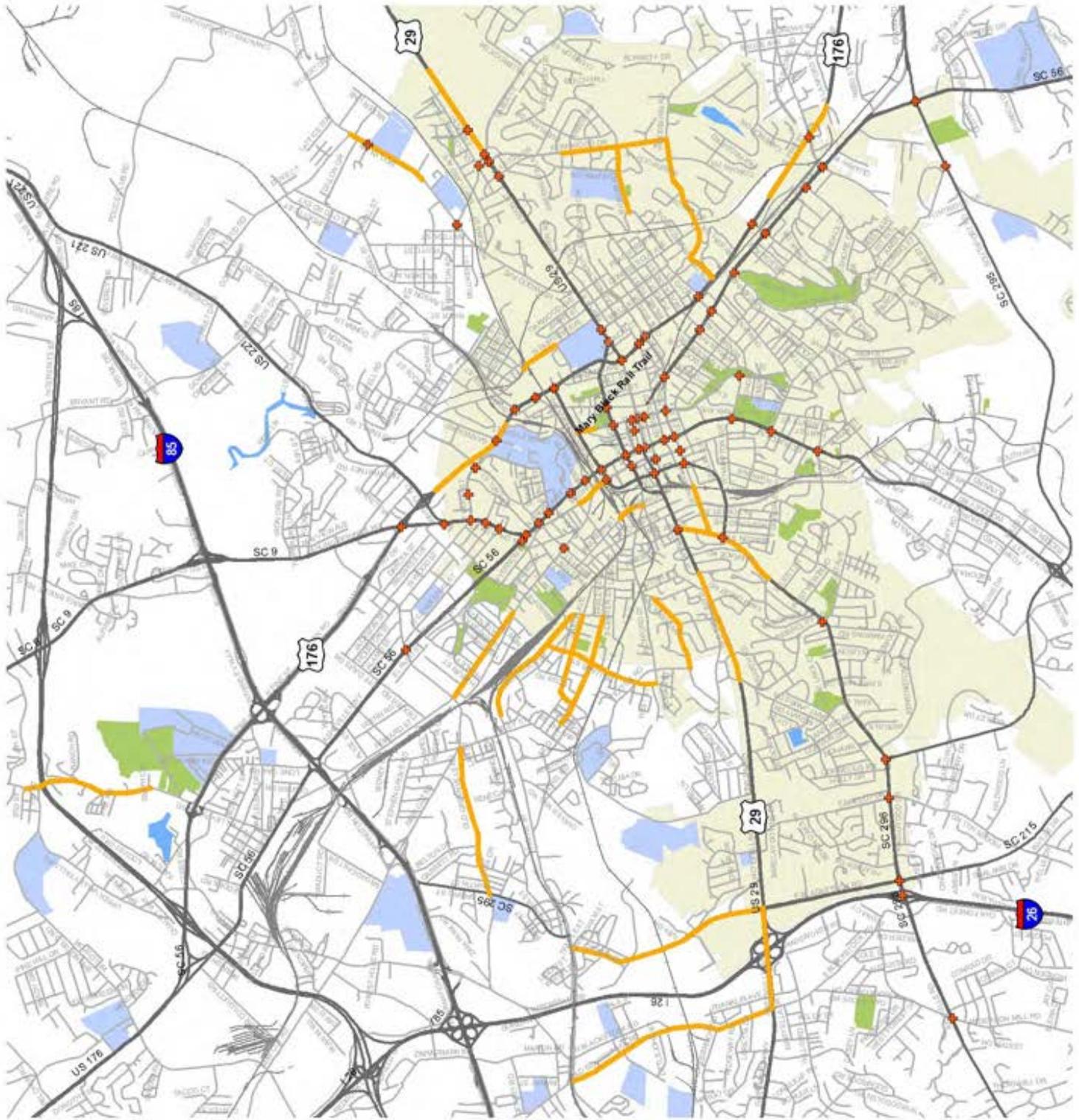


Legend

- Cycle Stations
- Top Priority Bicycle
- Rail Road
- Parks
- Water
- Schools

Data Source: SPATS

MAP 6.2
CITY OF
SPARTANBURG
TOP 25 PRIORITY
PEDESTRIAN
RECOMMENDATIONS



Legend

- Intersection Improvements
- Top Priority Sidewalks
- Rail Road
- Parks
- Water
- Schools

Data Source: SPATS

WELLFORD

KEY DESTINATIONS

- Food Lion shopping center
- Wellford Elementary
- Syphrit Road Pedestrian Bridge
- Lyman and Duncan

KEY ISSUES

- Many residents walk for health and some as a primary mode of transportation.
- Community would prefer shared-use pathways away from roadways where possible.
- Lack of connectivity throughout Wellford and to adjacent towns.
- There are a number of areas of concerns including multiple intersections that need pedestrian treatments.

PRIORITY PROJECTS

1. Pathway connections. Paths or sidewalks are needed along Carver, Syphrit, and Main.
2. Pedestrian connections on Old Spartanburg Hwy. Residential connections are needed to Food Lion, Freds, and Family Dollar.
3. Improvements to School Bus Drop-off at Dodd St. and Old Spartanburg Hwy

PRIORITY INTERSECTION

Tucapau Road and US 29

- Sidewalk needed.
- Stripe new high-visibility crosswalks.
- Construct new curb ramps.
- Construct median refuge islands by modifying existing island.
- Reduce turning radius with curb extensions (potential impact to trucks).
- Add pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.



Above: Food Lion Shopping Center



Above: Syphrit Road Pedestrian Bridge



Above: Old Spartanburg Highway



Above: Main Street

INSET MAP: WELLFORD

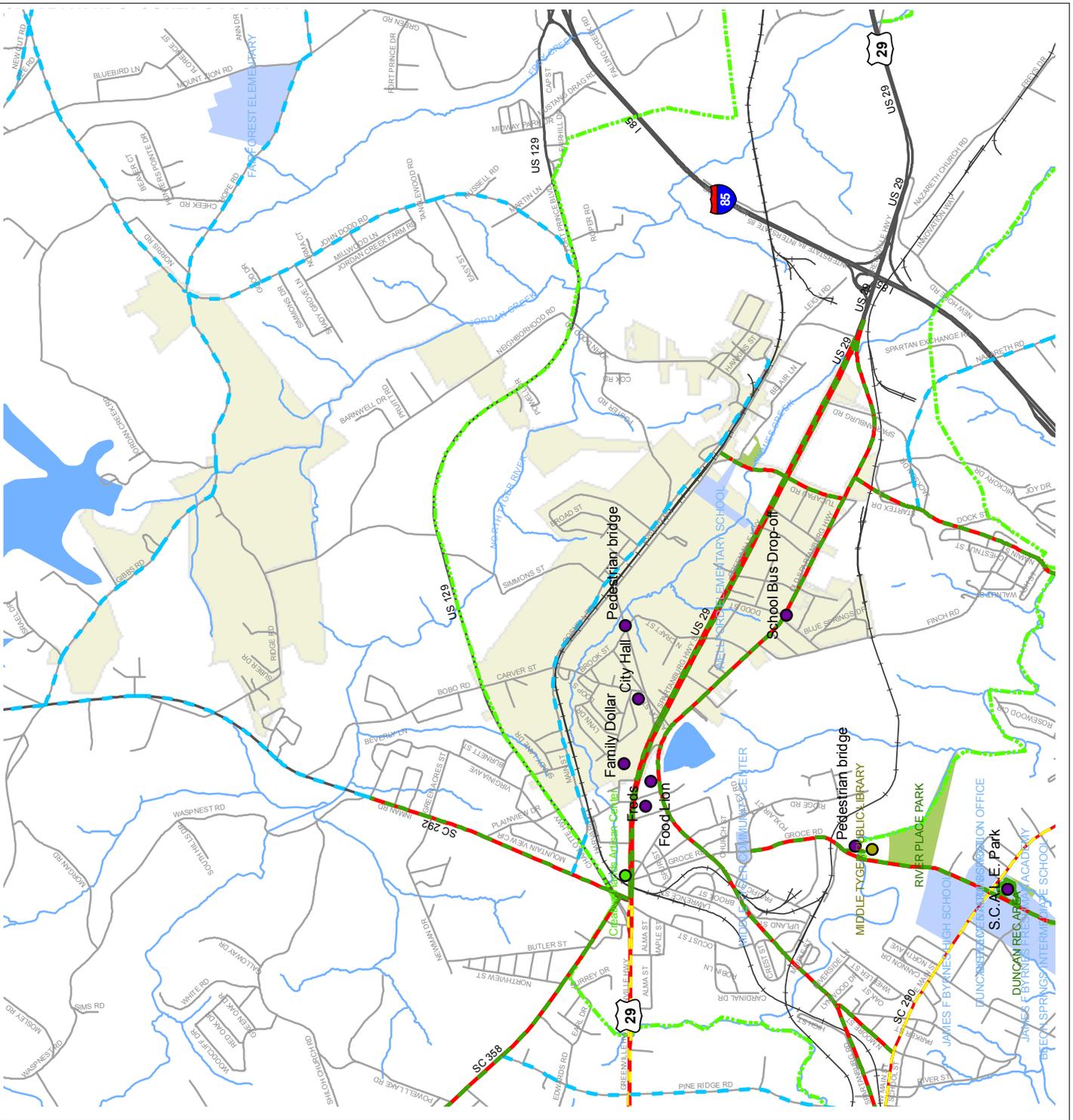


Above: existing conditions at Tucapau Road and US 29.

Below: A photo visualization of pedestrian improvements.



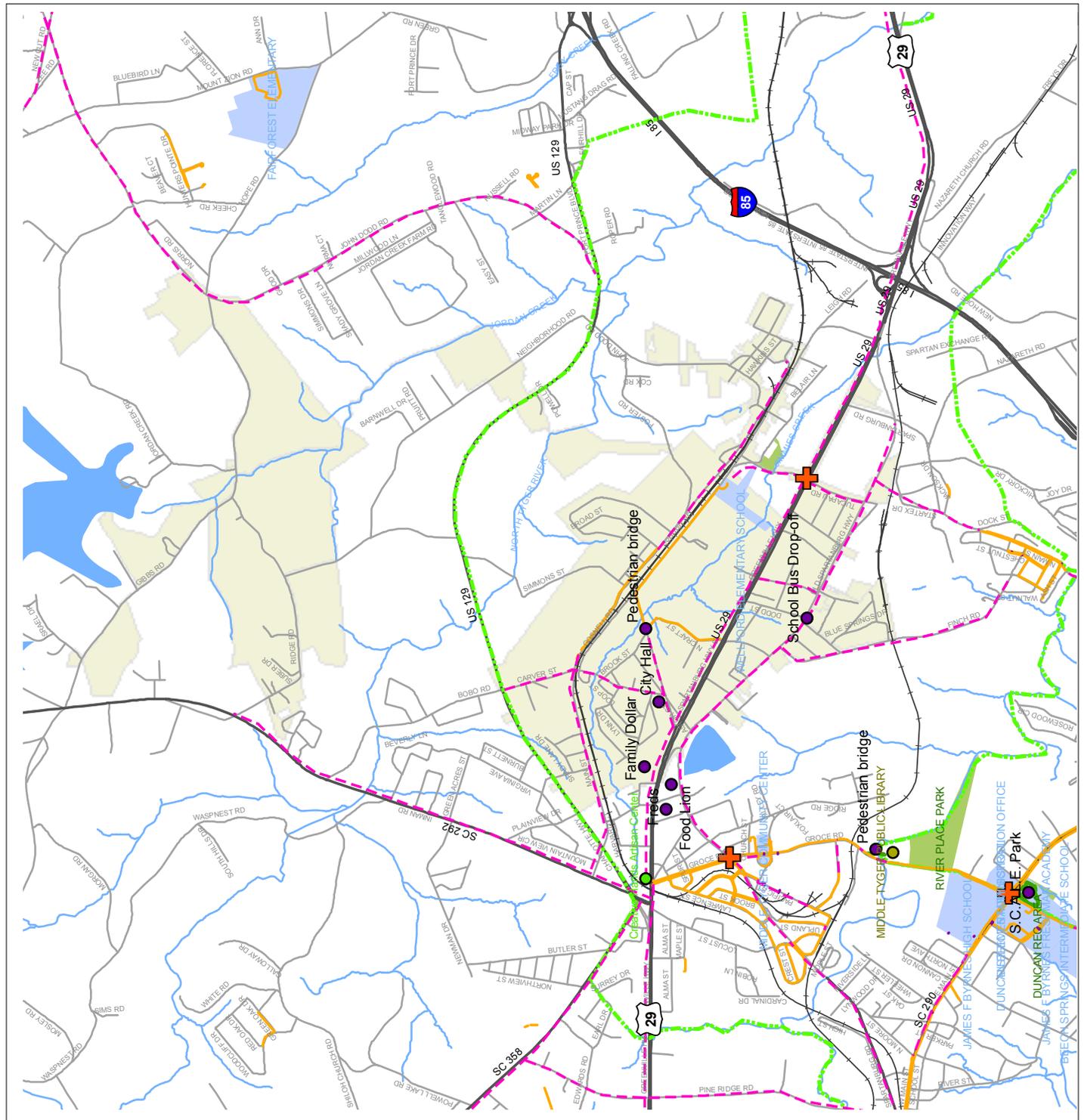
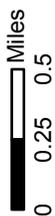
MAP 6.22 WELLFORD BICYCLE RECOMMENDATIONS



Legend	
	Cultural Tourism
	Various Destinations
	Libraries
	Destinations
Recommended Bicycle Facilities	
	Bike Lane, Restripe
	Bike Lane, New Const
	Paved Shoulder, New Const
	Road
	Existing Trails
	Enhancement Plan Rec. Trails
	Rail Road
	Streams and Lakes
	Schools
	Parks
	Water
	County Boundary

Data Source: SPATS

MAP 6.23 WELLFORD PEDESTRIAN RECOMMENDATIONS



Legend

- Intersection Improvements
- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

Recommended Pedestrian Facilities

- Existing Crosswalks
- Existing Sidewalk
- Recommended Sidewalk
- Existing Trails
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS

WOODRUFF

KEY DESTINATIONS

- Woodruff Primary, Elementary and Middle Schools
- Woodruff High School and ballfields
- Maroon and Gold Walking Loops at Schools
- Social Services on Chamblin, Irby, McArthur, & Woodruff St.
- Downtown
- Woodruff Library
- Woodruff Leisure Center
- McKinney Park
- Mills Mill Park

KEY ISSUES

- Lack of connectivity throughout Woodruff.
- Many sidewalks in need of repair, including Chamblin.
- Future phases of Woodruff Center may include trails near Jimmies Creek.
- Offset intersection of Chamblin St. and Church St. at Main St. has no traffic light or crosswalks and is difficult for pedestrians to cross.

PRIORITY PROJECTS

1. Sidewalks on Irby and McArthur. Sidewalks on Irby and McArthur would complete Chamblin, Irby, McArthur, Woodruff St. loop where many social services are located. There are considerable amounts of pedestrians in this area.
2. Maintenance of Sidewalk on Chamblin. Sidewalk is covered and grown over, needing maintenance.
3. Pedestrian connections to new parking behind buildings facing Main St. in downtown

PRIORITY INTERSECTION

Main Street and Peachtree Street

- Sidewalk needed on Peachtree south of Main; need to repair existing sidewalk
- Stripe new high-visibility crosswalks.
- Stripe new advanced stop lines on Main.
- Reconstruct existing curb ramps.
- Intersection does not currently have signal. Needs to be signalized for pedestrians with pedestrian countdown signals.
- Provide high-visibility pedestrian warning signs.



Above: Woodruff High School



Above: Downtown Woodruff



Above: Chamblin Street

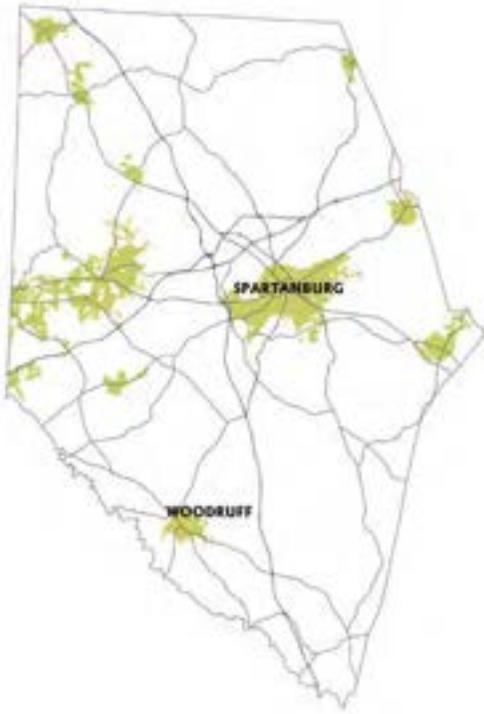


Above: Pedestrians on Peachtree Street



Above: Intersection of Main Street and Peachtree Street

INSET MAP: WOODRUFF



Above: existing conditions along McArthur Street

Below: A photo visualization of pedestrian improvements.



MAP 6.20 WOODRUFF BICYCLE RECOMMENDATIONS



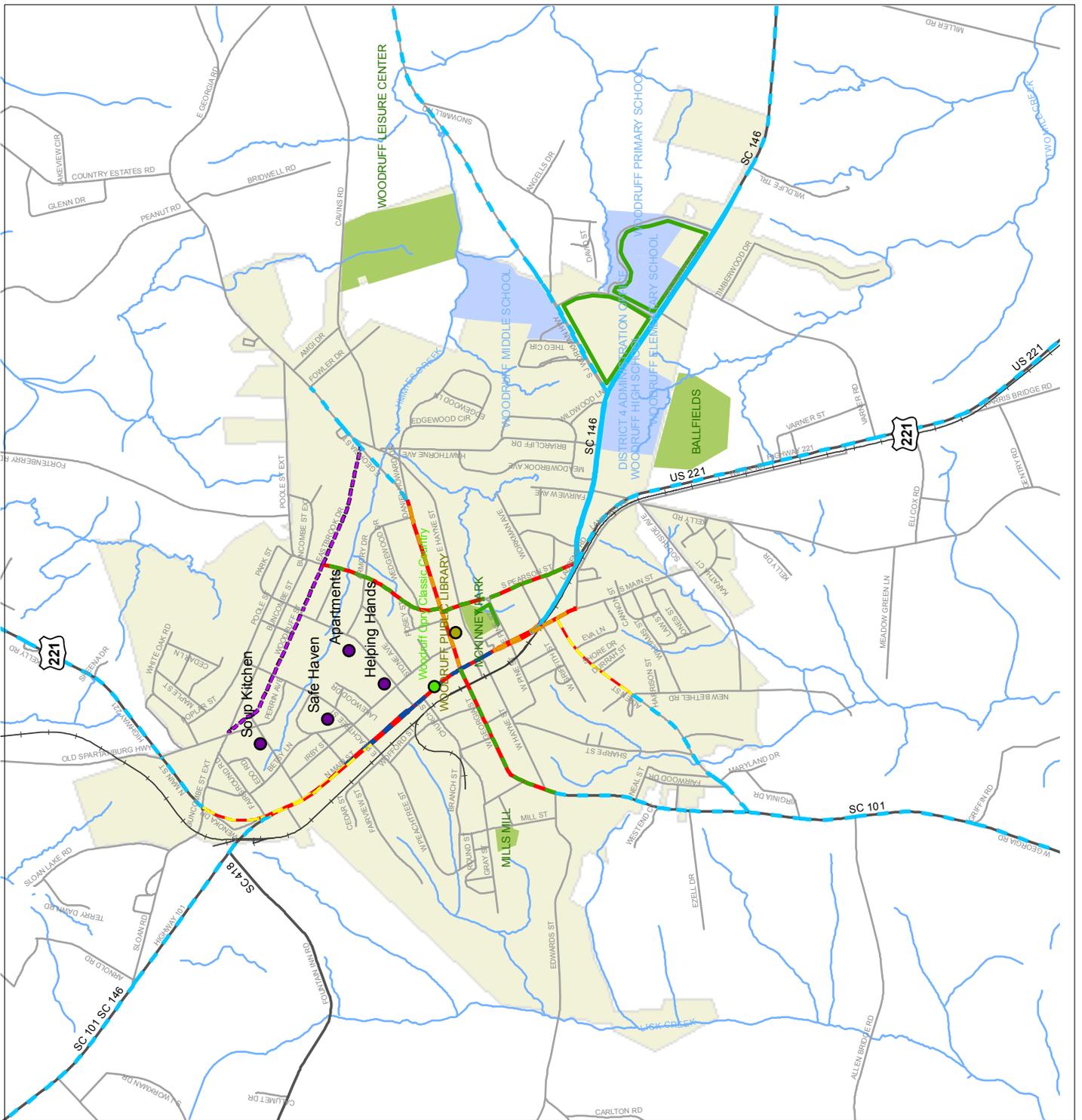
Legend

- Cultural Tourism
- Various Destinations
- Libraries
- Destinations

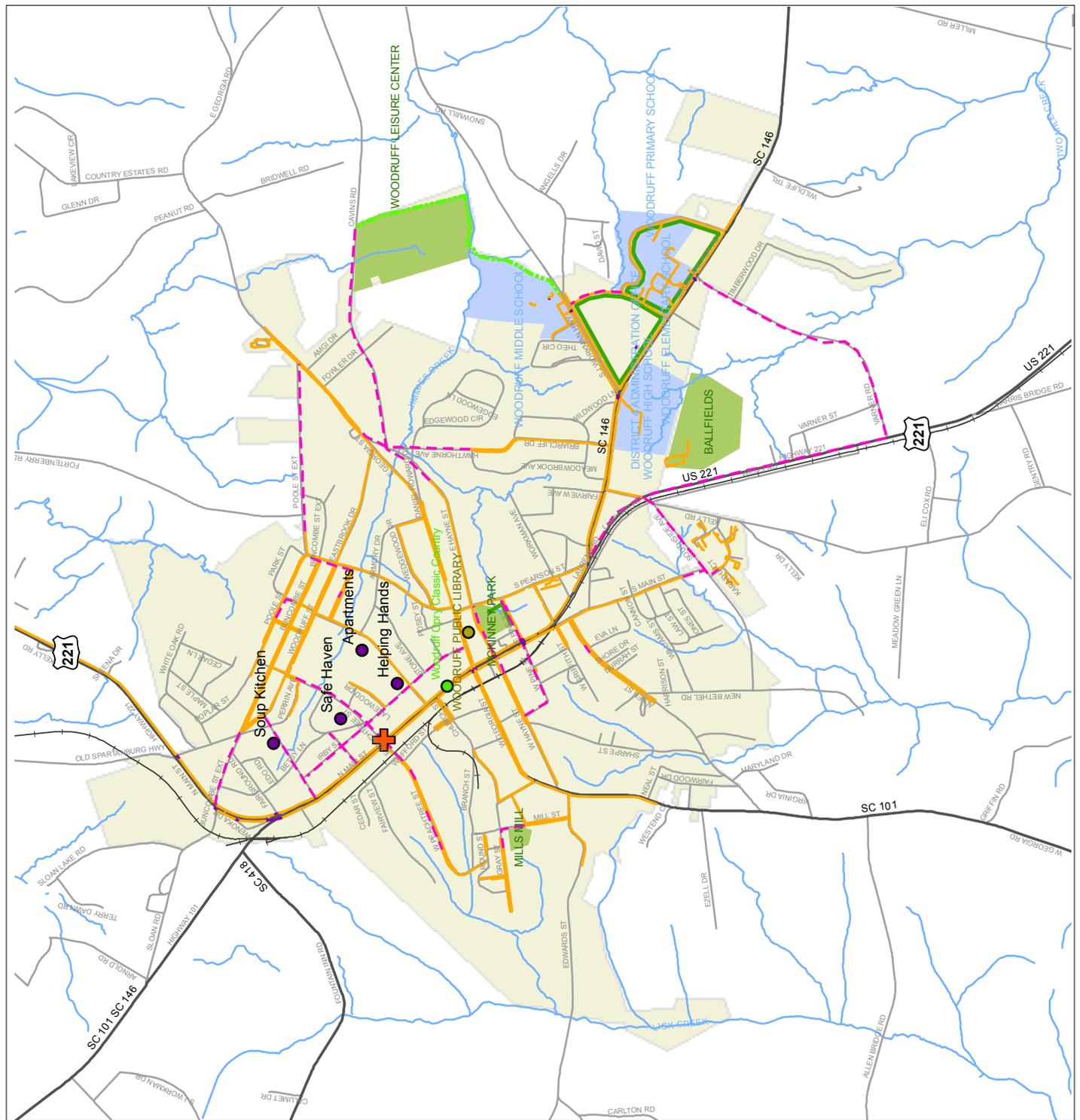
Recommended Bicycle Facilities

- Bike Lane, Stripe
- Bike Lane, Restripe
- Bike Lane, New Const
- Bike Lane, Road Diet
- Sharrow, Stripe
- Wide Outside Lane, Restripe
- Paved Shoulder, New Const
- Road
- Existing Trails
- Enhancement Plan Rec. Trails
- Rail Road
- Streams and Lakes
- Schools
- Parks
- Water
- County Boundary

Data Source: SPATS



MAP 6.21 WOODRUFF PEDESTRIAN RECOMMENDATIONS



Legend	
	Intersection Improvements
	Cultural Tourism
	Various Destinations
	Libraries
	Destinations
Recommended Pedestrian Facilities	
	Existing Crosswalks
	Existing Sidewalk
	Recommended Sidewalk
	Existing Trails
	Enhancement Plan Rec. Trails
	Rail Road
	Streams and Lakes
	Schools
	Parks
	Water
	County Boundary

Data Source: SPATS

CHAPTER SEVEN OUTLINE:

Policy Recommendations
 Spartanburg Co. Comp Plan
 City of Spartanburg Comp Plan
 Spartanburg Co. Unified Land Mgmt. Ord.
 City of Spartanburg Zoning Ord.
 Land Dev. Regs for the City of Spartanburg
 Bike/Ped-Related Policies in Spartanburg Co.

CHAPTER SEVEN: POLICY

POLICY RECOMMENDATIONS

Existing land development and planning policies have a significant effect on pedestrian and bicycle transportation and recreation within Spartanburg County. These policies are established in the Spartanburg County Comprehensive Plan, City of Spartanburg Comprehensive Plan, Spartanburg County Unified Land Management Ordinance, City of Spartanburg Zoning Ordinance and the Land Development Regulations for the City of Spartanburg.

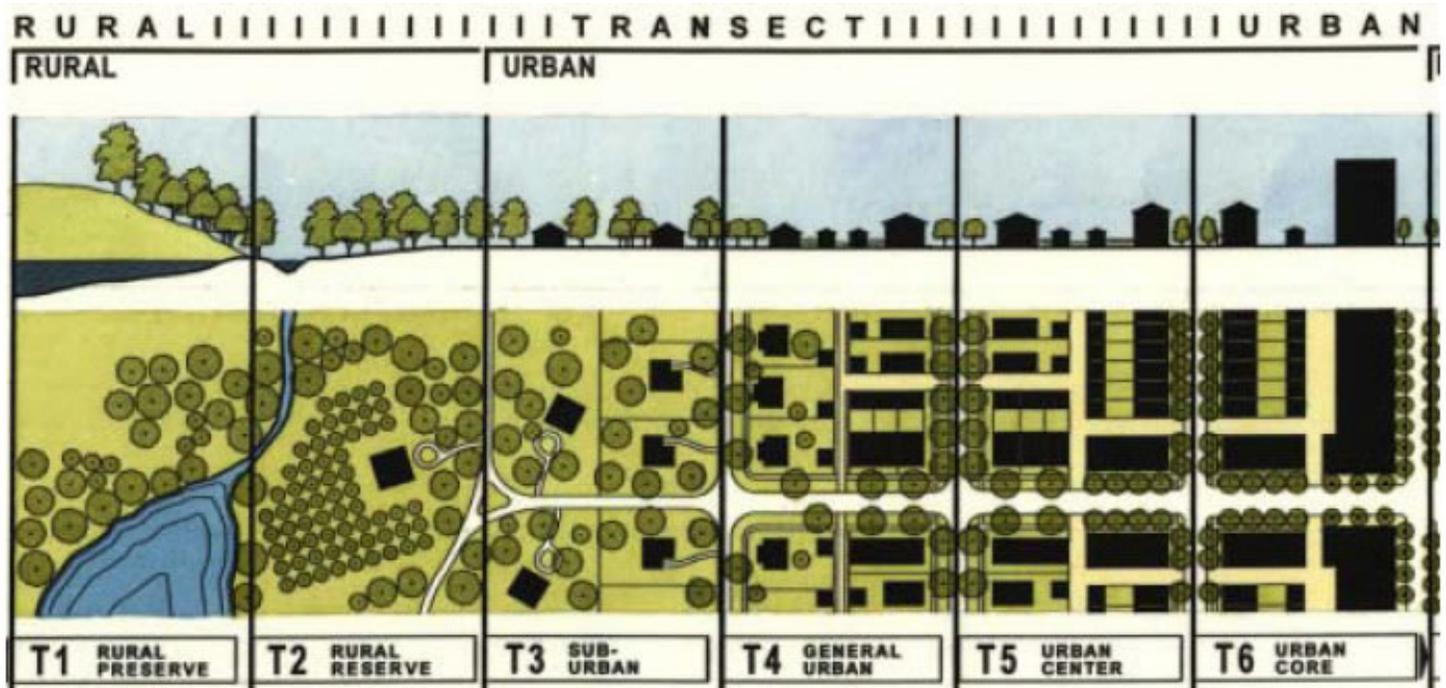
The existing policies need to be strengthened to improve accommodations for non-motorized transportation and recreation facilities. Several key requirements for pedestrian, bicycle, and greenway facilities are listed below. These and other requirements for creating a safe and convenient environment for pedestrian and bicycle transportation should be integrated into policy documents, such as the recommendations shown in Chapters 4-6 as well as the Spartanburg Area Active Living Assessment and the Spartanburg County Growth Management Audit. They apply to all new roadway construction and roadway reconstruction projects in urban, suburban, and village center areas, as well as in rural areas as appropriate (e.g., areas where new developments are being constructed).

- The existing Complete Streets policies within Spartanburg County need to be updated and made mandatory in all new and repair construction.
- Sidewalks should be provided on both sides of all collector, sub-collector, and local streets (except for roadways in areas with rural developments with less than one dwelling unit per 6 acres). Sidewalks should have a minimum width of 5 feet (wider sidewalks are recommended on streets with high traffic volumes and higher anticipated pedestrian activity).
- Developers should extend pedestrian and, where required, bicycle connections at least to the edge of the development and, in appropriate cases, to the nearest connection to other public facilities or developments.

- Consider applying the transect model for land use policy direction and pedestrian and bicycle facility type guidance. (See image below)

THE TRANSECT MODEL

The urban-to-rural transect is an urban planning model created by New Urbanist Andrés Duany. The transect defines a series of zones that transition from sparse rural farmhouses to the dense urban core. Each zone is fractal in that it contains a similar transition from the edge to the center of the neighborhood. In contrast to modern Euclidean zoning and suburban development, the transect decreases the necessity for long-distance travel by any means. For more on the Transect and the accompanying SmartCode, visit www.dpz.com/transect.aspx



- The buffer space between the sidewalk and the curb and gutter should be maximized within the available right-of-way.
- Streetscape requirements should be provided so streets have canopy trees, landscaped buffers, and visually appealing features.
- Pedestrian facilities, such as cross-walks, countdown signals, and curb ramps need to be provided on all intersections (except rural locations) especially where there is an existing sidewalk or planned sidewalk or trail.
- Raised medians or pedestrian refuge islands should be provided, where practical, at crosswalks on streets with more than three lanes, especially on streets with high volumes of traffic. They should be six to ten feet wide.

- Bicycle lanes should be provided, where practical, on collector and arterial roadways. They should be at least five feet wide (width may include gutter pan if it is flush with the pavement surface). Where there is not enough roadway width available for bicycle lanes, other treatments such as sharrows, and wide outside lanes should be used to improve conditions for bicyclists.
- Paved shoulders should be provided on rural roadways with moderate to high traffic volumes. There is no minimum width for paved shoulders, but a width of at least four feet is preferred.
- Roadway travel lane widths should not be excessively wide. Local and collector roadways should generally be striped with 10-foot travel lanes. Arterial roadways should have 11 to 12 foot travel lanes, depending on traffic volume and use by heavy trucks (SCDOT consultation will be necessary).
- Pedestrians and bicyclists should be accommodated on roadway bridges, underpasses, and interchanges and on any other roadways that are impacted by a bridge, underpass, or interchange projects. All new bridges should be constructed with bicycle lanes and wide sidewalks.
- Pedestrian and bicycle facilities and accommodation, including sidewalks, curb ramps, bicycle racks, and connections should be integrated into all parking lot design and construction.
- Bicycle parking should be required for all commercial, institutional, government, multi-use, and medium-high residential land uses.
- Connectivity of new residential subdivisions needs to be addressed through requiring multiple connections and multiple entrances-exits. Where cul-de-sacs are the last option (although not recommended) there needs to be pedestrian and bicycle access provided at the end so as to minimize the extra travel time cul-de-sacs present to pedestrians and bicyclists.

- On multi-lane roadways with excess existing and future traffic capacity, underutilized travel lanes should be removed. This extra right-of-way should be used for bicycle and pedestrian facilities.
- Where new development includes the routes of proposed trails or greenways, require that developers dedicate the rights-of-way for such trails or greenways and require that the developer complete construction of the trails or greenways.

In summary, for both the County and City of Spartanburg to be able to offer better facilities for pedestrians and bicyclists the development ordinances and plans need to require these facilities and provide strong guidance on their design. Furthermore, all of these ordinances and plans need to coincide with each other, all requiring the same standards and designs. Lastly, pedestrians and bicyclists need to be provided the same level of importance, preferably more, than the automobile, and appropriate accommodation for them needs to be provided in all instances.

SPARTANBURG COUNTY COMPREHENSIVE PLAN 1998

This plan needs to provide more specific planning and support for pedestrians and bicyclists throughout the entire contents. Strengthening this plan will help provide a strong foundation for the county to provide better and more pedestrian and bicycle facilities and policies. Below are a few of the main recommended changes needed to better accommodate pedestrians and bicyclists (for a more detailed list see Chapters 4-6):

- Consider applying the transect method for context-based development standards.
- Consider context sensitive street design standards that provide minimum standards for roadway development, including accommodations for all roadway users (including bicyclists and pedestrians) and streetscape requirements.
- Link this plan to the Spartanburg County Bicycle and Pedestrian Master Plan
- Maximize walk/bike access to school sites in site design. Seek partnership funding that schools could use for bicycle and pedestrian infrastructure.

- Dedicate funding to expand the greenway and park system to provide recreation and active transportation opportunities for more residents.
- Add a Transportation Element to the plan (as required by the South Carolina Priority Investment Act) with an Alternative Transportation Element (bicycle and pedestrian transportation) within.

CITY OF SPARTANBURG COMPREHENSIVE PLAN 2004

While this plan does contain pedestrian and bicycle provisions, they should be strengthened and revised. Below are a few of the main recommended changes needed to better accommodate pedestrians and bicyclists (for a more detailed list see Chapters 4-6):

- Offer more mixed use nodes where compatible residential, commercial, and civic uses can be provided within walking and biking distance of each other.
- Consider applying the transect method for context-based development standards.
- Consider context sensitive street design standards that provide minimum standards for roadway development, including accommodations for all roadway users (including bicyclists and pedestrians) and streetscape requirements.
- Dedicate funding to expand the greenway and park system to provide recreation and active transportation opportunities for more residents.
- Include streetscape and street tree requirements in all roadway design standards.
- Add a Transportation Element to the plan (as required by the South Carolina Priority Investment Act) with an Alternative Transportation Element (bicycle and pedestrian transportation) within.
- Link this plan to the Spartanburg County Bicycle and Pedestrian Master Plan

SPARTANBURG COUNTY UNIFIED LAND MANAGEMENT ORDINANCE 1999

This ordinance needs to better follow the standards and requirements set forth in the City of Spartanburg Comprehensive Plan, City of Spartanburg Zoning Ordinance and the Spartanburg County Comprehensive Plan. This ordinance provides design guidelines but does not make building sidewalks or streetscapes mandatory nor does it provide any guidance or requirements for bicycle provisions. In order for the County to offer better and more pedestrian and bicycle facilities it is imperative that this ordinance provide mandatory policies and guidelines that follow suit with the other plans and ordinances in play in the County and City. Below are a few of the main recommended changes needed to better accommodate pedestrians and bicyclists (for a more detailed list see Chapters 4-6):

- Need to add pedestrian, bicycle, and alternative non-motorized transportation language and guidelines throughout the entire County Unified Land Management Ordinance Requirements. These modes and facilities need to be stressed as equally if not more important than automobile provisions and facilities. Sidewalks, bicycle lanes, pedestrian facilities, and bicycle racks need to be required with all new development and should follow the recommendations and design guidelines set forth in the Spartanburg County Bicycle and Pedestrian Master Plan as well as the Spartanburg Active Living Assessment and the Spartanburg County Growth Management Audit.
- Revise the 'Goals and Projects' to include bicycle and pedestrian facilities: Provide choices for alternative means of transportation that can be used to reduce congestion on existing streets and roads and add to the general quality of life in the county. The following projects and initiatives are designed to implement this goal:
 - Create a governmental committee composed of local officials whose mission is to promote alternative transportation systems in the county. The agency would also be responsible for the procurement of funding for the implementation of such facilities.
 - Secure a public and private partnership to oversee the implementation of proposed improvements.
 - Promote the use of alternative transportation through educational, promotional and incentive programs.

- Consider applying the transect method for context-based development standards.
- Consider context sensitive street design standards that provide minimum standards for roadway development, including accommodations for all roadway users (including bicyclists and pedestrians) and streetscape requirements.
- Link this plan ordinance to the Spartanburg County Bicycle and Pedestrian Master Plan.
- Require sidewalks: Sidewalks should be required in appropriate urban locations (the Transect can provide guidance) and should be a preferred minimum width of five feet on most streets (the width required for two persons to walk side-by-side) and wider for certain higher density streets and environments.
- Add bicycle parking requirements to all commercial, multi-family residential, institutional, and government land uses.
- Provide design standards for parking lots, curb cuts, and driveways that are pedestrian and bicycle orientated and follow the design guidelines set forth in the the Spartanburg County Bicycle and Pedestrian Master Plan.
- Reduce the usage and requirements for cul-de-sacs. Cul-de-sacs should only be permitted when deemed absolutely necessary, and if used, their length should not exceed 250 feet and should provide pedestrian and bicycle access at the end.
- Developers should extend pedestrian and, where required, bicycle connections at least to the edge of the development and, in appropriate cases, to the nearest connection to other public facilities or developments.
- Pedestrian facilities, such as crosswalks, countdown signals, and curb ramps need to be provided on all intersections (except rural locations), especially where there is an existing sidewalk or planned sidewalk or trail.
- Bicycle lanes should be provided, where practical, on collector and arterial roadways. They should be at least five feet wide (width may include gutter pan if it is flush with the pavement surface). Where there is not enough roadway width available for bicycle lanes, other treatments such as sharrows, and wide outside lanes should be used to improve conditions for bicyclists.

- Where new development includes the routes of proposed trails or greenways, require that developers dedicate the rights-of-way for such trails or greenways and require that the developer complete construction of the trails or greenways.

CITY OF SPARTANBURG ZONING ORDINANCE 1999 AND LAND DEVELOPMENT REGULATIONS FOR THE CITY OF SPARTANBURG 1999

While the ordinance and regulations do contain some pedestrian and bicycle provisions and requirements, they should be strengthened and revised. Below are a few of the main recommended changes needed to better accommodate pedestrians and bicyclists (for a more detailed list see Chapters 4-6):

- Need to add pedestrian, bicycle, and alternative non-motorized transportation language and guidelines throughout the entire City of Spartanburg Zoning Ordinance. These modes and facilities need to be stressed as equally if not more important than automobile provisions and facilities. Sidewalks, bicycle lanes, pedestrian facilities, and bicycle racks need to be required with all new development and should follow the recommendations and design guidelines set forth in the Spartanburg County Bicycle and Pedestrian Master Plan as well as the Spartanburg Active Living Assessment and the Spartanburg County Growth Management Audit .
- Consider applying the transect method for context-based development standards.
- Consider context sensitive street design standards that provide minimum standards for roadway development, including accommodations for all roadway users (including bicyclists and pedestrians) and streetscape requirements.
- Link this plan ordinance to the Spartanburg County Bicycle and Pedestrian Master Plan
- Add bicycle parking requirements to all commercial, multi-family residential, institutional, and government land uses.
- Provide design standards for parking lots, curb cuts, and driveways that are pedestrian and bicycle orientated and follow the design guidelines set forth in the Spartanburg County Bicycle and Pedestrian Master Plan.

- Reduce the usage and requirements for cul-de-sacs. Cul-de-sacs should only be permitted when deemed absolutely necessary, and if used, their length should not exceed 250 feet and should provide pedestrian and bicycle access at the end.
- Developers should extend pedestrian and, where required, bicycle connections at least to the edge of the development and, in appropriate cases, to the nearest connection to other public facilities or developments.
- Pedestrian facilities, such as crosswalks, countdown signals, and curb ramps need to be provided on all intersections (except rural locations), especially where there is an existing sidewalk or planned sidewalk or trail.
- Bicycle lanes should be provided, where practical, on collector and arterial roadways. They should be at least five feet wide (width may include gutter pan if it is flush with the pavement surface). Where there is not enough roadway width available for bicycle lanes, other treatments such as sharrows, and wide outside lanes should be used to improve conditions for bicyclists.
- Where new development includes the routes of proposed trails or greenways, require that developers dedicate the rights-of-way for such trails or greenways and require that the developer complete construction of the trails or greenways.

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CHAPTER EIGHT OUTLINE:

Overview

Bike/Ped Program History & Current Programs

Programming Recommendations

Bicycle Friendly Community Status

Spartanburg Co. Bike/Ped Advisory Comm.

Education of Officers for Enforcement

Pilot Programming Effort

Education Programs & Resources

Encouragement Programs & Resources

Enforcement Programs & Resources

CHAPTER EIGHT: PROGRAMS

OVERVIEW

Programming is a key element of a comprehensive strategy aimed at creating a more walkable and bikable Spartanburg County. Facilities recommended in Chapters 4-6 are only one piece of the puzzle. Once facilities are in place, it is critical to focus on use and safety for the different transportation groups through education, encouragement, and enforcement programs. The Spartanburg area has been quite advanced already, with a significant amount of programs already existing, mainly within the City of Spartanburg. This chapter outlines current programs and makes recommendations to advance Spartanburg County even further.

BICYCLE/PEDESTRIAN PROGRAM HISTORY AND CURRENT PROGRAMS

Spartanburg County has had an active bicycle and pedestrian programming history over the past five years. The Mary Black Foundation has played a major supporting and funding role, largely because active living is one of its two major goals and funding topics. A number of other non-profits, especially Partners for Active Living, have spurred on programming. In 2005, the Palmetto Conservation Foundation received a Mary Black Foundation grant to apply for national Bicycle-Friendly Community (BFC) status. Through this process, a number of programs and events began. "Bike Town" became the unofficial name of this effort and has served as the umbrella for programs since this grant. In 2005, the area celebrated its first Bike-to-Work month in May with a bicycle race and other events. Advocacy started with give-a-ways and more programs. In 2006, the Palmetto Conservation Foundation passed the "torch" to Partners for Active Living.

Partners for Active Living (PAL) has been focused mostly on the urban bicycle and pedestrian setting since 2006. One of its goals has been to be the epicenter for bicycle and pedestrian programming to promote what other groups are doing and assist where needed. In its Strategic Plan, one of its main goals is to enhance its focus on bicycle and pedestrian pro-

gramming. PAL has written or assisted in writing many bicycle and pedestrian-related grant applications and is a strong advocate for facility development, programs, and policies. A number of different programs were started in association with PAL or by other groups such as SPATS, the Palmetto Cycling Coalition and Upstate Forever. Programs and events included:

- Bicycle rodeos
- Hub Cycle Lending program (maintained by volunteer cyclists; in early 2008, a professional mechanic was hired by grant)
- Lunchtime bicycle rides (seasonally every Friday)
- Weekend walkabouts (Saturday once a month to highlight areas of town)
- Weekend rideabouts (5-6 miles in length for beginner cyclists)
- Bike Month celebration
- Bike Education curriculum road courses
- League instructor program – Four League Certified Instructors (LCI's) now in Spartanburg County
- Bicycle commuter and parent courses
- Bike racing team sponsorship
- Girls on the run program – endurance running encouragement
- Speaker series bringing national bicycle and pedestrian planning and transportation experts (Mark Fenton, Andy Clarke, Michael Ronkin, etc.)
- Trainings and workshops for local engineers and leaders
- Ongoing pedestrian safety campaign now (from enhancement grant) for education utilizing posters, handouts, billboards, and local access channels
- Safe routes to school programs
- Bicycle parking grants
- Bicycle patrol downtown
- Walkability workshops in multiple communities
- Palmetto Conservation Foundation's Glendale Outdoor Leadership (mountain bike clinics)
- Pocket size South Carolina bicycle and pedestrian laws available at <http://www.pccsc.net/bikelaws.php>



*Above: Program example:
Girls on the Run*

Another key programming effort has been Safe Routes to School (SRTS) and Cycle Station. SCDOT has conducted two cycles of SRTS funding awards to-date across the state (around 12 awards each year). Pine Street Elementary and Lone Oak Elementary in the City of Spartanburg won in the program's first year while Inman Intermediate and Elementary Schools won in the second year. Pine Street Elementary School was one of the first in the state to conduct implementation which has included flashing pedestrian lights at Pine Street and a sidewalk addition. The school has also initiated Walking and Wheeling Wednesday in which 125-150 kids participate each week. Previous to this, the school has held Walk to School Days for nine years and Bike to School Days for the

last three years. Lone Oak Elementary has also developed an infrastructure plan.

SPATS has played a significant role in programming throughout Spartanburg County. Walkability workshops were held in county municipalities to stimulate ideas and understand pedestrian needs. A pedestrian advocacy group PEACHeS (People Enjoying Active Community Health and Safety) was formed in Inman and another in Cowpens as well.

These workshops gave residents, officials, and staff tools to discuss and implement engineering solutions to address these needs. A plan of action was formulated for each community. The SPATS Enhancement Committee continues to support and fund bicycle, pedestrian and trail projects within the SPATS Urban Area.

The following websites provide more information about ongoing programs in Spartanburg County:

Palmetto Cycling Coalition – www.pccsc.net/

Mary Black Foundation - www.maryblackfoundation.org/

Partners for Active Living - www.active-living.org/

Palmetto Conservation - www.palmettoconservation.org/

PROGRAMMING RECOMMENDATIONS

While existing programs have been hugely successful, there is still much that can be done. Existing programs need more support. For example, it is still very critical to work on changing mindsets (educating motorists, bicyclists and pedestrians) and expanding programs throughout all of Spartanburg County. Some specific areas that need improvement are discussed below followed by a thorough palette of education, encouragement, and enforcement programs and resources provided.

BICYCLE FRIENDLY COMMUNITY STATUS

The League of American Bicyclists (LAB) promotes the national Bicycle Friendly Communities (BFC) Program. The City of Spartanburg was the first city in South Carolina to achieve status, a bronze award in 2007. One of the current goals for PAL is to increase the status to a higher level. Spartanburg County, SPATS, the City of Spartanburg, and PAL should work together on this task. Having an adopted Bicycle and Pedestrian Master Plan in place, with key infrastructure and programming elements added, will make Spartanburg a very strong candidate. The City and County of Spartanburg should strive to implement programs that other BFC communities have completed.

SPARTANBURG COUNTY BICYCLE AND PEDESTRIAN ADVISORY COMMISSION (BPAC)

Due to the significant interest in this planning process at the staff level and resident level and the tremendous amount of implementation necessary within Spartanburg County as part of this Plan, a permanent Bicycle and Pedestrian Advisory Commission (BPAC) should be formed on the citizen level. The BPAC would be a beneficial resource for promoting both bicycle and pedestrian safety, providing feedback on opportunities and obstacles within the County, educating bicyclists and motorists about sharing the road, mobilizing support for bicycle and pedestrian issues, and assisting in the coordination of events and outreach campaigns. BPAC subcommittees could take on specific tasks focusing on facility development, programs, and policy development. Most importantly, this group would focus on countywide issues, including urban, suburban, and rural issues. The group would ensure that facilities and programs are provided for all Spartanburg County municipalities.

The BPAC would have representation from each municipality and key stakeholder groups that would include, but are not limited to, PAL, Upstate Forever, and the Tyger River Foundation. The group should meet quarterly to encourage and evaluate the progress of overall plan implementation. This group should work closely with appropriate staff from SPATS, Spartanburg County, SCDOT, and local municipalities.

Currently, there is a bicycle/pedestrian stakeholders group within the City of Spartanburg. Also, PEACHes is a walkability group in Inman. These groups should continue their efforts and focus on issues within their towns. Also, BPAC should encourage all municipalities to have biking/walking advocacy groups to promote local bicycling and walking. These groups could have a reporting member to the Spartanburg County BPAC.

EDUCATION OF OFFICERS FOR ENFORCEMENT

Training courses are needed for police officers throughout Spartanburg County. In many cases, officers and citizens do not fully understand state and local laws for motorists, bicyclists, and pedestrians. Officers should be trained so that proper enforcement can occur. This type of training can lead to additional education and enforcement programs that promote safety.

The State of South Carolina pedestrian laws can be found here: www.scdps.org/oea/attachments/Ped%20Laws.doc

The State of South Carolina bicycle laws can be found here: www.pccsc.net/bikelaws.php

PILOT PROGRAMMING EFFORT

Through cooperation with SPATS, SCDOT, Spartanburg County, the appropriate municipality, the BPAC, and PAL, strong education, encouragement, and enforcement campaigns should occur to coincide with a bicycle and/or pedestrian improvement. When an improvement has been made, the roadway environment has changed and proper interaction between motorists, bicyclists, and pedestrians is critical for the safety of all users. A programming campaign through local television, on-site enforcement, education/encouragement events, and other methods will bring attention to the new bicycle/pedestrian facility, and educate, encourage, and enforce proper use and behavior. An example opportunity would be the roadway improvement project to SC 9 in Boiling Springs.

EDUCATION PROGRAMS AND RESOURCES

PUBLIC EDUCATION AND EDUCATIONAL DEVICES

Spartanburg County should build on its existing programs by continuing to develop a variety of safety materials and distribute them widely throughout the community. Educational materials focus on safe behaviors, rules, and responsibilities. Information may include important bicycle and pedestrian laws, bulleted keys for safe bicycle and pedestrian travel, helmet requirements, safe motor vehicle operation around bicyclists and pedestrians, and general facility rules and regulations. This safety information is often available for download from national pedestrian advocacy organizations, such as the Pedestrian and Bicycle Information Center website, www.pedbikeinfo.org.

Partners for Active Living (PAL) has already worked on a number of educational programs. PAL developed an education campaign for pedestrian safety using tools such as fliers, posters, billboards, postcards, website, and local access channel. PAL has also hosted a speaker series with nationwide experts.



Above: Education examples:
Partners for Active Living.

Brown-bag events and clinics are also excellent means to provide education, especially for adults. Local events, such as Spring Fling, should be utilized to distribute information using a booth to display related print media. A representative from the newly formed BPAC could volunteer at the booth to answer questions related to bicycling and walking in Spartanburg County.

MOTORIST EDUCATION

Equally important as bicyclist education is motorist education. Many motorists do not recognize the simple fact that a bicycle is considered a vehicle by South Carolina state law. Several examples of safety materials have already been developed. An example of a motorist guide is the Triangle Motorist Guide to Bicycle Safety Brochure which is available for download on the CAMPO website: http://www.campo-nc.us/BPSG/BPSG_Home.htm.

The North Carolina Driver's Handbook has an entire section devoted to bicycles, bicyclists' rights and responsibilities, and how motorists should behave. Programs to promote bicycle and pedestrian safety should be included in high school driver education classes. Resource: http://www.ncdot.org/transit/bicycle/safety/programs_initiatives/share.html

The StreetSmart public awareness campaign in the Washington, DC region is another example of a Public Service Agency educating residents about pedestrian and bicycle safety. <http://www.mwcog.org/streetsmart/about.asp>

INTERNAL TRAINING

'Internal' education refers to the training of all people who are involved in the actual implementation of the Bicycle and Pedestrian Master Plan. PAL has played an active role through trainings, workshops, and guest speakers and should continue to develop these programs, with support from SPATS, Spartanburg County, and the municipalities of Spartanburg County.

Internal training is essential to institutionalizing bicycle and pedestrian issues into the everyday operations of public works, planning, and parks and recreation departments. In addition to relevant municipality staff, SCDOT staff, and Spartanburg County staff should also be included in training sessions whenever possible. This training should cover all aspects of the transportation and development process, including planning, design, development review, construction, and maintenance. This type of 'inreach' can be in the form of brown bag lunches, professional certification programs, and special sessions or conferences. Even simple meetings to go over the



Above: Education example: Adult BikeEd.

Bicycle and Pedestrian Master Plan and communicate its strategies and objectives can prove useful for staff and newly elected officials that may not have otherwise learned about the plan. Bicycle and pedestrian planning and design issues are complex, and state-of-the-art research and guidelines continue to evolve. Therefore, training sessions need to be updated and repeated on a regular basis.

Local law enforcement should be trained in accurate reporting of bicycle and pedestrian crashes involving automobiles. In many communities, police do not always adequately understand the rights of bicyclists. Proper interpretation of individual circumstances and events is critical for proper enforcement and respect between motorists and bicyclists. Special training sessions should be instituted and occur annually for new employees within the local police forces that focus on laws relating to bicycle travel. Every effort should be made for representation from the different police forces on the BPAC.



Above: Education example:
LCI Training

LCI TRAINING / BIKE ED

The League of American Bicyclists (LAB) has a national bicycle education program (Bike ED) that includes training to become certified League Cycling Instructors (LCI's). LCI's are trained to teach local bicycle skills training course. Already, there are 4 LCI's in Spartanburg County. Ideally, all BPAC members and key SPATS, SCDOT, and County staff would take LCI courses, or even become LCI instructors themselves. This effort should continue with expansion to other state, federal and municipal agencies.

BICYCLE AMBASSADOR PROGRAM

The newly formed BPAC should begin this program as an early initiative. The Bicycle Ambassadors Program would be the bicycle outreach and education component of the BPAC, promoting bicycle safety and awareness. Programs around the country promote safety for all road users, bicyclists, motorists, and pedestrians. Members of the BPAC may volunteer to be ambassadors as well as recruiting community members to be ambassadors. Ambassadors host and attend programs, demonstrations, and activities at events, summer camps, and schools. One very successful model program is Mayor Daley's Bicycling Ambassadors in Chicago (<http://www.bicyclingambassadors.org/>) where the group includes adult and junior ambassadors, hosts a number of educational events, and gives presentations that promote bicycling. Local bicycle shops and groups in Spartanburg County should be involved.

BICYCLE HELMETS PROGRAM

Spartanburg County, the City of Spartanburg, and the BPAC should form a charity program aimed to ensure young cyclists are educated and equipped to take part in bicycling. The main objective would be to increase helmet wearing among children. Strategies should start by expanding this component of the existing Bicycle Rodeo Program.

SCHOOL CROSSING GUARD TRAINING PROGRAM

As traffic continues to increase on streets and highways, concern has grown over the safety of our children as they walk and bike to and from school. At the same time, health agencies, alarmed at the increase in obesity and inactivity among children, are encouraging parents and communities to get their children walking and biking to school. Numerous school crossing guards are present throughout the County and City of Spartanburg. It is important to ensure that crossing guards are trained and provided at every school in which there are pedestrians.

ENVIRONMENTAL, CULTURAL AND HISTORIC EDUCATION/INTERPRETATION

Educational programs and interpretative signage could be developed along greenways. Greenways provide opportunities for learning outside the classroom. Specific programs that focus on water quality and animal habitat are popular examples. Simple educational signage would offer interactive learning opportunities for people who use the trails. Brochures can be used to supplement signage with more detailed information and a map of the interpretive system.

BICYCLE MAP EDUCATION

The City and County of Spartanburg should develop an updated bicycle and pedestrian map that includes new bicycle facilities and new greenways. This map is an opportunity for the County and City of Spartanburg to present education and safety materials including basic safety information, commuting information, trail etiquette, transit information, and a list of local resources on the back side of the map. This map should be developed as a foldable hardcopy map or on a website.

TEACHING

PAL, SPATS, and the City of Spartanburg have led a number of teaching efforts for people of all ages. This has included bicycle commuter and parent courses, walkability workshops in multiple communities, bike education curriculum road courses, and bicycle rodeos. These types of teaching exercises should be continued. Bicycling rodeos, training sessions,

summer camps, and other educational activities should be continued and promoted (and in the case of bicycle rodeos, continued) so that safety skills can be taught on an ongoing basis. The BPAC should ensure all of these efforts are extended throughout Spartanburg County.

EDUCATION RESOURCES

Partners for Active Living (PAL) in Spartanburg have created a number of educational campaigns, tools, and information. www.active-living.org/

The mission of the Mary Black Foundation is to improve the health and wellness of the people and communities of Spartanburg County. The Foundation selected “active living” as one of two funding priority areas. In addition to providing grants to promote active living in the County, the Foundation offers a variety of resources including research papers and data source books.

www.maryblackfoundation.org

The mission of the Palmetto Cycling Coalition (PCC) is to educate South Carolinians on the value and importance of cycling, and improving safety for South Carolina cyclists.

www.pccsc.net/

This section of the Pedestrian and Bicycle Information Center website provides important messages for a range of different audiences that can be part of an educational campaign or program. It also offers links for finding more information related to bicycling education:

www.bicyclinginfo.org/education/

The League of American Bicyclists has been working for better cycling in America since 1880. They do this by promoting bicycling, educating cyclists and motorists, and advocating on behalf of cyclists on Capitol Hill and with state legislators across the United States. This web page has information on some of their programs:

www.bikeleague.org/programs/index.php

The mission of the National Center for Bicycling and Walking (NCBW) is to help create bicycle-friendly and walkable communities across North America by encouraging and supporting the efforts of individuals, organizations, and agencies. This section of the website provides information on the workshops they offer for the general public as well as for training professionals: www.bikewalk.org/workshops.php

SCDOT's website provides information on their Pedestrian and Bicycle Program. Included is an overview of the program, recent project success stories, South Carolina's bicycle and pedestrian milestones, supporting links, information on potential funding sources, and a comment form.

www.scdot.org/getting/BikePed/BP_default.shtml

Safe Communities is a project of the National Highway Traffic Safety Administration (NHTSA). Nine agencies within the U.S. Department of Transportation are working together to promote and implement a safer national transportation system by combining the best injury prevention practices into the Safe Communities approach to serve as a model throughout the nation. **www.nhtsa.dot.gov/safecommunities**

Safe Kids Worldwide is a global network of organizations whose mission is to prevent accidental childhood injury, a leading killer of children 14 and under. More than 450 coalitions in 15 countries bring together health and safety experts, educators, corporations, foundations, governments and volunteers to educate and protect families. Visit their website to receive information about programs, involving media events, device distribution and hands-on educational activities for kids and their families. **www.usa.safekids.org/**

Rules of the Road for Grandchildren: Safety Tips is an information website for grandparenting. If you are a grandparent, you can play an important role in teaching your grandchildren the "rules of the road." AARP.

www.aarp.org/confacts/grandparents/rulesroad.html

Eat Smart, Move More is a statewide movement that promotes increased opportunities for healthy eating and physical activity wherever people live, learn, earn, play and pray.

www.eatsmartmovemorenc.com/

American Trails supports local, regional, and long-distance greenways and trails, whether in backcountry, rural, or urban areas. This page of the website contains studies and reports that can be referenced in educational materials related to trails and greenways: **www.americantrails.org/resources/**

Worldcarfree.net is a clearinghouse of information from around the world on how to revitalize towns and cities and create a sustainable future. In addition to serving the carfree movement, Worldcarfree.net offers resources for architects, planners, teachers/professors, students, decision-makers and engaged citizens: **www.worldcarfree.net/**

ENCOURAGEMENT PROGRAMS AND RESOURCES

BICYCLE LENDING PROGRAM

The Hub Cycle lending program in Spartanburg is a program of PAL designed to increase availability and access to bicycles. PAL accepts new or used bicycles which are repaired by an expert mechanic. These bikes may then be borrowed. This program has also served to teach bike safety, maintenance, and on-road skills and has encouraged more people to bicycle for exercise, transportation, and leisure. This program should be continued and expanded with support from local governments. The program should also expand outward, providing these services to other municipalities in the county in addition to the City of Spartanburg.



EMPLOYER PROGRAMS

To encourage bicycling and walking to work, employers can provide programs and incentives. When bicycling and walking is encouraged, the employer benefits from improved employee health and morale along with an enhanced community perception when protecting the environment and being active in the community. Promotions could include a Bike to Work Day or a morning Pit-Stop where employees can receive free refreshments. Employers can provide educational workshops, bicycle parking options, and employee incentives. Incentives may include prize drawings, t-shirts, and free tune-ups at a local bicycle shop.



Above: Encouragement example:
HUB Cycle program

The Smart Commute Challenge is a great example in the Raleigh-Durham area of North Carolina. Actively supported and encouraged in the Triangle area by Triangle Transit and CAMPO, it is an excellent means of having residents pledge to commute to work by bicycle. Prizes are available and educational information on commuting to work are available at <http://www.smartcommutechallenge.org/>.

SHOWERS AT WORK

Some employees will not consider biking or walking to work without the assurance that they can shower when they arrive. Showers also allow employees to exercise at lunch. In buildings with 50-100 employees, one shower should be sufficient. In buildings with 100- 250 employees, one shower for each sex should be provided. Buildings housing over 250 employees should provide at least four showers with two of them being accessible to the disabled.

CLOTHES LOCKERS

Ideally, there should be one lockable gym locker for every long-term bicycle parking space provided where the regular bicycle commuter can store work clothes. In addition to providing a locker to each regular bicycle commuter, other lockers should be available to encourage potential new bike commuters. These facilities will also encourage lunch-time fitness activities which benefit both the employee and the employer.

SCHOOL PROGRAMS

Many programs exist to aid communities in developing safer pedestrian and bicycle facilities around schools. Programs can be adopted by parents or the schools to provide initiatives for biking and walking. Information is available to encourage group travel, prevent bicycle-related injuries, and sponsor commuter-related events. After-school programs, summer Bike Camps, bicycle rodeos, and Family Fun Rides can be created to provide a supportive environment for children to learn how to ride a bike comfortably and safely with friends, learn how to repair and maintain a bicycle, and tour their city and its destinations.

SAFE ROUTES TO SCHOOL

Municipalities within Spartanburg County should seek programming and facility funding from the Safe Routes to School program, administered by SCDOT. Through support from PAL, a number of schools have already received infrastructure and program funding. Funding is also available for school workshops and action plans.

AWARENESS DAYS/EVENTS

A specific day of the year can be devoted to a theme to raise awareness and celebrate issues relating to that theme. A greenway and its amenities can serve as a venue for events that will put the greenway on display for the community. Major holidays, such as July 4th, and popular local events serve as excellent opportunities to distribute bicycling information. The following are examples of other national events that Spartanburg County and its municipalities can use to improve usage of bicycle facilities:

BIKE-TO-WORK DAY (THIRD FRIDAY IN MAY)

Bike-to-Work Day is an annual event held on the third Friday of May across the United States that promotes the bicycle as an option for commuting to work. Leading up to Bike-to-Work Day, national, regional, and local bicycle advocacy groups



Above: Encouragement example: Walk to School Day



Above: Encouragement example: Bike to Work Day

encourage people to try bicycle commuting as a healthy and safe alternative to driving by providing route information and tips for new bicycle commuters. On Bike-to-Work Day, these groups often organize bicycle-related events, and in some areas, pit stops along bicycle routes with snacks.

Through support from PAL, Bike-to-Work Day and Month have had successful events and celebrations. The City of Spartanburg, with support from PAL, hosts the annual Spartanburg Regional Classic, a major bicycle race. In 2009, Spartanburg celebrated the annual Bike-to-Work Day with a bicycle ride for elected officials. Other ideas for Bike-to-Work month, week, and day include a bicyclists breakfast, commuter contests, and worksite events.

CAR-FREE DAY (SEPTEMBER 22)

Car Free Day is an international day to celebrate getting around without cars. This fall event coincides with the beginning of the school year and is the perfect way to kick-off programs that promote bicycling and raise awareness for environmental issues. Car-Free events can last for an entire week or month, featuring alternative transportation promotional activities, fitness expos, transit-use incentives, walking and jogging group activities, running and bicycling races and rides, etc.

“STRIVE NOT TO DRIVE DAY”

This event example, from the Town of Black Mountain, North Carolina, is an annual event to celebrate and promote the Town’s pedestrian achievements for the year throughout their region. Awards for pedestrian commuters, as well as booths, contests, and other events are organized through their local MPO Bicycle and Pedestrian Task Force and the Land-of-Sky Regional Council. A similar event could be held in Spartanburg County to focus on walking or bicycling issues, as the Bicycle and Pedestrian Master Plan is implemented.



NATIONAL TRAILS DAY

This event is held every year in June. Other events, competitions, races, and tours can be held simultaneously to promote trail use within Spartanburg County. For example, in Greensboro, North Carolina, the Parks and Recreation-Trails Division sponsors events for National Trails Day, and it has become a huge event for the entire city. The Palmetto Trail would be a perfect location for hosting an event.

EARTH DAY

Earth Day is April 22nd every year and offers an opportunity to focus on helping the environment. Efforts can be made to

encourage people to help the environment by bicycling to destinations and staying out of their automobiles. This provides an excellent opportunity to educate people of all ages in Spartanburg County.

USE FACILITIES TO PROMOTE OTHER CAUSES

Bicycle and pedestrian facilities could be used for events that promote other causes, such as health awareness. Not only does the event raise money/publicity for a specific cause, but it encourages and promotes healthy living and an active lifestyle, while raising awareness for bicycling and walking activities. Non-profit organizations such as the American Cancer Society, American Heart Association, and the Red Cross sponsor events such as the Tour de Cure, a series of cycling events held in more than 80 cities nationwide to benefit the American Diabetes Association.

Non-profit organizations sponsor existing events that could easily be hosted, including:

- American Diabetes Association's Tour de Cure, a series of cycling events held in more than 80 cities nationwide.
- American Cancer Society's Relay for Life, a national and international all-night team walk to celebrate cancer survivors and raise money for cancer research.
- Leukemia and Lymphoma Society's Light the Night Walk, a walk held to raise awareness of blood related cancers and money for research to find a cure for such diseases. Participants carry different colored lighted balloons to designate if they are a walking as a survivor, supporter, or in memory of a loved one.

BICYCLE AND PEDESTRIAN ACTIVITIES/PROMOTION WITHIN LOCAL ORGANIZATIONS

Spartanburg County has numerous organizations that could be utilized to promote bicycling and walking activities (e.g. the local bicycle stores, local cycling groups, local schools/PTAs, neighborhood groups, homeowners associations, etc). Education, enforcement, and encouragement programs can be advertised and discussed in local organization newsletters, seminars, and meetings. Such organizations could even organize and cross-promote their own group rides, trail clean-ups, and other activities listed in this section.

CYCLING CLUBS/BICYCLE-COMMUTING GROUPS

Neighborhoods, local groups, or businesses could promote cycling clubs for local residents or employees to meet at a



Above: Encouragement example: Spartanburg Junior Cyclists

designated area and exercise on certain days before or after work (or even to work), during lunch breaks, or anytime that works for the group. This informal group could be advertised on local bulletin or information boards. These clubs could be specialized to attract different interest groups.

Clubs and bicycle shops provide opportunities for group rides. These rides should be promoted by the City and County of Spartanburg and the BPAC, reaching out to bicyclists of all abilities.

ART IN THE LANDSCAPE

The inclusion of art along greenway corridors and trails would capitalize and expand upon Spartanburg's existing culture of public art, while encouraging the use of facilities and provide a place for artwork and healthy expression to occur. Artwork could be displayed in a variety of ways and through an assortment of materials. Living artwork could be "painted" through the design and planting of various plant materials. Sculpture gardens could be arranged as an outdoor museum. Art through movement and expression could be displayed during certain hours during the day or during seasonal events. Artwork can be provided by local schools, special interest clubs and organizations, or donated in honor or memory of someone.

SPARTANBURG COUNTY AND PUBLIC BICYCLE/WALKING MAP

Currently, there is no official bicycle map for the City or County of Spartanburg. A hardcopy and online map should be developed and subsequently distributed widely throughout the community, through municipal governments, schools, advocacy groups, and other organizations throughout the county. Maps should be made available at parks and recreation centers, libraries, municipal buildings, the transit center, on transit buses, and at tourism information centers. The map should be updated every 3 to 5 years to reflect the bicycle and greenway improvements that will be implemented through this Plan. The map should be made available in hardcopy format and online and contain educational and safety information as well.

SPECIAL UNIVERSITY-BASED PROGRAMS

The City and County of Spartanburg should work with local colleges and universities, such as Wofford College and USC-Upstate, to develop a comprehensive network of campus bicycle and walking routes that are connected with bicycle and pedestrian facilities in the surrounding areas. Integration with colleges and universities will allow greenway and bike facilities to cater to one of the network's largest user groups.

ADOPT-A-TRAIL

Local clubs and organizations provide great volunteer services for maintaining and patrolling trails. This idea could be extended to follow tour routes or specified streets/sidewalks. A sign to recognize the club or organization could be posted as an incentive to sustain high quality volunteer service. The Boy Scouts of America serve as a good model for participation in this type of program.

REVENUE GENERATING PROGRAMS

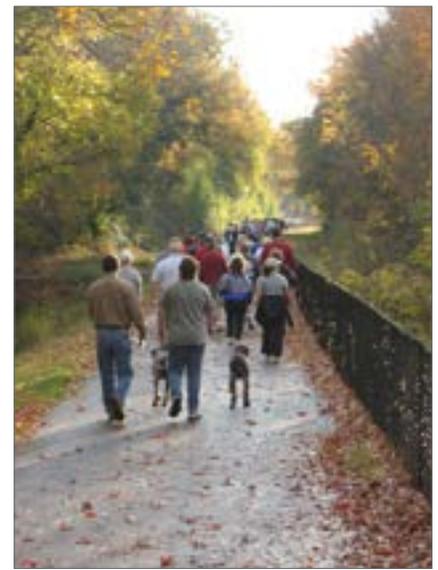
The City and County of Spartanburg should be proactive in increasing revenue from programs and events that can help fund the building, management, and maintenance of future facilities. Fees could be increased in events annually or bi-annually to increase revenue. Specific program and event ideas that are being used to generate revenue across the country include:

- Races/triathlons (fees and/or donations)
- Concessions
- Educational/Nature/Historic tours (fees and/or donations)
- Fund-raisers including dinners/galas
- Moonlight bike rides and walks (fees and/or donations)
- Greenway parade (fees and/or donations)
- Concerts (fees and/or donations)
- Art events along greenway (fees and/or donations)
- Events coincident with other local events such as fairs, festivals, historic/folk events, etc.
- Media events and ribbon-cuttings for new trails and bicycle facilities (donations)

ENCOURAGEMENT RESOURCES

Safe Routes to School is a national program with \$612 million dedicated from Congress from 2005 to 2009. Local Safe Routes to School programs are sustained by parents, community leaders, and citizens to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. This funding can also be used towards the development of school related programs to improve safety and walkability initiatives. The state requires the completion of a competitive application to apply for funding and a workshop at the school to determine what improvements are needed. www.scdot.org/community/saferoutes.shtml

Bikelowa provides a good resource, the "Employer's Bike to Work Guide," providing ideas for encouraging bicycle commuting: www.bikeiowa.com/asp/bike/EmployerGuide.asp



Revenue program examples:
Above: Turkey Day
Below: Spartanburg Regional Classic



This web page from the League of American Bicyclists has information on encouraging bicycle commuting:

www.bikeleague.org/resources/better/commuters.php

The role of the Active Living Resource Center (ALRC) web site is to provide resources and tools to help make walking and bicycling part of your community's healthy lifestyle. This page of the website has encouraging success stories from other communities: **www.activelivingresources.org/stories_directory.php**

Bikes Belong is sponsored by the U.S. bicycle industry with the goal of putting more people on bicycles more often. From helping create safe places to ride to promoting bicycling, they carefully select projects and partnerships that have the capacity to make a difference. Their work concentrates on four main areas: federal policy and funding, national partnerships, community grants, and promoting bicycling. In addition, they operate the Bikes Belong Foundation to focus on kids and bicycle safety. **www.bikesbelong.org/**

ENFORCEMENT PROGRAMS AND RESOURCES

MOTORIST ENFORCEMENT

Based on crash data analysis and observed patterns of behavior, law enforcement can use targeted enforcement to focus on key issues such as motorists speeding, passing too closely to cyclists, parking in bicycle lanes, etc. These issues should be targeted and enforced consistently. The goal is for bicyclists and motorists to recognize and respect each other's rights on the roadway.

BICYCLIST AND PEDESTRIAN ENFORCEMENT

Observations made by local trail and bicycle facility users can be utilized to identify any conflicts or issues that require attention (see online public comment form results). To maintain proper use of trail facilities, volunteers could be used to patrol the trails, particularly on the most popular trails and on days of heavy use. The volunteer patrol can report any suspicious or unlawful activity, as well as answer any questions a trail user may have. When users of the bicycle or pedestrian network witness unlawful activities, they should have a simple way of reporting the issue to police. A hot line should be created, which would compliment trail patrol programs. People could call in and talk to a live operator or to leave a voice mail message about the activity they witnessed. Accidents could also be reported to this hot line. Accident locations could then be mapped to prioritize and support necessary facility improvements.

Additionally, unsafe cycling and walking (e.g. riding on the wrong side of the street, without lights at night, or crossing roadways not in a marked crosswalk) should be addressed by local law enforcement through warnings, with an understanding that there may be a learning curve for new or inexperienced cyclists and pedestrians. Again, the goal is for bicyclists, pedestrians, and motorists to recognize and respect each other's rights on the roadway.

POLICE ON BIKES

The City of Spartanburg already has police bike patrols in the Downtown area. Increased use of police on bikes is a significant benefit for community policing and quality of life. This idea should be coordinated with and extended to include enforcement within the college campuses. Police on bicycles should be models for other cyclists by wearing helmets and riding accordingly.

LOCAL POLICE INPUT

An appointed member of the police forces should serve on the BPAC if possible to understand issues in the area and contribute to the process. Police understand firsthand the common bicycle and pedestrian problems, issues, and areas of concern.

MANDATORY HELMET LAW

The municipalities of Spartanburg County should consider enacting a new mandatory helmet law for their residents. The State of South Carolina is one of the few states without a helmet law (most states require children under the age of 16 to wear a helmet). Municipalities should consider options such as mandatory helmet laws for all ages or possibly increasing to ages above 16. The National Highway Traffic Safety Administration (NHTSA) supports the enactment of bicycle helmet usage laws by states and municipalities. This is due to statistics that prove bicycle helmets provide protection (Example: Helmets are 85 to 88% effective in mitigating head and brain injuries). A number of communities throughout the country have made helmet usage mandatory for all ages especially in the states of Missouri and Washington. For more information, visit <http://helmets.org/mandator.htm> and www.bikeleague.org/media/facts/pdf/BicycleHelmetUseLaws.pdf

As an enforcement/education measure, a partnership between the City and County of Spartanburg and all county municipalities, local shops and groups, and the BPAC could distribute prizes to children seen wearing a helmet. Enforce-

ment should not be heavy-handed but rather an opportunity to educate and encourage helmet usage.

ENFORCEMENT RESOURCES

The National Highway Traffic Safety Administration (NHTSA) awarded a grant to MassBike to develop a national program to educate police departments about laws relating to bicyclists. The program is intended to be taught by law enforcement officers to law enforcement officers as a stand-alone resource. The link contains downloads for presentations, videos, and other resources that are useful for police officers and everyday cyclists alike: www.massbike.org/police/

This webpage of the Pedestrian and Bicycle Information Center has a wealth of resources regarding enforcement issues, ranging from training for local law enforcement to procedures for handling violators, to enforcement example case studies: www.bicyclinginfo.org/enforcement/

The State of South Carolina pedestrian laws can be found here: www.scdps.org/oea/attachments/Ped%20Laws.doc

The State of South Carolina bicycle laws can be found here: <http://www.pccsc.net/bikelaws.php>

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CHAPTER NINE OUTLINE:
 Overview
 Key Action Steps
 Staffing Recommendations
 Facility Development
 Action Steps Table

CHAPTER NINE: IMPLEMENTATION

OVERVIEW

The text and images in this chapter describe how Spartanburg County can turn the vision of a connected network of safe bicycle and pedestrian routes into a reality. The strategy for doing so involves some physical changes to the roadway environment and other landscapes, as well as new local government policies and programs. Successful implementation will also require the dedication of SPATS, county, and municipality staffs, the creation of a countywide Bicycle and Pedestrian Advisory Committee (BPAC), and the support of local advocates. This chapter will serve as a simple guide with key action steps, top priority projects, staffing recommendations, an evaluation and monitoring process, and methods of for bicycle and pedestrian facility development.

KEY ACTION STEPS

ADOPT THIS PLAN

Before any other action takes place, Spartanburg County, the City of Spartanburg, and all municipalities should adopt, publicize, and champion this plan. This should be considered the first step in implementation. Through adoption of this document and its accompanying maps as the County's official bicycle and pedestrian plan, Spartanburg County will be better able to shape transportation decisions so that they fit with the goals of this plan. The County and City of Spartanburg will more appropriately shape future land development so that the resulting built form achieves the goals and vision of this plan. Most importantly, adoption is key to securing funding from SCDOT and other state and federal agencies in support of implementing the recommendations of this plan.

BENCHMARK PROGRESS

In crafting this Plan, a comprehensive database has been developed that documents the location and type of existing bicycle and pedestrian facilities, pedestrian and bicycle crash data, and roadway bicycling suitability (BLOS) in Spartanburg County. Now that the hard part is done (compiling the database from scratch), keeping the database current (as new facilities come online and new crash data is published) should be a relatively easy task. The outputs (maps, etc.) of this

database should be made accessible to local governments, residents, and visitors through website and/or hardcopy formats.

As a complement to this dynamic database, an annual performance report should be published to benchmark progress made in improving the bicycle and pedestrian environment in Spartanburg County. This report would provide an update on a variety of topics, including: bicycle and pedestrian crashes (including changes in high-crash locations); specific new facilities that have been added to the network that year; cumulative statistics on facilities (miles of bike lanes, miles of sidewalks, percentage of intersections that meet ADA guidelines for pedestrian signals and curb ramps, etc.); and education, enforcement, and encouragement programs. This document would be a showcase of success stories and would serve as a barometer for work that still needs to be accomplished. Such a performance report would also be an excellent tool as the City of Spartanburg works toward improving its Bicycle Friendly Community status.

ESTABLISH A BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

As described in Chapter 8, SPATS should encourage and facilitate the establishment of a Bicycle and Pedestrian Advisory Committee (BPAC) to assist in the implementation of this Plan. The BPAC would be comprised of both commuting and recreational cyclists, and should work in cooperation with the SPATS Intermodal Transportation Planner, to champion the recommendations of this Plan. The BPAC's role would be to provide a communications link between the citizens of Spartanburg County, City of Spartanburg, and municipality governments, as well as an avenue for reviewing/revising project priorities for implementation. The BPAC should meet periodically and be tasked with assisting the City and County staff in community outreach, marketing, and educational activities recommended by this Plan.

BEGIN TOP PRIORITY PROJECTS

The entire Spartanburg County Bicycle and Pedestrian Facility Network is described in Chapters 4-6. However, the system will be developed incrementally. For a complete overview of the Top Priority Projects (including the process used for prioritization and cut-sheets for the top projects in metro Spartanburg) refer to Appendix B.

The prioritization of bicycle and pedestrian facility develop-

ment provides a list of the most important projects to improve connectivity and safety, the Top Priority Projects. Steering Committee input, public input, and criteria such as sidewalk gap closure and proximity to schools, tourist destinations, and other trip attractors were used to develop this prioritization list for the City of Spartanburg. Municipality leader input and fieldwork identified 3-5 top priority projects for each municipality.

Immediate attention to the Top Priority Projects will build momentum for the Plan and instantly have a large impact on bicycle and pedestrian conditions throughout Spartanburg County. These projects are the most readily implementable and/or serve to fill critical gaps in the existing network. Development of these Top Priority Projects should result in a swift return on investment, noticeable improvements in the bicycle and pedestrian network, and ultimately generate positive buzz and excitement for the implementation of additional Plan components. Top Priority Projects should be supported by local funding and become part of local Capital Improvement Programs (CIPs).

The Top Priority Project list should be regularly evaluated by the BPAC and SPATS to assess success and progress. Additionally, it should be a dynamic list and as projects are completed and come off the list, new Top Priority Projects should be identified.

IMPROVE AND ENFORCE BICYCLE/PEDESTRIAN POLICIES

As discussed in Chapter 7, Spartanburg County lacks any ordinance for sidewalk or bicycle facility provision. The City of Spartanburg does provide bicycle and pedestrian requirements in its regulations, but improvements are needed. To ensure future development provides pedestrian and bicycle facilities and improves bicycle/pedestrian friendliness, regulations should be updated and enforced. These policy recommendations are provided in more detail in Chapter 7. It should be the goal of the Spartanburg County and City of Spartanburg Planning Department to update zoning and subdivision regulations as soon as possible and to enforce these. The other twelve municipalities in Spartanburg County should also develop and/or enhance their policy documents to be modeled after recommendations in this Plan. SPATS should consider facilitating these efforts by developing a model ordinance that could be customized and adopted by municipalities that may not have the available resources to craft such

for themselves. All pedestrian and bicycle-related regulations should be subject to case-by-case environmental evaluation.

PREPARE ADDITIONAL DOCUMENTS AND STUDIES

This Plan should be viewed as a springboard for additional bicycle and pedestrian planning, research, and documentation. Additional efforts that should be completed include:

- *Develop a Greenway Master Plan* to address the hundreds of miles of greenway recommended throughout the County as part of the Enhancement Plan. The plan would provide more specific trail type, routing, and alignment recommendations and provide an implementation strategy for trail acquisition and development.
- *Publish the bicycle/walking map* described in Chapter 8. The map would encourage individuals and groups to become more active through biking and walking by showcasing key destinations, designated routes, facility locations, and safety/etiquette information.
- *Work with SCDOT and local municipalities to investigate bicycle detection at intersections and traffic signal timing.* Upon completion of evaluation, specific improvement recommendations should be made.
- *Conduct a bicycle parking study.* Such should identify and inventory existing parking facilities and make specific recommendations for the location of additional bicycle parking facilities. A phased priority listing should be developed for implementation.
- *Partner with SPARTA and local municipalities to perform a bus stop access improvement study.* The purpose of such a study would be to assess the need for and recommend sidewalk connections and safe crossings in the vicinity of bus stops. Additionally, comfortable facilities (e.g., shelters, benches, etc.) for people waiting for the bus could also be recommended.

BEGIN SEMIANNUAL (TWICE A YEAR) MEETING WITH PROJECT PARTNERS

It is critical to establish a procedure for the development of bicycle and pedestrian facilities as part of future roadway reconstruction and resurfacing projects. Roads throughout Spartanburg County vary in ownership between the state, the county, and local municipalities. Semiannual meetings with representatives from SCDOT, Spartanburg County Pub-

lic Works, City of Spartanburg Public Works and Engineering, SPATS, BPAC, and local municipalities should occur in order for proper communication to occur. These meetings will help establish a process of incorporating bicycle and pedestrian improvements into upcoming roadway projects. Many bicycle and pedestrian projects recommended in this Plan could be developed as part of roadway reconstruction, widening, or resurfacing projects. Coordination between all appropriate government agencies will establish a system of checks and balances, provide a level of accountability, and ensure that recommendations in this Plan are implemented. The meetings could also feature special training sessions on bike/ped issues.

SEEK MULTIPLE FUNDING SOURCES AND FACILITY DEVELOPMENT OPTIONS

Multiple approaches should be taken to support bicycle and pedestrian facility development and programming. It is important to secure the funding necessary to undertake the short-term, Top Priority Projects but also to develop a long-term funding strategy to allow continued development of the overall system. Capital and local funds for sidewalk, bicycle lane, crosswalk, and greenway construction should be set aside every year, even if only for a small amount (small amounts of local funding can be matched to outside funding sources). A variety of local, state, and federal options and sources exist and should be pursued. These funding options are described in Appendix C. Other methods of pedestrian and bicycle facility development that are efficient and cost-effective are described later in this chapter.

CREATE A SIDEWALK/BICYCLE LANE/GREENWAY REQUEST FORM

Several communities across the county have created an on-line bicycle/pedestrian facility request form that citizens can use to ask for sidewalks and bicycle lanes to be built on streets that they use regularly. This practice should be expanded to all municipalities in the County. A universal request form should be developed, to ensure that prospective projects are judged “apples to apples” and that key funding eligibility questions are asked and answered.

Utilizing local citizens to help find gaps in the current bicycle and pedestrian network is highly important because they are familiar with their specific neighborhoods and needs. After these forms are completed the requested facility can be evaluated by BPAC and SPATS personnel and if deemed important for connectivity purposes they should be added as Top Priority Projects.

STAFFING RECOMMENDATIONS

Currently, the Intermodal Transportation Planner for SPATS handles all bicycle and pedestrian planning responsibilities. As SPATS grows and evolves, it is recommended that a fulltime Bicycle and Pedestrian Coordinator position be established. The “keeping” of this Plan would be the Coordinator’s primary responsibility, including working closely with the SCDOT, Spartanburg County, and municipalities to ensure its implementation, review, and regular update. The Bicycle and Pedestrian Coordinator would also serve as “staff” to the BPAC and would report BPAC progress as appropriate to the Technical and Policy Committees of the MPO.

Additionally, each local government within the County should designate a staff member to “wear the hat” of local bicycle and pedestrian coordinator. The City of Spartanburg should create a bicycle and pedestrian coordinator position. For all other municipalities, these will likely not be fulltime positions; rather, each municipality would assign an existing staff member to now dedicate some specified level of time (10-15%) to bicycle and pedestrian issues. This would include distribution and collection of the facility request forms mentioned above. These individuals would also serve as liaisons to the regional bicycle and pedestrian coordinator.

FACILITY DEVELOPMENT

This section describes types of transportation facility construction and maintenance projects that can be used to create new bicycle and pedestrian facilities. Note that roadway re-construction projects offer excellent opportunities to incorporate facility improvements for bicyclists and pedestrians. It is much more cost-effective to provide a bicycle facility when these road projects are implemented than to initiate the improvement as a “retrofit.”

In order to take advantage of upcoming opportunities to incorporate bicycle and pedestrian facilities into routine transportation projects, the County and its municipalities should continue to track repaving schedules, and other lists of projects. Additionally, the SCDOT’s district office should be encouraged to use this Plan as a ready reference when maintenance projects are being programmed. As recommended in this chapter, a semiannual meeting with project partners will ensure this critical communication. As the long-range transportation plan is updated in future years, bicycle and pedestrian improvements should be included in appropriately programmed projects.

BICYCLE PROJECTS

Restriping

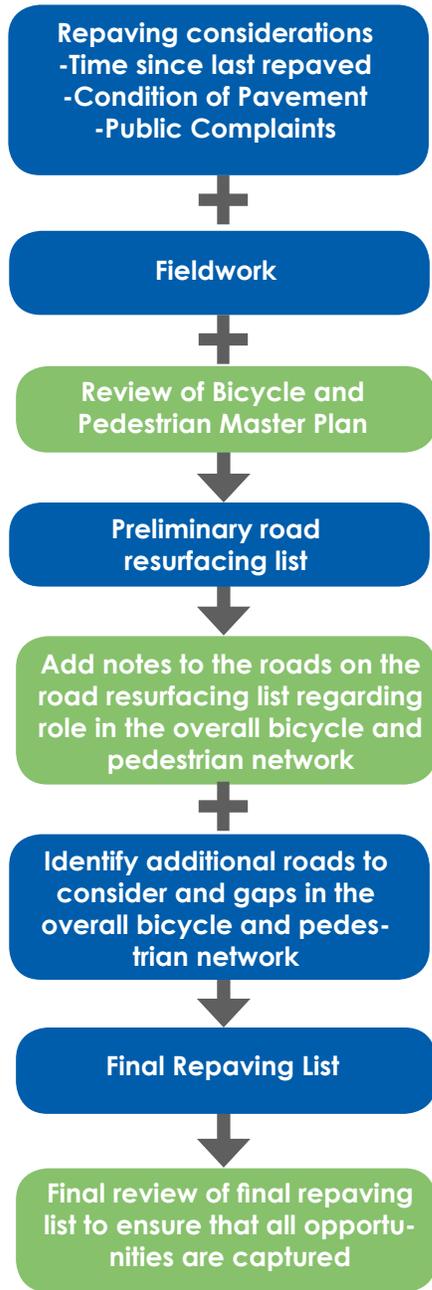
The simplest type of restriping project is the addition of bicycle lanes, edgelines, or shoulder stripes to streets without making any other changes to the roadway. Bicycle lanes, edgelines, and shoulder stripes can also be added by narrowing the existing travel lanes or removing one or more travel lanes. In some locations where the existing lanes are 12- or 13-foot wide, it may be possible to narrow them to 10 feet. This requires changing the configuration of the roadway during a resurfacing project. Several upstate municipalities are considering lane narrowing or “road diet” initiatives as a traffic calming measure. This type of downsizing represents an opportunity for adding bicycle and pedestrian facilities while working within the construct of an existing right-of-way width.

Removing Parking

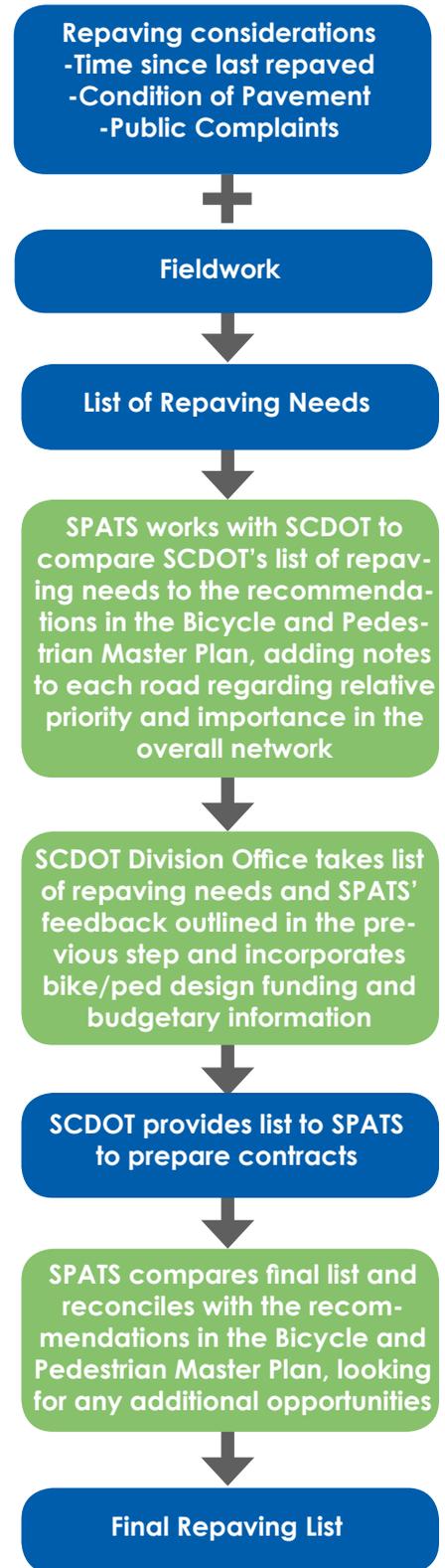
Some neighborhood collector roadways are wide enough to stripe with bike lanes, but they are used by residents for on-street parking, especially in the evening. In locations like this, removing parking is likely to create considerable controversy and is not recommended unless there is no other solution (unless the parking is never used). In the rare case that removing parking is being considered, the parking should not be removed unless there is a great deal of public support for the bike lanes on that particular roadway, and a full public involvement process with adjacent residents and businesses is undertaken prior to removing parking.

If it is not practical to add a bike lane, edgelines and shared lane markings may be considered. On roads where the outside lane and parking area combined are more than 17-foot-wide, 10-foot-wide travel lanes can be striped with an edgeline, leaving the rest of the space on either side for parking. The stripe would help slow motor vehicles and provide extra comfort for bicyclists, especially during the daytime when fewer cars would be parked along the curb. On roads with outside lane and parking areas that are narrower than 17-foot-wide, shared lane markings can be provided every 100 to 200 meters on the right side of the motor vehicle travel lane to increase the visibility of the bike route.

RECOMMENDED ADDITIONS TO THE LOCAL RESURFACING PROCESS



RECOMMENDED ADDITIONS TO THE SCDOT'S RESURFACING PROCESS



Repaving

Repaving projects provide a clean slate for revising pavement markings. When a road is repaved, the roadway should be restriped to create narrower lanes and provide space for bike lanes and shoulders, where feasible. In addition, if the spaces on the sides of non-curb and gutter streets have relatively level grades and few obstructions, the total pavement width can be widened to include paved shoulders.

Installing Shared Lane Markings

Spartanburg County should adopt the use of shared lane markings, or “sharrows” as one of its bicycle facility types. Shared lane markings are a new, experimental, pavement marking that takes the place of traditional bicycle lanes where lanes are too narrow for striping, where speeds do not exceed 35 mph, and/or where there is on-street parking. The intent of the shared lane marking is threefold: 1) they draw attention to the fact that the roadway is accommodating bicycle use and traffic; 2) they clearly define direction of travel for both bicyclists and motorists; and 3) with proper placement, they remind bicyclists to bike further from parked cars to prevent “dooring” collisions.

The National Committee on Uniform Traffic Control Devices (NUTCD) has recommended to the Federal Highway Administration (FHWA) that this marking be incorporated in the next edition of the Manual on Uniform Traffic Control Devices (MUTCD). However, until official action is taken by the FHWA to finalize approval and adoption of shared lane markings in the next edition of the MUTCD, the use of these markings is still considered experimental. The markings are not authorized for use except under written experimental authorization by the FHWA.

Roadway Construction and Reconstruction

Bicyclists should be accommodated any time a new road is constructed or an existing road is reconstructed. In the long-term, all roadways should have on-road bicycle facilities. However, sidepaths can be an acceptable solution in the short-term when a road has few driveways and high-speed, high-volume traffic.

Bridge Replacement

All new or replacement bridges should accommodate bicycles with on-road facilities on both sides of the bridge. If the bridge is in a developed area or an area that may experience development in the future, it should also have wide sidewalks on both sides to accommodate all types of bicyclists and pedestrians.

Federal law, as established in the Transportation Equity Act for the 21st Century (TEA-21), makes the following statement with respect to bridges:

“In any case where a highway bridge deck is being replaced or rehabilitated with Federal financial participation, and bicyclists are permitted on facilities at or near each end of such bridge, and the safe accommodation of bicyclists can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations.” (23 U.S.C. Section 217)

Bridge replacement projects on controlled access freeways where pedestrians and bicyclists are prohibited by law should not include facilities to accommodate bicyclists and pedestrians. In cases, however, where a bridge replacement project on a controlled access freeway impacts a non-controlled access roadway (i.e., a new overpass over an arterial roadway), the project should include the necessary access for pedestrians and bicyclists on the non-limited access roadway (i.e., paved shoulders, sidewalks, and pedestrian/bicycle crossing improvements). Existing and planned greenway crossings, both at-grade and below new bridges, should be similarly accommodated during bridge replacement projects.

Retrofit Roadways with New Bicycle Facilities

There may be critical locations in the Bicycle Route Network that have bicycle safety issues or are essential links to destinations. In these locations, it may be justifiable to add new bicycle facilities before a roadway is scheduled to be repaved or reconstructed.

In some places, it may be relatively easy to add extra pavement for shoulders, but others may require removing trees, moving landscaping or fences, or regrading ditches or hills. Retrofitting roadways with sidepaths creates similar challenges. Improvements in these locations are typically recommended in the long-term.

Some roads may require a “road diet” solution in order to accommodate bicycle facilities. Road diets involve removing vehicle travel lanes and replacing these lanes with on-road bicycle facilities and sidewalks or sidepaths. These are generally recommended only in situations where the vehicular traffic count can be safely and efficiently accommodated with a reduced number of travel lanes. Further study may be nec-

essary for recommended road diets to ensure that capacity and level-of-service needs are balanced against bicycle level of service needs.

Signage and Wayfinding Projects

Signage along specific routes or in an entire community can be updated to make it easier for people to find destinations. Bicycle route signs are one example of these wayfinding signs, and they should be installed along routes independently of other signage projects or as a part of a more comprehensive wayfinding improvement project.

PEDESTRIAN PROJECTS

Residential and Commercial Development

As detailed in Chapter 7, the construction of sidewalks and safe crosswalks should be required during development. Construction of pedestrian facilities that corresponds with site construction is more cost-effective than retrofitting. In commercial development, emphasis should also be focused on safe pedestrian access into, within, and through large parking lots. This ensures the future growth of the pedestrian network and the development of safe communities.

Retrofit Roadways with New Pedestrian Facilities

For top priority pedestrian projects, it may be necessary to add new facilities before a roadway is scheduled to be reconstructed. In some places, it may be relatively easy to add sidewalk segments to fill gaps, but other segments may require removing trees, relocating landscaping or fences, regrading ditches or cut and fill sections, and/or relocating/reconfiguring the drainage system.

Repaving

Repaving and resurfacing projects provide a clean slate for revising pedestrian crosswalk facilities, especially high visibility marked crosswalks, advanced stop lines, and enhanced curb ramps. Depending on the project, sidewalk and refuge islands may be developed as well.

ACTION STEPS TABLE

Task	Lead Agency	Support	Details	Phase
Present Plan to City of Spartanburg Council	SPATS	Project Consultant	Presentation to City Council - Late 2009. Focus on the benefits of bicycle and pedestrian transportation and key aspects of this plan.	Short Term (2009-2010)
Present Plan to Spartanburg County Council	SPATS	Project Consultant	Presentation to County Council - Late 2009. Focus on the benefits of bicycle and pedestrian transportation and key aspects of this plan.	Short Term (2009-2010)
Present Plan to all municipalities	SPATS	Local municipalities	Presentation to town councils - 2010. Focus on the benefits of bicycle and pedestrian transportation and key aspects of this plan.	Short Term (2009-2010)
Approve and adopt this Plan - City	City of Spartanburg	SPATS/Project Consultant	Official letter of approval expected by Early 2010. Through adoption, the Plan becomes a legitimate planning document of the City. Adoption shows that the city has been part of a successful, supported planning process and are partners in implementation.	Short Term (2009-2010)
Approve and adopt this Plan - County	Spartanburg County	SPATS/Project Consultant	Official letter of approval expected by Early 2010. Through adoption, the Plan becomes a legitimate planning document of the County. Adoption shows that the County has been part of a successful, supported planning process and are partners in implementation.	Short Term (2009-2010)
Approve and adopt this Plan - towns	Municipalities	SPATS	Official letter of approval expected by Early 2010. Through adoption, the Plan becomes a legitimate planning document of the county municipalities. Adoption shows that the municipalities have been part of a successful, supported planning process and are partners in implementation.	Short Term (2009-2010)
Create official Spartanburg County Bicycle and Pedestrian Advisory Commission (BPAC)	SPATS, Spartanburg County	City of Spartanburg, municipalities	BPAC will be instrumental in promoting bicycling/walking and championing implementation of this plan. The group would play a strong role in assisting Spartanburg County and its municipalities, fundraising, and establishing programs and activities. The group should be divided into meaningful subcommittees such as policy, program, implementation, and evaluation groups. BPAC members should be responsible for reading the Bicycle and Pedestrian Plan and becoming familiar with the content.	Short Term (2009-2010)
Involve media to spread word to public and elected officials.	SPATS	Spartanburg County, City of Spartanburg, Partners for Active Living	SPATS should utilize the media to announce the adoption of the bicycle and pedestrian plan. Media would include all local newspapers, websites, and local television. When significant trails are constructed, the media should be notified in order to spread the word to the public. This will help build upon successes.	Short Term (2009-2010)
Update bicycle and pedestrian database	SPATS	City of Spartanburg, municipalities	Continuous updating of bicycle and pedestrian database as new facilities come online and new crash data is published. SPATS should lead this effort, but the City of Spartanburg and other municipalities must coordinate as improvements are made.	Continuous/Ongoing
Publish Annual Performance Report	SPATS	City of Spartanburg, municipalities	Publish an annual report to provide an update on progress made during that year to advance bicycle and pedestrian modes. SPATS should lead this effort, but the City of Spartanburg and other municipalities must coordinate.	Annually

Task	Lead Agency	Support	Details	Phase
Begin semiannual project development meeting with project partners	SPATS, BPAC	SCDOT, Spartanburg County Public Works, City of Spartanburg Public Works and Engineering Depts; municipality planning/public works officials	These meetings will help establish a process of incorporating bicycle and pedestrian improvements into upcoming roadway projects. Many bicycle and pedestrian projects recommended in this Plan could be developed as part of a roadway reconstruction, widening, or resurfacing project. Coordination between all appropriate government agencies, especially SCDOT, will ensure that recommendations in this Plan are implemented.	Short Term (2009-2010)
Begin semiannual project development meeting with SCDOT	SPATS, BPAC	SCDOT	These meetings will help establish a process of incorporating bicycle and pedestrian improvements into upcoming roadway projects. Many bicycle and pedestrian projects recommended in this Plan could be developed as part of a roadway reconstruction, widening, or resurfacing project. Coordination is critical and a process should be established. SPATS, with assistance from the county and municipalities, will need to develop "typicals" to provide to SCDOT each bicycle and pedestrian facilities may be added through a roadway redesign. SPATS, with assistance from BPAC, may need to "chase pavers" on occasion to ensure facilities are implemented during ongoing projects.	Short Term (2009-2010)
Provide bicycle and pedestrian project lists, plan, and maps to SCDOT. Develop "typicals" with SCDOT so that bicycle and pedestrian facilities are implemented during upcoming roadway projects.	SPATS, SCDOT	Spartanburg County	The plan, project lists, and maps should be provided to appropriate personnel at SCDOT to ensure that recommendations are implemented during upcoming state roadway resurfacing, reconstruction, and widening projects. SCDOT has indicated their need for "typicals" as well for each project. The bicycle and pedestrian coordinator should develop these with assistance from appropriate agencies.	Short Term (2009-2010)
Empower municipalities to develop projects.	SPATS, BPAC	Municipalities	With this plan adopted and complete, municipalities across Spartanburg County should seek their own funding sources to implement projects. Having a plan in place will provide them greater opportunity to receive funds.	Short Term (2009-2010)
Ensure planning efforts are integrated regionally	SPATS, Spartanburg County, SCDOT, City of Spartanburg, municipalities,	BPAC, Partners for Active Living	Combining resources and efforts with surrounding municipalities, regional entities, and stakeholders is mutually beneficial. Communicate and coordinate Spartanburg County and neighboring municipalities on regional greenway corridors; partner for joint-funding opportunities. After adoption by the County, this document should also be recognized in regional transportation plans.	Short Term (2009-2010)
Encouragement Action #1	SPATS, PAL, Spartanburg County, City of Spartanburg, municipalities	Local schools, BPAC, SRTS Program	Apply for Safe Routes to School funding for planning and implementation. Establish 'bike-to-school' groups and regular bicycling activities for children through the Safe Routes to School Programs through 2012.	Short Term (2009-2010)
Enforcement Action #1	SPATS, PAL	Spartanburg County Council, Spartanburg City Council, and other municipalities	Consider mandatory helmet law for the county and cities that would extend the existing South Carolina law (under age 16) to more ages or all ages.	Short Term (2009-2010)

Task	Lead Agency	Support	Details	Phase
Begin development of Spartanburg County Greenways Plan and Palmetto Trail Master Plan	SPATS, Palmetto Conservation Foundation, greenway groups	Upstate Forever, Spartanburg County, City of Spartanburg, BPAC	A greenway master plan would address the hundreds of miles of greenway recommended throughout the county as part of the Enhancement Plan. The plan would provide more specific trail type, routing, and alignment recommendations and provide an implementation strategy for trail acquisition and development. A Palmetto Trail Master Plan for Spartanburg County is also critical because of its great potential as a long distance trail corridor.	Short Term (2010)
Identify and secure specific funding sources for Top Priority Projects implementation	SPATS	Partners for Active Living, Mary Black Foundation, Spartanburg County and City of Spartanburg, SCDOT	Appendix E contains funding opportunities.	Short Term (2010)
Complete Top Priority Projects	SPATS, SCDOT, Spartanburg County, City of Spartanburg	Municipalities	The prioritization of bicycle and pedestrian facility development provides a list of the most important projects to improve connectivity and safety. Immediate attention to these Top Priority Projects will instantly have a large impact on bicycling and walking conditions in Spartanburg County. Consider a bond referendum for greenways and roadway improvements for bicycle transportation. First phase work that can be done at a low cost includes crossing improvements and the simple bicycle lane/sharrow paint projects. The intersection recommendations are very critical because of safety concerns and because these projects are more affordable.	Short Term (2010)
Develop a long term funding strategy	SPATS, BPAC, Spartanburg County, City of Spartanburg	Municipalities	To allow continued development of the overall system, capital funds for bicycle and pedestrian facility construction should be set aside every year, even if only for a small amount (small amounts of local funding can be matched to outside funding sources). Funding for an ongoing maintenance program should also be included in the county and town operating budgets.	Short Term (2010)
Be open to creative solutions.	BPAC, City of Spartanburg, Spartanburg County	SCDOT, municipalities	In many cases, the most ideal bicycle and pedestrian scenario (such as a complete street of bicycle lanes and sidewalks) will not be achievable because of ROW issues, homeowners issues, etc. Consider alternative, creative means such as traffic calming techniques (speed humps, chicanes, bulb-outs, and speed limit reductions).	Continuous/Ongoing
Policy Action #1	Spartanburg County	SPATS	The Spartanburg County Bicycle and Pedestrian Master Plan should become a component of the Comprehensive Plan. This step will make clear the importance of both documents working together in future development and growth decisions.	Short Term (2010)
Policy Action #2	City of Spartanburg	SPATS	The Spartanburg County Bicycle and Pedestrian Master Plan should become a component of the Comprehensive Plan. This step will make clear the importance of both documents working together in future development and growth decisions.	Short Term (2010)
Policy Action #3	Spartanburg County	SPATS	Growth Management Audit should be adopted and implemented. Additional policies recommended in the Spartanburg County Bicycle and Pedestrian Plan should be incorporated	Short Term (2010)

Task	Lead Agency	Support	Details	Phase
Policy Action #4	Spartanburg County	SPATS	Revisions and additions to the Spartanburg County Unified Land Mangement Ordinance (ULMO): The changes suggested in Chapter 7 serve as recommendations for the ordinance, reflecting the findings and recommendations of this Bicycle and Pedestrian Plan, and clarify some basic policy positions regarding future development and the provision of bicycle and pedestrian facilities. Some edits are also suggested for consistency in terminology. Currently, the ULMO has no requirements for bicycle and pedestrian facilities with development.	Short Term (2010)
Policy Action #5	City of Spartanburg	SPATS	Revisions and additions to the City of Spartanburg Zoning Ordinance and Land Development Regulations: The changes suggested in Chapter 7 serve as recommendations for the ordinance, reflecting the findings and recommendations of this Bicycle and Pedestrian Plan, and clarify some basic policy positions regarding future development and the provision of bicycle and pedestrian facilities. Some edits are also suggested for consistency in terminology.	Short Term (2010)
Policy Action #6	SPATS, SCDOT, Spartanburg County, City of Spartanburg	Municipalities	Consider a design guideline policy to create bicycle lanes through the narrowing of travel lanes to 10' or 11' and lowering of speed limits.	Short Term (2010)
Policy Action #7	Municipalities	SPATS	Municipalities should develop and/or enhance policy documents to be modeled after the recommendations of this Plan. SPATS should consider developing a model ordinance to facilitate local municipality adoption of policy recommendations. Such could be customized and adopted by municipalities that may not have the resources to craft such for themselves.	Short Term (2010)
Develop Spartanburg County and City bicycle/walking map	BPAC, SPATS, Partners for Active Living	Spartanburg County, City of Spartanburg, and municipalities	A hardcopy and online map will display bicycle and pedestrian facilities, destinations, and educational materials. A map or series of maps would be developed for the cities and towns of Spartanburg County. These maps should be updated every 3-5 years.	Short Term (2010)
Perform bicycle detection and traffic signal timing analyses.	SPATS, SCDOT	Spartanburg County, City of Spartanburg, Municipalities	Work with SCDOT and local municipalities to investigate bicycle detection at intersections and traffic signal timing. Upon completion of evaluation, specific improvement recommendations should be made.	Continuous/Ongoing
Conduct a bicycle parking study.	SPATS, Spartanburg County, City of Spartanburg	Municipalities, Partners for Active Living, BPAC	Identify and inventory existing parking facilities and make specific reommendations for the location of additional bicycle parking facilities. A phase priority listing should be developed for implementation.	Short Term (2009-2010)
Apply for bicycle parking/locker grant applications.	SPATS, Partners for Active Living	Spartanburg County, City of Spartanburg, and municipalities	Apply for grant funding to provide enhanced bicycle parking and lockers.	Short Term (2009-2010)

Task	Lead Agency	Support	Details	Phase
Provide bicycle parking in key locations throughout City of Spartanburg and municipalities throughout the County.	SPATS, SCDOT, Spartanburg County, City of Spartanburg	Municipalities, Partners for Active Living, BPAC	Provide bicycle services such as bicycle racks, covered parking, bicycle stations, showers at employment centers, and bicycle rentals. Provide bicycle parking at sites recommended in this Plan. Work with downtown groups and BPAC to determine other key locations for future parking facilities.	Short- to Mid-Term (2010-2011)
Continually support and evaluate implementation of this plan	SPATS, BPAC	Spartanburg County, City of Spartanburg, and municipalities	The different county and city departments and boards and BPAC representatives should meet quarterly to assess implementation and evaluate progress.	Continuous/Ongoing
Perform bus stop access improvement study.	SPARTA, Spartanburg County, City of Spartanburg	SPATS, Municipalities	Assess the need for and recommend sidewalk connections and safe crossings in the vicinity of bus stops. Additionally, comfortable facilities (e.g., shelters, benches, etc.) for people waiting for the bus could also be recommended.	Short- to Mid-Term (2010-2011)
Take the necessary steps to increase bronze status by the League of American Bicyclists as a 'Bicycle Friendly Community' by 2011.	Partners for Active Living	SPATS	Download and review the application for the Bicycle Friendly Community designation. Determine which action steps of this plan would be the most strategic in terms of applying for the desired designation. Place emphasis on completing those steps, then apply.	Short- to Mid-Term (2009-2011)
Begin pilot programming effort	SPATS, BPAC	Spartanburg County, City of Spartanburg, and municipalities, Partners for Active Living	As described in Chapter 8, begin pilot education/encouragement/enforcement campaign immediately following the completion of a major bicycle and/or pedestrian project, such as SC 9 in Boiling Springs.	Continuous/Ongoing
Use updated AASHTO bicycle and pedestrian design guide	SPATS, SCDOT, Spartanburg County, City of Spartanburg	Municipalities	Obtain new published AASHTO bicycle and pedestrian guidelines when published in late 2009/early 2010. Consider utilization of these new guidelines for facilities recommended in this Plan.	Short- to Mid-Term (2009-2011)
Online form for bicycle/pedestrian facility request	SPATS	Spartanburg County, City of Spartanburg, and municipalities	Provide a service that allows residents to request bicycle and pedestrian facilities.	Short- to Mid-Term (2009-2011)
Hire fulltime Bicycle and Pedestrian Coordinator	SPATS	Spartanburg County	The "keeping" of this Plan would be the Coordinator's primary responsibility, including working closely with the SCDOT, Spartanburg County, and municipalities to ensure its implementation, review, and regular update. The Coordinator would also serve as "staff" to the BPAC and report BPAC progress as appropriate to the Technical and Policy Committees of the MPO.	Mid-Term (2011-2012)
Designate staff member to be local bicycle and pedestrian coordinator	City of Spartanburg, Municipalities	SPATS	Each local government within the County should designate a staff member to "wear the hat" of local bicycle and pedestrian coordinator. The City of Spartanburg should create a bicycle and pedestrian coordinator position. For the other municipalities in Spartanburg County, these will likely not be fulltime positions; rather, each municipality would assign an existing staff member to now dedicate some specified level of time (10-15%) to bicycle and pedestrian issues.	Mid-Term (2011-2012)

Task	Lead Agency	Support	Details	Phase
Enforcement Action #2	Spartanburg County, City, and other municipality Police Departments	General Public (for reporting enforcement issues/violation incidents)	Establish an easy-to-use and well-publicized bicycle and pedestrian enforcement hot line and online resource. Complaints that include license numbers should result in a letter to the owner of the vehicle that includes the complaint as well as a handout that outlines the rules of the road and rights for both cyclists and motorists.	Mid-Term (2011-2012)
Maintain bicycle and pedestrian facilities	Spartanburg County, SCDOT, City of Spartanburg, municipalities, SPATS	BPAC + General Public (for reporting maintenance needs)	SCDOT, Spartanburg County, and the municipalities should make immediate repairs to any on-road bicycle facilities that are damaged or have hazardous conditions. The governments should make commitment to regular sweeping of bicycle lanes.	Continuous/Ongoing
Encouragement Action #2	SPATS, PAL, Spartanburg County, City of Spartanburg, municipalities	BPAC, SPARTA	Develop programs and incentives for employers to bicycle to work. Work with local employers to accomplish this goal. Continue to promote and expand Bike to Work Month and Bike to Work Day.	Continuous/Ongoing
Enforcement Action #3	Spartanburg County, City, and other municipality Police Departments	General Public (for reporting enforcement issues/violation incidents)	Target and enforce all illegal motorist and bicyclist behavior that may jeopardize public safety and the success of the Bicycle and Pedestrian Network, particularly speeding. Base the location of targeted enforcement areas on reported incidents from the hotline.	Continuous/Ongoing
Continue to make regional bicycle and pedestrian connections	SPATS, PAL, Spartanburg County, City of Spartanburg, municipalities	Surrounding counties and towns, SCDOT	Work with surrounding counties and towns to ensure bicycle and pedestrian connectivity. Focus on regional trail systems.	Continuous/Ongoing
Complete phase 2 projects	SPATS, PAL, Spartanburg County, City of Spartanburg, municipalities	BPAC, SCDOT	In 2011, reevaluate priorities based on what has been completed thus far by creating a new agenda of "Phase 2" projects. Consider including phase one projects that were not completed and consider updating certain aspects of the plan's design standards, programs, and policies based on innovations and new ideas since 2009.	Mid Term (2011-2013)
Complete phase 3 projects	SPATS, PAL, Spartanburg County, City of Spartanburg, municipalities	BPAC, SCDOT	In 2014, reassess projects and reevaluate priorities and phases. Consider updating the entire plan.	Long Term (2014-2019)

APPENDIX A OUTLINE:
Overview
Public Workshops
Municipality Meetings
Comment Forms

APPENDIX A: Public Input

OVERVIEW

In order to gain local knowledge and input, a public outreach component was included as an integral part of planning efforts for the Spartanburg County Bicycle and Pedestrian Master Plan. Public input was gathered through several different means including the following: Steering Committee meetings, public workshops, municipality meetings, stakeholder meetings, and public comment forms. This offered the representatives and citizens of Spartanburg County and its municipalities opportunity to contribute to the Plan's development.

Steering Committee meetings were held throughout the planning process with representatives from Spartanburg County and its municipalities. These took place to establish visions and goals for this effort. Committee members also identified key opportunities and strategies for the bicycle and pedestrian system and provided feedback to the Draft Plan.

Stakeholder meetings were held with municipality citizens, greenway advocates, senior groups, and SCDOT. Input was received and recorded. In addition to receiving input, these meetings served as a springboard into the implementation process.

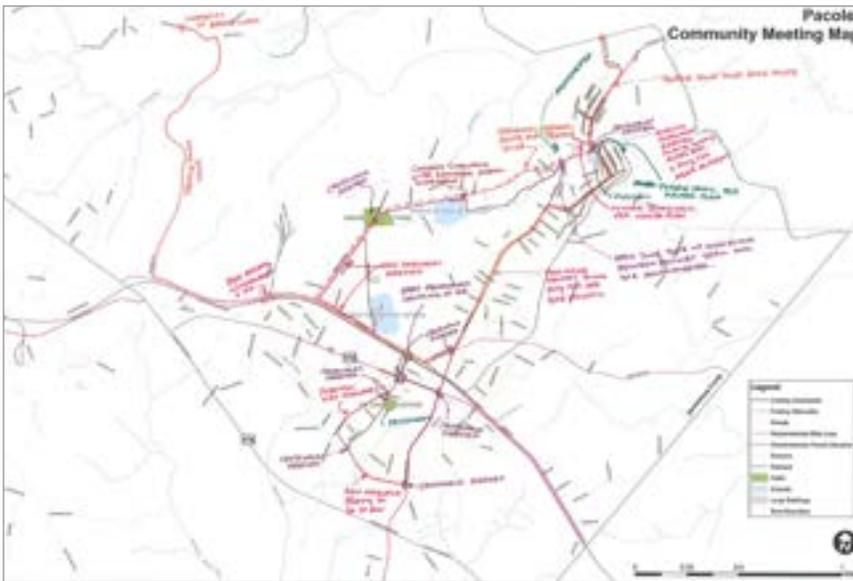
PUBLIC WORKSHOPS

Two public input workshops were conducted during the planning process. The workshops were both held at major public events in order to receive input from a wide cross section of people (not just bicycle and pedestrian advocates). The first opportunity was a booth in Downtown Spartanburg, held in conjunction with the annual Spring Fling Festival and the Spartanburg Regional Classic bicycle races. This initial public input session sought to gather preliminary input from citizens to assist in the development of draft recommendations for the plan. The second public workshop presented draft recommendations and solicited public comment during the Carolina Panthers Party. Preliminary recommendations were presented in map form. Citizens responded to these draft recommendations by providing feedback and discussion of proposed bicycle and pedestrian facilities.

At both workshop sessions, public input was taken in the form of map markups, written comments, and through discussions between citizens, consultant staff from Greenways Incorporated and BP Barber, and SPATS staff. In addition, a hardcopy public comment form was developed and distributed for hand written responses during each event.

MUNICIPALITY MEETINGS

A meeting was held with each of the 13 municipalities in Spartanburg County early in the planning process. SPATS staff and BP Barber staff visited each community, met with local leaders and planners, and toured the area. The goal was to learn the bicycle and pedestrian visions, goals, and priorities for each community and to reflect this information in the Plan. BP Barber staff recorded notes, meeting summaries, and map comments. This information was used to update the bicycle and pedestrian network recommendations. See Appendix F: Community Meeting Summaries for details.



Left: An example community input map (from Pacolet) that was marked up with useful input of bicycle and pedestrian conditions and recommendations.

COMMENT FORM

A comment form was developed for this process and made available in both hardcopy and online form. The comment form was available online for six months. To maximize the responses to the online form, the web address was distributed at the public meeting, to local interest groups, in newsletters, and on flyers throughout the county. Approximately 1,059 persons completed the comment form.

The comment form results shown on the following pages have been tabulated to provide insight into local residents' opinions and values.

1. How do you rate present pedestrian conditions in the Spartanburg area? (select one)			
		Response Percent	Response Count
Excellent		8.5%	89
Fair		61.6%	642
Poor		29.8%	311
		<i>answered question</i>	1,042
		<i>skipped question</i>	17

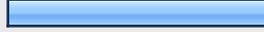
2. How do you rate present bicycling conditions in the Spartanburg area? (select one)			
		Response Percent	Response Count
Excellent		6.6%	68
Fair		50.8%	527
Poor		42.6%	442
		<i>answered question</i>	1,037
		<i>skipped question</i>	22

3. How important to you is improving walking and biking conditions in the Spartanburg area? (select one)			
		Response Percent	Response Count
Very important		75.6%	788
Somewhat important		20.4%	213
Not important		4.0%	42
		<i>answered question</i>	1,043
		<i>skipped question</i>	16

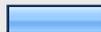
4. Do you feel that the Spartanburg area should consider non-automobile transportation (i.e. pedestrian and bicycle) as a priority? (select one)

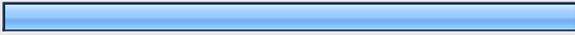
		Response Percent	Response Count
Yes		76.3%	791
No		14.0%	145
Doesn't matter		9.7%	101
<i>answered question</i>			1,037
<i>skipped question</i>			22

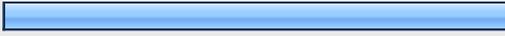
5. How often do you walk now? (select one)

		Response Percent	Response Count
never		8.1%	84
few times per month		27.0%	280
few times per week		40.1%	416
5+ times per week		24.9%	258
<i>answered question</i>			1,038
<i>skipped question</i>			21

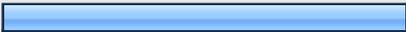
6. How often do you bike now? (select one)

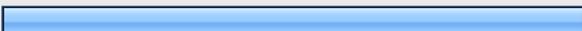
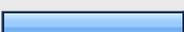
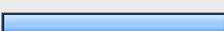
		Response Percent	Response Count
never		52.2%	545
few times per month		25.6%	268
few times per week		14.4%	151
5+ times per week		7.8%	81
<i>answered question</i>			1,045
<i>skipped question</i>			14

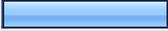
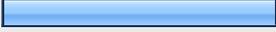
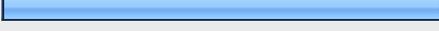
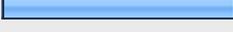
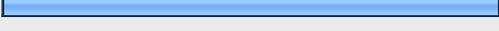
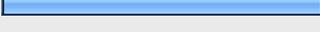
7. Would you walk more often if more sidewalks, trails, and safe roadway crossings were provided for pedestrians?			
		Response Percent	Response Count
Yes		88.7%	923
No		11.3%	118
		<i>answered question</i>	1,041
		<i>skipped question</i>	18

8. Would you bike more often if more bicycle lanes, trails, and safe roadway crossings were provided for bicyclists?			
		Response Percent	Response Count
Yes		78.3%	807
No		21.7%	224
		<i>answered question</i>	1,031
		<i>skipped question</i>	28

9. Should public funds be used to improve pedestrian and bicycle options and facilities?			
		Response Percent	Response Count
Yes		88.3%	902
No		11.7%	120
		<i>answered question</i>	1,022
		<i>skipped question</i>	37

10. What types of funds should be used? (Choose all that apply)			
		Response Percent	Response Count
Local foundation or nonprofit		62.4%	630
Capital improvements bond or other financing strategy		41.2%	416
Existing local taxes		52.0%	525
New local taxes		19.6%	198
State and federal grants		74.3%	750
Other (please specify)		8.2%	83
		<i>answered question</i>	1,009
		<i>skipped question</i>	50

11. For what purposes do you walk or bike most now and/or would you want to walk for in the future? Select all that apply.			
		Response Percent	Response Count
Fitness or recreation		90.1%	923
Transportation to some destination		38.0%	389
Social visits		27.6%	283
Walking the dog		34.4%	352
Walking the baby / pushing a stroller		13.7%	140
		<i>answered question</i>	1,024
		<i>skipped question</i>	35

12. What walking and bicycling destinations would you most like to get to? Select all that apply.			
		Response Percent	Response Count
Place of work		34.6%	347
School		25.3%	254
Restaurants		42.0%	422
Public Transportation		17.6%	177
Shopping		36.4%	365
Parks		67.9%	682
Entertainment		35.6%	357
Trails and greenways		76.7%	770
Libraries or recreation centers		49.2%	494
		<i>answered question</i>	1,004
		<i>skipped question</i>	55

13. What factors discourage walking? Select all that apply.			
		Response Percent	Response Count
Lack of sidewalks and trails		77.8%	790
Lack of crosswalks at traffic signals		37.5%	381
Lack of pedestrian signals at intersections		31.3%	318
Automobile traffic and speed		65.6%	666
Pedestrian unfriendly streets and land uses		55.8%	566
Lack of interest		10.1%	103
Lack of time		17.4%	177
Aggressive motorist behavior		46.5%	472
Sidewalks in need of repair		35.7%	362
Lack of nearby destinations		28.4%	288
Criminal activity		35.2%	357
Level of street lighting		34.1%	346
Lack of landscaping and/or buffer between sidewalks and road		33.8%	343
	Other (please specify)		56
	answered question		1,015
	skipped question		44

14. What factors discourage biking? Select all that apply.			
		Response Percent	Response Count
Lack of bicycle lanes, shoulders, or paths		77.6%	737
Narrow lanes		56.2%	534
High-speed traffic		73.9%	702
Traffic volume		55.1%	523
Inconsiderate motorists		59.6%	566
Lack of bicycle parking		27.3%	259
Lack of showers and lockers at workplace		13.2%	125
Criminal activity		26.7%	254
Loose gravel or potholes		33.9%	322
Crossing busy roads		40.7%	387
Poor lighting		25.2%	239
Drainage grates		13.5%	128
Other travel modes are safer or more comfortable		18.8%	179
Hills		9.3%	88
Physical ability		10.8%	103
Travel time or distance		16.7%	159
	Other (please specify)		42
	answered question		950
	skipped question		109

15. What do you think are the top roadway corridors most needing pedestrian and bicycle improvements?

Roadway Corridor	Responses
Main Street/W O Ezell/US 29	167
Pine Street	91
Reidville Road/John B. White Sr. Blvd.	68
Church Street	57
SC 9 (Spartanburg - Boiling Springs)	50
US 290	31
US 221	26
Asheville Highway	25
Blackstock Road	22
Woodburn Road	22
Fernwood Drive	20
Country Club Road	19
Fernwood Glendale Avenue	14

16. What do you think are the top intersections most needing pedestrian and bicycle improvements? Example: Smith Ave. & Turner St.

Intersection	Responses
Main Street & Pine Street	73
Hwy 29 (WO Ezell Blvd) & Blackstock Road (not differentiated)	30
Pine Street & Country Club Road	25
Main Street & Fernwood-Glendale Road	24
Union Street & Henry Street	20
Main Street and Church Street	15
Henry Street & Church Street	14
Reidville Road & Blackstock Road (not differentiated)	14
Saint John Street and Main Street	14
All intersections	13
Saint John Street and Pine Street	13

17. What is your zip code?

		Response Count
<i>(see question #20, page A-12)</i>		
		934
	answered question	934
	skipped question	125

18. What is your gender?			Response Percent	Response Count
M			43.8%	424
F			56.2%	544
			<i>answered question</i>	968
			<i>skipped question</i>	91

19. What is your age?			Response Percent	Response Count
0-18			3.1%	30
19-25			7.7%	75
26-35			21.6%	211
36-45			22.6%	220
46-55			20.5%	200
56-65			14.6%	142
65 and older			9.9%	97
			<i>answered question</i>	975
			<i>skipped question</i>	84

20. Where do you live?			
		Response Percent	Response Count
City of Spartanburg		33.3%	312
Spartanburg County		36.6%	343
Woodruff		3.1%	29
Cowpens		1.3%	12
Pacolet		2.8%	26
Duncan		2.8%	26
Landrum		1.5%	14
Chesnee		3.5%	33
Lyman		2.5%	23
Wellford		1.6%	15
Inman		6.1%	57
Greer		1.0%	9
Reidville		1.6%	15
Greenville County		2.4%	22
		Other (please specify)	85
		<i>answered question</i>	936
		<i>skipped question</i>	123

21. Please provide your email address below if you would like to stay up to date with the Spartanburg Bicycle and Pedestrian Transportation Plan.		
		Response Count
		359
		<i>answered question</i>
		359
		<i>skipped question</i>
		700

APPENDIX B: Prioritization and Phase One Cut-Sheets

PRIORITIZATION PROCESS

The prioritization process began by making a list of all the roadways in the metro-Spartanburg area (within city boundaries and adjoining areas) for which bicycle and/or pedestrian recommendations were made. The roadways were then broken down into hundreds of segments at logical points, such as major intersections. Most segments are between one half mile and two miles long.

The weighted criteria used to rank each segment was custom designed for Spartanburg, based on public input, steering committee input, and data collected pertaining to Spartanburg's existing conditions. Project steering committee members were given a worksheet with example criteria and weights used in other communities. They were then asked to adjust both the criteria and the weights assigned to each criteria, according to the bicycling and pedestrian-related needs and desires expressed by themselves and the public (the specific criteria and weights used are listed on the following page). Furthermore, public survey results were also incorporated into the prioritization process.

After creating a list of prioritized individual segments, the top 10 were selected from each of the bicycle and pedestrian lists (see prioritization tables on pages B-3 through B-8).

Note: While it is ideal to develop bicycle and pedestrian facilities in order of priority, it is best to also construct facilities as opportunities arise. Some of the most cost-effective opportunities to provide bicycle and pedestrian facilities are during routine roadway construction, reconstruction, and repaving projects. A new commercial development or a roadway widening project, for instance, would provide the means to build bicycle facilities or trails as a component of an existing effort, regardless of priority ranking through this process.

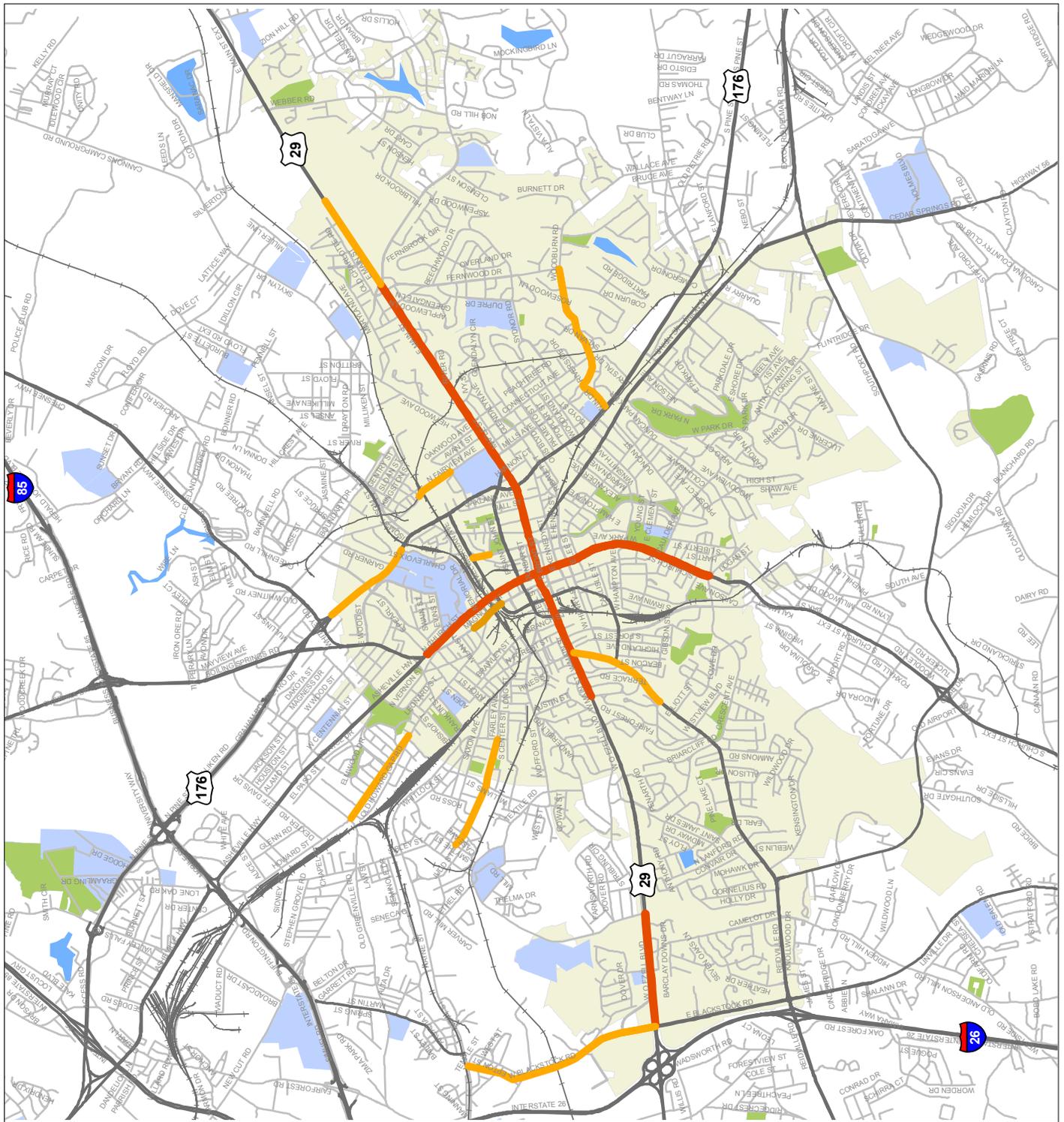
CRITERIA AND WEIGHT USED TO PRIORITIZE FACILITIES

<i>Criteria</i>	<i>Weight*</i>
Direct Access to/from a School	5
Direct Access to/from an Existing or Funded Greenway	5
Segment Contains High Level of Reported Bike Accidents	5
Direct Access to/from a Park or Recreation Center	5
Serves low income areas with low car ownership rates	5
Top 1-5 "Most in Need of Improvement" (from Online Survey)	4
Direct Access to/from Downtown	4
Direct Access to/from most used bus stops	4
Elementary, Middle, and High School Proximity (1/2 mile)	4
Top 6-10 "Most in Need of Improvement" (from Online Survey)	4
Segment Contains a Top 10 Intersection	
"Most in Need of Improvement" (from Online Survey)	4
Proposed Cycle Station Proximity (1/2 mile)	4
College/University Proximity (1 mile radius)	4
Park or Recreation Center Proximity (1/2 mile)	3
Regional Connection and/or Interstate Highway Crossing and Rail Road Crossing	3
Segment contains reported bike/ped accidents	3
Direct Access to Major Employment Centers	3
Direct Access to/from a Proposed Greenway	3
Direct Access to/from High Density Residential Areas (Census Data)	3
Shopping Center Proximity (1/2 mile)	2

PROJECT CUT-SHEETS (PAGES B-9 THROUGH B-30)

Project cut-sheets are provided for anyone who wishes to better understand the top 10 projects that are recommended in this plan for both bicycle *and* pedestrian facilities (20 projects total). The cut sheets are particularly useful for engineers from the municipalities, county and SCDOT, as they begin developing more detailed design work for these projects. They will also help the various planning and transportation department staff persons as they explain these projects to locally elected officials, potential funding agencies, and interested citizens. The map on the following page shows locations for these projects. The labels on Map B.1 correspond to the cut-sheets that follow ('B1' is for 'Bicycle Project #1', and 'P1' is for 'Pedestrian Project #1', and so forth).

MAP B.1 TOP 10 PRIORITY BICYCLE & PEDESTRIAN RECOMMENDATIONS



Legend

- █ Top 10 Bicycle Priorities
- █ Top 10 Pedestrian Projects
- Rail Road
- Parks
- Water
- Schools

Data Source: SPATS

BIKE PROJECT 1: E MAIN ST

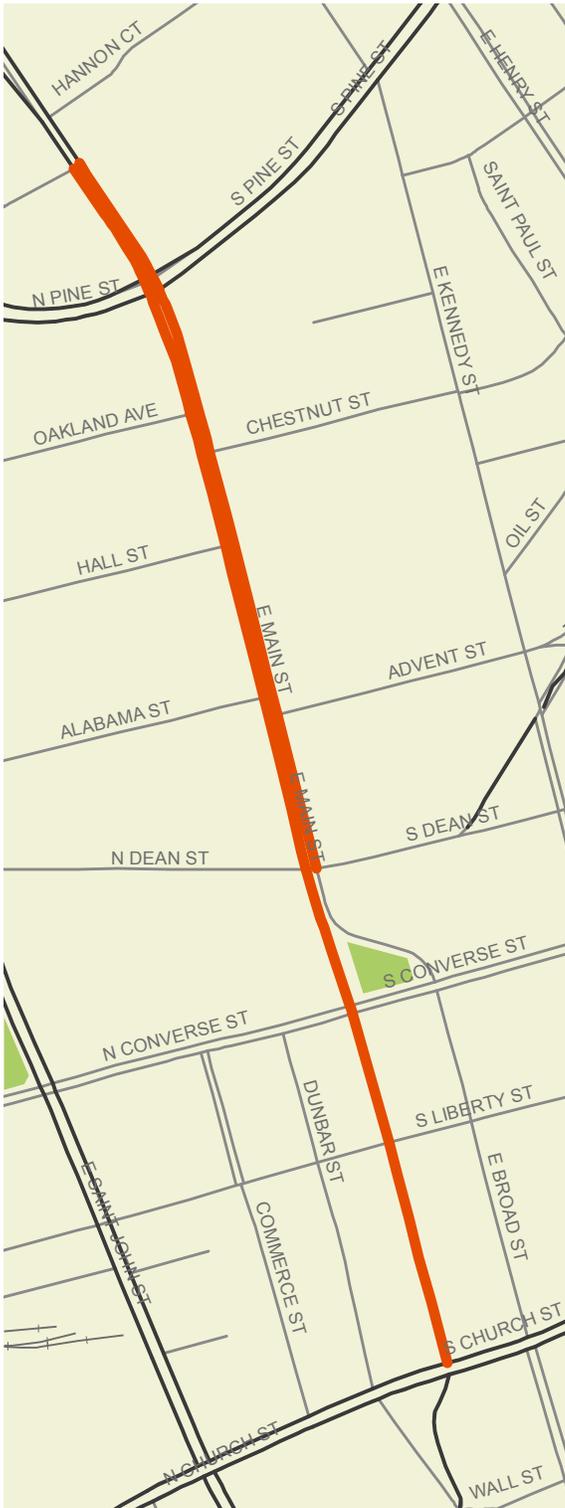


Boundaries:
S Church St
Galbraith St

Facility:
Sharrows

Project Type:
Paint-Stripe

Function:
Downtown
Connection



Existing
62' Roadway
4 Lanes W/Turn Lanes
On Street Parking

Recommendation
Stripe Sharrows

Existing
20' Roadway
2 Lanes
Angle Parking

Recommendation
Stripe Sharrows

BIKE PROJECT 2: S CHURCH ST



Boundaries:

W Lee St
Bomar Ave

Facility:

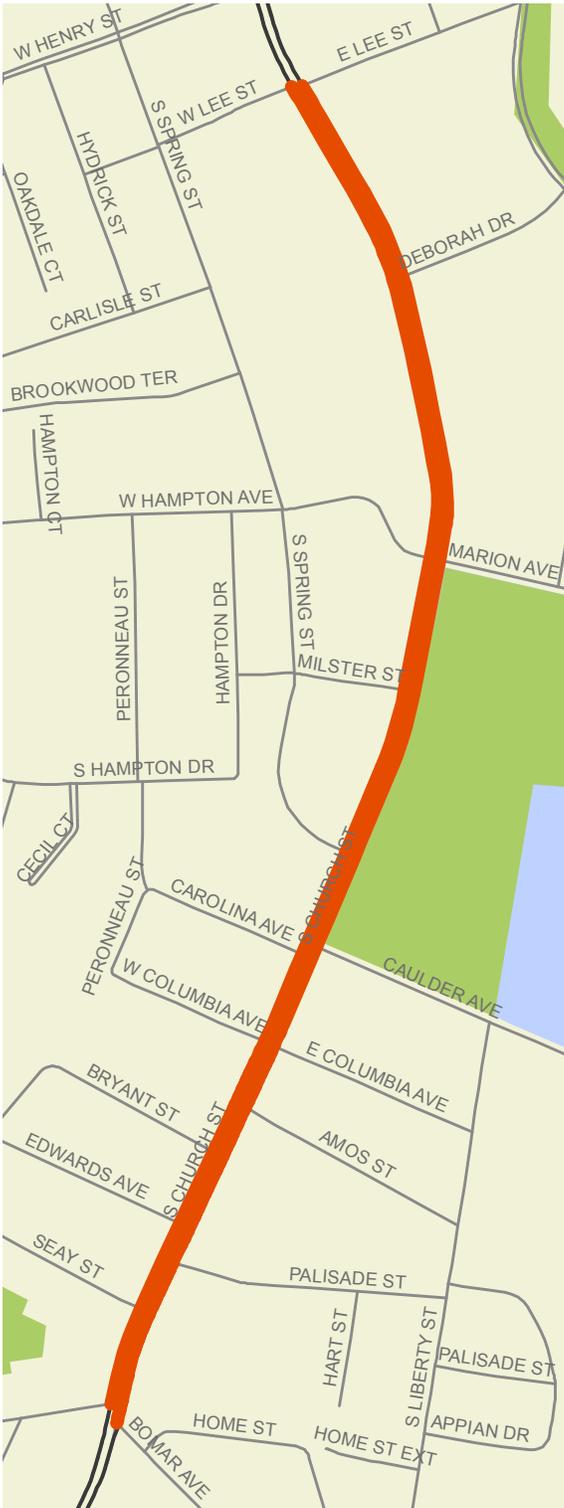
5' Bicycle Lane

Project Type:

Paint-Stripe

Function:

Downtown
Connection



Existing
60' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe 5' Bicycle Lane

Existing
62' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe 5' Bicycle Lane



BIKE PROJECT 3: E MAIN ST



Boundaries:
Galbraith St
Heywood Ave

Facility:
5' Bicycle Lane

Project Type:
Paint-Stripe

Function:
Downtown/
Neighborhood
Connection



Existing
62' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe 5' Bicycle Lane

Existing
62' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe 5' Bicycle Lane

BIKE PROJECT 4: N CHURCH ST



Boundaries:

Dewey Ave
Alba Ct

Facility:

Wide Outside Lane

Project Type:

Paint-Stripe

Function:

Downtown/
Neighborhood
Connection



Existing
58' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe Wide Outside Lane

Existing
53' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe Wide Outside Lane



BIKE PROJECT 5: W MAIN ST



Boundaries:
S Daniel Morgan Ave
S Church St

Facility:
Sharrows

Project Type:
Paint-Stripe

Function:
Downtown
Connection



Existing
2- 15' Roadways
1 Way Each Way
On Street Parking

Recommendation
Stripe Sharrows

Existing
30' Roadway
2 Lanes
On Street Parking

Recommendation
Stripe Sharrows



BIKE PROJECT 6: W MAIN ST

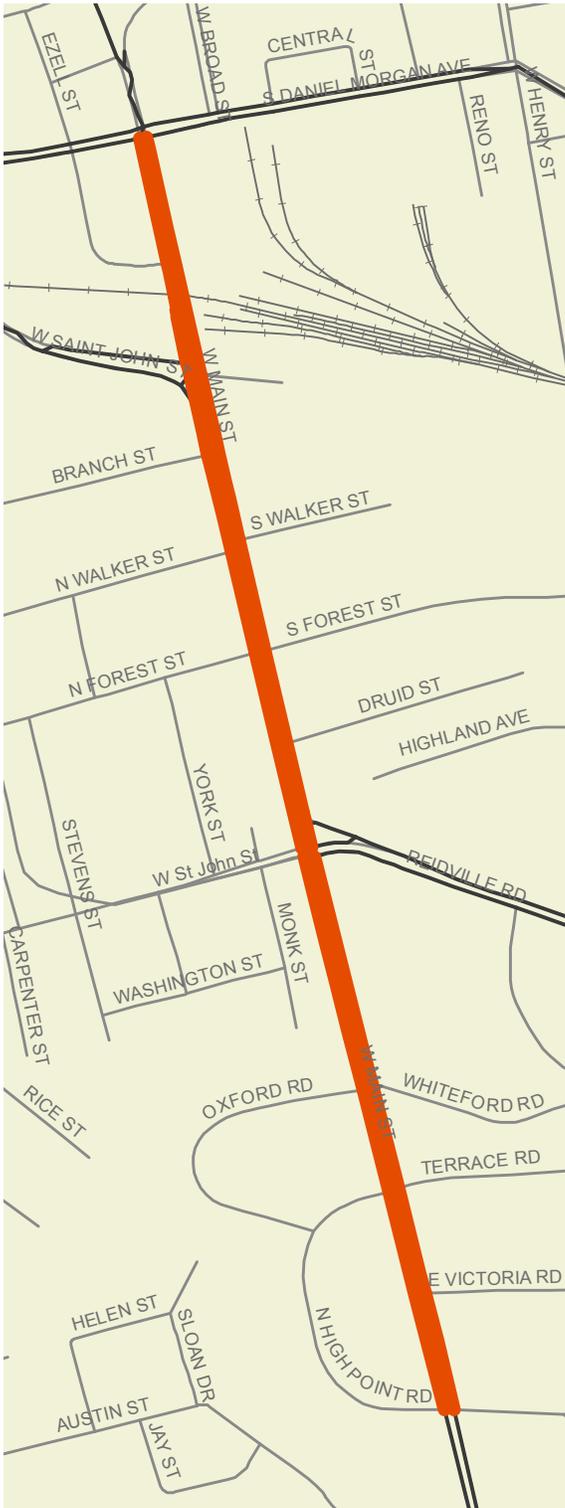


Boundaries:
S High Point Rd
S Daniel Morgan Ave

Facility:
5' Bicycle Lane

Project Type:
Road Diet

Function:
Downtown/
Neighborhood
Connection



Existing
60' Roadway
4 Lanes W/Median and
Turn Lanes

Recommendation
Road Diet- Bike Lane

Existing
52' Roadway
4 Lanes W/Center Turn

Recommendation
Road Diet- Bike Lane

BIKE PROJECT 7: N CHURCH ST



Boundaries:
Alba Ct
E Main St

Facility:
Sharrows

Project Type:
Paint-Stripe

Function:
Downtown/
Neighborhood
Connection



Existing
53' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe Sharrows

Existing
53' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe Sharrows



BIKE PROJECT 8: S CHURCH ST



Boundaries:

E Main St
W Lee St

Facility:

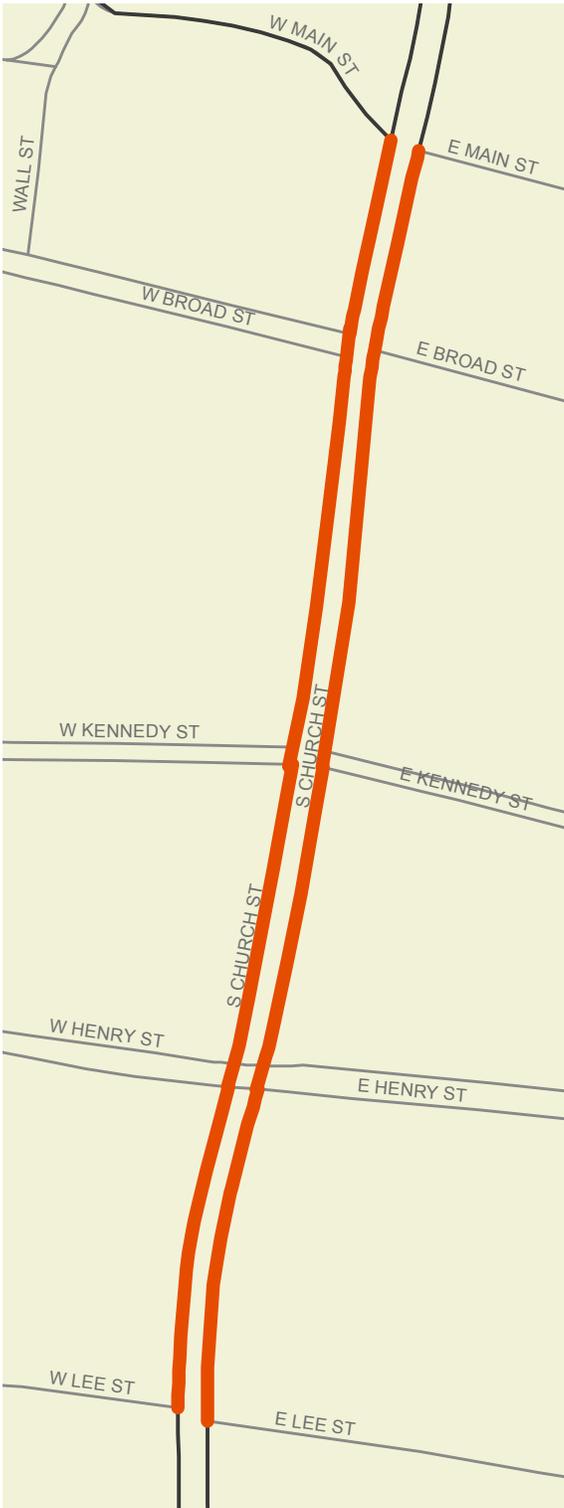
Sharrows

Project Type:

Paint-Stripe

Function:

Downtown/
Neighborhood
Connection



Existing
60' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Stripe Sharrows

Existing
60' Roadway
4 Lanes W/Median

Recommendation
Stripe Sharrows



BIKE PROJECT 9: E MAIN ST



Boundaries:
Heywood Ave
Fernwood Glendale Ave

Facility:
5' Bicycle Lane

Project Type:
Paint-Stripe

Function:
Downtown/
Neighborhood
Connection



Existing
2- 15' Roadways
1 Way Each Way
On Street Parking

Recommendation
Stripe Sharrows

Existing
30' Roadway
2 Lanes
On Street Parking

Recommendation
Stripe Sharrows



BIKE PROJECT 10: W O EZELL BLVD

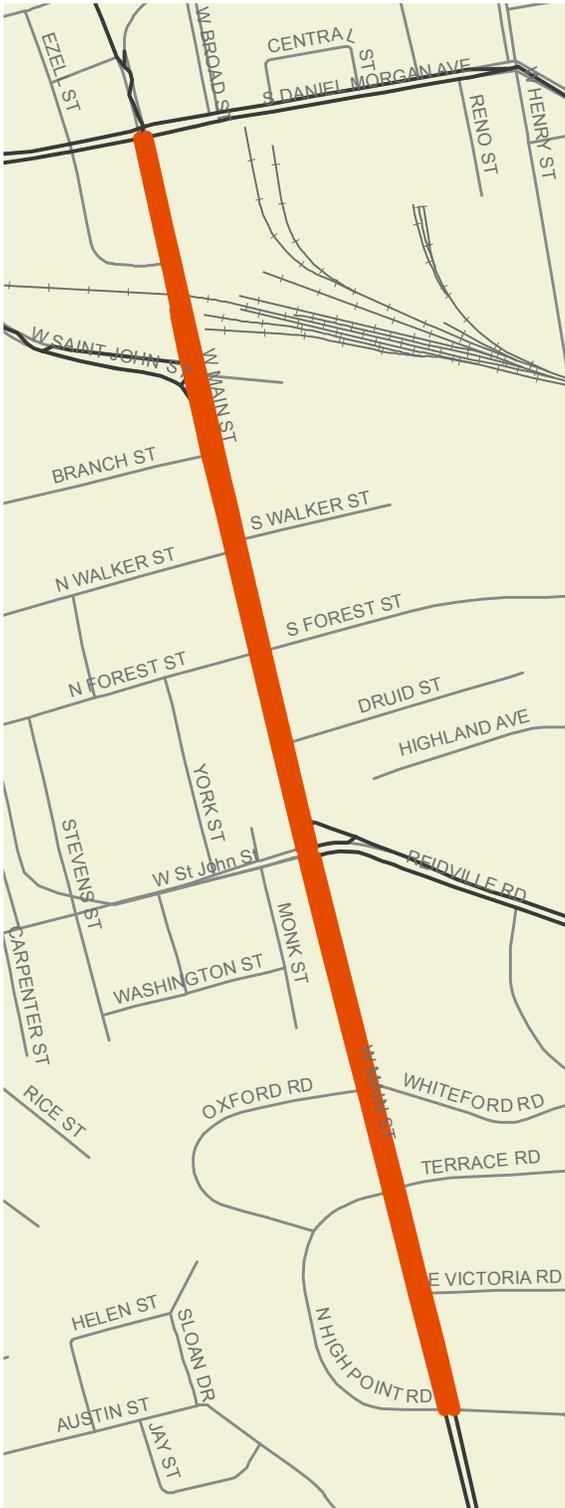


Boundaries:
Blackstock Rd
Powell Mill Rd

Facility:
Wide Outside Lane

Project Type:
Paint-Stripe

Function:
Shopping/
Neighborhood
Connection



Existing
60' Roadway
4 Lanes W/Median and Turn
Lanes

Recommendation
Road Diet- Bike Lane

Existing
52' Roadway
4 Lanes W/Center Turn Lane

Recommendation
Road Diet- Bike Lane



PED PROJECT 1: N PINE ST

P1

Boundaries:
Whitney Rd
Charlevoix St

Function:
School
Connection



Recommendation
Sidewalk One Side of Street

Distance
3700 Feet

PED PROJECT 2: WOODBURN RD/TWIN DR

P2

Boundaries:
Fernwood Dr
S. Pine St

Function:
School/Park/
Neighborhood
Connection



Recommendation
Sidewalk One Side of Street

Distance
6000 Feet

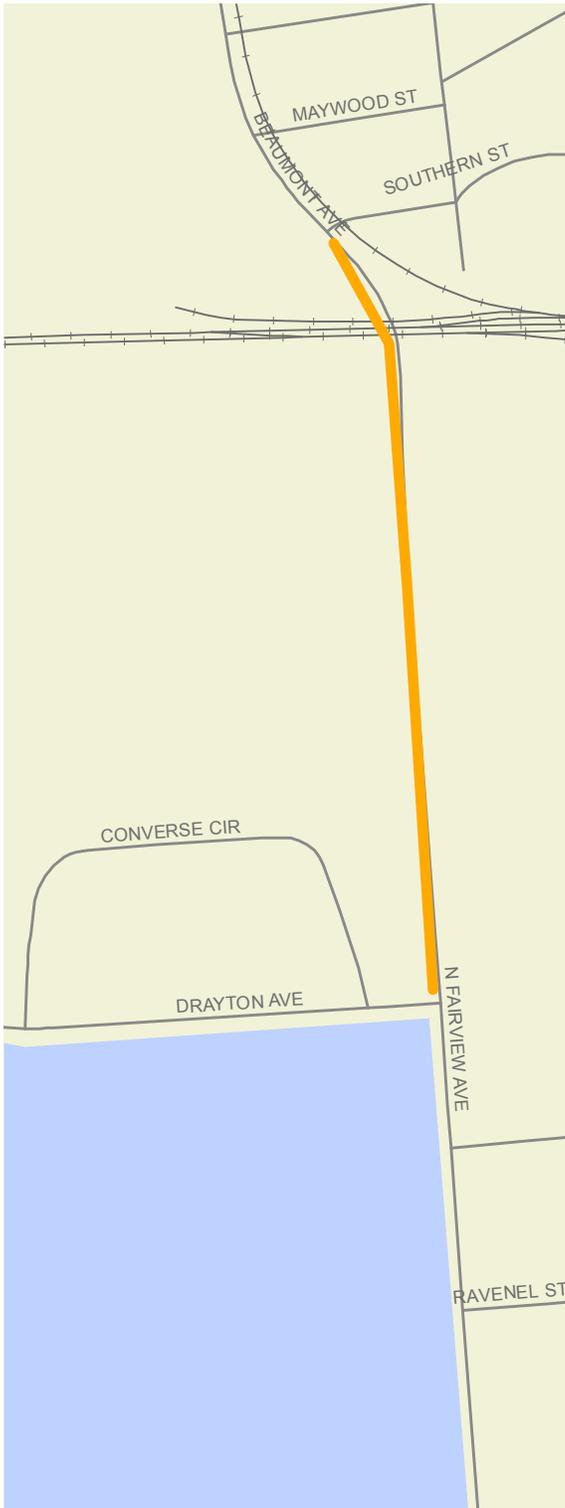


PED PROJECT 3: N. FAIRVIEW AVE



Boundaries:
Southern St
Near Drayton Ave

Function:
School/
Neighborhood Connection



Recommendation
Sidewalk One Side of Street

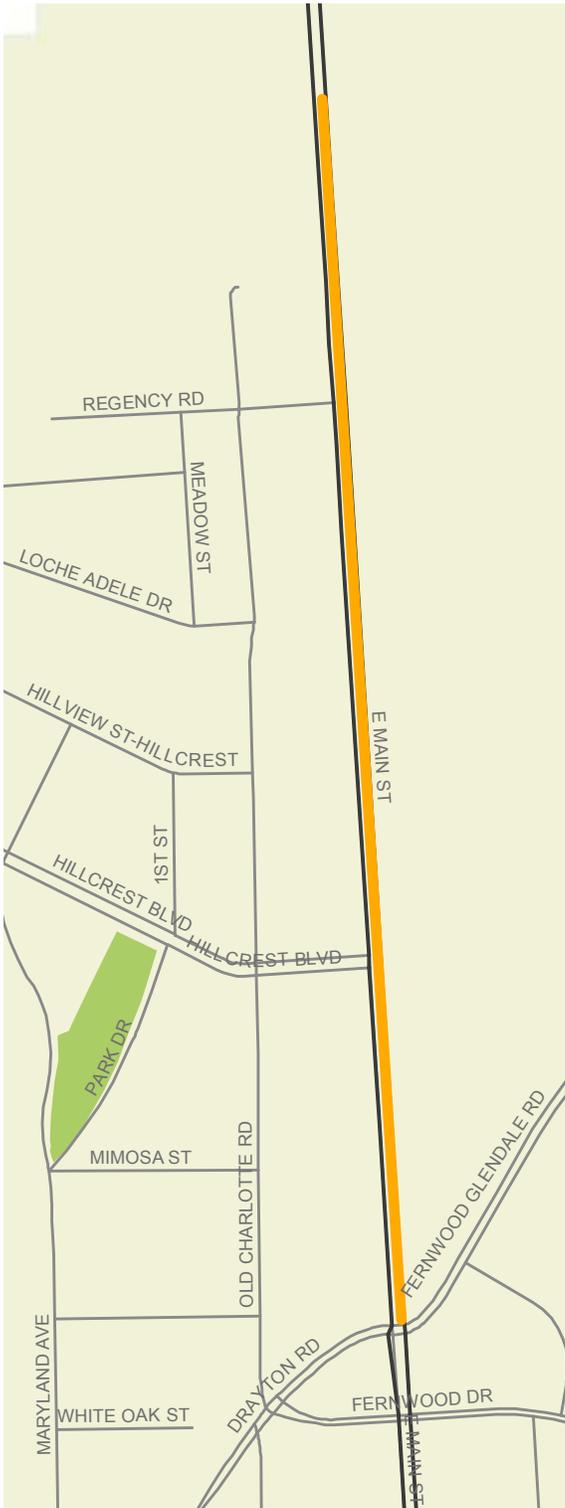
Distance
1200 Feet

PED PROJECT 4: E. MAIN ST



Boundaries:
Fernwood Glendale Rd
1000 ft east of Regency Rd

Function:
Main St
Connection



Recommendation
Sidewalk One Side of Street

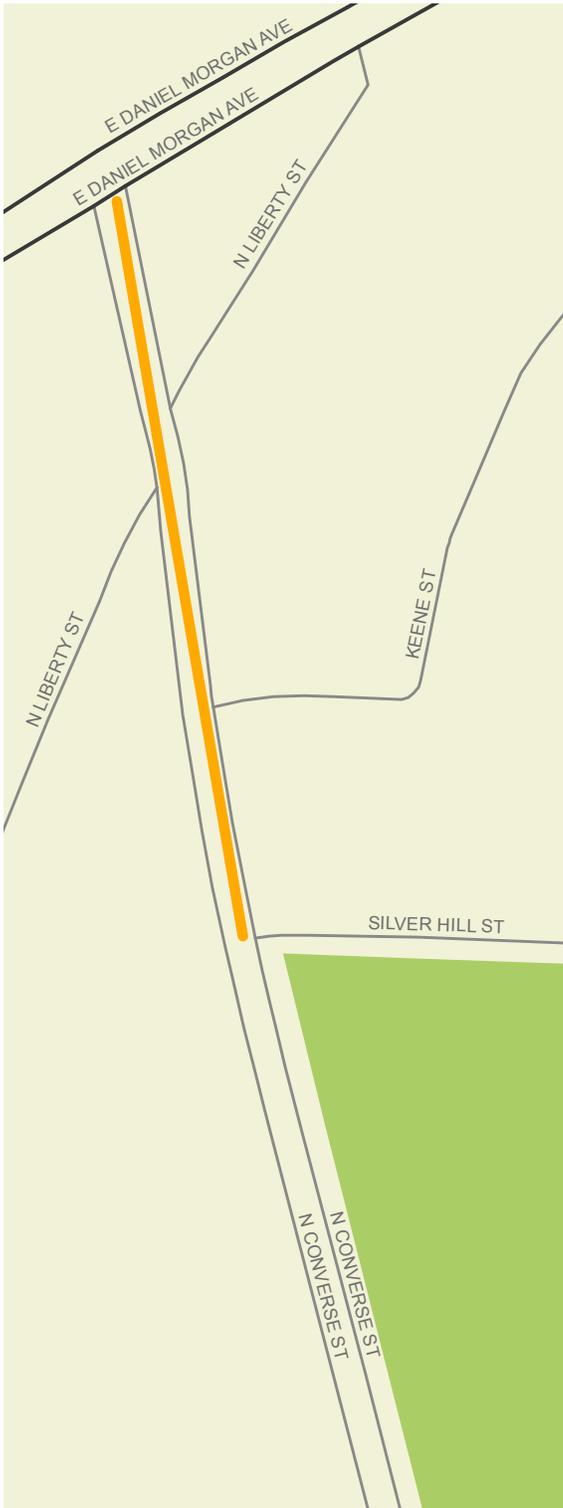
Distance
3800 Feet

PED PROJECT 5: N. CONVERSE ST



Boundaries:
Daniel Morgan Ave
Silver Hill St

Function:
Downtown/
Park Connection



Recommendation
Sidewalk Both Sides of Street

Distance
600 Feet

PED PROJECT 6: W. BLACKSTOCK RD

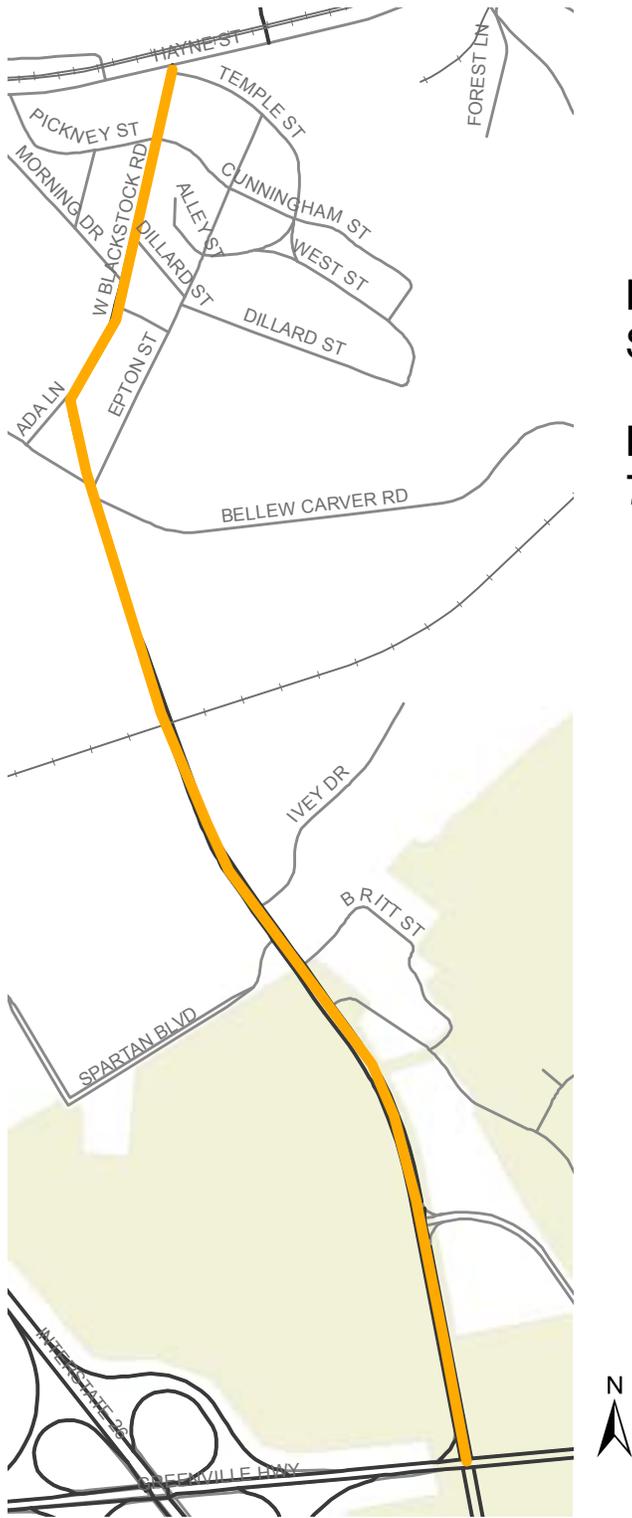


Boundaries:

Hayne St
US 29 (WO Ezell Blvd)

Function:

Neighborhood/
Shopping Connection



Recommendation
Sidewalk One Side of Street

Distance
7700 Feet

PED PROJECT 7: REIDVILLE RD



Boundaries:
W Main St
W Victoria Rd

Function:
Neighborhood/
Downtown
Connection



Recommendation
Sidewalk One Side
(Filling in Missing Gaps)
Distance
1000 Feet

PED PROJECT 8: FARLEY AVE. EXT

P8

Boundaries:
Smythe St
Hugh St

Function:
Neighborhood/
Park Connection



Recommendation
Sidewalk One Side

Distance
4500 Feet

PED PROJECT 9: HOWARD ST



Boundaries:
California Ave
Myrtle Ave

Function:
Neighborhood/
Park Connection



Recommendation
Sidewalk One Side
(Filling in Two Missing Gaps)

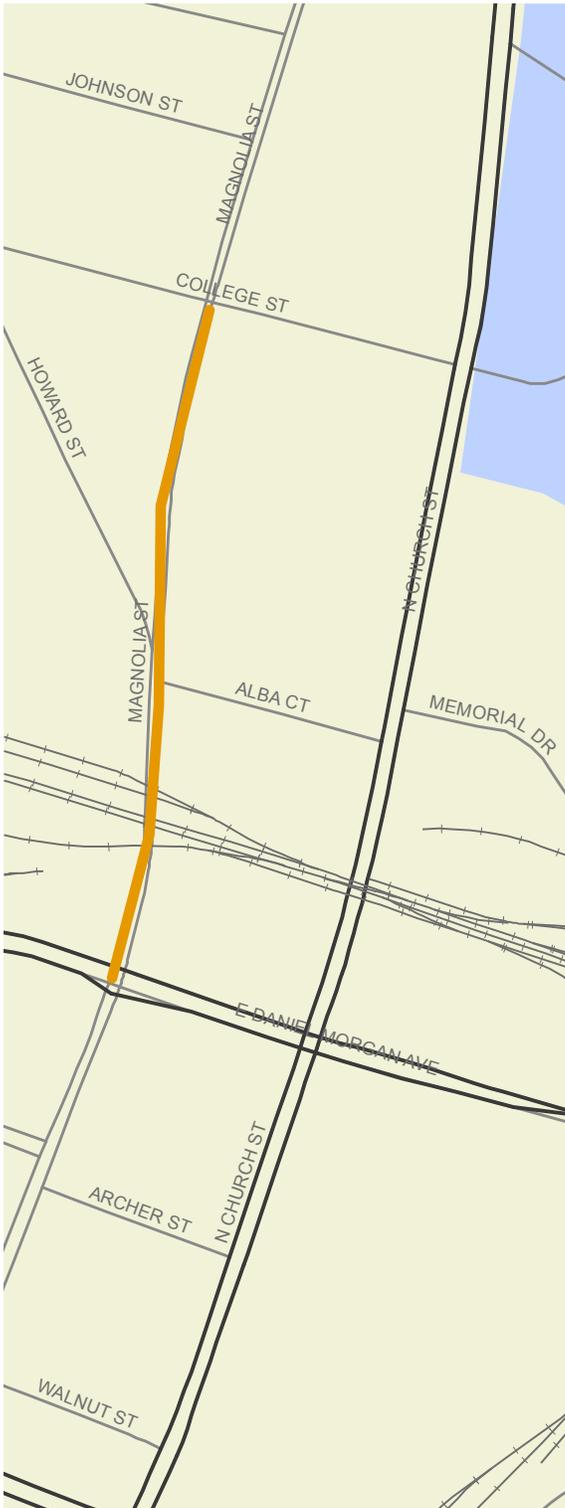
Distance
2470 Feet

PED PROJECT 10: MAGNOLIA ST



Boundaries:
College St
Daniel Morgan Ave

Function:
Downtown/
School Connection



Recommendation
Sidewalk Both Sides
(Filling in Two Missing Gaps)

Distance
850 Feet



TABLE B.1: BICYCLE FACILITY PRIORITIZATION (CONTINUED)

SPARTANBURG, SOUTH CAROLINA

(See page B-2 for full criteria descriptions)

Bicycle Facilities	From	To	Facility Type	Method	Maintenance	Criteria																													
						Direct Access to/from a School	Segment Access to/from an Existing or Planned Greenway	Segment Contains High Level of Reported Bike/Ped Accidents	Serves low income areas with low car ownership rates	Top 15 "Most in Need of Improvement" from Online Survey	Direct access to/from downtown	Eminent: Middle and High School Proximity (1/2 mile)	Top 6-10 "Most in Need of Improvement" from Online Survey	Segment Contains a Top 10 Intersection "Most in Need of Improvement"	College/University Proximity (1/2 mile)	Park or Recreation center proximity (1/2 mile)	Regional Congestion and/or Interstate Highway Crossing and	Direct Access to Major Employment Centers**	Direct access to proposed greenway	Direct Access to/from High Density Residential Area	Shopping Center Proximity (1/2 mile)	Transit													
W St John St	W Main St	Worford St	Bike Lane	Roadway Restriping	State	0	0	0	0	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	77
W St John St	W Main St	N Daniel Morgan Ave	Bike Lane	Roadway Restriping	State	0	0	0	0	5	1	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	41	
W St John St (Old Road)	W Main St	N Church St	Sharrow	Roadway Striping	State	0	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	41		
Worford St	Austin St	N Forest St	Sharrow	Roadway Striping	State	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	41		
Ashville Hwy	N Cleveland Park Dr	Dewey Ave	Wide Outside Lane	Roadway Restriping	State	0	0	0	10	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	40			
Saint Andrews St	S Pine St	Union St	Sharrow	Roadway Restriping	County	5	5	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	40			
Woodburn Rd	Ferrwood Dr	Bums St	Paved Shoulder	New Construction	State	0	5	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	40			
Dunbar St	Magnolia St	N Church St	Sharrow	Roadway Striping	State	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	39			
Lafayette St	E Kennedy	E Henry St	Sharrow	Roadway Striping	County	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	39			
Magnolia St	N Church St	College St	Bike Lane	Roadway Restriping	County	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	39			
S Converse St	Hudson L Barksdale Blvd	Marion Ave	Bike Lane	Roadway Restriping	State	0	0	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	39			
Gaulder Ave	Hudson L Barksdale Blvd	W Park Dr	Sharrow	Roadway Striping	County	0	5	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	38			
Dupre Rd	Emory Rd	Ferrwood Dr	Sharrow	Roadway Striping	State	5	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	38			
Heywood Ave	Montgomery St	Pennell Dr	Bike Lane	New Construction	State	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	38				
Howard St	Arch St	Magnolia St	Sharrow	Roadway Striping	State	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	38				
S Daniel Morgan Ave	S Forest St	Reidville Rd	Bike Lane	Roadway Restriping	State	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	38				
Memorial Dr	N Church St	E Cleveland St	Bike Lane	Roadway Striping	County	5	0	5	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	37				
Sydnor Rd	Brentwood Dr	Ferrwood Dr	Sharrow	Roadway Striping	State	5	5	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	37				
Franklin St	Dupre Dr	Hugh St	Bike Lane	Roadway Restriping	State	5	5	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	37				
Boyd St	Howard St	Connecticut Ave	Sharrow	Roadway Striping	County	5	5	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	36				
Connecticut Ave	S Pine St	Connecticut Ave	Sharrow	Roadway Striping	County	5	5	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	35				
E Blackstock Rd	W O Ezell Blvd	Otis Blvd	Bike Lane	Roadway Striping	State	0	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	35				
S Converse St	Marion Ave	Reidville Rd	Wide Outside Lane	Roadway Restriping	State	0	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	35				
W Blackstock Rd	Spartan Blvd	Duncan Park Dr	Bike Lane	Roadway Restriping	State	0	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	35				
Reidville Rd	S High Point Rd	W O Ezell Blvd	Wide Outside Lane	Roadway Restriping	State	0	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	35				
Southport Rd	Blackstock Rd	Crescent Ave	Wide Outside Lane	Roadway Restriping	State	5	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	33				
Bishop St	Southport Rd	Blackstock Rd	Wide Outside Lane	Roadway Restriping	State	0	0	0	0	5	4	0	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	33				
Bishop St	Howard St	Franklin St	Sharrow	Roadway Striping	County	0	0	0	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	31				
Duncan Park Dr	S Converse St	Franklin St	Sharrow	Roadway Striping	County	0	5	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	31				
Hayne St	Williams St	Union St	Bike Lane	New Construction	State	0	0	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	31					
Hayne St	Nahant St	Williams St	Bike Lane	New Construction	State	0	0	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	31					
Country Club Rd	Union St	S Pine St	Bike Lane	Roadway Restriping	State	0	5	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	29				
Drayton Rd	Skylyn Dr	E Main St	Bike Lane	Roadway Diet	State	5	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	29				
Worford St	Textile Rd	Austin St	Bike Lane/Sharrow	Roadway Restriping	State	0	0	0	0	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	29				
E Park Dr	S Park Dr	N Park Dr	Sharrow	Roadway Striping	County	0	5	0	5	5	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	0	28			

TABLE B.2: PEDESTRIAN FACILITY PRIORITIZATION

SPARTANBURG, SOUTH CAROLINA

(See page B-2 for full criteria descriptions)

Pedestrian Facilities	From	To	Facility Type	Sides of Road	Distance	Criteria																									
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
N. Pine St.	Whitney Rd.	Charlevoix St.	Sidewalk	1	3700	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	77		
Woodburn Rd./Twin Dr./Sherwood Cir.	Ferrwood Dr.	S. Pine St.	Sidewalk	1	6000	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	51		
N. Fairview Ave.	Southern St.	Near Dryden Ave.	Sidewalk	1	1200	5	0	5	1	0	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	46		
E. Main St.	Ferrwood Glendale Rd.	1000 ft east of Hillcrest Blvd.	Sidewalk	1	3800	0	0	5	0	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	44		
N. Converse St.	Daniel Morgan Ave.	Silver Hill St.	Sidewalk	2	600	0	0	5	5	5	0	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	0	41		
W. Blackstock Rd.	Hayne St.	US 29 (WO Ezell Blvd.)	Sidewalk	1	7700	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	41		
Reidville Rd.	W. Main St.	W. Victoria Rd.	Sidewalk	1	1000	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	0	40		
Farley Ave. Ext.	Smythe St.	Hugh St.	Sidewalk	1	4500	0	0	5	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	39	
Howard St.	California Ave.	Myrtle Ave.	Sidewalk	1	2470	0	0	5	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	39	
Magnolia St.	College St.	Daniel Morgan Ave.	Sidewalk	2	850	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	39	
S. Pine St.	W. Lanford St.	1300ft east of Forest Ave.	Sidewalk	2	3700	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	39		
Sydnor Rd.	Brentwood Dr.	Ferrwood Dr.	Sidewalk	1	2600	5	0	5	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	38	
N. Blackstock Rd./Old Blackstock Rd.	Greenville Hwy (US 29)	Fairforest Clevedale Rd	Sidewalk	1	8100	5	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	37	
Skylyn Dr.	west of Willow Lane	Floyd Rd.	Sidewalk	1	3300	10	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	37	
Brawley St.	Worford St.	near Allen Ct.	Sidewalk	1	1060	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	36	
Hayne St.	Fairfax St.	near Rhett St.	Sidewalk	1	5070	0	0	5	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	0	36
Saxon Ave.	Hugh St.	Farley Ave. Ext	Sidewalk	1	3000	0	0	5	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	36	
US 29 (WO Ezell Blvd.)	Brianwood Rd.	S. High Point Rd.	Sidewalk	2	4200	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	36	
W. Henry St.	Reidville Rd.	875ft west of Dan. Morgan Ave.	Sidewalk	2	1800	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	36	
Williams St.	Hayne St.	Worford St.	Sidewalk	1	4400	0	0	5	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	0	36
Ferrwood Dr.	Woodburn Rd.	Emory Rd.	Sidewalk	1	3600	0	5	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	35	
US 29	N Blackstock Rd.	Upper Valley Falls Rd (SC 295)	Sidewalk	2	3870	0	0	0	0	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	2	35		
Valley Falls Rd.	Smith Circle	W. Blackstock Rd (SC 295)	Sidewalk	1	4200	5	0	0	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	35	
E. Main St.	1000 ft east of Hillcrest Blvd.	Zion Hill Rd.	Sidewalk	2	5800	5	0	0	5	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	34	
Vanderbilt Rd.	Textile Rd.	Baltimore St.	Sidewalk	1	3200	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	34	
Ferrwood Dr.	Emory Rd.	E. Main St.	Sidewalk	1	3200	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	33	
Old Greenville Rd.	Fairforest Rd.	New Cut Rd.	Sidewalk	1	5700	5	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	33	
California Ave.	Ashville Highway	Boiling Springs Rd	Sidewalk	1	5000	5	0	0	5	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	31	
New Cut Rd.	Bus. I-85	California Ave.	Sidewalk	1	4700	5	0	0	5	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	31	
US 29 (WO Ezell Blvd.)	Powell Mill Rd.	Brianwood Rd.	Sidewalk	2	4400	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	31	
Arlison Dr./Ashley St.	Old Charlotte Rd.	Ferrwood Dr.	Sidewalk	1	1800	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	29	
Anderson Mill Rd	Anderson Mill	Tilolston Rd	Sidewalk	1	10584	5	0	0	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	28	
Country Club Rd.	Woodburn Rd.	Pine St.	Sidewalk	1	4000	0	5	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	28	
Hayne St.	Carver Mill Rd.	Nott St.	Sidewalk	1	3900	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	28	
Old Converse St./Cherry Hill Rd.	E. Main St.	south of Willow Pond Rd.	Sidewalk	1	3900	5	0	0	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	28	
Worford St.	Austin St.	240 ft east of Austin St.	Sidewalk	2	240	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	28	
Irwin Ave. Ext.	Crescent Ave.	S Church St. Ext	Sidewalk	1	2100	0	0	5	0	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	27	
S. Blackstock Rd.	Reidville Rd.	Greenville Hwy (US 29)	Sidewalk	1	6700	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	27	
Springfield Rd.	Amardale Dr.	Upper Valley Falls Rd.	Sidewalk	1	4200	5	0	0	5	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	27	
Textile Rd.	Vanderbilt Rd.	Front St.	Sidewalk	1	6000	5	0	0	5	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	27	
Upper Valley Falls Rd.	Boiling Springs Rd.	Valley Falls Rd.	Sidewalk	1	1835	5	0	0	5	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	27	
Woodburn Rd.	Burns St.	Ferrwood Dr.	Sidewalk	1	5300	0	0	0	5	5	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	27	
Boiling Springs Rd.	Bus. I-85	Bus. I-85	Sidewalk	1	6500	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	0	27	

APPENDIX C OUTLINE:

- Overview
- Study Scope and Approach
- BLOS Regression Equation
- BLOS Grades
- BLOS Table Summary
- BLOS Maps

APPENDIX C: Bicycle Level of Service Analysis (BLOS)

OVERVIEW

One of this study's tasks was the development of a special indicator to monitor the quality of bicycle travel conditions along arterial and collector streets. The study team selected the Bicycle Level of Service (BLOS)1 model as the quality of service indicator. The BLOS model (version 2.0) was applied for analyzing Spartanburg's arterial and collector roadways only. The BLOS model was developed through a national research project for arterial and collector streets. The BLOS model has been applied in many jurisdictions to measure and monitor bicycle travel conditions.

The Bicycle Level of Service Model is based on the proven research documented in Transportation Research Record 1578 published by the Transportation Research Board of the National Academy of Sciences. It was developed with a background of over 150,000 miles of evaluated urban, suburban, and rural roads and streets across North America. Many urban planning agencies and state highway departments are using this established method of evaluating their roadway networks.

The model has also been applied in Richmond and the Northern Virginia region (VDOT), Anchorage AK, Baltimore MD, Birmingham AL, Buffalo NY, Gainesville FL, Greensboro NC, Houston TX, Lexington KY, Philadelphia PA, Sacramento CA, Springfield MA, Tampa FL, Washington, DC, Winston-Salem NC, and by the Delaware Department of Transportation (DelDOT), Florida Department of Transportation (FDOT), New York State Department of Transportation (NYDOT), Maryland Department of Transportation (MDOT) and many others. Widespread application of the original form of the BLOS Model has provided several refinements. Application of the BLOS Model in the metropolitan area of Philadelphia resulted in the final definition of the three effective width cases for evaluating roadways with on-street parking.

Application of the BLOS Model in the rural areas surrounding the greater Buffalo region resulted in refinements to the "low traffic volume roadway width adjustment". A 1997 statistical enhancement to the Model (during statewide application in Delaware) resulted in better quantification of the effects of high speed truck traffic [see the $SPT(1+10.38HV)^2$ term]. As a result, Version 2.0 has the highest correlation coefficient ($R^2 = 0.77$) of any form of the Bicycle LOS Model.

¹ Landis, Bruce W. et.al. "Real-Time Human Perceptions: Toward a Bicycle Level of Service" *Transportation Research Record 1578*, Transportation Research Board, Washington, DC 1997

STUDY SCOPE AND APPROACH

The study took on the task of developing Bicycle Level of Service (BLOS) for the first time in the Spartanburg area. The consultant team was responsible for compiling and verifying input data for the entire study area's network of arterial and collector streets, developing a GIS-based database to store input data, computing BLOS scores, and preparing BLOS maps to document problem areas and to identify opportunities for improvements.

The BLOS analysis utilized GIS as the main database platform and focused on utilizing existing data resources and avoided new data collection whenever possible. The BLOS results helped determine locations needing bicycle improvements and assisted in the preparation of the bicycle suitability map.

The BLOS model (version 2.0) was applied for analyzing Spartanburg's arterial and collector roadways only. The BLOS model is not applicable for freeways.

The following data sets, among others, were obtained and utilized in the BLOS model (Version 2.0):

- Street center lines with attribute data
- Historical Annual Average Daily Traffic (AADT) Counts
- Pavement Condition Data for State-maintained roadways
- Arterial and collector speed limits

In addition, the Consultant team used aerial maps and Google Street views to verify geometric and other attribute data needed for the BLOS model. The results of the BLOS analysis were mapped to document current bicycle travel conditions and to identify causes of poor conditions.

BLOS REGRESSION EQUATION

Bicycle Level of Service (BLOS) was developed as a linear regression model by transportation researchers. The BLOS regression equation (version 2.0) provides a discomfort and inconvenience score for bicycle travel by taking into account four prevailing roadway and traffic conditions:

1. Peak traffic flow in the outside lane
2. Speed of traffic and percent of heavy traffic
3. Pavement surface condition
4. Pavement width available for bicycling

The first three variables are impact scores and reflect perceived challenges to bicycling. The fourth variable is a benefit score and reflects perceived opportunities to bicycling.

The BLOS regression equation is presented below (colored text in the equation corresponds to the descriptions that follow):

$$\begin{aligned}
 \text{BLOS} &= 0.507 \times \ln(\text{Vol15/Ln}) \\
 &+ 0.199 \times \text{SPt} (1+10.38\text{HV})^2 \\
 &+ 7.066 \times (1/\text{PR5})^2 - 0.005 \times (\text{We})^2 \\
 &+ 0.76
 \end{aligned}$$

Where,

Vol15 Directional traffic volume during peak 15-minute time period

$$= (\text{ADT} \times \text{D} \times \text{Kd}) / (4 \times \text{PHF})$$

Where, ADT = Average daily traffic
 D = Directional factor
 Kd = Peak to Daily factor
 PHF = Peak hour factor (1.0 assumed)

Ln Number of directional through lanes

SPt Effective Speed Limit

$$= 1.1199 \times \ln(\text{SPp} - 20) + 0.8103$$

Where, SPp = posted speed limit

HV Percentage of heavy vehicles

PR5 Pavement condition rating based on FHWA's 5-point scale

We Average effective width of outside through lane

$$\begin{aligned}
 &= \text{Wv} - (10 \text{ ft} \times \% \text{ OSPA}), \text{ for } \text{WI} = 0 \\
 &= \text{Wv} + \text{WI} (1 - 2 \times \% \text{ OSPA}), \text{ for } \text{WI} > 0 \text{ and } \text{Wps} = 0 \\
 &= \text{Wv} + \text{WI} - 2 (10 \times \% \text{ OSPA}), \text{ for } \text{WI} > 0 \text{ and } \text{Wps} > 0 \text{ and has a bike lane}
 \end{aligned}$$

Where, Wv = Effective width as a function of traffic volume
 = Wt if ADT > 4,000 vehicles per day
 = Wt (2 - 0.00025 x ADT) if ADT ≤ 4,000 vehicles per day and the street is undivided and unstriped

Wt = total width of outside lane (and shoulder) pavement
 WI = width of paving between the outside lane stripe and the edge of pavement
 OSPA = percentage of segment with occupied on-street parking
 Wps = width of pavement striped for on-street parking

The first part of the BLOS equation measures the impacts of peak hour vehicular traffic flow on bicyclists. Roads with high traffic volume on the outside lane would receive high BLOS score, indicating low suitability for bicycle travel. The second part of the BLOS equation measures the impacts of speed of travel and percent of heavy traffic (buses and trucks) on bicycle travel environment. Roads with high posted speed limit and high number of trucks and buses would receive high BLOS score, indicating low suitability for bicycle travel. Similarly, the third part of the BLOS equation measures the impact of pavement surface condition on bicycle ride quality and assigns high BLOS score for roadways with deteriorated pavements. These first three parts of the BLOS score and a constant term are added together to compute the raw BLOS score. The final BLOS score is computed by subtracting the benefits score (fourth term in the BLOS equation) based on pavement width available for bicycling from the raw score. Roadways with striped bike lanes, wide outside lanes, paved shoulders, or low on-street parking volumes would receive discounts from the raw BLOS score, resulting in low BLOS values or good level of service.

BLOS GRADES

Bicycle Level of Service (BLOS) was developed as a linear regression model by transportation researchers. The BLOS regression equation (version 2.0) provides a discomfort and inconvenience score for bicycle travel by taking into account four prevailing roadway and traffic conditions:

The BLOS scale uses six letter grades, A through F, to describe the quality of a roadway segment for bicycle travel from best to worst conditions based on user perception. This is depicted in Table C.1.

TABLE C.1 BICYCLE LEVEL OF SERVICE DEFINITION

BLOS Grade	BLOS Score	Description
A	≤ 1.5	Excellent bicycle environment
B	1.5 - 2.5	Good bicycle environment
C	2.5 - 3.5	Fair bicycle environment (acceptable to experienced and novice bicyclists)
D	3.5 - 4.5	Poor environment (acceptable to experienced bicyclists)
E	4.5 - 5.5	Deficient environment (Unacceptable to experienced and novice bicyclists)
F	> 5.5	Unsafe environment (Unsuitable for any bicycle travel)

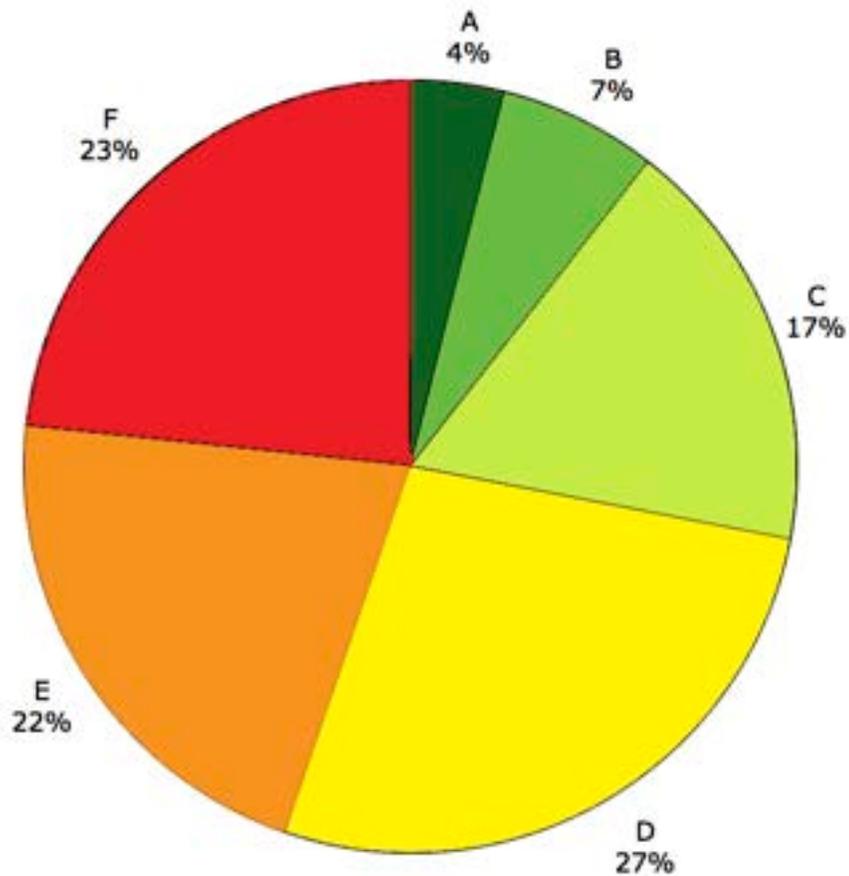
In urban areas like the City of Spartanburg, it is desirable to have a long range target of achieving BLOS C or better on bicycle network routes. This high service standard would ensure that bicycling is a viable, efficient and safe mode of travel for work, recreational and school trips.

BLOS TABLE SUMMARY

TABLE C.2 SPARTANBURG COUNTY BICYCLE LEVEL OF SERVICE (BLOS) SUMMARY FOR STUDY NETWORK ROADWAYS

BLOS Grade	Miles	% Measured Miles
A	32.1	3.9
B	55.3	6.7
C	142.1	17.4
D	221.1	27.2
E	175.1	21.5
F	188.3	23.2
Totals	813	100.0

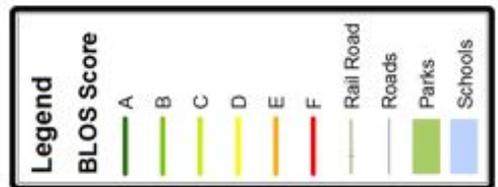
CHART C.1
SPARTANBURG COUNTY
BICYCLE LEVEL OF
SERVICE (BLOS)
SUMMARY FOR STUDY
NETWORK ROADWAYS



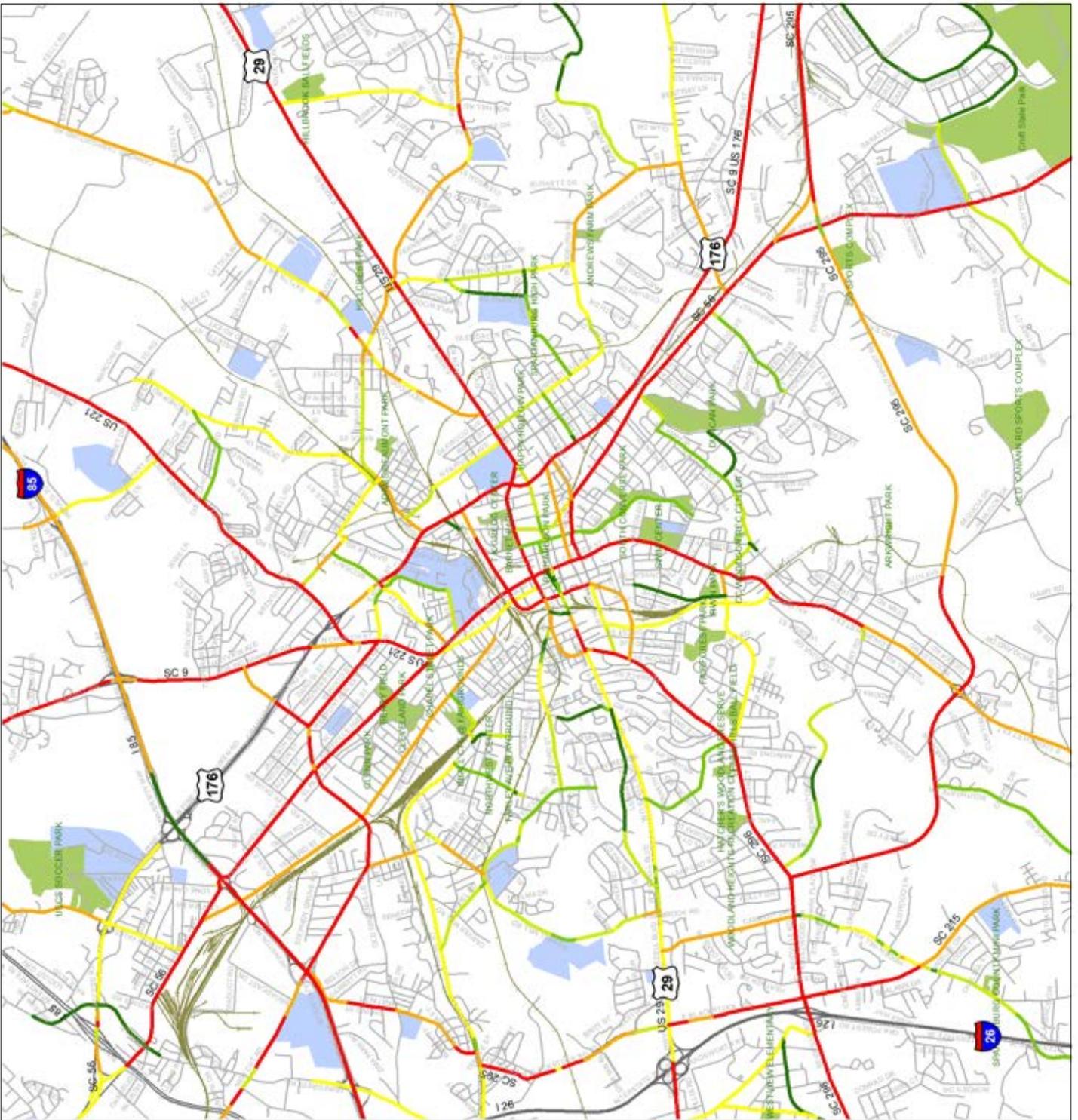
BLOS MAPS

The most common letter grade for Spartanburg County's arterials and major collectors was a "D." 72% of the measured roadways received a BLOS score of "D" or below. Only 3.9% received a score of "A." Maps C.1 and C.2 show BLOS for the City of Spartanburg and Spartanburg County.

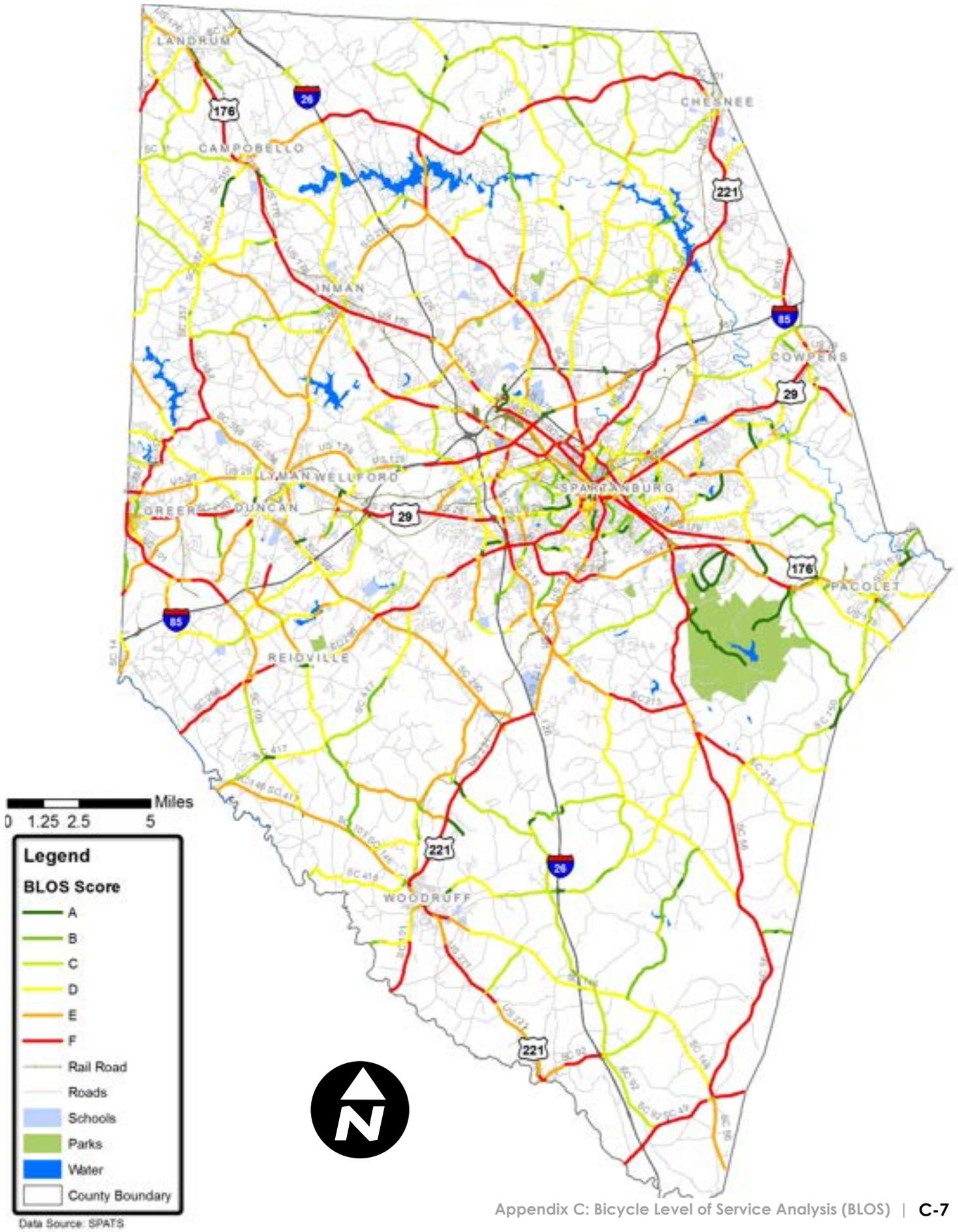
MAP C.1 METRO SPARTANBURG: BICYCLE LEVEL OF SERVICE (BLOS)



Data Source: SPATS



MAP C.2 SPARTANBURG COUNTY AND MUNICIPALITIES: BICYCLE LEVEL OF SERVICE (BLOS)



APPENDIX D: Bicycle Network Table

OVERVIEW

The tables on the following pages list all the recommended bicycle facilities for this plan. The tables include the name of the road on which the facility is located, the beginning and ending cross streets, the type of facility recommended, the construction method, and the main agency involved. The tables also note which bicycle facility recommendations are on roadways identified for other improvements or funding, using the following color code:

 = American Recovery and Reinvestment Act (ARRA) Pavement Improvement Project

 = C Fund Project List*

 = Transportation Improvement Plan (TIP)

** The C Program is a long-established partnership between SCDOT and the forty six counties of South Carolina to fund the improvements of state roads, county roads, city streets and other local transportation projects. The C Program is successful because local leaders and citizens alike are willing to work with SCDOT to meet the needs of the communities throughout South Carolina.*

Currently, Spartanburg County roadway projects are funded by the \$25 road fee and the C-fund (a state road tax program). Within the \$25 road fee fund (a fee implemented per vehicle which allows for programming projects in CIP), \$2.8 million goes to resurfacing projects, \$700,000 goes to municipalities for roadway/safety/pedestrian projects, and \$2.1 million to other major projects such as road widening, bridges, and intersection projects. Priority projects are identified and taken forward to the C-fund (project list updated every two to three years). Repaving projects are about to start this summer.

MUNICIPAL LIST

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
Spartanburg	Asheville Hwy	N Cleveland Park Dr	Dewey Ave	Wide Outside Lane	Roadway Restriping	State
Spartanburg	Beaumont Ave	Isom St	N Fairview Ave	Bike Lane	Roadway Striping	State
Spartanburg	Beaumont Ave	Isom St	Garner Rd	Paved Shoulder	New Construction	State
Spartanburg	Bishop St	Howard St	Franklin St	Sharrow	Roadway Striping	County
Spartanburg	Bowmar Ave	S Church St	S Liberty St	Bike Lane	Roadway Striping	County
Spartanburg	Boyd St	S Pine St	Connecticut Ave	Sharrow	Roadway Striping	County
Spartanburg	Briarcliff Rd	Briarwood Rd	Reidville Rd	Bike Lane	Roadway Striping	County
Spartanburg	Briarwood Rd	W O Ezell Blvd	Briarcliff Rd	Bike Lane	Roadway Striping	State
Spartanburg	Camelot Dr	W O Ezell Blvd	Reidville Rd	Bike Lane	Roadway Restriping	State
Spartanburg	Caulder Ave	S Church St	Hudson L Barksdale Blvd	Bike Lane	Roadway Restriping	County
Spartanburg	Caulder Ave	Hudson L Barksdale Blvd	W Park Dr	Sharrow	Roadway Striping	County
Spartanburg	Cedar Springs Rd	Union St	Francis Marion Dr	Bike Lane	Roadway Restriping	State
Spartanburg	Collins Ave	S Converse St	Caulder Ave	Bike Lane	Roadway Striping	State
Spartanburg	Collins Ave	Caulder Ave	Bowmar Ave	Bike Lane	Roadway Striping	State
Spartanburg	Connecticut Ave	Otis Blvd	Woodburn Rd	Sharrow	Roadway Striping	State
Spartanburg	Connecticut Ave	E Main St	Otis Blvd	Bike Lane	Roadway Striping	State
Spartanburg	Cornelius Rd	Reidville Rd	St James Dr	Signed Route	Roadway Signage	County
Spartanburg	Country Club Rd	Union St	S Pine St	Bike Lane	Roadway Restriping	State
Spartanburg	Crescent Ave	Reidville Rd	Massachusetts Blvd	Bike Lane	Roadway Striping	State
Spartanburg	Crescent Ave	Massachusetts Blvd	S Church St	Sharrow	Roadway Striping	State
Spartanburg	Drayton Rd	Skylyn Dr	E Main St	Bike Lane	Roadway Diet	State
Spartanburg	Dunbar St	Magnolia St	N Church St	Sharrow	Roadway Striping	State
Spartanburg	Duncan Park Dri	S Converse St	Union St	Sharrow	Roadway Striping	County
Spartanburg	E Blackstock Rd	W O Ezell Blvd	Reidville Rd	Wide Outside Lane	Roadway Restriping	State
Spartanburg	E Daniel Morgan Ave	N Church St	N Pine St	Bike Lane	Roadway Restriping	State
Spartanburg	E Henry St	S Church St	Saint Paul St	Bike Lane	Roadway Restriping	State
Spartanburg	E Henry St	Saint Paul St	S Pine St	Bike Lane	Roadway Restriping	State
Spartanburg	E Main St	S Church St	Galbraith St	Sharrow	Roadway Striping	State
Spartanburg	E Main St	Galbraith St	Heywood Ave	Bike Lane	Roadway Restriping	State
Spartanburg	E Main St	Heywood Ave	Fernwood Glendale Rd	Bike Lane	Roadway Restriping	State
Spartanburg	E Main St	Fernwood Glendale Rd	Webber Rd	Bike Lane	Roadway Restriping	State
Spartanburg	E Park Dr	S Park Dr	N Park Dr	Sharrow	Roadway Striping	County
Spartanburg	E St John St	N Daniel Morgan Ave	E Main St	Sharrow	Roadway Striping	State
Spartanburg	E/N Daniel Morgan Ave	N Church St	W Main St	Bike Lane	Roadway Restriping	State
Spartanburg	Fernwood Dr	Drayton Rd	Sydnor Rd	Bike Lane	Roadway Restriping	State
Spartanburg	Fernwood Dr	Sydnor Rd	Woodburn Rd	Paved Shoulder	New Construction	State
Spartanburg	Fernwood Glendale Rd	E Main St	Fernridge Dr	Bike Lane	Roadway Diet	State
Spartanburg	Franklin St	Howard St	Hugh St	Sharrow	Roadway Striping	County
Spartanburg	Glendalyn Ave	S Pine St	Connecticut Ave	Sharrow	Roadway Striping	County
Spartanburg	Gordon Dr	St James Dr	Midway Dr	Signed Route	Roadway Signage	County
Spartanburg	Hayne St	Williams St	Franklin St	Bike Lane	New Construction	State
Spartanburg	Hayne St	Nahant St	Williams St	Bike Lane	New Construction	State
Spartanburg	Heywood Ave	Pennell Dr	E Main St	Bike Lane	Roadway Restriping	State
Spartanburg	Heywood Ave	Montgomery St	Pennell Dr	Bike Lane	New Construction	State
Spartanburg	Hidden Hill Rd	Reidville Rd	Knollwood Dr	Bike Lane	Roadway Striping	State
Spartanburg	Hill St	Railroad St	Woodlawn Ave	Signed Route	Roadway Signage	County
Spartanburg	Howard St	Hale St	Arch St	Bike Lane	Roadway Striping	State
Spartanburg	Howard St	Arch St	Magnolia St	Sharrow	Roadway Striping	State
Spartanburg	Isom St	Beaumont Ave	N Liberty St	Bike Lane	Roadway Restriping	State
Spartanburg	Lucerne Dr	Union St	Maxwell Rd	Bike Lane	Roadway Striping	County
Spartanburg	Lucerne Dr	Maxwell Rd	Sharon Dr	Side Path	New Construction	County
Spartanburg	Magnolia St	N Church St	College St	Bike Lane	Roadway Restriping	County
Spartanburg	Memorial Dr	N Church St	E Cleveland St	Bike Lane	Roadway Striping	County
Spartanburg	Midway Dr	Gordon Dr	Briarwood Rd	Signed Route	Roadway Signage	County
Spartanburg	Mills Ave	E Main St	Boyd St	Sharrow	Roadway Striping	County
Spartanburg	N Church St	Alba Ct	E Main St	Sharrow	Roadway Striping	State
Spartanburg	N Church St	Dewey Ave	Alba Ct	Wide Outside Lane	Roadway Restriping	State
Spartanburg	N Church St	Mandala Ln	Dewey Ave	Wide Outside Lane	Roadway Restriping	State
Spartanburg	N Converse St	E Main St	E Saint John St	Sharrow	Roadway Striping	State
Spartanburg	N Converse St	E Saint John St	E Daniel Morgan Ave	Sharrow	Roadway Striping	State
Spartanburg	N Fairview Ave	Beaumont Ave	E Main St	Bike Lane	Roadway Striping	County
Spartanburg	N Liberty St	Isom St	E Boundary Dr	Bike Lane	Roadway Restriping	County
Spartanburg	N Park Dr	E Park Dr	Duncan Park Dr	Sharrow	Roadway Striping	County
Spartanburg	Parkview Drive	Carolyn Dr	S Park Dr	Sharrow	Roadway Striping	County
Spartanburg	Powell Mill Rd	County Rd	W O Ezell Blvd	Bike Lane	Roadway Restriping	State
Spartanburg	Railroad St	S Liberty St	Hill St	Signed Route	Roadway Signage	County
Spartanburg	Reidville Rd	W Main St	S High Point Rd	Bike Lane	Roadway Restriping	State
Spartanburg	Reidville Rd	S High Point Rd	Crescent Ave	Wide Outside Lane	Roadway Restriping	State
Spartanburg	Reidville Rd	Crescent Ave	Southport Rd	Wide Outside Lane	Roadway Restriping	State
Spartanburg	Reidville Rd	Southport Rd	Blackstock Rd	Wide Outside Lane	Roadway Restriping	State
Spartanburg	S Church St	E Main St	W Lee St	Sharrow	Roadway Striping	State
Spartanburg	S Church St	W Lee St	Bomar Ave	Bike Lane	Roadway Restriping	State
Spartanburg	S Converse St	E Main St	E Henry St	Sharrow	Roadway Striping	State
Spartanburg	S Converse St	Hudson L Barksdale Blvd	Marion Ave	Bike Lane	Roadway Restriping	State
Spartanburg	S Converse St	Marion Ave	Duncan Park Dr	Bike Lane	Roadway Restriping	State
Spartanburg	S Daniel Morgan Ave	W Main St	S Forest St	Bike Lane	Roadway Restriping	State
Spartanburg	S Daniel Morgan Ave	S Forest St	Reidville Rd	Bike Lane	Roadway Restriping	State
Spartanburg	S Liberty St	Caulder Ave	Railroad St	Signed Route	Roadway Signage	State
Spartanburg	S Park Dr	Parkview Dr	E Park Dr	Sharrow	Roadway Striping	County

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
Spartanburg	S Spring St	W Main St	W Broad St	Sharrow	Roadway Striping	State
Spartanburg	Saint Andrews St	S Pine St	Union St	Sharrow	Roadway Striping	County
Spartanburg	St James Dr	Cornelius Rd	Gordon Dr	Signed Route	Roadway Signage	County
Spartanburg	Sydnor Rd	Brentwood Dr	Dupre Dr	Sharrow	Roadway Striping	State
Spartanburg	Sydnor Rd	Dupre Dr	Fernwood Dr	Bike Lane	Roadway Restriping	State
Spartanburg	Union St	E Henry St	Duncan Park Dr	Bike Lane	Roadway Restriping	State
Spartanburg	Union St	Duncan Park Dr	Washington Rd	Bike Lane	Roadway Restriping	State
Spartanburg	Union St	Washington Rd	Cedar Springs Rd	Bike Lane	Roadway Restriping	State
Spartanburg	W Blackstock Rd	Spartan Blvd	W O Ezell Blvd	Wide Outside Lane	Roadway Restriping	State
Spartanburg	W Henry St	S Forest St	S Church St	Sharrow	Roadway Striping	State
Spartanburg	W Main St	S Daniel Ave	S Church St	Sharrow	Roadway Striping	State
Spartanburg	W O Ezell Blvd	S High Point Rd	S Daniel Morgan Ave	Bike Lane	Roadway Diet	State
Spartanburg	W O Ezell Blvd	Sweetbriar Ct	S High Point Rd	Bike Lane	New Construction	State
Spartanburg	W O Ezell Blvd	Powell Mill Rd	Sweetbriar Ct	Bike Lane	Roadway Restriping	State
Spartanburg	W O Ezell Blvd	Blackstock Rd	Powell Mill Rd	Wide Outside Lane	Roadway Restriping	State
Spartanburg	W Park Dr	S Converse St	Carolyn Dr	Sharrow	Roadway Striping	County
Spartanburg	W St John St	W Main St	St John St	Bike Lane	Roadway Restriping	State
Spartanburg	W St John St	W Main St	N Daniel Morgan Ave	Sharrow	Roadway Striping	State
Spartanburg	Webber Rd	E Main St	Fernwood Glendale Rd	Paved Shoulder	New Construction	State
Spartanburg	Wofford St	Textile Rd	Austin St	Bike Lane/Sharrow	Roadway Restriping	State
Spartanburg	Wofford St	Austin St	N Forest St	Sharrow	Roadway Striping	State
Spartanburg	Wofford St	N Forest St	W St John St	Bike Lane	Roadway Restriping	State
Spartanburg	Woodburn Rd	Connecticut Ave	Fernwood Dr	Paved Shoulder	New Construction	State
Spartanburg	Woodburn Rd	Fernwood Dr	Burns St	Paved Shoulder	New Construction	State
Spartanburg	Anita Dr	Lucerne Dr	Southport Rd	Signed Route	Roadway Signage	County
Spartanburg	Maxwell Rd	S Park Dr	Lucerne Dr	Signed Route	Roadway Signage	County
Spartanburg	Lafayette St	E Kennedy	E Henry St	Sharrow	Roadway Striping	County
Spartanburg	E Kennedy	Lafayette St	S Daniel Morgan	Sharrow	Roadway Striping	State
Spartanburg	Dupre Rd	Emory Rd	Fernwood Dr	Sharrow	Roadway Striping	State
Spartanburg	W St John St	W Main St	Wofford St	Bike Lane	Roadway Restriping	State
Landrum	Howard Ave	N Laurel Ave	E Short St	Bike Lane	New Construction	State
Landrum	W Rutherford St	Clearwater Rd	S Randolph Ave	Paved Shoulder	New Construction	State
Landrum	E Rutherford St	S Randolph Ave	S Lee Ave	Sharrow	Roadway Striping	State
Landrum	E Prince Rd	E Rutherford St	Asbury Dr	Paved Shoulder	New Construction	State
Landrum	E Rutherford St	S Lee Ave	S Edgewood Ave	Bike Lane	New Construction	State
Landrum	E Rutherford St	S Edgewood Ave	Boyce St	Bike Lane	Roadway Restriping	State
Chesnee	W Cherokee St	Rhode Island Cir	S Virginia Ave	Bike Lane	Roadway Striping	State
Chesnee	W Cherokee St	S Virginia Ave	Ohio St	Bike Lane	New Construction	State
Chesnee	W Cherokee St	Ohio St	Rail Road Tracks	Bike Lane	Roadway Restriping	State
Chesnee	E Cherokee St	Rail Road Tracks	County Line	Bike Lane	Roadway Striping	State
Chesnee	Fairfield St	Ezell Cir	W Cherokee St	Paved Shoulder	New Construction	County
Chesnee	W Manning St	Loyd Ct	S Florida Ave	Paved Shoulder	New Construction	State
Chesnee	W Manning St	S Florida Ave	E Union St	Bike Lane	New Construction	State
Chesnee	E Union	S Florida Ave	W Manning St	Bike Lane	New Construction	State
Chesnee	S Florida Ave	E Cherokee St	W Manning St	Bike Lane	Roadway Striping	State
Chesnee	N Alabama Ave	W Oconee St	E Cherokee St	Bike Lane	Roadway Restriping	State
Chesnee	S Alabama Ave	E Cherokee St	York St	Sharrow	Roadway Striping	State
Chesnee	S Alabama Ave	York St	Pinecrest Rd	Bike Lane	Roadway Striping	State
Chesnee	Hampton St	N Alabama St	County Line	Bike Lane	Roadway Striping	State
Cowpens	Foster St	Cannons Campground Rd	Goforth St	Paved Shoulder	New Construction	State
Cowpens	Foster St	Goforth St	N Main St	Bike Lane	New Construction	State
Cowpens	W Church St	Seagle Rd	S Main St	Bike Lane	New Construction	State
Cowpens	E Church St	S Main St	S Linda St	Bike Lane	Roadway Striping	State
Cowpens	Battleground Rd	Goforth St	Foster St	Bike Lane	Roadway Striping	State
Cowpens	N Main St	Battleground Rd	Top Notch Rd	Bike Lane	Roadway Restriping	State
Cowpens	N Main St	Top Notch Rd	County Line	Paved Shoulder	New Construction	State
Cowpens	N Main St	Foster St	E Church St	Sharrow	Roadway Striping	State
Cowpens	S Main St	W Church St	Wagon Wheel Rd	Bike Lane	Roadway Restriping	State
Cowpens	S Linda St	S Church St	Palmetto St	Bike Lane	Roadway Striping	State
Cowpens	Palmetto St	S Main St	S Linda St	Bike Lane	Roadway Striping	County
Cowpens	S Linda St	Palmetto St	Murph Hill Rd	Bike Lane	New Construction	State
Cowpens	S Linda St	Murph Hill Rd	Old Pacolet Rd	Paved Shoulder	New Construction	State
Lyman	Inman Rd	Canady Rd	Clearview Dr	Paved Shoulder	New Construction	State
Lyman	Inman Rd	Clearview Dr	Greenville Hwy	Bike Lane	New Construction	State
Lyman	Holly Springs Rd	Hampton Rd	Inman Rd	Bike Lane	New Construction	State
Lyman	Pine Ridge Rd	Holly Springs Rd	Duncan Heights Rd	Paved Shoulder	New Construction	State
Lyman	Greenville Hwy	Pine Ridge Rd	Inman Rd	Bike Lane	Roadway Restriping	State
Lyman	Spartanburg Hwy	Inman Rd	Rosewood Dr	Bike Lane	New Construction	State
Lyman	Groce Rd	Spartanburg Hwy	Community St	Bike Lane	Roadway Striping	State
Lyman	Groce Rd	Community St	E Main St	Bike Lane	New Construction	State
Lyman	Spartanburg Rd	Old Spartanburg Hwy Ent	Riverside Ln	Bike Lane	New Construction	State
Lyman	Wellford Rd	Inman Rd	Lucille Dr	Paved Shoulder	New Construction	State
Pacolet	W Main St	S Pine St	McDowell St	Paved Shoulder	New Construction	State
Pacolet	Sunny Acres Rd	W Main St	Victor Pk	Paved Shoulder	New Construction	State
Pacolet	Stone St	Victor Pk	Mongomery Ave	Bike Lane	Roadway Striping	State
Pacolet	Stone St	Montgomery St	Walker St	Sharrow	Roadway Striping	State
Pacolet	Limestone St	Moore St	Sunny Acres Rd	Bike Lane	Roadway Striping	State
Pacolet	Sunny Acres Rd	Limestone St	Victor Pk	Side Path	New Construction	State
Pacolet	Victor Pk	Sunny Acres Rd	Stone St	Side Path	New Construction	State
Pacolet	N Hwy 150	Stone St	E Main St	Bike Lane	Roadway Restriping	State

SPARTANBURG, SOUTH CAROLINA

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
Pacolet	Jerusalem Rd	W Main St	Beech St	Paved Shoulder	New Construction	State
Pacolet	W Main St	McDowell St	N Hwy 150	Bike Lane	New Construction	State
Pacolet	E Main St	N Hwy 150	Hart St	Paved Shoulder	New Construction	State
Pacolet	S Pine	Pine Dr	Crescent St	Paved Shoulder	New Construction	State
Pacolet	S Pine	Crescent St	N Hwy 150	Bike Lane	Roadway Restriping	State
Pacolet	S Pine	N Hwy 150	County Line	Paved Shoulder	New Construction	State
Pacolet	Glenn Springs Rd	W Main St	Hwy 176	Paved Shoulder	New Construction	State
Greer	E Wade Hampton Blvd	County Line	Gap Creek Rd	Bike Lane	Roadway Restriping	State
Greer	Gap Creek Rd	Brookdale Acres	Barnett Rd	Paved Shoulder	New Construction	State
Greer	E Poinsett St Ext	County Line	Robinson Rd	Paved Shoulder	New Construction	State
Greer	Victor Ave Ext	County Line	Hendrix Rd	Paved Shoulder	New Construction	County
Greer	Abner Creek Rd	E Greer St	Liberty Hill Rd	Paved Shoulder	New Construction	State
Reidville	Reidville Rd	Yank Dr	Planters Dr	Paved Shoulder	New Construction	State
Reidville	Duncan Reidville Rd	Silver Lake Rd	Reidville Rd	Paved Shoulder	New Construction	State
Reidville	Main St	Spring St	Park	Bike Lane	New Construction	State
Reidville	Gaston Dr	Chestnut St	Lightwood Knot Rd	Paved Shoulder	New Construction	State
Reidville	Reidville Sharron Rd	Cummingham Cir	Lightwood Knot Rd	Paved Shoulder	New Construction	County
Woodruff	N Main St	Old Spartanburg Hwy	Buncombe St Ext	Paved Shoulder	New Construction	State
Woodruff	N Main St	Buncombe St Ext	W Peachtree St	Bike Lane	Roadway Restriping	State
Woodruff	N Main St	W Peachtree St	Calaboose St	Bike Lane	Roadway Diet	State
Woodruff	S Main St	Calaboose St	Lanford Rd	Bike Lane	Roadway Striping	State
Woodruff	Woodruff St	Buncombe St	N Pearson St	Sharrow	Roadway Striping	State
Woodruff	Eastbrook Dr	N Pearson St	E Georgia St	Sharrow	Roadway Striping	State
Woodruff	E Georgia St	Fowler Rd	Daniel Howard Dr	Paved Shoulder	New Construction	State
Woodruff	N Pearson St	Woodruff St	Cross Anchor Rd	Bike Lane	New Construction	State
Woodruff	E Georgia St	Daniel Howard Dr	N Main St	Bike Lane	Roadway Striping	State
Woodruff	W Georgia St	N Main St	Edwards St	Bike Lane	New Construction	State
Woodruff	Allen St	S Main St	Bennett Cir	Bike Lane	Roadway Restriping	State
Woodruff	Allen St	Bennett Cir	W Georgia Rd	Paved Shoulder	New Construction	State
Woodruff	Laurens Rd	E Griffith St	Cross Anchor Rd	Wide Outside Lane	Roadway Restriping	State
Woodruff	Cross Anchor Rd	Laurens St	Wildlife Trl	Wide Outside Lane	Roadway Restriping	State
Woodruff	S J Workman Hwy	Snowmill Rd	Cross Anchor Rd	Paved Shoulder	New Construction	State
Woodruff	Laurens Rd	Cross Anchor Rd	Fairview Ave	Paved Shoulder	New Construction	State
Welford	Main St	Lucile Dr	Jackson St	Paved Shoulder	New Construction	State
Welford	Tucapau Rd	Syphrit Rd	Old Spartanburg Hwy	Bike Lane	New Construction	State
Welford	Spartanburg Hwy	Rosewood Dr	Syphrit Rd	Bike Lane	New Construction	State
Welford	Old Spartanburg Hwy	Edgewood St	Greenville Hwy	Bike Lane	New Construction	State
Campobello	Pine St Ext	Hwy 11	Roberts St	Bike Lane	Roadway Diet	State
Campobello	Pine St Ext	Roberts St	Turner Ave	Bike Lane	Roadway Striping	State
Campobello	Pine St Ext	Pine St	Rock Ridge Rd	Paved Shoulder	New Construction	State
Campobello	Hwy 357	Falling Leaf Ln	N Main St	Paved Shoulder	New Construction	State
Campobello	N Main St	Pine St Ext	Lanford St	Bike Lane	Roadway Restriping	State
Campobello	S Main St	Lanford St	Wheeler St	Bike Lane	New Construction	State
Campobello	S Main St	Wheeler St	Pack St	Bike Lane	Roadway Restriping	State
Campobello	Old Mill St	Pack St	China Berry Ln	Paved Shoulder	New Construction	State
Duncan	E Wade Hampton Blvd	Gap Creek Rd	Pine Ridge Rd	Bike Lane	Roadway Restriping	State
Duncan	Gap Creek Rd	E Wade Hampton Blvd	W Main St	Paved Shoulder	New Construction	State
Duncan	N Spencer St	Duncan Heights Rd	W Main St	Paved Shoulder	New Construction	State
Duncan	S Spencer St	W Main St	Twin Valley Rd	Paved Shoulder	New Construction	State
Duncan	E Poinsett St Ext	Robinson Rd	W Main St	Paved Shoulder	New Construction	State
Duncan	W Main St	E Poinsett St Ext	North St	Paved Shoulder	New Construction	State
Duncan	W Main St	North St	Church St	Bike Lane	Roadway Restriping	State
Duncan	E Main St	Church St	W Pine St	Bike Lane	Roadway Restriping	State
Duncan	Spartanburg Rd	W Main St	Riverside Ln	Bike Lane	New Construction	State
Duncan	N Moore St	W Main St	Spartanburg Rd	Bike Lane	New Construction	State
Duncan	S Danzler Rd	E Main St	Forest Lake Rd	Bike Lane	New Construction	State
Duncan	N Danzler Rd	Groce Rd	E Main St	Bike Lane	New Construction	State
Inman	Compton Bridge Rd	Hicks Dr	Park St	Paved Shoulder	New Construction	State
Inman	N Howard St	Park St	Prospect St	Side Path	New Construction	State
Inman	N Main St	Asheville Hwy	Woodland Ave	Paved Shoulder	New Construction	State
Inman	N Main St	Woodland Ave	Pineview Dr	Bike Lane	New Construction	State
Inman	N Main St	Pineview Dr	Wingo St	Bike Lane	Roadway Restriping	State
Inman	N Main St	Wingo St	Mill St	Bike Lane	Roadway Striping	State
Inman	S Main St	Mill St	Asheville Hwy	Bike Lane	Roadway Striping	County
Inman	E Main St	Mill St	Clark Rd	Bike Lane	Roadway Striping	State
Inman	Mills Ave	N Main St	Asheville Hwy	Sharrow	Roadway Striping	State
Inman	W Miller St	N Main St	Oakland Ave	Bike Lane	Roadway Restriping	County
Inman	Oakland Ave	W Miller St	Littlefield St	Bike Lane	Roadway Restriping	County
Inman	Park Rd	Oakland Ave	Asheville Hwy	Bike Lane	Roadway Striping	State

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
County	1st St	Park Rd	Ridge Rd	Paved Shoulder	New Construction	State
County	Abner Creek Rd	Liberty Hill Rd	Berry Shoals Rd	Paved Shoulder	New Construction	State
County	Anderson Mill Rd	Reidville Rd	Old Anderson Mill Rd	Paved Shoulder	New Construction	State
County	Asheville Hwy	I 85	N Cleveland Park Dr	Wide Outside Lane	Roadway Restriping	State
County	Asheville Hwy	Fairforest Rd	Short St	Wide Outside Lane	Roadway Restriping	State
County	Asheville Hwy	E Short St	N Main St	Paved Shoulder	New Construction	State
County	Asheville Hwy	Greenwood Rd	N Randolph Ave	Paved Shoulder	New Construction	State
County	Battleground Rd	County Line	Chesnee Hwy	Paved Shoulder	New Construction	State
County	Battleground Rd	Quinn Tr	Goforth St	Paved Shoulder	New Construction	State
County	Beaumont Ave Ext	Whitney Rd	Garner Rd	Paved Shoulder	New Construction	State
County	Belcher Rd	Frontage Road 5	Asheville Hwy	Paved Shoulder	New Construction	County
County	Berry Shoals Rd	Highway 101	Abner Creek Rd	Paved Shoulder	New Construction	State
County	Bibendum Rd	New Cut Rd	I 26	Paved Shoulder	New Construction	State
County	Bible Church Rd	McMillin Blvd	Highway 9	Paved Shoulder	New Construction	County
County	Bishop Rd	Compton Bridge Rd	Clark Rd	Paved Shoulder	New Construction	County
County	Blackstock Rd	Lyman Rd	New Cut Rd	Paved Shoulder	New Construction	State
County	Blue Ridge St	Old Mill Rd	Herrie Rd	Paved Shoulder	New Construction	State
County	Boiling Springs Rd	I 85	Whitney Rd	Wide Outside Lane	Roadway Restriping	State
County	Boiling Springs Rd	Rainbow Lake Rd	I 85	Wide Outside Lane	Roadway Restriping	State
County	Brannon Belcher Rd	Old Furnace Rd	Belcher Rd	Paved Shoulder	New Construction	County
County	Brice Rd	South Gate Dr	Canaan Rd	Paved Shoulder	New Construction	State
County	Caldwell Rd	New Cut Rd	Sibley St	Paved Shoulder	New Construction	County
County	California Ave	Howard St	Boiling Springs Rd	Paved Shoulder	New Construction	State
County	Campground Rd	Mt Zion Rd	New Cut Rd	Paved Shoulder	New Construction	State
County	Canaan Rd	Brice Rd	Carolina Country Club Rd	Paved Shoulder	New Construction	County
County	Cannons Campground Rd	Kelly Rd	Floyd Rd	Paved Shoulder	New Construction	State
County	Cannons Campground Rd	Kelly Rd	County Line	Paved Shoulder	New Construction	State
County	Carolina Country Club Rd	Cedar Springs Rd	Cedar Springs Dr	Paved Shoulder	New Construction	State
County	Carolina Country Club Rd	Canaan Rd	Cedar Springs Rd	Paved Shoulder	New Construction	State
County	Cedar Springs Rd	Francis Marion Dr	Carolina Country Club Rd	Bike Lane	Roadway Restriping	State
County	Chesnee Hwy	N Church St	Sunset Dr	Wide Outside Lane	Roadway Restriping	State
County	Chesnee Hwy	Scruggs Rd	Jones Rd	Paved Shoulder	New Construction	State
County	Chesnee Hwy	Jones Rd	Sunset Dr	Wide Outside Lane	Roadway Restriping	State
County	Clark Rd	Highway 9	E Main St	Paved Shoulder	New Construction	County
County	Clifton Glendale Rd	Zion Hill Rd	County Club Rd	Paved Shoulder	New Construction	State
County	Compton Bridge Rd	Walnut Hill Church Rd	Bishop Rd	Paved Shoulder	New Construction	State
County	Compton Bridge Rd	Windmill Rd	Hicks Dr	Paved Shoulder	New Construction	State
County	Country Club Rd	S Pine St	Clifton Glendale Rd	Paved Shoulder	New Construction	State
County	Cowpens Clifton Rd	S Main St	N High St	Paved Shoulder	New Construction	State
County	Crate Rd	Howard Gap Rd	Compton Bridge Rd	Paved Shoulder	New Construction	County
County	Cross Anchor Rd	Wildlife Tr	I 26	Paved Shoulder	New Construction	State
County	Cross Anchor Rd	I 26	Highway 56	Paved Shoulder	New Construction	State
County	Dan River Rd	Cannons Campground Rd	S Main St	Paved Shoulder	New Construction	State
County	Dickson Rd	Old Mill Rd	Rock Hill Church Rd	Paved Shoulder	New Construction	County
County	Double Bridge Rd	Belcher Rd	Boiling Springs Rd	Bike Lane	New Construction	County
County	Drayton Rd	E Boundary Dr	Skylyn Dr	Bike Lane	Roadway Diet	State
County	Duncan Reidville Rd	Twin Valley Rd	Silver Lake Rd	Paved Shoulder	New Construction	State
County	E Blackstock Rd	Reidville Rd	Old Georgia Rd	Wide Outside Lane	Roadway Restriping	State
County	E Main St	Peachtree St	Howell Rd	Bike Lane	Roadway Restriping	State
County	E Main St	Howell Rd	Reidville Rd	Paved Shoulder	New Construction	State
County	E Main St Ext	Zion Hill Rd	Dan River Rd	Wide Outside Lane	Roadway Restriping	State
County	E Union St	E Manning St	Greenlake Rd	Paved Shoulder	New Construction	State
County	Edwards Rd	Compton Bridge Rd	Highway 9	Paved Shoulder	New Construction	State
County	Fairfield Rd	Parris Bridge Rd	Ezell Cir	Paved Shoulder	New Construction	State
County	Fairforest Clevedale Rd	N Blackstock Rd	Greenville Hwy	Paved Shoulder	New Construction	State
County	Fairforest Rd	Martin Rd	Charity Dr	Sharrow	Roadway Striping	State
County	Fairforest Rd	Asheville Hwy	Martin Rd	Paved Shoulder	New Construction	State
County	Fairwinds Rd	Highway 14 E	Landrum Mill Rd	Paved Shoulder	New Construction	County
County	Fernwood Glendale Rd	Fernridge Dr	Clifton Glendale Rd	Paved Shoulder	New Construction	State
County	Floyd Rd	Chesnee Hwy	Skylyn Dr	Paved Shoulder	New Construction	County
County	Foster Rd	Compton Bridge Rd	Highway 11	Paved Shoulder	New Construction	County
County	Front St	Textile Rd	Sibley St	Sharrow	Roadway Striping	State
County	Gaskins Rd	Old Canaan Rd Ext	Proposed Greenway	Side Path	New Construction	County
County	Gentry Rd	S Alexander Dr	Martin Rd	Bike Lane	New Construction	County
County	Glenn Springs Rd	Highway 176 Bypass	Highway 56	Paved Shoulder	New Construction	State
County	Greenlake Rd	E Union St	Battleground Rd	Paved Shoulder	New Construction	County
County	Greenville Hwy	Fairforest Clevedale Rd	Shoresbrook Rd	Side Path	New Construction	State
County	Hanging Rock Rd	Sugar Ridge Rd	Valley Falls Rd	Paved Shoulder	New Construction	State
County	Hayne St	I 26	Nahant St	Paved Shoulder	New Construction	State
County	Hayne St	N Blackstock Rd	I 26	Paved Shoulder	New Construction	State
County	Henderson Rd	Highway 11	Fairfield Rd	Paved Shoulder	New Construction	County
County	Herrie Rd	Blue Ridge St	Turpin Rd	Paved Shoulder	New Construction	County
County	Heywood Ave	Montgomery St	Drayton Rd	Bike Lane	Roadway Restriping	State
County	Hickory Nut Dr	Mud Creek Rd	Rainbow Lake Rd	Paved Shoulder	New Construction	County
County	Hidden Hill Rd	Knollwood Dr	Old Anderson Mill Rd	Paved Shoulder	New Construction	State
County	Highway 101	Bellview Rd Ext	Fountain Inn Rd	Paved Shoulder	New Construction	State
County	Highway 101	Rogers Bridge Rd	Bellview Rd Ext	Paved Shoulder	New Construction	State
County	Highway 11	I 26	Cannon Ford Rd	Paved Shoulder	New Construction	State
County	Highway 11	Rock Ridge Rd	I 26	Paved Shoulder	New Construction	State

SPARTANBURG, SOUTH CAROLINA

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
County	Highway 11	County Line	N Main St	Paved Shoulder	New Construction	State
County	Highway 11 W	Cannon Ford Rd	W Ocone St	Paved Shoulder	New Construction	State
County	Highway 14 W	Clearwater Rd	County Line	Paved Shoulder	New Construction	State
County	Highway 221	E Blackstock Rd	Moore Duncan Hwy	Paved Shoulder	New Construction	State
County	Highway 221	Fairview Ave	Parker Rd	Paved Shoulder	New Construction	State
County	Highway 222	Moore Duncan Hwy	Woodruff St Ext	Paved Shoulder	New Construction	State
County	Highway 357	Falling Leaf Ln	Greer Rd	Paved Shoulder	New Construction	State
County	Highway 56	Carolina Country Club Rd	Glenn Springs Rd	Paved Shoulder	New Construction	State
County	Highway 56	Glenn Springs Rd	Stames Rd	Paved Shoulder	New Construction	State
County	Highway 56	Cross Anchor Rd	County Line	Paved Shoulder	New Construction	State
County	Highway 9	Highway 11	Farm Lake Rd	Paved Shoulder	New Construction	State
County	Highway 9	Farm Lake Rd	Rainbow Lake Rd	Wide Outside Lane	Roadway Restriping	State
County	Highway 92	I 26	Long Branch Rd	Paved Shoulder	New Construction	State
County	Holly Springs Rd	Highway 357	Hampton Rd	Paved Shoulder	New Construction	State
County	Holly Springs Rd	New Cut Rd	Ridge Rd	Paved Shoulder	New Construction	State
County	Hope Rd	John Dodd Rd	Mt Zion Rd	Paved Shoulder	New Construction	State
County	Howard Gap Rd	Turpin Rd	Windmill Rd	Paved Shoulder	New Construction	County
County	Howard St	California Ave	Hale St	Bike Lane	New Construction	State
County	Howard St	Asheville Hwy	California Ave	Paved Shoulder	New Construction	State
County	Huntington Dr	Cedar Springs Dr	W Croft Cir	Paved Shoulder	New Construction	County
County	I 26	Cross Anchor Rd	County Line	Paved Shoulder	New Construction	State
County	Island Ford Rd	Highway 11	Rainbow Lake Rd	Paved Shoulder	New Construction	County
County	John Dodd Rd	Asheville Hwy	Hope Rd	Paved Shoulder	New Construction	State
County	Lake Bowen Dam Rd	Island Ford Rd	Highway 9	Paved Shoulder	New Construction	State
County	Lake Forest Dr	Ferwood Glendale Rd	Woodburn Rd	Paved Shoulder	New Construction	State
County	Lincoln School Rd	Old Blackstock Rd	End of Road	Side Path	New Construction	State
County	Lyman Rd	Asheville Hwy	Canady Rd	Paved Shoulder	New Construction	State
County	Lytle St	Old Blackstock Rd	N Blackstock Rd	Sharrow	Roadway Striping	State
County	Martin Rd	Gentry Rd	Fairforest Rd	Bike Lane	New Construction	County
County	Miller Town Rd	Highway 56	Riddle Rd	Paved Shoulder	New Construction	County
County	Minnow Farm Rd	Parris Bridge Rd	Peach Shed Rd	Paved Shoulder	New Construction	County
County	Moore Duncan Hwy	Reidville Rd	Smith Rd	Paved Shoulder	New Construction	State
County	Mt Zion Rd	Hope Rd	Campground Rd	Paved Shoulder	New Construction	State
County	Mud Creek Rd	Riveroak Rd	Hickory Nut Dr	Paved Shoulder	New Construction	State
County	N Blackstock Rd	Azalea Ct	Greenville Hwy	Bike Lane	Roadway Restriping	State
County	N Blackstock Rd	Old Blackstock Rd	Azalea	Bike Lane	New Construction	State
County	N Blackstock Rd	Charity Dr	Lytle St	Bike Lane	Roadway Restriping	State
County	N Howard Ave	N Randolph Ave	Barnett St	Paved Shoulder	New Construction	State
County	N Main St	Dock St	S Main St Ext	Bike Lane	New Construction	State
County	Nazareth Church Rd	Irby Rd	Reidville Rd	Paved Shoulder	New Construction	State
County	Nazareth Rd	Spartanburg Rd	Irby Rd	Paved Shoulder	New Construction	State
County	New Cut Rd	Caldwell Rd	Howard St	Paved Shoulder	New Construction	State
County	New Cut Rd	I 26	Fairforest Rd	Paved Shoulder	New Construction	State
County	New Cut Rd	Highway 357	Lyman Rd	Paved Shoulder	New Construction	State
County	New Cut Rd	Lyman Rd	I 26	Paved Shoulder	New Construction	State
County	Oak Grove Rd	S Blackstock Rd	Reidville Rd	Paved Shoulder	New Construction	State
County	Old Anderson Mill Rd	Hidden Hill Rd	Wellington Dr	Paved Shoulder	New Construction	State
County	Old Blackstock Rd	Lytle St	N Blackstock Rd	Bike Lane	New Construction	State
County	Old Canaan Rd Ext	Southport Rd	Gaskins Rd	Side Path	New Construction	State
County	Old Furnace Rd	Asheville Hwy	Brannon Belcher Rd	Paved Shoulder	New Construction	State
County	Old Georgia Rd	Old Anderson Mill Rd	Brice Rd	Paved Shoulder	New Construction	State
County	Old Mill Rd	Chinaberry Ln	Compton Bridge Rd	Paved Shoulder	New Construction	State
County	Old Pacolet Rd	S Linda St	County Line	Paved Shoulder	New Construction	State
County	Park Rd	Asheville Hwy	1st St	Bike Lane	New Construction	County
County	Park Rd	1st St	Lyman Rd	Bike Lane	Roadway Striping	County
County	Park Rd	Lyman Rd	Blackstock Rd	Paved Shoulder	New Construction	State
County	Park St	Bishop Rd	Powell St	Paved Shoulder	New Construction	State
County	Parker Rd	Long Branch Rd	Highway 221	Paved Shoulder	New Construction	State
County	Parris Bridge Rd	Arrowood Branch Rd	Boiling Springs Rd	Paved Shoulder	New Construction	State
County	Peach Shed Rd	Minnow Farm Rd	Turkey Farm Rd	Paved Shoulder	New Construction	County
County	Plainview Dr	Cannons Campground Rd	E Main St	Paved Shoulder	New Construction	County
County	Rainbow Lake Rd	Highway 11	Highway 9	Paved Shoulder	New Construction	State
County	Reidville Rd	Anderson Mill Rd	E Blackstock Rd	Wide Outside Lane	Roadway Restriping	State
County	Reidville Rd	Highway 101	Yank Dr	Paved Shoulder	New Construction	State
County	Reidville Rd	Green Ridge Dr	Planters Dr	Paved Shoulder	New Construction	State
County	Reidville Rd	Caldwell Cir	Green Ridge Dr	Wide Outside Lane	Roadway Restriping	State
County	Riddle Rd	Miller Town Rd	Walnut Grove Rd	Paved Shoulder	New Construction	State
County	Riveroak Rd	Highway 9	Rainbow Lake Rd	Paved Shoulder	New Construction	State
County	Rock Hill Church Rd	Dickson Rd	Edwards Rd	Paved Shoulder	New Construction	County
County	Rodgers Bridge Rd	E Main St	Highway 101	Paved Shoulder	New Construction	State
County	S Alabama Ave	Pincrest Rd	Scruggs Rd	Wide Outside Lane	Roadway Restriping	State
County	S Blackstock Rd	Fann Ct	Reidville Rd	Bike Lane	New Construction	State
County	S Blackstock Rd	Greenville Hwy	Fann Ct	Bike Lane	Roadway Restriping	State
County	S Church St Ext	McAbee Rd	E Blackstock Rd	Paved Shoulder	New Construction	State
County	S Danzler Rd	Forest Lake Rd	Duncan Reidville Rd	Paved Shoulder	New Construction	State
County	S Main St	Spruce St	E Main St	Bike Lane	New Construction	State
County	S Main St	New St	Dan River Rd	Bike Lane	Roadway Restriping	State
County	S Main St Ext	N Main St	Spruce St	Bike Lane	New Construction	State
County	Seay Rd	Hanging Rock Rd	Highway 9	Paved Shoulder	New Construction	County
County	Sibley St	Front St	Hayne St	Sharrow	Roadway Striping	County

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
County	Sibley St	Caldwell Rd	Hayne St	Paved Shoulder	New Construction	County
County	SJ Workman Hwy	I 26	Snowmill Rd	Paved Shoulder	New Construction	State
County	Skylyn Dr	Drayton Rd	Floyd Rd	Bike Lane	Roadway Restriping	State
County	South Gate Dr	Southport Rd	Brice Rd	Paved Shoulder	New Construction	State
County	Southport Rd	Reidville Rd	S Church St	Side Path	New Construction	State
County	Southport Rd	S Church St	Existing Sidepath	Side Path	New Construction	State
County	Southport Rd	Cedar Springs Rd	Patch Dr	Wide Outside Lane	Roadway Restriping	State
County	Southport Rd	Patch Dr	S Pine St	Paved Shoulder	New Construction	State
County	Spartanburg Rd	Tacapau Rd	Nazareth Rd	Paved Shoulder	New Construction	State
County	Spring Valley Rd	Clark Rd	Sugar Ridge Rd	Paved Shoulder	New Construction	County
County	Springfield Rd	Wegefield Dr	New Cut Rd	Paved Shoulder	New Construction	County
County	Springfield Rd	Wegefield Dr	Uppervalley Falls Rd	Paved Shoulder	New Construction	State
County	Starnes Rd	Cross Anchor Rd	Highway 56	Paved Shoulder	New Construction	County
County	Stewart Rd	Carolina Country Club Rd	Kirkwood Pl	Paved Shoulder	New Construction	County
County	Sugar Ridge Rd	Spring Valley Rd	Old Furnace Rd	Paved Shoulder	New Construction	County
County	Sugar Ridge Rd	Highway 9	Clark Rd	Paved Shoulder	New Construction	County
County	Tacapau Rd	Old Spartanburg Hwy	Dock St	Bike Lane	New Construction	State
County	Textile Rd	Mill Rd	Ethel Rd	Bike Lane	Roadway Restriping	State
County	Textile Rd	Ethel Rd	Wofford St	Paved Shoulder	New Construction	State
County	Turkey Farm Rd	Peach Shed Rd	Fish Camp Rd	Paved Shoulder	New Construction	County
County	Turpin Rd	Herrle Rd	Compton Bridge Rd	Paved Shoulder	New Construction	State
County	Uppervalley Falls Rd	Springfield Rd	Valley Falls Rd	Paved Shoulder	New Construction	County
County	Valley Falls Rd	Asheville Hwy	Burnett St	Bike Lane	New Construction	State
County	Valley Falls Rd	I 85	Burnett St	Paved Shoulder	New Construction	State
County	Valley Falls Rd	Boiling Springs Rd	I 85	Paved Shoulder	New Construction	State
County	W Blackstock Rd	Bellew Carver Rd	Spartan Blvd	Wide Outside Lane	Roadway Restriping	State
County	W Blackstock Rd	Hayne St	Bellew Carver Rd	Paved Shoulder	New Construction	State
County	W Cherokee St	W Oconee St	Rhode Island Cir	Paved Shoulder	New Construction	State
County	W Cherokee St	Rhode Island Cir	Berkeley	Bike Lane	Roadway Striping	County
County	W Georgia Rd	Ezell Dr	County Line	Paved Shoulder	New Construction	State
County	W Main St	S Pine St	Pine Dr	Paved Shoulder	New Construction	State
County	W Manning St	Fish Camp Rd	Richland St	Paved Shoulder	New Construction	State
County	W Oconee St	W Cherokee St	County Line	Paved Shoulder	New Construction	State
County	Wallace Ave	Burns St	Country Club Rd	Paved Shoulder	New Construction	State
County	Walnut Grove Rd	Riddle Rd	I 26	Paved Shoulder	New Construction	State
County	Walnut Hill Church Rd	Walnut Hill Rd	Compton Bridge Rd	Paved Shoulder	New Construction	County
County	Walnut Hill Rd	Highway 11	Walnut Hill Church Rd	Paved Shoulder	New Construction	County
County	Watson Rd	Cross Anchor Rd	Waldrop Rd	Paved Shoulder	New Construction	State
County	Whitestone Glendale Rd	Country Club Rd	Southport Rd	Paved Shoulder	New Construction	State
County	Willis Rd	Copperline	Franklin Ave	Bike Lane	New Construction	County
County	Willis Rd	Greenville Hwy	Hawk Creek Dr	Side Path	New Construction	County
County	Woodlawn St	Hill St	South Ave	Signed Route	Roadway Signage	County
County	Woodley Rd	South Ave	Southport Rd	Signed Route	Roadway Signage	State
County	Zion Hill Rd	E Main St	Cliffon Glendale Rd	Paved Shoulder	New Construction	County
County	E Prince Rd	Asbury Dr	Red Barn Rd	Paved Shoulder	New Construction	State
County	Red Barn Rd	E Prince Rd	County Line	Paved Shoulder	New Construction	County
County	Hwy 14 E	Cambell Ave	Hwy 26	Paved Shoulder	New Construction	State
County	Fairwinds Rd	Hwy 14 E	Landrum Mill Rd	Paved Shoulder	New Construction	County
County	Asheville Hwy	County Line	N Laurel Ave	Bike Lane	New Construction	State
County	Sugar Ridge Rd	Hwy 9	Spring Valley Rd	Paved Shoulder	New Construction	County
County	Seay Rd	Hwy 9	Hanging Rock Rd	Paved Shoulder	New Construction	County
County	Belcher Rd	I 26	Brannon Belcher Rd	Paved Shoulder	New Construction	County
County	Casey Creek Rd	Black Creek Rd	Chesnee Hwy	Paved Shoulder	New Construction	State
County	Double Branch Rd	Chesnee Hwy	Battleground Rd	Paved Shoulder	New Construction	County
County	Cliffon Glendale Rd	Zion Hill Rd	River Dr	Paved Shoulder	New Construction	State
County	Beacon Light Rd	River Dr	Old Pacolet Rd	Paved Shoulder	New Construction	State
County	Goldmine Rd	Cliffon Glendale Rd	W Main St	Paved Shoulder	New Construction	State
County	Emma Cudd Rd	Whitestone Glendale Rd	Bethesda Rd	Paved Shoulder	New Construction	County
County	Bethesda Rd	Emma Cudd	End of Road	Paved Shoulder	New Construction	County
County	Jerusalem Rd	Beech St	County Line	Paved Shoulder	New Construction	State
County	Hwy 150	Bellwood Ln	County Line	Paved Shoulder	New Construction	State
County	S Pine St	Hart St	County Line	Paved Shoulder	New Construction	State
County	Carolina Country Club Rd	Canaan Rd	Stone Station Rd	Paved Shoulder	New Construction	State
County	Stone Station Rd	E Church St Ext	Hwy 56	Paved Shoulder	New Construction	State
County	E Blackstock Rd	Old Georgia Rd	E Church St Ext	Paved Shoulder	New Construction	State
County	Anderson Mill Rd	Moore Duncan Hwy	Old Anderson Mill Rd	Paved Shoulder	New Construction	State
County	Hwy 417	Reidville Rd	County Line	Paved Shoulder	New Construction	State
County	Hwy 215	Hwy 56	County Line	Paved Shoulder	New Construction	State
County	Victor Hill Rd	Hendrix Rd	Duncan Reidville Rd	Paved Shoulder	New Construction	County
County	Berry Shoals Rd	Hwy 101 S	Shoals Rd	Paved Shoulder	New Construction	State
County	Silver Lake Rd	Duncan Reidville Rd	Berry Shoals Rd	Paved Shoulder	New Construction	State
County	Greenville Hwy	Syphrit Rd	I 26	Wide Outside Lane	Roadway Restriping	State
County	John Dodd Rd	Hope Rd	Fort Prince Blvd	Paved Shoulder	New Construction	State
County	Gap Creek Rd	County Line	Hampton Rd	Paved Shoulder	New Construction	State
County	Moore Duncan Hwy	Green Ridge Dr	Hwy 221	Paved Shoulder	New Construction	State
County	New Cut Rd	Fairforest Rd	Caldwell Rd	Paved Shoulder	New Construction	State
County	Bethlehem Church Rd	Old Anderson Mill Rd	Old Georgia Rd	Paved Shoulder	New Construction	State
County	Fairforest Clevedale Rd	Greenville Hwy	I 26	Paved Shoulder	New Construction	State
County	Willis Rd	Copperline	Franklin Ave	Bike Lane	New Construction	County
County	Old Bethel Rd	Reidville Rd	Lightwood Knot Rd	Paved Shoulder	New Construction	State

SPARTANBURG, SOUTH CAROLINA

Location	Bicycle Facility	From	To	Recommendation	Const Type	Agency
County	S Hammet Rd	Hwy 101 S	Reidville Rd	Paved Shoulder	New Construction	County
County	Lightwood Knot Rd	Reidville Rd	Hwy 417	Paved Shoulder	New Construction	County
County	Fowler Rd	Lightwood Knot Rd	Greenpond Rd	Paved Shoulder	New Construction	State
County	Reidville Sharron Rd	Lightwood Knot Rd	Sharon Rd	Paved Shoulder	New Construction	County
County	Sharon Rd	Hwy 101 S	Reidville Sharron Rd	Paved Shoulder	New Construction	County
County	Greenpond Rd	Lightwood Knot Rd	Hwy 417	Paved Shoulder	New Construction	State
County	Old Furnace Rd	Belcher Rd	Paris Bridge Rd	Paved Shoulder	New Construction	State
County	Compton Bridge Rd	Bishop Rd	Howard Gap Rd	Paved Shoulder	New Construction	State
County	Windmill Hill Rd	Compton Bridge Rd	Blue Ridge St	Paved Shoulder	New Construction	State
County	Blue Ridge St	Herrle Rd	Windmill Hill Rd	Paved Shoulder	New Construction	State

APPENDIX E OUTLINE:

Introduction
 National and Federal Funding Sources
 Overview of State Funding Sources
 Local Government Funding Sources
 Other Local Options
 Private Foundations and Corporations

APPENDIX E: Funding

INTRODUCTION

Implementing the recommendations of this plan will require a combination of funding sources that include local, state, federal, and private money. Fortunately, the benefits of protected greenways, bicycle facilities, and pedestrian facilities are many and varied. This allows programs in Spartanburg County to access money earmarked for a variety of purposes including water quality, hazard mitigation, recreation, air quality, alternate transportation, wildlife protection, community health, and economic development. Competition is almost always stiff for state and federal funds, so it becomes imperative that local governments work together to create multijurisdictional partnerships and to develop their own local sources of funding. These sources can then be used to leverage outside assistance. The long term success of this plan will almost certainly depend on the dedication of a local revenue stream for greenways.

It is important that Spartanburg County, its municipalities, and SPATS fully evaluate its available options and develop a funding strategy that can meet community needs, maximize local resources, and leverage outside funding. Financing will be needed to administer the continued planning and implementation process, acquire parcels or easements, and manage and maintain facilities.

It is advised that Spartanburg County, its municipalities, and SPATS pursue a variety of funding options. Below is a list of some of the funding opportunities that have typically been pursued by other communities. Creative planning and consistent monitoring of funding options will likely turn up new opportunities not listed here.

NATIONAL AND FEDERAL FUNDING SOURCES

Most federal programs provide block grants directly to states through funding formulas. For example, if a South Carolina community wants funding to support a transportation initiative, they would contact the South Carolina Department of Transportation and not the US Department of Transportation to obtain a grant. Despite the fact that it is rare for a local community to obtain a funding grant directly from a federal agency, it is relevant to list the current status of federal programs and the amount of funding that is available to South Carolina through these programs.

SURFACE TRANSPORTATION ACT (SAFETEA LU)

For the past 15 years, the Surface Transportation Act has been the largest single source of funding for the development of greenway, pedestrian and bikeway projects. Prior to 1990, the nation, as a whole, spent approximately \$25 million on building community-based bicycle and pedestrian projects, with the vast majority of this money spent in one state. Since the passage of ISTEA, funding has been increased dramatically for bicycle, pedestrian and greenway projects, with total spending north of \$5 billion. SAFETEA-LU will more than double the total amount of funding for bicycle/pedestrian/trail projects as compared to its predecessor TEA-21, with approximately \$800 million available each year.

There are many programs within SAFETEA-LU that deserve mention. The authorizing legislation is complicated and robust. The following provides a summary of how this federal funding can be used to support certain elements of the Spartanburg Bicycle and Pedestrian Master Plan.

1) SURFACE TRANSPORTATION PROGRAM (STP)

This is the largest single program within the legislation from a funding point of view, with \$32.5 billion committed over the next five years. Of particular interest to greenway enthusiasts, 10 percent of the funding within this program is set aside for Transportation Enhancements (TE) activities. Historically, a little more than half of the TE funds have been used nationally to support bicycle/pedestrian/trail projects. So nationally, it is projected that \$1.625 billion will be spent on these projects under SAFETEA-LU.

2) CONGESTION MITIGATION AND AIR QUALITY (CMAQ)

Under SAFETEA-LU, approximately \$8.6 billion has been set aside. Historically, about five percent of these funds have been used to support bicycle/pedestrian/trail projects. This would equal about \$430 million under SAFETEA-LU. The Spartanburg-Greenville-Anderson region will most likely remain a non-attainment area throughout the life of SAFETEA, and that makes it a very eligible community for this type of funding. The Birmingham, AL, metro region, for example, used all of its CMAQ allocation one year to fund a regional bicycle, pedestrian and trails study, which subsequently identified projects that were funded for development.

3) HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

SAFETEA-LU funds this program at \$5 billion over four years. Historically, bicycle and pedestrian projects have accounted for one percent of this program, or about \$50 million under SAFETEA-LU. Some of the eligible uses of these funds would include

traffic calming, bicycle and pedestrian safety improvements, and installation of crossing signs. This is not a huge source of funding, but one that could be used to fund elements of a project.

4) RECREATIONAL TRAILS PROGRAM (RTP)

The Recreational Trails Program is specifically set up to fund both motorized and non-motorized trail development. Under SAFTEA-LU funding is established at \$370 million for the five-year term of the legislation. At least 30% of these funds must be spent on non-motorized trails, or \$110 million. South Carolina operates a grant program to distribute to this funding to local governments.

5) SCENIC BYWAYS

The National Scenic Byway program has not traditionally been a good source of funding for bicycle/pedestrian/trail projects. The total amount of funding available nationally is \$175 million under SAFETA-LU. Historically, only 2 percent of these funds have been used to support bicycle and pedestrian improvements.

6) SAFE ROUTES TO SCHOOL PROGRAM (SR2S)

A new program under SAFETEA-LU is the Safe Routes to School (SR2S) program, with \$612 million in funding during the term of the legislation. This is an excellent new program that within South Carolina can be paired with a variety of health and wellness programs, to increase funding for access to the outdoors for children. Each state will receive no less than \$1 million in funding, with 10% to 30% of the funds allocated to non-infrastructure activities.

7) HIGH PRIORITY PROJECTS

Under SAFETEA-LU more than 5,091 transportation projects were earmarked by Congress for development, with a total value in excess of \$3 billion.

8) FEDERAL TRANSIT ADMINISTRATION PROGRAMS

The Federal Transit Administration provides stewardship of combined formula and discretionary programs totaling more than \$10B to support a variety of locally planned, constructed, and operating public transportation systems throughout the nation, including buses.

- Urbanized Area Formula Grants (49 USC 5307) - An urbanized area is an incorporated area with a population of 50,000 or more. Capital is available to improve bicycle and pedestrian access to transit facilities and vehicles, including bike stations.

- Urbanized Area Formula Grants Transportation Enhancements Set-Aside (49 USC 5307(k)) - 1% set aside of section 5307 funds for areas with populations over 200,000 for 9 specific activities included in the definition of Transit Enhancement Activities. Eligible activities include improving pedestrian and bicycle access, bicycle storage facilities, and installing equipment to transport bicycles on mass transportation vehicles.

9) TRANSPORTATION INVESTMENT GENERATING ECONOMIC RECOVERY (TIGER) DISCRETIONARY GRANTS

On February 17, 2009, the President of the United States signed the American Recovery and Reinvestment Act (ARRA) to, among other purposes, preserve and create jobs, promote economic recovery, and invest in transportation infrastructure. ARRA appropriated \$1.5B in discretionary grant funds to the Department of Transportation for capital investment in surface transportation infrastructure. The Department refers to these grants as TIGER Discretionary Grants. Applications must be submitted by September 15, 2009 from state and local governments, metropolitan planning organizations, or other political subdivisions. These funds are available for obligation until September 30, 2011, and will be awarded on a competitive basis to projects that have significant impact on the Nation, a metropolitan area, or a region.

Eligible projects include public transportation projects eligible under Chapter 53 of Title 49 United States Code. These include bicycle and pedestrian improvements. TIGER Discretionary Grants may be used for up to 100% of project costs, but priority will be given to those projects for which federal funding will be required to complete an overall financing package that includes non-federal sources. Additionally, priority must be given to projects that can be completed by February 17, 2012. ARRA specifies that grants funded under the program may be no less than \$20M and no greater than \$300M. However, the Department has been given the discretion to waive the \$20M minimum grant size for the purpose of funding projects in smaller cities, regions, or states. No more than 20% of the total funds may be awarded to projects in any one state.

Although the deadline for submission may have passed by the time this Bicycle and Pedestrian Master Plan has been adopted, it is still worthy of consideration. In the event that all available funds are not obligated, the Department may decide to publish an additional solicitation. Additionally, potential future rounds of economic stimulus legislation may follow that utilize similar project requirements and funding opportunities.

LAND AND WATER CONSERVATION FUND (LWCF)

The Land and Water Conservation Fund is the largest source of federal money for park, wildlife, and open space land acquisition. The program's funding comes primarily from offshore oil and gas drilling receipts, with an authorized expenditure of \$900 million each year. However, Congress generally appropriates only a fraction of this amount. The program provides up to 50 percent of the cost of a project, with the balance of the funds paid by states or municipalities. These funds can be used for outdoor recreation projects, including acquisition, renovation, and development. Projects require a 50 percent match. For 2006, Congress has appropriated \$30 million for state assistance, which is about 1/3 of the financial support in 2005. This program is administered by the South Carolina Department of Parks, Recreation and Tourism. The amount of money available through this program within South Carolina is less than \$1 million.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

The EPA funds a program that enables communities to clean up polluted properties. Grant funding considers the following factors:

- Needy communities fare better in competition
- High unemployment rates, high poverty rates, loss of jobs population, minority or other sensitive populations.
- Health concerns
- Present the environmental, economic, social and health impacts of brownfields on the community
- Environmental justice concerns
- Focus on the environmental and health impacts of your project.

"CLIMATE SHOWCASE COMMUNITIES"

The goal of the program is to create replicable models of sustainable community action that generate cost-effective and persistent greenhouse gas reductions while improving the environmental, economic, public health, or social conditions in a community. Although 2009 fiscal year applications are due July 22, 2009, it is not known if this appropriation will continue in FY 2010 or future years. The grant awards include a maximum of \$500,000 and a 50% match requirement.

US DEPARTMENT OF ENERGY (DOE) ENERGY EFFICIENCY AND CONSERVATION BLOCK GRANT PROGRAM

This program, authorized in the Energy Independence and Security Act of 2007, exists to assist eligible entities in implementing energy efficiency and conservation strategies to reduce fossil fuel emissions, total energy use, and to improve energy

efficiency in the transportation sector. Specifically, funds are available for transportation infrastructure: bike lanes/pathways, pedestrian walkways, and synchronized traffic signals. The total annual appropriation is \$2B, and DOE will develop a formula for allocating \$1.36B (68%) of the block grants among cities and counties. Approximately \$560M (28%) will be passed to the states and each state will decide how to award these funds among its cities and counties. \$40M (2%) is available in a competitive program to non-formula cities/counties, and the final \$40M (2%) is appropriated under a tribal program.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA) STATE AND COMMUNITY HIGHWAY SAFETY PROGRAM

More commonly referred to as “Section 402 Funds,” these grants exist to assist eligible entities in carrying out specific programs that will have a direct impact in reducing the number of collisions and traffic-related fatalities and injuries. Each year, South Carolina receives approximately \$3M in Section 402 funds from the NHTSA (USDOT). The South Carolina Department of Public Safety is tasked with the administration of the state program. Eligible areas of funding include the development, implementation and evaluation of educational and enforcement programs that will enhance pedestrian safety. These funds support, in general, non-construction activities.

COMMUNITY BLOCK DEVELOPMENT GRANT PROGRAM (HUD-CBDG)

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

OVERVIEW OF STATE FUNDING SOURCES

The most direct source of public-sector funding for Spartanburg County, its municipalities, and SPATS can come from state agencies. Generally, these funds are made available to local governments based on grant-in-aid formulas. The single most important key to obtaining state grant funding is for local governments to have adopted plans for greenway, bicycle, and pedestrian or trail systems in place prior to making an application for funding. This report summarizes the programs that most often have been used to support greenway, bicycle and pedestrian development. A brief description of the program is provided followed by a list of current funding levels and information necessary to obtain grant forms to access the funds.

SOUTH CAROLINA CONSERVATION BANK

The goal of the South Carolina Conservation Bank is to improve the quality of life in South Carolina through the conservation of significant natural resource lands, wetlands, historical properties, and archeological sites. The Act is funded by placing twenty-five cents out of each one dollar thirty-five cents of the Documentary Deed Stamp recording fee into a trust for the Conservation Bank to carry out the Act. Funding began in July 2004. Landowners who wish to participate may sell property outright or sell conservation easements and retain traditional use of the land. Only willing landowners will participate in this program. No one can be forced to sell land or provide easements. With an increasingly mobile society, South Carolina has an exceptionally high quality of life, but in order to attract the next generation of growth, the State's quality of life must be protected by securing important landscapes. Funding from the Bank can be used to:

- Protect significant natural resource areas and wildlife habitats
- Protect water quality
- Maintain the State's forest lands
- Protect farmlands, especially family farms
- Protect and enhance the State's natural beauty
- Protect and enhance significant historical and archeological sites
- Enhance public access for outdoor recreation and preserve traditional uses such as hunting, fishing, and other types of outdoor recreation.

Funding of proposals is based on the amount of funding available and the priority of the proposals as set by the Conservation Bank Board in accordance with the statutory criteria. Non-acceptance of a proposal does not mean it is not a good proposal, nor does non-acceptance less than one budget cycle preclude a proposal from being re-submitted. Proposals go through a two-stage process of implementation. Web site: <http://sccbanc.sc.gov>. E-mail: DavantM@dnr.sc.gov.

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION – SAFETEA

The South Carolina DOT manages the implementation of all transportation programs and improvements throughout the state. SCDOT produces a Transportation Improvement Program (STIP). The STIP is a comprehensive report listing the various types of projects in which work activity is planned within the six year period (October 1, 2006 to September 30, 2012). The report details the funding of each project and the work phase for each project in the appropriate year. The present STIP includes the fiscal years 2007-2009. It is produced and printed every two years as part of the SAFETEA federal requirement. For the pur-

pose of greenway, bicycle, pedestrian and trail projects, the following funding has been defined within SAFETEA-LU for the SCDOT. The description of each program is provided under the Federal Sources SAFETEA description.

SRTS PROGRAM

Funding for the Safe Routes to School Program comes from the STIP. In South Carolina the contact person for the SRTS program is:

Patti Sistrunk South Carolina Department of Transportation
PO Box 191
Columbia, South Carolina 29202-0191
Phone: 803-737-4073 E-mail: sistrunkp@scdot.org

SOUTH CAROLINA DOT TRANSPORTATION ENHANCEMENT PROGRAM

Since 1992, the SCDOT Commission has elected to allocate a portion of available funds to the Transportation Enhancement Program. The program facilitates and provides a a greater opportunity for local governments to collaborate with the agency to pursue a broad range of non-traditional transportation related activities such as bicycle and pedestrian facilities, streetscaping, scenic and landscaping programs, and historic preservation. The program defines "enhancement" projects among 12 categories. Specific to this master plan, relevant programs include:

- Bike and Pedestrian Safety. This category includes non-construction safety-related activities such as bicycle route brochures and signage.
- Bicycle and Pedestrian Facilities. This category includes construction of new bicycle and pedestrian facilities or modifications to existing facilities. Bicycle facilities must be transportation-oriented (not solely for recreational purposes), can be located within or outside the highway right-of-way, and could include riding or walking surfaces and related amenities.
- Preservation of Abandoned Rail Corridors. The purpose of this category is to preserve abandoned railway corridors for public use, including bicycle and pedestrian uses. Commonly called "Rails to Trails," this program allows eligible entities to purchase abandoned rail corridors, and develop and construct multi-use facilities within the old corridors.

SOUTH CAROLINA DOT PEDESTRIAN AND BICYCLE PROGRAM

The South Carolina Department of Transportation is committed to meeting the on-going challenge of providing better and safer accommodations for people who choose to walk or cycle. This effort is coordinated by the agency's Pedestrian

and Bicycle Program. Early in 2002, SCDOT Executive Director Elizabeth Mabry launched a 'new initiative' to establish partnerships to provide more facilities for bicycling and walking in South Carolina. A Bicycle and Pedestrian Infrastructure Advisory Committee was formed in June 2002, composed of representatives of the private sector, the General Assembly, other state agencies, and walking and cycling advocacy groups. There is no specific financial information available for the program. Contact person:

Tom Dodds, Pedestrian & Bicycle Coordinator
 South Carolina Dept of Transportation
 PO Box 191
 Columbia SC 29202-0191
 Phone: (803)737-1052 E-mail: doddsdt@scdot.org

SOUTH CAROLINA DOT RECREATIONAL TRAILS PROGRAM

The Recreational Trails Program is a federally funded grant program to build or improve trails across South Carolina. This is a reimbursable grant program requiring a 20% match. RTP funds are available to state, federal and local government agencies or qualified private organizations. The minimum grant amount is \$10,000 with a maximum of \$100,000. Final appropriations for this program are not currently available, although the amount is expected to be approximately \$700,000. South Carolina will receive a total of \$5.5 million through SAFETEA-LU to fund this program for Fiscal Years 2004 to 2009. It is not clear when applications are due for the grant. Contact person:

Tom Dodds, Pedestrian & Bicycle Coordinator
 South Carolina Dept of Transportation
 PO Box 191
 Columbia SC 29202-0191
 Phone: (803)737-1052 E-mail: doddsdt@scdot.org

SOUTH CAROLINA DEPARTMENT OF PARKS, RECREATION, AND TOURISM FUNDING OPPORTUNITIES: LAND AND WATER CONSERVATION FUND

LWCF is a federally funded grant program for the acquisition and development of outdoor recreation areas. It requires a 50% match and is a reimbursable grant. LWCF funds are available only for local and state agencies. The minimum request is \$25,000 and the maximum amount is \$250,000, unless the project is determined to have regional or statewide significance, in which case it could be eligible to up to \$500,000.

The contact person is the Grants Coordinator:

Todd Stump

South Carolina Department of Parks, Recreation, and Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone: (803) 734-0617 E-mail: tstump@scprt.com

RECREATIONAL TRAILS PROGRAM

The RTP is a federally funded grant program, not associated with the South Carolina DOT Recreational Trails Program, to build or improve trails across South Carolina. This is a reimbursable grant program requiring a 20% match. RTP funds are available to state, federal, and local government agencies or qualified private organizations. The minimum grant amount is \$10,000 with a maximum of \$100,000. RTP typically funds 10 – 15 trail projects per year, with budget of approximately \$1.2M. The contact person is the State Trails Coordinator:

Ronda Pratt, South Carolina
Department of Parks, Recreation, and Tourism
1205 Pendleton Street
Columbia, SC 29201
Phone: (803) 734-0130 E-mail: rpratt@scprt.com

SOUTH CAROLINA RECREATION LAND TRUST FUND GRANTS

The Recreation Land Trust Fund Grant (RELT) is a state-funded grant program specifically for the purpose of acquiring property for public recreation. It requires a 50% match and is a reimbursable grant. RELT funds are available only for local or state agencies. The maximum you can apply for is \$25,000, unless your project is determined to have regional or statewide significance, in which case you may be eligible for up to \$100,000. Final appropriations for this program are not currently available, although the amount is expected to be approximately \$250,000.

The Recreation Land Trust Fund grant is one of four that provides technical assistance and administers grant programs for development of public recreational opportunities throughout the state. All grant programs administered by this office are reimbursable funds from various sources with specific qualifications and restrictions as described below. Annual Grant Cycle:

- Can only be used for the acquisition of land for the purpose of public recreation
- Applications graded utilizing Open Project Selection Process (OPSP) reviewed by a grading team
- This is a 50-50 match program
- Eligible governmental entities are notified and letters of in-

tent are solicited in December

- Applications are then mailed to those who respond and the application deadline is in March.

The contact person is the Grants Coordinator:

Todd Stump

South Carolina Department of Parks, Recreation, and Tourism
1205 Pendleton Street

Columbia, SC 29201

Phone: (803) 734-0617 E-mail: tstump@scprt.com

SOUTH CAROLINA PARKS AND RECREATION DEVELOPMENT FUND

The Park & Recreation Development Fund grant is one of four that provides technical assistance and administers grant programs for development of public recreational opportunities throughout the state. All grant programs administered by this office are reimbursable funds from various sources with specific qualifications and restrictions as described below. Monthly Grant Cycle:

- Non-competitive program available to eligible local governmental entities within each county area for development of new public recreation facilities or enhancement/renovations to existing facilities
- Projects need endorsement of majority weighted vote factor of County Legislative Delegation Members
- This is an 80-20 match program
- Application Deadline is the 10th of each month

Eligible Entities notified of new Allocation amounts each July.
Contact:

SC Department of Parks, Recreation & Tourism

1205 Pendleton St., Room 505

Columbia SC 29201

E-mail: recreationgrants@scprt.com.

www.discoverouthcarolina.com/agency/grantslandtrust.asp

SOUTH CAROLINA NATIONAL HERITAGE CORRIDOR GRANT PROGRAM

The SC National Heritage Corridor, through a public, private partnership with the SC Department of Parks, Recreation and Tourism, will provide opportunities for communities and organizations to conserve and develop their historical, cultural, and natural assets so they many contribute to the sustainable economic revitalization of the Heritage Corridor. It is the mission of the South Carolina National Heritage Corridor to promote development in the areas of conservation and preservation;

education and interpretation; and nature-based recreation while serving economic development.

- Economic Development Projects should have the potential for providing economic opportunities related to heritage tourism through public and private partnerships.
- Conservation and Preservation Projects must help conserve the historical, cultural, and natural assets of the South Carolina National Heritage Corridor.
- Education and Interpretation Projects should increase public awareness and appreciation of the historical, cultural, and natural assets of the South Carolina National Heritage Corridor.
- Nature-Based Recreation Projects should enhance the potential of natural areas to provide environmental opportunities for nature-based tourism.

Developing, implementing, and maintaining a successful heritage tourism attraction is a long-term, complex process and involves many features. In order to assist communities and organizations in preparing a program that will benefit the existing residents and attract visitors to the area, grants will be made available in the following two categories. Applicants may submit grant proposals in multiple grant cycles, however total grant awards may not exceed \$60,000 per location. Grant applicants must provide a dollar for dollar, 50/50 reimbursable cash match to the grant request. For example, if the total proposed project budget is \$20,000, the organization may request \$10,000 in grant funds and must provide an additional cash match of \$10,000. This match must come from funds other than federal money, such as state, local, and/or private funds. Each grant applicant must demonstrate a dollar-for-dollar cash match and provide legible invoices or receipts for all project expenses before payment will be distributed. It will also be necessary to submit copies of cancelled checks (front and back) to earn reimbursement. Partial reimbursement may be given for grants exceeding \$2,500 before the project is completed, according to an agreed upon payment schedule.

Funds may be used for technical assistance including but not limited to feasibility studies (engineering, architecture and marketing); interpretation, museum exhibits, marketing, displays based on historical research and artifacts, conservation and preservation, agricultural heritage programs, interpretive programs, and nature-based recreation. Projects that directly impact the visitor experience and that demonstrate a high degree of sustainability will be given greater consideration. Support will be considered for cultural, ethnic, arts and recreation programs to the extent that they highlight the themes of the

SCNHC.

Intent to Apply Applications are Due: April 3 and September 3. Awards occur on May 15 and October 15. All applications must be received by 5:00 P.M. on or before the due date by the SCNHC Director of Marketing and Field Services. In the event the deadline falls on a weekend, the grants must be received by the following Monday at noon.

Web site: www.sc-heritagecorridor.org/grants-program
E-mail: EHarm@scprt.com.

LOCAL GOVERNMENT FUNDING SOURCES

Spartanburg County and its municipalities should create independent, local funding sources to be used to match federal and state grants for greenway development. The following provides a list of funding options that each of the local governments should consider for future greenbelts acquisition and facility development.

BONDS/LOANS

Bonds have been a very popular way for communities across the country to finance their open space and greenway projects. A number of bond options are listed below. Contracting with a private consultant to assist with this program may be advisable. Since bonds rely on the support of the voting population, an education and awareness program should be implemented prior to any vote.

REVENUE BONDS

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

GENERAL OBLIGATION BONDS

Local governments generally are able to issue general obligation (G.O.) bonds that are secured by the full faith and credit of the entity. In this case, the local government issuing the bonds pledges to raise its property taxes, or use any other sources of revenue, to generate sufficient revenues to make the debt service payments on the bonds. A general obligation pledge is stronger than a revenue pledge, and thus may carry a lower interest rate than a revenue bond. Frequently, when local gov-

ernments issue G.O. bonds for public enterprise improvements, the public enterprise will make the debt service payments on the G.O. bonds with revenues generated through the public entity's rates and charges. However, if those rate revenues are insufficient to make the debt payment, the local government is obligated to raise taxes or use other sources of revenue to make the payments. G.O. bonds distribute the costs of open space acquisition and make funds available for immediate purchases. Voter approval is required.

SPECIAL ASSESSMENT BONDS

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

STATE REVOLVING FUND (SRF) LOANS

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

TAXES

A number of taxes provide direct or indirect funding for the operations of local governments. Some of them are:

SALES TAX

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

PROPERTY TAX

Property taxes generally support a significant portion of a local government activities. However, the revenues from property taxes can also be used to pay debt service on general obligation bonds issued to finance open space system acquisitions. Because of limits imposed on tax rates, use of property taxes to fund open space could limit the county's or a municipality's ability to raise funds for other activities. Property taxes can provide a steady stream of financing while broadly distributing the tax burden. In other parts of the country, this mechanism has been popular with voters as long as the increase is restricted to

parks and open space. Note, other public agencies compete vigorously for these funds, and taxpayers are generally concerned about high property tax rates.

EXCISE TAXES

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

FEES AND SERVICE CHARGES

Several fee options that have been used by other local governments are listed here:

STORMWATER UTILITY FEES

Stormwater charges are typically based on an estimate of the amount of impervious surface on a user's property. Impervious surfaces (such as rooftops and paved areas) increase both the amount and rate of stormwater runoff compared to natural conditions. Such surface cause runoff that directly or indirectly discharges into public storm drainage facilities and creates a need for stormwater management services. Thus, users with more impervious surface are charged more for stormwater service than users with less impervious surface.

The rates, fees, and charges collected for stormwater management services may not exceed the costs incurred to provide these services. The costs that may be recovered through the stormwater rates, fees, and charges includes any costs necessary to assure that all aspects of stormwater quality and quantity are managed in accordance with federal and state laws, regulations, and rules. Open space may be purchased with stormwater fees, if the property in question is used to mitigate floodwater or filter pollutants.

IMPACT FEES

Impact fees, which are also known as capital contributions, facilities fees, or system development charges, are typically collected from developers or property owners at the time of building permit issuance to pay for capital improvements that provide capacity to serve new growth. The intent of these fees is to avoid burdening existing customers with the costs of providing capacity to serve new growth ("growth pays its own way"). Park and greenway impact fees are designed to reflect the costs incurred to provide sufficient capacity in the system to meet the additional open space needs of a growing community. These charges are set in a fee schedule applied uni-

formly to all new development. Communities that institute impact fees must develop a sound financial model that enables policy makers to justify fee levels for different user groups, and to ensure that revenues generated meet (but do not exceed) the needs of development. Factors used to determine an appropriate impact fee amount can include: lot size, number of occupants, and types of subdivision improvements.

Pursuing park and greenway impact fees will require enabling legislation to authorize the collection of the fees.

IN-LIEU-OF FEES

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

OTHER LOCAL OPTIONS

LOCAL CAPITAL IMPROVEMENTS PROGRAM

In communities that can afford it a yearly appropriation for greenway and trail development in the capital improvements program is another option. In Raleigh, for example, the greenways system has been developed over many years through a dedicated source of annual funding that has ranged from \$100,000 to \$500,000, administered through the Parks and Recreation Department.

LOCAL TRAIL SPONSORS

A sponsorship program for trail amenities allows smaller donations to be received from both individuals and businesses. Cash donations could be placed into a trust fund to be accessed for certain construction or acquisition projects associated with the greenways and open space system. Some recognition of the donors is appropriate and can be accomplished through the placement of a plaque, the naming of a trail segment, and/or special recognition at an opening ceremony. Types of gifts other than cash could include donations of services, equipment, labor, or reduced costs for supplies.

VOLUNTEER WORK

It is expected that many citizens will be excited about the development of a greenway corridor or a new park or canoe access point. Individual volunteers from the community can be brought together with groups of volunteers from church groups, civic groups, scout troops and environmental groups to work on greenway development on special community workdays. Volunteers can also be used for fund-raising, maintenance, and programming needs. Many State grant programs recognize these local efforts and assign a dollar value as in-kind services towards a local match requirement.

PRIVATE FOUNDATIONS AND CORPORATIONS

Many communities have solicited greenway funding assistance from private foundations and other conservation-minded benefactors. Below are examples of private funding opportunities available in South Carolina.

MARY BLACK FOUNDATION

In 1996, the Mary Black Foundation was established as an independent grant-making organization in Spartanburg, SC. The foundation's priorities include Active Living, Early Childhood Development, and Community Health. The Foundation selected these priorities after careful research, planning, and deliberation. The process included reviewing lessons learned from past grant making, examining public health research, analyzing national and local data, and seeking input from a cross-section of community stakeholders on the issues affecting the health and wellness of Spartanburg County. Previous grants under the Active Living category have funded the Mary Black Rail Trail in Spartanburg County. For 2009, approximately \$302,000 was awarded to four recipients to support projects in South Carolina. Of note, the Mary Black Foundation awarded the Spartanburg Area Transportation Study of Spartanburg County \$70,000 to support the development of this Bicycle and Pedestrian Master Plan for Spartanburg County.

The Mary Black Foundation welcomes applications from tax-exempt organizations that:

- Promote the health and wellness of the people and communities of Spartanburg County, South Carolina;
- Exhibit a high degree of collaboration among community organizations, programs and volunteers;
- Employ promising, innovative approaches or strategies with demonstrated success; and
- Identify clearly defined goals, anticipated outcomes and specific plans to evaluate outcomes.

PALMETTO CONSERVATION FOUNDATION

The mission of the Palmetto Conservation Foundation is to conserve South Carolina's natural and cultural resources, preserve historic landmarks, and promote outdoor recreation through trails and greenways. With offices in Columbia and Glendale (Spartanburg County), the Foundation is a non-profit organization that has access to federal earmark funds that may be used in Spartanburg County. Although the Foundation's primary emphasis is developing and promoting the Palmetto Trail, they may entertain small grant assistance to individual projects not associated with the Palmetto Trail. In this eventuality, the Foundation's preference is to assist with recreationally-oriented projects, such as off-road trails or greenways.

BIKES BELONG COALITION

Bikes Belong formed in 1999 when U.S. bicycle companies recognized an exceptional opportunity to work together to maximize bike funding in TEA-21 – the multi-year transportation bill of the time. The initial goal was to ensure funding for new bicycle facilities that would increase riding, boost public health and enjoyment, and strengthen the bike business. In the intervening years, Bikes Belong has successfully harnessed the collective power of the U.S. bicycle industry. They have steadily expanded their efforts, but remain focused on creating safe places to ride so more people will bike, and bike more by:

- Working with the federal government to maximize federal funding for bicycling
- Awarding grants to help create more and better places to ride
- Sponsoring programs to help cities and towns become more bike-friendly
- Cultivating cooperation throughout the bike industry

The Bikes Belong Grants Program funds important and influential projects that leverage federal funding. These projects include bike paths, lanes, routes, as well as bike parks, mountain bike trails, BMX facilities, and large-scale bicycle advocacy initiatives. Since 1999, Bikes Belong has awarded 186 grants in 45 states, investing nearly \$1.5M in bicycling projects and leveraging close to \$500M in federal, state, and private funding.

Bikes Belong will accept requests for funding up to \$10,000 for project construction. They do not require a specific match, but will not consider grant requests in which they are the sole funder – they look for existing funding partnerships. Priority is given to bicycle organizations, coalitions, and associations that have not received Bikes Belong funding in the past. Applications are reviewed on a quarterly basis, and typically 15-20% of the received applications are approved.

ACTIVE LIVING BY DESIGN

Active Living by Design was established in 2001 as a national program office of the Robert Wood Johnson Foundation. Based in Princeton, New Jersey, the mission of the Robert Wood Johnson Foundation is to improve the health and health care of all Americans. Active Living by Design works with local and national partners to build a culture of active living by pursuing a “5P Approach.” Active Living by Design has focused on five strategies to promote physical activity: preparation, promotions, programs, policies, and physical projects.

Active Living by Design’s approach to grant making is “high touch, low dollar” and is demonstrated by modest financial contributions to the community partnerships – just \$200,000 over five years for each site – but providing generous support in the form of high-quality technical assistance to build capacity in the communities. Active Living by Design contact info:

University of North Carolina at Chapel Hill
 School of Public Health
 400 Market Street, Suite 205
 Chapel Hill, NC 27516-4028
 (919) 843-2523

GENERAL MILLS FOUNDATION

The General Mills Foundation was created in 1954 to focus on the Company’s philanthropic resources on community needs. The Foundation’s mission is to provide financial assistance to nonprofit organizations that create sustainable community improvement in the areas of youth nutrition and fitness, social services, education and arts and culture. Based in the General Mills World Headquarters in Minneapolis, the Foundation has awarded over \$400M to nonprofits since its inception. In fiscal 2008, the Foundation contributed \$21M in grants.

Among the Foundation’s four grant categories, the Champions for Healthy Kids grant program is most relevant to the Bicycle and Pedestrian Master Plan. Under this category, the Foundation awards 50 grants per year of \$10,000 each to community-based groups that develop creative ways to help youth adopt a physically active lifestyle. The grant cycle begins in November when applications are made available. Grant checks are mailed to recipients in May. The Foundation contact info:

Community.ActionQA@genmills.com
 (763) 764-2211
www.generalmills.com/corporate/index.aspx.

SURDNA FOUNDATION

Surdna is a New York-based family foundation established in 1917 to pursue philanthropic purposes. The foundation makes grants to non-profit organizations in the areas of environment, community revitalization, effective citizenry, the arts and the non-profit sector, with annual grantmaking of approximately \$37M. Applicants are asked to first submit a letter of inquiry to request funding. Due to the large number of requests Surdna receives, applicants are asked to send full proposals only when requested by the foundation following a successful review of the letter of inquiry. Within the context of the Bicycle and Pedestrian Master Plan, the following information describes the relevant grant programs:

- Build support for programs to stabilize climate change at the local, state, and national level. This includes accelerating energy efficient solutions to conserve energy, reduce emissions and promote a “green” economy.
- Improve transportation systems and patterns of land use across metropolitan areas, working landscapes, and intact ecosystems. Specifically, this grant category seeks to ensure the implementation of demonstration projects that will improve patterns of land use and transportation systems in metropolitan areas, enhance community sustainability, and enhance regional green infrastructure.

The Surdna Foundation can be reached at:

330 Madison Avenue, 30th Floor
New York, NY 10017
(212) 557-0010

EAT SMART, MOVE MORE SC

The Eat Smart Move More Coalition in South Carolina is a partnership that exists to coordinate obesity prevention across the state through collaboration between state agencies, business and industry, health care organizations, schools, and communities. Through their mini-grant program, the coalition promotes healthy eating and active living as the pillars for healthy lifestyles in healthy communities.

The 2009 program offered \$3,000 mini grants to five South Carolina communities. If future rounds of funding are offered, applicants that demonstrate existing community partnerships to plan and implement physical activity and/or nutrition projects will receive priority.

FREEWHEELERS OF SPARTANBURG, INC.

Freewheelers of Spartanburg is a non-profit community service organization, the purpose of which is to provide education and promotion of bicycle safety and a forum for amateur sports competition and touring. In 2008, Freewheelers of Spartanburg donated over \$20,000 to non-profit organizations to advance their goals.

FOUNDATION FOR THE CAROLINAS

Established in 1958, the Foundation for the Carolinas is the one of the largest community foundations in the South. The foundation's Web site features information for potential donors; program information, guidelines, and deadlines; listings of senior management and board members; an electronic form for requesting copies of the foundation's publications; and contact information. Web site: <http://www.fftc.org/>

AMERICAN GREENWAYS EASTMAN KODAK AWARDS

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants (\$250 to \$2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities. For more information visit The Conservation Fund's website at: www.conservationfund.org.

BANK OF AMERICA CHARITABLE FOUNDATION, INC.

The Bank of America Charitable Foundation is one of the largest in the nation. The primary grants program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Programs, and specifically the Program Related Investments. This program targets low and moderate income communities and serves to encourage entrepreneurial business development. Visit the web site for more information: www.bankofamerica.com/foundation.

DUKE ENERGY FOUNDATION

At the core of our commitment to the community is The Duke Energy Foundation. Funded by Duke Energy shareholders, this non-profit organization makes charitable grants to selected non-profits or governmental subdivisions. Each annual grant must have:

- An internal Duke Energy business “sponsor”
- A clear business reason for making the contribution

One of three categories is ‘Community Vitality, Health and Human Services’, generally managed through federated campaigns (e.g. United Way). This includes environmental conservation, education, research, community leadership development, and targeted arts giving. Web site: www.duke-energy.com.

NATIONAL TRAILS FUND

American Hiking Society created the National Trails Fund in 1998; the only privately supported national grants program providing funding to grassroots organizations working toward establishing, protecting and maintaining foot trails in America. 73 million people enjoy foot trails annually, yet many of our favorite trails need major repairs due to a \$200 million backlog of badly needed maintenance. National Trails Fund grants help give local organizations the resources they need to secure access, volunteers, tools and materials to protect America’s cherished public trails. To date, American Hiking has granted more than \$382,000 to 105 different trail projects across the U.S. for land acquisition, constituency building campaigns, and traditional trail work projects. Awards range from \$500 to \$10,000 per project. What types of projects will American Hiking Society consider? Securing trail lands, including acquisition of trails and trail corridors, and the costs associated with acquiring conservation easements. Building and maintaining trails which will result in visible and substantial ease of access, improved hiker safety, and/or avoidance of environmental damage. Constituency building surrounding specific trail projects - including volunteer recruitment and support. Annual applications are typically due in the late summer, with grants awarded in the spring of the following year. Website: www.americanhiking.org/NTP.aspx

DUCKS UNLIMITED, INC. SOUTH CAROLINA CONSERVATION PROGRAMS

In South Carolina, Ducks Unlimited’s wetland conservation program continues to grow and gain popularity, especially land protection. We are finding and responding to excellent opportunities for wetland conservation on both private and public lands. Our habitat conservation priorities continue to be the protection, restoration, and enhancement of coastal, forested and riverine wetlands. Collectively, these programs have benefited in the conservation of over 154,000 acres of various wetland habitats since conservation activities began for South Carolina in 1989. The following is a summary of the activities and accomplishments of the DU South Carolina Conservation Program for the period July 1, 2007 through June 30, 2008.

SOUTH CAROLINA PUBLIC LANDS

During fiscal year 2008, Ducks Unlimited conserved nearly 22,000 acres of habitat in South Carolina, including wetlands restoration on Santee Coastal Reserve and Santee National Wildlife Refuge. Combined these projects restored over 3,400 acres of waterfowl habitat on public lands. Informational requests on public land projects should be referred to Craig LeSchack, Director of Conservation Programs (cleschack@ducks.org) at (843) 745-9110.

THE CONSERVATION ALLIANCE

The Conservation Alliance is a non-profit organization of outdoor businesses whose collective annual membership dues support grassroots citizen-action groups and their efforts to protect wild and natural areas. One hundred percent of its member companies' dues go directly to diverse, local community groups across the nation. For these groups, who seek to protect the last great wild lands and waterways from resource extraction and commercial development, the Alliance's grants are substantial in size (about \$35,000 each), and have often made the difference between success and defeat. Since its inception in 1989, The Conservation Alliance has contributed more than \$7 million to conservation projects across the nation, and its member companies are proud of the results: To date the groups funded have saved over 39 million acres of wild lands and 27 dams have been either prevented or removed—all through grassroots community efforts.

The Conservation Alliance is a unique funding source for grassroots environmental groups. It is the only environmental grant maker whose funds come from a potent yet largely untapped constituency for protection of ecosystems - the non-motorized outdoor recreation industry and its customers. This industry has great incentive to protect the places in which people use the clothing, hiking boots, tents and backpacks it sells. The industry is also uniquely positioned to educate outdoor enthusiasts about threats to wild places, and engage them to take action. Finally, when it comes to decision-makers - especially those in the Forest Service, National Park Service, and Bureau of Land Management, this industry has clout - an important tool that small advocacy groups can wield.

The Conservation Alliance Funding Criteria: The Project should be focused primarily on direct citizen action to protect and enhance our natural resources for recreation. We're not looking for mainstream education or scientific research projects, but rather for active campaigns. All projects should be quantifiable, with specific goals, objectives and action plans and

SPARTANBURG, SOUTH CAROLINA

should include a measure for evaluating success. The project should have a good chance for closure or significant measurable results over a fairly short term (one to two years). Funding emphasis may not be on general operating expenses or staff payroll.

Web site: www.conservationalliance.com/grants

APPENDIX F: COMMUNITY MEETING SUMMARIES

March 31, 2009

COMMUNITY OF BOILING SPRINGS

11:00 A.M.

Attendees:

Michael Baker, President, Business Association
 Eric Hayler, Vice President, Business Association
 Scott Miller, Assistant Chief, Boiling Springs Fire Department
 Lisa Bollinger, Spartanburg Area Transportation Study
 Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving Boiling Springs' vision for a walkable/bikeable community.

Meeting Summary

- The meeting began by reviewing the existing conditions map and discussing the preliminary recommendations for bicycle accommodations.
 - Old Furnace Rd. needs paved shoulders – very dangerous for bicyclists and vehicles. Old Furnace Rd. serves as a primary connection for a majority of citizens.
 - Double Bridge Rd. needs at least paved shoulders – prefer bike lanes and sidewalks. SCDOT maintained from Hwy. 9 to end of school property; Spartanburg County maintained beyond.
 - Laurelwood Dr. now connects to McMillan Blvd.
- Desired linkages include:
 - Need to connect residential areas to schools and schools to one another.
 - Need sidewalks to Boiling Springs High School.
 - Laurelwood Dr. or creek could serve as good connection from residential areas to Va Du Mar Park.
 - A 50-foot Piedmont Natural Gas right-of-way exists off of Rainbow Lake Rd. behind Lowe's that could link to Va Du Mar Park.
 - A cross country training trail exists around perim-

eter of high school – could be a potential connection.

- Areas of concern:
 - With the widening of Hwy 9 (Brannon Circle to existing five-lane), there is difficulty fitting sidewalks or pathways in area near Good Shepherd Memorial Park (cemetery) due to topography.
 - The midblock crossing on Hwy. 9 between Baptist Church and Boiling Springs 9th Grade School is very dangerous. It was established because parents prefer to drop off students at church rather than get in school drop-off traffic. There is no crossing guard at this crosswalk. Might be potential for pedestrian bridge.
 - Sidewalks along Hwy. 9 are rarely used because of lack of buffer between street and sidewalks. Vehicles drive at much higher speeds than posted speed limits.
 - Intersection of Rainbow Lake Rd. and Hwy.9 is very dangerous. Too many curb cuts in close proximity to the intersection and each other.
 - Will new bike/pedestrian facilities improve or complicate traffic issues in Boiling Springs?
 - Connections along creeks may be problematic due to flash flooding issues.
- Other thoughts:
 - North Spartanburg Sports Complex is a regional facility with most folks coming from other areas of Spartanburg County – in their cars – not a big walking/biking destination.
 - Everything in Boiling Springs centers around school traffic. A new school is planned at Rainbow Lake Rd. and Riveroak Rd. Schools are being pushed out to areas that cannot handle increased traffic. Future development will occur around schools.
 - Due to narrow right-of-way, it is impossible for emergency vehicles to get through on Hwy. 9 north of Bible Church Rd.

March 16, 2009
CITY OF CHESNEE
8:30 A.M.

Attendees:

Max Cash, Mayor, City of Chesnee
Nancy Ogle, VSP Foundation
Ridge Garland, Senior Centers of Spartanburg
Margie Barklow, Local Senior Citizen

Alissa Ritzo, Spartanburg Area Transportation Study/Clemson Graduate Student
 Lisa Bollinger, Spartanburg Area Transportation Study
 Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the City of Chesnee's vision for a walkable/bikeable community.

Meeting Summary

- The working map's existing conditions appeared to be accurate (one clarification below) and the preliminary recommendations were reasonable.
 - Blue area on Fairfield St. is Chesnee Elementary School
- Chesnee desires bike lanes, sidewalks, and trails to support the active lifestyles of seniors and others in the community.
- Destinations were discussed:
 - Senior Center is biggest destination in Chesnee
800 seniors
Elder housing is being constructed across Union Street
Ball fields and playground are adjacent
Safety concerns with intersection of Manning and Union Streets
Senior Center walking groups walk through Mill Village and to Bi-Lo and Library
 - Other key destinations include Spartanburg Regional Medical Center, Post Office, drug store at corner of Cherokee St. and Alabama Ave.
- Pressing issues related to walking/bicycling:
 - Safety
 - Mobility
 - Pulling the community together
 - Convenience
- Desired linkages include:
 - Bicycle connection between Chesnee and Cowpens National Battlefield
Potential routes include Hwy 11 or US 221 Alt.
An existing trailhead for the Palmetto Trail exists off Hwy 11 at Battlefield

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- Potential railtrail at park at N. Carolina Ave. and E. Cherokee St.
- Connection to Burr's Trading Post (flea market/ farmer's market) at intersection of Oconee St. and Old Stage Rd.
- Kentucky St. is very wide – potential for bike lane – pawn shop wants on-street parking
- Sidewalks to Chesnee Elementary School on Fairfield St.
- Areas of concern:
 - Intersection of Pickens Avenue and US 221 at Bi-Lo
 - Upper drive of Bi-Lo has experienced many accidents
 - Pickens Avenue needs sidewalks
 - Runners from Chesnee High School run up US 221, circle Mill Village, then back down US 221
- Obstacles/Challenges:
 - No regulations for sidewalks or parcel interconnectivity
 - No Safe Routes to Schools program – yet
 - No master plan – need “road map” and cost estimates; need articulated vision
 - Parking is always an issue for community events (e.g., Spring Fling, art festival, music in the park, Christmas tree lighting, etc.) – more walking would help
- Other thoughts:
 - Chesnee is marketed as an “elder ready” community so pedestrian mobility is essential
 - Assault on Mount Mitchell comes right through Chesnee
 - Bicycle groups ride around Lake Blalock
 - Many cyclists have been observed on Casey Creek Rd.

March 16, 2009
TOWN OF COWPENS
10:30 A.M.

Attendees:

Pam Camp, Council Member, Town of Cowpens
Bobby Dowis, Council Member, Town of Cowpens
Roy Logan, Council Member, Town of Cowpens
Fred Gossett, Town Manager, Town of Cowpens

Lisa Bollinger, Spartanburg Area Transportation Study
Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the Town of Cowpen's vision for a walkable/bikeable community.

Meeting Summary

- Destinations were discussed:
 - Downtown
 - Cowpens National Battlefield
 - Depot
 - Veterans Park
 - Little League Field
 - Future Senior Center along Foster St.
- Pressing issues related to walking/bicycling:
 - Safety
 - Mobility
 - Pulling the community together
 - Convenience
- Desired linkages include:
 - Top priority - Circulator sidewalk system along Go-forth St., Battleground Rd., Main St., and Foster St.
 - Waters Rd. is receiving SCDOT sidewalk stimulus money
 - Trail connecting Little League Park, Depot, and Veterans Park
 - Sidewalks along Old Pacolet Highway
 - Regional bike connection from Glendale (Beacon Light), through Cowpens (Palmetto, Main, Battleground), to Chesnee (via Hwy 11)
- Areas of concern:
 - Old Pacolet Rd. needs sidewalks
 - Maple Street has sidewalks but trees overhang very low so people walk in road
 - Intersection of Hwy 110 and US 29 – poor geometrics – no good way to get pedestrians across. Trucks cannot turn right onto Hwy 110 when traveling south on US 29 so they cut through on Moore St. posing a pedestrian safety concern).
 - Crosswalks needed at Main Street's intersections with Palmetto St., Church St., and Old Pacolet Rd.

- Obstacles/Challenges:
 - Walkable Communities Committee is dormant
 - If money and political will were there – it would happen
- Other thoughts:
 - Currently have small informal groups that walk throughout town
 - Mighty Moo Festival generates large amounts of pedestrian traffic in the vicinity of the Veterans Park between Palmetto St. to Church St.

April 15, 2009
TOWN OF DUNCAN
10:00 A.M.

Attendees:

Frances Bowen, Town Administrator, Town of Duncan
Cory Swaim, Parks and Recreation Director, Town of Duncan
Lisa Bollinger, Spartanburg Area Transportation Study
Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the Town of Duncan's vision for a walkable/bikeable community.

Meeting Summary

- Preliminary recommendations are reasonable. Necessary updates to existing conditions:
 - Stoneledge Park is new playground, walking loop, and Shipwreck Cove water park (to be completed in May 2009) at the corner of Spencer St. and Spring St.
 - Park shown at the corner of Main St. and Danzler Rd. is SCALE (South Carolina Academic Learning Environment) Park, which includes walking trails.
 - Spring Street continues to the west into large residential development "Duncan Station."
- Desired linkages include:
 - Potential for sharrow along Main St.
 - Potential for sharrow along Spencer St. – wide pavement width in places.
 - Connections from residential neighborhood of Duncan Station to Stoneledge Park.
 - Spencer St. south of Main St., Danzler Rd., and

Groce Rd. would all make nice bicycle routes.

- Areas of Concern:
 - Intersection of Main St., Spencer St., and SC 292 is impossible for pedestrians.
 - Existing crosswalks in front of Byrnes High School are of concern for pedestrian safety.
- Other thoughts:
 - 67.5% of children in Duncan live below the poverty line.
 - Spartanburg County congregates parks in/around the City of Spartanburg.

April 20, 2009
CITY OF GREER
11:00 A.M.

Attendees:

Rick Danner, Mayor
 Lisa Bollinger, Spartanburg Area Transportation Study
 Trey Hodges, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the City of Greer's vision for a walkable/bikeable community.

Meeting Summary

- The meeting began with an overview of the Community Map and the existing conditions (see session's working map).
 - SC-80 is not depicted on the Community Map. We need to add this connector between SC-14 and Wade Hampton Boulevard (US-29).
 - The recommended paved shoulder along SC-290 may need to be rethought. The City thinks this may not be the best option given the large amount of truck traffic on this route.
- The City of Greer has completed several large-scale projects in the downtown area that will spawn focused pedestrian use.
 - The new City Hall and City Park encompasses 12 acres of outdoor attractions – an amphitheater, picnic shelters, playground, and lake. Usage plans include live concerts during the lunch hour and an evening movie series. These venues may dramatically increase pedestrian traffic and increase the need for bike/ped facilities. There are

many walking groups already meeting at the Park.

- In order to continue the momentum inspired by the new Park, the City wishes to improve connectivity to the Park. The City has developed a goal of connecting City Hall with all neighborhoods within ¼ mile.
- The area immediately east of City Hall and Line Street in the vicinity of Dunbar Elementary School is a Low-to-Moderate Income (LMI) neighborhood, traditionally void of sidewalks. There are recently-constructed sidewalks along Lorla Avenue that connect this neighborhood to the Wal-Mart. The City would like to install a main sidewalk along Sunnyside Drive between Highland Avenue and Arlington Road to serve as a pedestrian thoroughfare. Connections could then be made between Sunnyside Drive and the City Hall complex via new sidewalks on Highland Avenue, E. Church Street, or Oak Street.
- Spartanburg County is currently working to revitalize the Old Victor Mill site located near the intersection of S. Line Street and Victor Avenue. This effort will include brown-field remediation efforts, but may ultimately require bike/ped improvements for connectivity.
- The intersection of SC-101 and SC-290 is seen as a priority. There are two railroad tracks in close proximity, and a lack of pedestrian facilities currently creates a barrier into the downtown area.
- The residential area to the west of Main Street is a 1920-1950's era traditional neighborhood with a large number of interior sidewalks. However, external connectivity can be improved with short sidewalks along Poinsett or Jason Streets to funnel pedestrians to the City Hall and City Park complex.
- The City has adopted several policies regarding pedestrian facilities in new developments. The City requires interior sidewalks in new subdivisions along at least one side of all streets. Additionally, the City requires exterior sidewalks along road frontages.
- The Greenville County Redevelopment Authority has an on-going revitalization project in the vicinity of Canteen and Oakland Avenues. The City provided a contact for coordination purposes: Martin Livingston. We should inquire about the project's future vision regarding bike/ped facilities.
- The area southwest of the City center is targeted for future revitalization. There is still some build-out potential, and the City feels that a future sidewalk will be needed along Pelham Street, possibly between S. Main Street and Trade Street, in order to provide pedestrian connectivity between the revitalized district and the downtown center.

- The area around Riverside High School and Riverside Middle School has traditionally been the fastest growing segment of the City. Therefore, land costs were high and there is very little space dedicated for recreation. Additionally, bike/ped connectivity will be a future concern.
- Greenway Vision: The City has some properties that they may be able to leverage in the future to develop trails/greenways:
 - The City and Commission of Public Works (CPW) owns a stretch of the Enoree River between Riverside Park and Brushy Creek Road. This has potential for use as a greenway trail.
 - The Park on Country Club Road presents a possibility for an additional greenway trail along the Tyger River. This project will most likely become a reality prior to the Enoree River trail.
- The Greer CPW recently acquired the service rights to the "Golden Box," an area of high growth potential south of Interstate 85 and between SC-101, Brockman McClimon Road, and SC-296. This area previously had no sewer service, but as CPW extends service to a new elementary school in the area, rapid development may follow. Bike/ped planning will be important to promote connectivity.
- The Greenville-Pickens Area Transportation Study (GPATS) has recommended the widening or improvement of Abner Creek Road from SC-14 to SC-101.
- The City would like the Master Plan to investigate bike/ped options in the vicinity of two new hospitals.
 - The Village at Pelham hospital complex near the intersection of SC-14 and Westmoreland Road.
 - The Greer Medical Campus of the Greenville Hospital System on SC-136.
- The City has several clubs that meet regularly for bike/ped activities.
 - A bicycle group meets on Thursday evenings at City Hall and generally rides out Victor Avenue to access the rural roadways southeast of the City. Victor Avenue may be a good candidate for some share the road signage or other bike improvements.
 - A walking program has been started downtown, although we could not determine if it is City-sponsored or a program of the downtown association.
- There are currently no bike racks at the new City Park.
- Crestview Elementary, located near the intersection of Country Club Road and Arlington Street, is bordered to

the north and east by entry-level residential developments that contain interior sidewalks. Chandler Creek Elementary, located near the intersection of SC-14 and Chandler Road, is in the vicinity of primarily multi-family housing. According to the Mayor, these two schools are primarily bus/car schools, and new sidewalks are a lower priority.

March 31, 2009
CITY OF INMAN
9:00 A.M.

Attendees:

Doug Hurlbert, Planning Commission, City of Inman
Bessie Fisher, Planning Commission, City of Inman / President,
Chamber of Commerce
Paul Ricardi, City of Inman
Dale Culbreath, Spartanburg County Council
Lynn Skinner-Johnson, Inman PEACHeS / Citizen
Lisa Bollinger, Spartanburg Area Transportation Study
Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the City of Inman's vision for a walkable/bikeable community.

Meeting Summary

- Inman has a strong pedestrian focus with grass roots advocacy for active lifestyles.
 - The Inman PEACHeS (People Enjoying Active Community Health and Safety) started with a Walkable Workshop and continue to meet once a month. They have produced a brochure/map through a Michelin Grant, support walking tours, conduct a Bike Rodeo, publish a periodic newsletter, and raise funds for Safe Routes to Schools.
- Inman has developed a conceptual "Inman Trail" plan (see attached map and trail link descriptions). The complete trail would include five links: School Link (0.75 mile); North Main Street Link (0.50 mile); South Main Street Link (0.50 mile); Mill Street Link (0.30 mile); and Asheville Highway Link (0.60 mile).
 - The School Link is considered the top priority and would run along an abandoned railroad bed. The tracks have been removed but right-of-way has reverted back to adjacent landowners, so acquisition or easement (similar to an alley) would be necessary. There are several large parcel owners and 12 owners of smaller parcels (these are con-

- sidered the more oppositional to the trail). This link would be a shared-use trail and serve as a Safe Route to School.
 - Another important link, considered a second priority, is the North Main Street Link. Pending successful negotiations with the railroad, this would be a rails with trails.
 - The South Main Street Link has utility issues.
 - The Asheville Hwy. Link would bring the character of downtown out to US 176.
 - Ultimately, as part of future links, it would be desirable to continue trail out both E. Main St. and Asheville Hwy.
- Envision Inman as a community that is personified by:
 - Community pride
 - Friendly community
 - Healthy lifestyles – exercise choices
 - Informed community
 - Economically friendly
- Desired linkages include:
 - Linkage to Inman Health & Fitness on Asheville Hwy. south of E. Main St.
 - Group would like the Palmetto Trail to come through Inman. Presently the link between Spartanburg and Landrum is missing and could be brought through Inman via Ayers Dr. to Blue Ridge St. from Campobello. It could pass through “Windmill Hill” and connect to the Inman Trail.
 - Potential for trail along Marlowe Farm Rd. behind Chapman High School.
- Areas of concern:
 - There is a crown in E. Main St. from Gosnell Ave. to Gallman Rd. that causes vehicular accidents (especially when wet).
 - Compton Bridge Rd. is very dangerous going out to Chapman High School.
- Other thoughts:
 - Need areas large enough for golf carts and bikes with trailers.
 - Lots of walkers/runners on E. Main St.
 - Lots of bikes out Holy Springs Rd. – bike club comes through Inman.

April 20, 2009
CITY OF LANDRUM
9:00 A.M.

Attendees:

Steven Wolochowicz, City Administrator
John Cash, Bicycle Enthusiast
Lisa Bollinger, Spartanburg Area Transportation Study
Trey Hodges, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the City of Landrum's vision for a walkable/bikeable community.

Meeting Summary

- The initial focus of the meeting was to confirm the Community Map's existing conditions. Several updates are necessary (see session's working map):
 - Existing sidewalks are located along both sides of SC-14 from Interstate 26 to the Library/School area.
 - An existing sidewalk is located on the south side of SC-14 from Randolph Avenue to the western boundary of the City Limits.
 - An accessible interior trail is located in Brookwood Park, complete with pedestrian bridges.
 - Several greenspaces were added to the map. A leased site at N. Randolph Avenue and W. Simmons Street provides a picnic area and playground. A pocket park at W. Rutherford Street and W. Finger Street includes landscaping and park benches. A walking area and landscaped greenspace connects the Landrum Depot to E. Rutherford Street.
 - The Map's far western portion of SC-14 has been improved with a wider shoulder that is more bike-friendly. This begins at approximately Oak Grove Road, and continues to the four-way stop at SC-11.
 - The City now owns a significant portion of the railroad right-of-way, extending from approximately Greenwood Road to the north to Hulon Howard Road to the south. Several development options are being considered, including a scenic privately owned tourism train or a Rails-to-Trails project. Both options require railroad abandonment of the line, which is not forthcoming. The line is not currently in use, and signals and barrier arms have been removed.

- It is important to understand that the City is perhaps more connected with Polk County, NC and the Town of Tryon than it is to other Spartanburg County municipalities. Any bike/ped improvements should keep this in mind. There are live-work commuters between these two communities that would benefit from Bike/Ped improvements to US-176 north of Landrum.
- Landrum recently installed small landscaped bumpouts along Rutherford Street in the downtown area to beautify the corridor and calm traffic. These have increased pedestrian access. However, the sidewalk has accessibility shortcomings that may need to be addressed.
- The City has identified several sidewalk projects for the future. The first will install a sidewalk along N. Randolph Avenue from Barnett Street to W. Rutherford Street, and is funded through a combination of a SCDOT Enhancement Grant and Spartanburg County grants. Other sidewalk needs include repair of deteriorating sidewalks in the S. Lyle Avenue area, and construction of new sidewalks along Bomar Avenue and E. Brookwood Drive to increase connectivity with Brookwood Park.
- The Map's recommended bicycle facilities were well accepted. Of note, the stretch of US-176 between the City Limits and Greenwood Road needs priority. This area contains the speed limit change from 35mph to 45mph, and the existing conditions are particularly unsafe for bicyclists. However, this route sees a lot of bike use, especially on Sundays. Consider extending the recommended bike lane to incorporate this stretch.
- To the south of Landrum, New Cut Road (near the intersection of SC-11 and SC-14) is a popular bicycle route. It is a share-the-road route, but could be a candidate for upgrade to a bike lane due to its popularity.
- Mr. Cash raised a question about the SC-11 bike lane from the Cowpens Battlefield to Seneca. He wanted to know why the project was unfinished after its initial progress 6-7 years ago.
- The City's popular destinations include the downtown district, Brookwood Park, the Landrum Library, and the School facilities. In general, connectivity to these areas is enhanced by the sidewalks along E. Rutherford Street. Bike racks may be simple but much needed improvements.
- The City's regional connections and destinations include Tryon, NC, the Palmetto Trail's Blue Wall Passage, and the Foothills Equestrian Nature Center (F.E.N.C.E.). The Palmetto Trail and F.E.N.C.E. provide important recreational opportunities that may need to be recognized and incorporated in the Master Plan.
- The City does not maintain any bike and/or walking programs.

- There are no bike/ped-related development policies in place. NOTE: The City is currently negotiating with a private landowner in the area of Mountain View Road for annexation that may support subdivision development. If annexation occurs, this may be an opportunity for the City to explore mandatory internal or external sidewalk connections.
 - The City no longer owns a utility. Spartanburg Water has taken over water distribution and wastewater collection services. The City is not aware of any water or sewer easements utilizing the alternate route on the Textile Town Tour.

April 9, 2009
TOWN OF LYMAN
1:30 P.M.

Attendees:

Dennis Lindey, Citizen

Mike Frost, Startex-Jackson-Wellford-Duncan Water District (SJWD)

Lisa Bollinger, Spartanburg Area Transportation Study

Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the Town of Lyman's vision for a walkable/bikeable community. Another meeting was held on April 22, 2009 with additional representatives from the Town of Lyman.

Meeting Summary

- The meeting began by viewing the newly installed pedestrian bridge over the Middle Tyger River at River Place Park adjacent to the Middle Tyger Library. This bridge provides a critical pedestrian and bicycle connection along Groce Rd., as the vehicular bridge is not wide enough to safely accommodate these modes.
- Correction to map – Lyman Elementary School has moved out near D.R. Hill Middle School on Holly Springs Rd.
- Desired linkages include:
 - Utilize former utility service road along south bank of Middle Tyger River for shared-use trail. Potential to utilize Duke Power right-of-way to connect back up to Groce Rd. sidewalks, which run back down to River Place Park to complete loop.
 - Potential for trail along rail line running from Lawrence St. to Groce Rd. and connect to pedestrian bridge.

- Northern bank of Middle Tyger River could serve as kayak landing and “blueway.”
- Loop through Startex to SC 290.
- Other thoughts:
 - SJWD owns facilities and rights-of-way in the area that could assist in making connections.

April 22, 2009
TOWN OF LYMAN
10:00 A.M.

Attendees:

Rodney Turner, Mayor
 Dennis Drozbak, Finance Director
 Janice Daniel, Town Engineer
 Bob Bowman, Middle Tyger Area Association
 Lisa Bollinger, Spartanburg Area Transportation Study
 Trey Hodges, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the Town of Lyman's vision for a walkable/bikeable community. Another meeting was held on April 9, 2009 with additional representatives from the Town of Lyman.

Meeting Summary

- The meeting began with an overview of the Community Map and the existing conditions (see session's working map).
 - The Town has some concerns about the recommended bike facilities on SC-292 to the north of Town. There is a lot of quarry-truck traffic here, and therefore some safety concerns.
- The Town's #1 priority was quickly highlighted. The close proximity of the two schools on Holly Springs Road (DR Hill Middle and the new Lyman Elementary) have challenged the existing two-lane road's capacity. These schools support a combined 2,000 students. This is seen by the Town as a safety issue. The Town has posted a police officer near the trouble spots on a daily basis.
 - There are existing crosswalks, but no sidewalks.
 - The Mayor suggested widening Holly Springs Road from the schools southeast to Pine Ridge Road to a 4-lane road. According to the Mayor, Pine Ridge Road is also a candidate for widening from Holly Springs Road to US-29. Sidewalks and/or bike lanes should be incorporated into the widening effort.

- Due to the close proximity of the schools and very low build-out of the surrounding property, the Town expects a high growth potential in this area over the next few years. Several developers have inquired about future projects. Holly Springs Road is the main connector to the Town center, so congestion is only expected to worsen.
- There is a perceived issue on Holly Springs Road, particularly east of Pine Ridge Road, concerning narrow or uncertain right-of-way. Partly for this reason, the Mayor does not recommend the widened road of Holly Springs Road beyond Pine Ridge Road.
- The Town is eager to work with its close neighbors, Duncan and Wellford, to improve connectivity among the municipalities. “Middle Tyger Connected” was mentioned as a theme of teamwork to bring more visibility to the transportation needs of the west end of the County.
 - The Lyman Police Department has entered into a cooperative framework with Wellford’s Police Department for patrols and traffic enforcement. This cooperation includes alignment of many standards and procedures, and could be a benchmark for future cooperation in other areas (bike/ped, transportation).
 - There is a possibility of improving bike/ped facilities along Groce Road to connect a large number of public facilities. Among these facilities are the Lyman Senior/Youth center, the future River Place Park and Trail, the Lyman Library, new Vocational Rehabilitation Center, the Byrnes High School, Freshmen Academy, Elementary, and Middle School megacomplex, and the SCALE park. Each of these facilities are important destinations, but the existing sidewalk is not properly functioning to promote the needed connections.

A pedestrian bridge has been constructed in River Place Park over the Middle Tyger River, but the approaches remain unfinished. This needs to be a priority, as there is currently no safe pedestrian access across the Middle Tyger River.
 - The Town views potential sidewalks along Pine Ridge Road from US-29 to Duncan as an important connection to the new Duncan water park.
- The Town is eager to learn more about Rails-to-Trails projects. There are unused railroad facilities in the Town as a result of the Mill’s closing in 2005. They are seeking control of the rights-of-way, but there is disagreement over the current ownership (railroad, Mill, etc.). The Town would like to have this issue resolved and secure a commitment towards a donation, purchase, or lease agreement prior to expending resources in planning a project.

- The Town is interested in learning more about a connection to the Palmetto Trail. Inman is currently trying to secure a Palmetto Trail connection via US-176, and Lyman would be able to then connect to Inman via SC-292 and Lake Cooley.
- There is evidence of deterioration among the Town's existing sidewalks. Many of the sidewalks in the old mill village have been destroyed by tree roots, and the sidewalks are now unusable/unsafe. The Town expects SCDOT to maintain the sidewalks, and periodically hears complaints from the residents.
- Greenways Vision
 - The Town has a vision of a river trail concept along the Middle Tyger River all the way upstream to Lake Lyman.
 - The Town owns several water and sewer easements that may serve as future recreational/transportation corridors for bike/ped participants.
 - There is a 50' permanent easement along the raw water supply line that runs along the Seaboard railroad all the way to the North Tyger Reservoir.
 - There is a sewer easement that serves the gravity sewer line from DR Hill Middle and Lyman Elementary south towards US-29 and then east into Lyman.
 - The future trail in River Place Park may provide a connection between Lyman and Startex.
- The Town perceives a level of service problem at the intersection of Holly Springs Road and SC-292. This intersection becomes overloaded during peak hours, and will become more of a choke point as development heats up in the area around DR Hill Middle and Lyman Elementary.
- The Mayor discussed the Town's festival, Lymanfest, on May 16. This will be an opportunity for SPATS to seek more public comment.
- The Mayor offered to share with SPATS traffic count and traffic speed data within their jurisdiction.
- The Mayor is concerned about safety on future/proposed trails.
 - The Town will investigate bike-mounted police patrols as a means to provide services and promote bike transportation.
 - The Mayor has concerns about night usage of the trails, and wants to investigate lighting.
- The Town views Lake Cooley, located approximately 2 miles north, as a high growth potential area. They con-

sider bike/ped connections to the area important to the Town's long term growth, but understand these types of projects will require close coordination with Startex-Jackson-Wellford-Duncan (SJWD) water district.

- There is a walking group that meets at the First Baptist Church everyday.
- The Town currently has no bike/ped-related policies concerning sidewalk or connectivity requirements within new developments.

April 14, 2009
TOWN OF PACOLET
9:00 A.M.

Attendees:

Elaine Harris, Mayor, Town of Pacolet
Betty Littlejohn, Mayor Pro Temp, Town of Pacolet
Jean Crow, Partners for Active Living
Lou Kinsey, T.W. Edwards Recreation Center
Lisa Bollinger, Spartanburg Area Transportation Study
Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the Town of Pacolet's vision for a walkable/bikeable community.

Meeting Summary

- Overall, map of existing conditions appeared accurate and preliminary recommendations are reasonable.
 - Need to show connection between sidewalk on south side of Sunny Acres Rd. and the Pacolet Trail via the sidewalk in front of Middle School of Pacolet.
- Existing "Textile Town Tour" bicycle route enters takes Old Pacolet Rd. to Short Dr. to Hwy. 150 across river. It then circles up around museum and Town Hall to Montgomery Avenue, turning right on Stone St. It then travels Hwy. 150 to Memorial Dr. and then onto W. Main St. Next it turns right onto Goldmine Rd., connects to Bethesda Dr. and then follows out to Emma Cudd. An alternate connection exists from the Town Hall area of the route along Sunny Acres Rd. connecting to W. Main St. but this is more challenging topographically.
- Currently have CTC/Enhancement/Stimulus monies for the construction of sidewalk along Hillbrook Circle from Glenn Springs Rd. to existing sidewalk just south of Sunset Dr. Ready to go to bid.

- Desired linkages include:
 - Need crosswalks:
 - Crossing Memorial Dr. at Hwy. 150.
 - Crossing US 176 at Hwy. 150.
 - All four quadrants of the intersection of US 176 and Church St.
 - Crossing Hillbrook Circle at Glenn Springs Rd.
 - Crossing Hillbrook Circle at Sunset Dr.
 - Crossing Sunset Dr. at T.W. Edwards Recreation Center.
 - Crossing Church St. at Sunset Dr.
 - Crossing Sunny Acres Rd. connecting two sides of Greater Pacolet Park.
 - Crossing Hwy. 150 at Sunny Acres Rd. near museum.
 - Crossing Sunny Acres Rd. at Hwy. 150 near museum.
 - Need sidewalks:
 - Along W. Main St. from McDowell St. to Sunny Acres Rd.
 - Along Sunny Acres Rd. from W. Main St. to McDowell St.
 - Along Sunny Acres Rd. and Hwy 150 near museum.
 - Along Hillbrook Circle from Deerwood Dr. to Sunset Dr.
 - Potential for some type of connection to amphitheater on Sunny Acres Rd. near end of Pacolet Trail.
 - Need pedestrian crossing of railroad at Church St. and W. Main St.
 - Master Plan shows future boardwalk along river in front of former mill site.
 - Master Plan shows future trail along railroad line on south side of river wrapping around Walker St.
- Areas of Concern:
 - Drainage grates along Hwy. 150.
 - Bike hazard at railroad crossing of W. Main St.
 - Sidewalk in disrepair along Montgomery Ave.
- Other thoughts:
 - Want folks to know that Pacolet is accessible! Two meanings: 1) accessible to bikes and pedestrians; and 3) close to everything. There is a misconception that Pacolet is far away and out of the way.
 - Add bike parking near museum.

- Citizens walk in cemetery along Memorial Dr.
- Restrooms at Greater Pacolet Park could serve as a stop-off point for bicyclists utilizing the alternate route on the Textile Town Tour.

April 15, 2009
TOWN OF REIDVILLE
2:00 P.M.

Attendees:

Sandra Gowan, Town Clerk, Town of Reidville
Community Citizens (Virginia, Ann, and Carol)
Lisa Bollinger, Spartanburg Area Transportation Study
Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the Town of Reidville's vision for a walkable/bikeable community.

Meeting Summary

- Preliminary recommendations are reasonable. Necessary updates to existing conditions:
 - Bike lanes exist on Main St. from Spring St. to College St. (same extents as sidewalks that are shown on map).
 - Reidville Rd. (SC 296) has been realigned to the south at its intersection with SC 101 to create more of a perpendicular intersection (this also realigned Sharon Rd.) (see sketch on map).
 - Western town limits need to be revised somewhat to capture properties in the vicinity of Apple Valley Rd. at Brushy Creek.
- Desired linkages include:
 - Reidville Sharon Rd., Sharon Rd. Greenpond Rd., Fowler Rd., and Old Bethel Rd. would all make nice bicycle routes.
 - Connecting Reidville Elementary School to Reidville Academy Park - sidewalks and bike lanes will be added to Main St. from Spring St. to Gaston Dr. as part of Phase II of streetscape.
 - Sidewalks are needed on Pine St.
 - Existing former highway bridge over South Tyger River may provide potential for trail – may have maintenance issues.
 - Sidewalks desired on Reidville Rd. from western town limits to Dillard Rd.

- Sidewalks desired on Dillard Rd. from Reidville Rd. to Westside Regional Park.
- Other thoughts:
 - Lots of mothers and children walk between residential areas south of Reidville Rd. and the elementary school – low traffic volumes, so not many safety issues.

April 9, 2009
CITY OF WELLFORD
10:30 A.M.

Attendees:

Sallie Peake, Mayor, City of Wellford
 Lisa Bollinger, Spartanburg Area Transportation Study
 Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the City of Wellford's vision for a walkable/bikeable community.

Meeting Summary

- The meeting began with Mayor Peake stating that Wellford has a history of being left out of SPATS funding/projects. She specifically cited her pursuit of an enhancement grant for bike lanes or shared-use paths along Main St., Carver St., and Syphrit Rd. since 2005 with no success.
- Citizens walk for health and as a primary mode of transportation for those who do not have automobiles. They need a safe place to walk. The community would prefer paved shared-use pathways to sidewalks.
- Desired linkages include:
 - Main St. from Lucille Dr. to the Jackson Mill neighborhood.
 - Carver St. from Fort Prince Blvd. to Syphrit Rd.
 - Syphrit Rd. from US 29 to existing sidewalk at N. Craft St.
 - Connections to Food Lion, Family Dollar, and Fred's along US 29.
 - Old Spartanburg Hwy. may provide a better pedestrian linkage as an alternate to the divided US 29.
- Areas of concern:
 - Intersection of Syphrit Rd. and US 29.

- Intersection of Tucapau Rd. and US 29.
 - Intersection of “SEW Eurodrive Road” and US 29.
 - Old Spartanburg Hwy. is utilized by many citizens from neighborhoods and small nursing home facility.
 - School bus drop-off at Dodd St. and Old Spartanburg Hwy.
- Other thoughts:
 - Monarch Pl. has a large low income population where many do not own cars.
 - A pedestrian bridge exists over Jimmies Creek adjacent to Syphrit Rd. Bridge.
 - A wide right-of-way exists between Main St. and the railroad.

April 14, 2009
CITY OF WOODRUFF
11:30 A.M.

Attendees:

Brad Burnett, Mayor, City of Woodruff
Stephen Seese, City Manager, City of Woodruff
Michael Doles, Building & Zoning, City of Woodruff
Audrey Bettis, Historic Preservation Commission
Jessie Fuller, Woodruff City Bulletin
Breanna White, Woodruff City Bulletin
Lisa Bollinger, Spartanburg Area Transportation Study
Ernie Boughman, BP Barber

Objective:

Discuss the purpose of the Spartanburg Comprehensive Bicycle and Pedestrian Plan and how it can assist in achieving the City of Woodruff’s vision for a walkable/bikeable community.

Meeting Summary

- Preliminary recommendations are reasonable. Necessary updates to existing conditions:
 - Hwy 101’s intersection with US 221 has been realigned to the north to be more perpendicular (see map).
 - New ball fields have been added south of Woodruff High School.
 - As part of a streetscape project, crosswalks have been added on all four quadrants of the intersection of Main St. and Pine St.

- Sidewalk exists along Chamblin St. between Armory Dr. and Woodruff St. It may be overgrown and not recognizable in aerial photography (there may be other similar cases in Woodruff – possibly section of W. Peachtree St.).
- The cross country team at Woodruff High School runs a loop from the school on Cross Anchor Rd. to Varner Rd. to US 221 to Fairview Ave. back to Cross Anchor Rd.
- Desired linkages include:
 - Loop to include Chamblin St. to Irby St. to McArthur St. to Woodruff St. to connect social service establishments including Helping Hands, Soup Kitchen, and Safe Haven. Irby St. has some utility issues that may pose a problem for sidewalks.
 - Connections across Peachtree St. at Main St. are needed.
 - A sewer right-of-way exists along Jimmies Creek from Pearson St. and might provide a good connection to the Woodruff Center Park.
 - Investigate potential for connecting to the Walnut Grove Tour bicycle route.
- Areas of Concern:
 - Offset intersection of Chamblin St. and Church St. at Main St. has no traffic light or crosswalks and it is difficult for pedestrians to cross here.
- Other thoughts:
 - New parking will soon be constructed behind buildings on both sides of Main St. in the vicinity of Georgia St., Hayne St., and Pine St. Should provide more opportunities for pedestrian traffic on Main St.
 - Spartanburg County Parks and Recreation Commission has indicated that future phases of the Woodruff Center may include trails on the south side of the property near Jimmies Creek.

APPENDIX G: Glossary

OVERVIEW

The material in this glossary is largely taken from the International Pedestrian Lexicon available online at: <http://user.itl.net/~wordcraf/lexicon.html#a>. Other definitions came from a variety of other sources.

DEFINITIONS

AASHTO – American Association of State Highway and Transportation Officials: a nonprofit, nonpartisan association representing highway and transportation departments of all transportation modes in the 50 states, the District of Columbia and Puerto Rico.

ADA – American Disabilities Act of 1991: The Act gives civil rights protections to individuals with disabilities including equal opportunities in public accommodations, employment, transportation, state and local government services, and telecommunications.

“A” Cyclist – a term generally used to describe experienced or advanced bicyclists that are comfortable in all cycling environments, even busy roadways that lack bicycle facilities. “A” Cyclists will typically bicycle in any condition, whether hospitable or not.

Advance Stop lines - applies to a stop line placed prior to a crosswalk, to either prevent motor vehicle encroachment, or to improve visibility. It plays an important safety role especially in multi-lane roads.

Aesthetics - The study or philosophy of beauty. In pedestrian planning, it refers to pedestrian facilities that are pleasing to view such as landscaping, street furniture, and art.

Alternative (Multi-modal) Transportation – modes of travel in addition to private cars, such as walking, bicycling, rollerblading, carpooling and transit

Arterial Connections – interconnected corridors designed to accommodate a large volume of through traffic

Bargain Sale – the sale of a property at less than the fair market value. The difference between a bargain sale price and fair market value often qualifies as a tax-deductible charitable contribution. Commonly used to acquire land or easements for greenways or multi-use paths.

“B” Cyclist – a term generally used to describe intermediate level cyclists, who bicycle for reasons ranging from recreation and fitness riding to commuting. “B” cyclists typically prefer on-street bicycle facilities, such as bicycle lanes and paved shoulder.

Bicycle – Every vehicle propelled solely by human power upon which any person may ride, having two tandem wheels, except scooters and similar devices. The term “bicycle” in this document also includes three and fourwheeled human-powered vehicles, but not tricycles for children.

Bicycle Activated Detector Loop – sensors installed in the roadway at intersections that trigger a change in a traffic signal. They allow cyclists to remain in the travel lane and avoid maneuvering to the side of the road to trigger a push button.

Bicycle Box – a box painted on a roadway at an intersection that allows bicyclists to move to the front of the line in traffic. Generally a bicycle lane allows cyclists to pass stopped motor vehicle traffic and enter the bicycle box. The bicycle box is located between the intersection and front of the motor vehicle stop line. Bicycle Boxes increase awareness of cyclists in the roadway environment and provide the opportunity to cross intersections before motor vehicles.

Bicycle Facilities – a general term denoting improvements and provisions made by public agencies to accommodate or encourage bicycling. Examples include, but are not limited to bicycle parking/storage facilities, shared roadways not specifically designated for bicycle use, bicycle lanes, paved shoulders, and sidepaths.

Bicycle Friendly Community (BFC) – a program established by the League of American Bicyclists that recognizes and awards municipalities who encourage bicycling and make significant strides in creating a bicycle friendly environment.

Bicycle Lane - a portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.

Bicycle Station – a location that offers secure bicycle parking along with other amenities that may include bicycle repair, cafes, showers, bike rentals, changing facilities, etc.

BLOS – Bicycle Level of Service; an scientifically-calibrated evaluation of bicycle suitability on roadways based on a number of different factors

Bridge Culvert – a sewer or drain crossing used for the transference of surface water from a bridge

Buffer (See also Screening) - A strip of land with natural or planted vegetation, located between a structure or use and a side or rear property line, intended to spatially separate and visually obstruct the view of two adjacent land uses or properties from one another. A buffer area may include any required screening for the site.

Bulb-out - extended pavement to narrow roadway, or pinch through fare, or provide space for bus stop, bench, etc. Commonly used as a traffic calming measure.

CIP – Capital Improvements Program

“C” Cyclist – a term generally used to describe beginner, juvenile or elderly cyclists who are not comfortable bicycling in an environment with significant motor vehicle traffic. Typically “C” cyclists prefer to cycle on shared-use paths, greenways, and calm neighborhood streets.

Collector Streets – a public road designed to flow traffic from small neighborhood streets and connect to larger thoroughfares

Concurrent Signal Timing - motorists running parallel to a crosswalk are allowed to turn into and through the crosswalk (left or right) after yielding to pedestrians

Condemnation - the taking of private property for public use, with adequate compensation to the owner, under the right of eminent domain

Connectivity - the logical and physical interconnection of functionally related points so that people can move among them

Conservation Easement - a legally binding agreement not to develop part of a property, but to leave it “natural” permanently or for some designated very long period of time regardless of ownership transfer

Corridor - a spatial link between two or more destinations

Crosswalk - a designated point on a road at which some means are employed to assist pedestrians who wish to cross a roadway or intersection. They are designed to keep pedestrians together where they can be seen by motorists, and where they can cross most safely with the flow of vehicular traffic.

Curb Cut – interruption in the curb, as for a driveway

Curb Extension - a section of sidewalk at an intersection or mid-block crossing that reduces the crossing width for bicyclists and pedestrians and is intended to slow the speed of traffic and increase driver awareness

Curb Ramp - a ramp leading smoothly down from a sidewalk, greenway or multiuse path to an intersecting street, rather than abruptly ending with a curb

Demographics - the characteristics of human populations for purposes of social studies

Design Guidelines - a set of discretionary statements and graphics to guide land development and pedestrian facility development to achieve a desired level of quality and safety for pedestrians and the physical environment

Driveway Apron – the section of a driveway between a sidewalk or greenway and the curb

Driveway Access Management - the management and reduction of the size and number of necessary driveway entrances. Driveway access management creates a safer walking environment for pedestrians by reducing crossings and continuing a safe walking zone.

Eminent Domain – the acquisition of property by the government which is deemed to be necessary for the completion of a public project from an owner that is unwilling to negotiate a price for its sale.

EPA – Environmental Protection Agency

Fee Simple Purchase – an outright purchase of the land by municipality

FHWA – Federal Highway Administration

First Right of Refusal - the right specified in an agreement to have the first opportunity to purchase or lease a given property before it is offered to others

Fitness Trail - a pathway upon which users jog or walk from station to station to perform various exercise tasks

GIS – (Geographic Information System) a system for collecting, analyzing and displaying spatial information

Greenway - a linear open space; a corridor composed of natural vegetation. Greenways can be used to create connected networks of open space that include traditional parks and natural areas.

High Volume Artery – an important transportation corridor that is used by large traffic levels

Hub - a center of activity or interest or commerce or transportation; a focal point around which events revolve

Hydrologic Resources – stream and sewer corridors and buffer zones that can be used to facilitate the building of greenways

Illumination - the degree of visibility of your environment. In pedestrian planning, it refers to the degree in which lighting improves visibility for both pedestrians and motorists at dark

Incentive Zoning - a system by which zoning incentives are provided to developers on the condition that specific physical, social, or cultural benefits are provided to the community

Implementation - the realization of an application, or execution of a plan, idea, model, design, specification, standard, algorithm, or policy

Intersection - an area where two or more pathways or roadways join together.

Islands of Vegetation - a landscaping feature that is planted with flora chosen for its ability to remove pollution and toxins. These spaces manage stormwater runoff from impervious surfaces; the water is slowed down, preventing erosion and allowing water to be absorbed into the ground.

Land Use - describes how land is used for example as residential, commercial, or agricultural

Leaseback - the process of selling a property and also entering into a lease to continue using that property

Linear Stream Corridor - generally consists of the stream channel, floodplain, and transitional upland fringe aligned linearly

LPI – Leading pedestrian interval. Pedestrians are given the signal to begin crossing before parallel traffic.

L RTP – Long Range Transportation Plan

Median - a barrier, constructed of concrete, asphalt, or landscaping and separates two directions of traffic.

Median Refuge Island - island in the median, that offers a stopping or halfway point for a pedestrian

Mixed Use Area – a term used to describe a specific area that poses a combination of different land use types, such as residential, commercial, and recreation

Mode Share - a term used to describe percentage splits in transportation options

Mode Share - a term used to describe percentage splits in transportation options

MPO – Metropolitan Planning Organization

MUTCD – Manual of Uniform Traffic Control Devices: National standards guidebook on signage and pavement marking for roadways

Municipal Boundary – the limit of municipal jurisdiction

Nature Trail - a marked trail designed to lead people through a natural environment, which highlights and protects resources

Negotiated Dedications - a local government may ask a landowner to enter into negotiations for certain parcels of land that are deemed beneficial to the protection and preservation of specific parcel of land

On-Road Pedestrian Facility – any sidewalk, curb, median refuge or crosswalk designed for pedestrian use.

On-street Bicycle Facility – any bicycle facility that is constructed or marked on a roadway, such as a shared roadway, signed route, wide outside lane, bicycle lane, or paved shoulder

Off-Road Trail – paths or trails in areas not served by the street system, such as parks and greenbelt corridors. Off-street paths are intended to serve both recreational uses and other trips, and may accommodate other non-motorized travel modes, such as bicycles in addition to walking.

Open Space - empty or vacant land which is set aside for public or private use and will not be developed. The space may be used for passive or active recreation, or may be reserved to protect or buffer natural areas.

Ordinance - a statute enacted by a city government

Overlay Zone - a zone or district created by the local legislature for the purpose of conserving natural resources or promoting certain types of development. Overlay zones are imposed over existing zoning districts and contain provisions that are applicable in addition to those contained in the zoning law.

P.E.A.C.H.E.S - People Enjoying Active Community Health and Safety (Inman group)

Pedestrian - a person on foot or a person on roller skates, roller blades, child's tricycle, non-motorized wheelchair, skateboard, or other non-powered vehicles (excluding bicycles)

Pedestrian Advocacy Group - a group of individuals that promotes community walkability and pedestrian safety through programs, grant-writing, campaigns, and implementation.

Pedestrian Corridor – long distance corridor comprised of on-road sidewalks, crosswalks and related pedestrian facilities.

Pedestrian Network - a continuous, connected pedestrian system composed of sidewalks, trails, and roadway crossing facilities

Planned Unit Development (PUD) - a project or subdivision that includes common property that is owned and maintained by a homeowners' association for the benefit and use of the individual PUD unit owners

Pocket Park - a small area accessible to the general public that is often of primarily environmental, rather than recreational, importance; they can be urban, suburban or rural and often feature as part of urban regeneration plans in inner-city areas to provide areas where wild life can establish a foothold.

Preservation Easement – a voluntary legal agreement that protects historic, archaeological, or cultural resources on a property. The easement provides assurance to the property owner that intrinsic values will be preserved through subsequent ownership. In addition, the owner may obtain substantial tax benefits.

Public Access Easement – a voluntary legal agreement which grants a municipality a perpetual right-of-way and easement for public access and public benefit

Quality of Life - a measure of the standard of living which considers non-financial factors such as health, functional status and social opportunities that are influenced by disease, injury, treatment or social and political policy

Rail Trail - the conversion of a disused railway easement into a multi-use path, typically for walking, cycling and sometimes horse riding

Retrofit - the redesign and reconstruction of an existing facility or subsystem to incorporate new technology, to meet new requirements, or to otherwise provide performance not foreseen in the original design.

Right Turn Slip Lane “Pork Chop Island” - the channel created in larger intersection by a very long turning radius to which the pedestrian must cross before being in the formal intersection that is controlled by lights. The right-turn cut-off allows continuous right turns at fairly high speeds without stopping but the drivers do not always yield to pedestrians.

Road Diet – reconfiguring or reducing the number or width of motorized vehicle lanes to provide room to integrate a bicycle facility into a roadway. Commonly used on 4 lane roads with moderate motorized traffic volumes. Generally roadways are reconfigured to include a center turn lane, two 5' bicycle lanes and two motor vehicle travel lanes on either side.

Roundabout - traffic calming device at which traffic streams circularly around a central island after first yielding to the circulating traffic

ROW (right of way) - an easement held by the local jurisdiction over land owned by the adjacent property owners that allows the jurisdiction to exercise control over the surface and above and below the ground of the right-of-way; usually designated

for passage

RPO - Rural Transportation Planning Organization

RTOR – Right turn on red

Safe Routes to School (SRTS) – a federal program that provides funding to encourage and facilitate the planning and implementation of bicycle and pedestrian projects near schools.

SAFETEA-LU - Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SCDOT – South Carolina Department of Transportation

Shared Roadway – A roadway that is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes of 14-feet to 15-feet, or road with paved shoulders. Generally lower speed roadways that are located in residential or compact urban environments.

Sharrow – painted roadway marking that alerts motorists that bicyclists are present and frequently use the roadway. Traditionally used in 35 MPH settings with wide curb lanes. To officially appear in the MUTCD in 2010.

Shared Use Path (Multi Use Path/Sidepath) - A bikeway and walkway physically separated from motorized vehicular traffic by an open space or barrier and located either within the highway right-of-way (often termed “parallel shared use path”) or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. In some cases shared use paths also accommodate equestrians.

Shoulder - The portion of the roadway contiguous with the traveled way for the accommodation of stopped vehicles, for emergency use, and for lateral support of sub-base, base, and surface courses. Paved shoulders can be used for pedestrian and bicycle travel as well.

Sidewalk - an improved facility intended to provide for pedestrian movement; usually, but not always, located in the public right-of-way adjacent to a roadway. Typically constructed of concrete, but can be made with asphalt, bricks, stone, wood, and other materials.

Signed/Shared Roadway (signed bike route) – A shared roadway that has been designated by signing as a preferred

route for bicycle use with either a “Share the Road” or “Bike Route” sign.

SPATS – Spartanburg Area Transportation Study

SPARTA - Spartanburg Area Regional Transit Agency

Speed Table - Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. Their long flat fields give speed tables higher design speeds than Speed Humps. The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction. Speed tables are good for locations where low speeds are desired but a somewhat smooth ride is needed for larger vehicles.

Thoroughfare - a public road from one place to another, designed for high traffic volumes and essential connections

TND (traditional neighborhood development) - an area of land developed in a planned fashion for a compatible mixture of residential units for various income levels and nonresidential commercial and workplace uses, with a high priority placed on access to open spaces

Traffic Calming - a range of measures that reduce the impact of vehicular traffic on residents, pedestrians and cyclists - most commonly on residential streets, but also now on commercial streets

Trip Attractor/Generator - a location which, because of what it contains, generates itself as a destination for people

Village Center - an area in a community where people naturally congregate.

APPENDIX H OUTLINE:
Overview

USDOT Bicycle and Pedestrian Policy

FHWA Memorandum on
Mainstreaming Bicycle
and Pedestrian Projects

SCDOT Resolution

APPENDIX H: Policies

OVERVIEW

A number of federal and state pedestrian policies have been developed in recent years. This appendix covers a number of these policies that are intended to better integrate walking and bicycling into transportation infrastructure.

UNITED STATES DEPARTMENT OF TRANSPORTATION BICYCLE AND PEDESTRIAN POLICY

A United States Department of Transportation (US DOT) policy statement regarding the integration of bicycling and walking into transportation infrastructure recommends that, “bicycling and walking facilities will be incorporated into all transportation projects” unless exceptional circumstances exist. The Policy Statement was drafted by the U.S. Department of Transportation in response to Section 1202 (b) of the Transportation Equity Act for the 21st Century (TEA-21) with the input and assistance of public agencies, professional associations and advocacy groups. USDOT hopes that public agencies, professional associations, advocacy groups, and others adopt this approach as a way of committing themselves to integrating bicycling and walking into the transportation mainstream. The full statement reads as follows, with some minor adjustments for applicability in Roxboro:

1. Bicycle and pedestrian ways shall be established in new construction and reconstruction projects in all urbanized areas unless one or more of three conditions are met:

- Bicyclists and pedestrians are prohibited by law from using the roadway. In this instance, a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right of way or within the same transportation corridor.
- The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Excessively disproportionate is defined as exceeding twenty percent of the cost of the larger transportation project.
- Where sparsity of population or other factors indicate an absence of need. For example, on low volume, low speed residential streets, or streets with severe topographic or natural resource constraints.

2. In rural areas, paved shoulders should be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day. Paved shoulders have safety and operational advantages for all road users in addition to providing a place for bicyclists and pedestrians to operate. Rumble strips are not recommended where shoulders are used by bicyclists unless there is a minimum clear path of four feet in which a bicycle may safely operate.

3. Sidewalks, shared use paths, street crossings (including over- and undercrossings), pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways shall be designed, constructed, operated and maintained so that all pedestrians, including people with disabilities, can travel safely and independently.

4. The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:

- Planning projects for the long-term. Transportation facilities are long-term investments that remain in place for many years. The design and construction of new facilities that meet the criteria in item 1) above should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements. For example, a bridge that is likely to remain in place for 50 years, might be built with sufficient width for safe bicycle and pedestrian use in anticipation that facilities will be available at either end of the bridge even if that is not currently the case.
- Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.
- Getting exceptions approved at a senior level. Exceptions for the non-inclusion of bikeways and walkways shall be approved by a senior manager and be documented with supporting data that indicates the basis for the decision.
- Designing facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards

that are commonly used, such as the AASHTO Guide for the Development of Bicycle Facilities, AASHTO's A Policy on Geometric Design of Highways and Streets, and the ITE Recommended Practice "Design and Safety of Pedestrian Facilities. (Many of these guidelines are summarized in Chapter 4: Bicycle Facility Standards)

(Retrieved from <http://www.fhwa.dot.gov/environment/bikeped/design.htm> on 5/6/2008)

FHWA MEMORANDUM ON MAINSTREAMING BICYCLE AND PEDESTRIAN PROJECTS

(See pages H-4 through H-6)

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**U.S. Department of
Transportation
Federal Highway Administration**

Memorandum

Subject: ACTION: Transmittal of Guidance on Bicycle and Pedestrian Provisions of the Federal-aid Program

Date: February
24, 1999

From: Kenneth R. Wykle
Federal Highway Administrator

**In reply, HEPH-30
refer to:**

To:
Division Administrators
Federal Lands Highway Division Engineers

This memorandum transmits the Federal Highway Administration's (FHWA) Guidance on the Bicycle and Pedestrian Provisions of the Federal-aid Program and reaffirms our strong commitment to improving conditions for bicycling and walking. The nonmotorized modes are an integral part of the mission of FHWA and a critical element of the local, regional, and national transportation system. Bicycle and pedestrian projects and programs are eligible for but not guaranteed funding from almost all of the major Federal-aid funding programs. We expect every transportation agency to make accommodation for bicycling and walking a routine part of their planning, design, construction, operations and maintenance activities.

The Transportation Equity Act for the 21st Century (TEA-21) continues the call for the mainstreaming of bicycle and pedestrian projects into the planning, design, and operation of our Nation's transportation system. Under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), Federal spending on bicycle and pedestrian improvements increased from \$4 million annually to an average of \$160 million annually. Nevertheless, the level of commitment to addressing the needs of bicyclists and pedestrians varies greatly from State to State.

The attached guidance explains how bicycle and pedestrian improvements can be routinely included in federally funded transportation projects and programs. I would ask each division office to pass along this guidance to the State DOT and to meet with them to discuss ways of expediting the implementation of bicycle and pedestrian projects. With the guidance as a basis for action, States can then decide the most appropriate ways of mainstreaming the inclusion of bicycle and pedestrian projects and programs.

Bicycling and walking contribute to many of the goals for our transportation system we have at FHWA and at the State and local levels. Increasing bicycling and walking offers the potential for cleaner air, healthier people, reduced congestion, more liveable communities, and more efficient use of precious road space and resources. That is why funds in programs such as Congestion Mitigation and Air Quality Improvement, Transportation Enhancements, and the National Highway System, are eligible to be used for bicycling and

walking improvements that will encourage use of the two modes.

We also have a responsibility to improve the safety of bicycling and walking as the two modes represent more than 14 percent of the 41,000 traffic fatalities the nation endures each year. Pedestrian and bicycle safety is one of FHWA's top priorities and this is reflected in our 1999 Safety Action Plan. As the attached guidance details, TEA-21 has opened up the Hazard Elimination Program to a broader array of bicycle, pedestrian, and traffic calming projects that will improve dangerous locations. The legislation also continues funding for critical safety education and enforcement activities under the leadership of the National Highway Traffic Safety Administration. If we are successful in improving the real and perceived safety of bicyclists and pedestrians, we will also increase use.

You will see from the attached guidance that the Federal-aid Program, as amended by TEA-21, offers an extraordinary range of opportunities to improve conditions for bicycling and walking. Initiatives such as the Transportation and Community and System Preservation Pilot Program and the Access to Jobs program offer exciting new avenues to explore.

Bicycling and walking ought to be accommodated, as an element of good planning, design, and operation, in all new transportation projects unless there are substantial safety or cost reasons for not doing so. Later this year (1999), FHWA will issue design guidance language on approaches to accommodating bicycling and pedestrian travel that will, with the cooperation of AASHTO, ITE, and other interested parties, spell out ways to build bicycle and pedestrian facilities into the fabric of our transportation infrastructure from the outset. We can no longer afford to treat the two modes as an afterthought or luxury.

The TEA-21 makes a great deal possible. However, in the area of bicycling and walking in particular, we must work hard to ensure good intentions and fine policies translate quickly and directly into better conditions for bicycling and walking. While FHWA has limited ability to mandate specific outcomes, I am committed to ensuring that we provide national leadership in three critical areas.

- The FHWA will encourage the development and implementation of bicycle and pedestrian plans as part of the overall transportation planning process. Every statewide and metropolitan transportation plan should address bicycling and walking as an integral part of the overall system, either through the development of a separate bicycle and pedestrian element or by incorporating bicycling and walking provisions throughout the plan. Further, I am instructing each FHWA division office to closely monitor the progress of projects from the long-range transportation plans to the STIPs and TIPs. In the coming months, FHWA will disseminate exemplary projects, programs, and plans, and we will conduct evaluations in selected States and MPOs to determine the effectiveness of the planning process.
- The FHWA will promote the availability and use of the full range of streamlining mechanisms to increase project delivery. The tools are in place for States and local government agencies to speed up the delivery of bicycle and pedestrian projects - it makes no sense to treat installation of a bicycle rack or curb cut the same way we treat a new Interstate highway project - and our division offices must take a lead in promoting and administering these procedures.
- The FHWA will help coordinate the efforts of Federal, State, metropolitan, and other relevant agencies to improve conditions for bicycling and walking. Once again, our division offices must ensure that those involved in implementing bicycle and pedestrian projects at the State and local level are given maximum opportunity to get their job done, unimpeded by regulations and red tape from the Federal level. I am asking each of our division offices to facilitate a dialogue among each State's bicycle and pedestrian coordinator, Transportation Enhancements program manager, Recreational Trails Program administrator, and their local and FHWA counterparts to identify and remove obstacles to the implementation of bicycle and pedestrian projects and programs.

In less than a decade, bicycling and walking have gone from being described by my predecessor Tom Larson as "the forgotten modes" to becoming a serious part of our national transportation system. The growing acceptance of bicycling and walking as modes to be included as part of the transportation mainstream started with passage of ISTEA in 1991 and was given a considerable boost by the Congressionally-mandated National Bicycling and Walking Study. That study, released in 1994, challenges the U.S. Department of Transportation to double the percentage of trips made by foot and bicycle while simultaneously reducing fatalities and injuries suffered by these modes by 10 percent - and we remain committed to achieving these goals.

The impetus of ISTEA and the National Bicycling and Walking Study is clearly reinforced by the bicycle and pedestrian provisions of the TEA-21. The legislation confirms the vital role bicycling and walking must play in creating a balanced, accessible, and safe transportation system for all Americans.

[FHWA Guidance \(1999\)](#) - Bicycle and Pedestrian Provisions of Federal Transportation Legislation

To provide Feedback, Suggestions, or Comments for this page contact Gabe Rousseau at gabe.rousseau@dot.gov.

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United States Department of Transportation - **Federal Highway Administration**

SCDOT RESOLUTION

In February 2003, the South Carolina Department of Transportation Commission approved a resolution affirming that bicycling and walking accommodations should be a routine part of the Department's planning, design, construction and operating activities, and will be included in the everyday operations of its transportation system. The resolution reads as follows:

“WHEREAS, increasing walking and bicycling offers the potential for cleaner air, greater health of the population, reduced traffic congestion, more livable communities, less reliance on fossil fuels and their foreign supply sources and more efficient use of road space and resources; and

WHEREAS, in 2001 crashes involving bicyclists and pedestrians represented 13 percent of the traffic fatalities in S.C. and in the U.S.; and

WHEREAS, the Federal Highway Administration (FHWA) in its February 24, 1999 Policy statement “Guidance on the Bicycle and Pedestrian Provisions of the Federal-Aid Program” urges states to include bicycle and pedestrian accommodations routinely in their programmed highway projects; and

WHEREAS, bicycle and pedestrian projects and programs are eligible for funding from almost all of the major Federal-aid funding programs; and

WHEREAS, the South Carolina Department of Transportation Commission is strongly committed to improving conditions for walking and bicycling; and

WHEREAS, the Transportation Equity Act for the 21st Century (TEA-21) calls for the mainstreaming of bicycle and pedestrian projects into the planning, design and operation of our Nation's transportation system;

NOW, THEREFORE, BE IT RESOLVED that the South Carolina Department of Transportation Commission in meeting duly assembled this 14th day of January 2003, affirms that bicycling and walking accommodations should be a routine part of the department's planning, design, construction and operating activities, and will be included in the everyday operations of our transportation system; and

THEREFORE, BE IT FURTHER RESOLVED, that the South Carolina Department of Transportation Commission requires South Carolina counties and municipalities to make bicycling and pedestrian improvements an integral part of their transporta-

SPARTANBURG, SOUTH CAROLINA

tion planning and programming where State or Federal Highway funding is utilized.”