

## 9 Bicycle and Pedestrian Element

### 9.1 Introduction

#### 9.1.1 Purpose of Chapter

This chapter provides the bicycle and pedestrian element of the RFATS 2035 Long Range Transportation Plan (LRTP). It describes the existing conditions and trends at the national level, at the statewide/regional level and within the RFATS Study Area. It then describes the current and future issues, at the same set of levels. Stakeholder input is summarized, followed by a review of key points and a list of recommendations.

#### 9.1.2 Relevance to the Transportation System and the Plan

Bicycle and pedestrian transportation has traditionally been greatly undervalued in transportation planning. In some cases, they have not been considered to be within the realm of transportation at all, but simply as recreational activities.



There is an increasing recognition that cycling and walking should be the preferred modes of transportation for short trips. They provide mobility and accessibility, particularly for the many sections of the community who cannot, or prefer not to, drive. Therefore, bicycle and pedestrian networks are important for reaching transit services and supporting a transit system.

There are also wider public benefits to be gained. In public health terms, high levels of obesity – the result of a culture excessively focused on automobile travel – are affecting national economic productivity as well as individual lives. In overall quality-of-life terms, trails and greenways add to the beauty and amenity value within a community.

In the RFATS Study Area, this change in approach has been reflected in a number of programs that aim to bring cycling and walking into the mainstream of transportation planning. However, much remains to be done to correct the legacy of decades of development in which these modes were insufficiently considered.

## **9.2 Existing Conditions and Trends**

### **9.2.1 National Conditions and Trends**

Cycling and walking have recently received increasing consideration at the national level, particularly in Federal law and funding streams.

In the most recent round of legislation (SAFETEA-LU), more emphasis has been placed upon improving (and indeed not degrading) existing facilities for bicyclists and pedestrians. All projects planned to receive Federal funds must adhere to federal guidelines that aim to ensure this is achieved.

Federal law allows most funds – including, importantly, the main surface transportation fund that has traditionally been seen as providing highway funding – to be used for pedestrian and bicycle programs. However, with highway projects having strong and established claims to funds, it can be difficult in practice to treat bicycle and pedestrian planning in the mainstream way that Federal law now envisages.

There are also two specific funding streams that support bicycle and pedestrian projects:

- The relatively new Safe Routes to Schools Program is aimed, as the name suggests, at improving access to schools on foot and by cycle.
- The Transportation Enhancements Program requires that a small percentage of the main surface transportation fund be spent on certain activities that count as enhancements (rather than simply building extra capacity); the eligible activities include bicycle and pedestrian projects.

### **9.2.2 Statewide and Regional Conditions and Trends**

Bicycling and walking paths are very important transportation facilities for the number of statewide and regional organizations that are active participants in providing or promoting these modes (Table 9.1). This particularly applies to the development of trails and greenways.

A major advance came in 2003, when the SCDOT Commission directed that accommodating bicycles should be a routine part of the Department’s planning, design, construction and operating activities.

However, the safety of pedestrians and cyclists remains a problem. South Carolina continues to be in the ‘top ten’ nationally for the rate of both pedestrian and cyclist fatalities due to crashes with motor vehicles (Table 9.2).

SCDOT currently has a program to install ‘Share the Road’ signs on highways with significant bicycle traffic but no designated bicycle facilities.

**Table 9.1 Relevant Statewide and Regional Organizations**

Organization	Key activities
South Carolina Parks, Recreation and Tourism	Developed <i>State Comprehensive Outdoor Recreation Plan</i>
South Carolina Department of Natural Resources	Manages preservation programs Heritage Preserves and managed lands programs,
South Carolina Scenic Rivers Act	Protects South Carolina rivers
South Carolina Conservation Bank	Funds land conservation
South Carolina Bicycle and Pedestrian Program (SCDOT)	Provides Bike and Pedestrian accommodations. Channels Safe Routes to Schools funding.
Palmetto Cycling Coalition	Promotes bicycling
Rock Hill Bicycling Club	Promotes bicycling
Rock Hill Greenways and Trails Committee	Promotes regional trail and greenway networks
University of North Carolina Charlotte Urban Institute	Promotes open space preservation issues
Carolina Thread Trail	Plans regional trail and greenway network
Carolina Piedmont Green Initiative	Documents values of green infrastructure
York County Forever	Promotes conservation of natural resources
Palmetto Conservation Foundation	Promotes conservation, preservation, and recreation issues
Nations Ford Land Trust	Preserves open spaces
Katawba Valley Land Trust	Preserves Catawba River

**Table 9.2 Pedestrian and Cyclist Fatality Rates**

	South Carolina	National Average
Pedestrian fatalities in collisions with vehicles (per 100,000 population)	2.89	1.60
Cyclist fatalities in collisions with vehicles (per million population)	3.70	2.58

*Source: SCDOT. Data for 2006 (the most recent year available)*

### 9.2.3 Conditions and Trends in the RFATS Study Area

At the MPO level, **RFATS** places a particular importance on bicycle and pedestrian mobility, as well as the safety of cyclists and pedestrians. RFATS and its member governments have several plans and programs in place to support these modes, and these policies have borne fruit with a number of enhancement projects in recent years. The main programs are described in more detail below.

**York County** has incorporated bicycle and pedestrian goals and strategies into its Comprehensive Plan adopted in 2004. Like the municipalities, it has used grants to add sidewalks to streets and develop trails. The one-cent sales tax program (Pennies for Progress) has been very effective in providing sidewalks with most all road improvements. It has also funded a large number of small-scale sidewalk and bicycle-shoulder projects on existing streets, and the 2003 program includes bicycle lanes in some locations. Additionally, the County is currently developing policies to address the installation of sidewalks or bicycle lanes in new developments in an upcoming code rewrite.

The City of **Rock Hill** adopted its first Trails and Greenways Master Plan in June 2003 and completed an update in April 2008. The focus of the 2003 plan was to connect major destinations, primarily by sidewalks. The focus of the update was to create a more comprehensive network and extend it beyond the existing city limits. The City has also developed construction standards for trails and sidewalks, which are included in the City's zoning ordinance.



As a result of the Trails and Greenways Master Plan, the trail network has grown substantially in recent years. In 2003, there were only 11 miles of trails. Since then, the network has grown to 46 miles. The new trails were constructed by several entities including the City of Rock Hill, neighborhood groups, and private interests.

The Plan also recognized a strategic network of sidewalks, totaling 22 miles, that are important in the connectivity of the trails and greenways systems. However, many other city streets still need to be retrofitted with sidewalks or have their existing sub-standard sidewalks improved, so that people can walk safely to their destinations.

**Fort Mill's** historic core has a grid pattern of streets that is supportive of cycling and walking. However, the challenge for the community is to connect the rapidly growing outskirts and new developments to the historic core and to community facilities. The City has been taking advantage of grants to fund bicycle and pedestrian projects.



The Ann Close Springs Greenway is an award-winning private greenway system

which is open to the public and serves as a green belt around the town.

Much of the development in **Tega Cay** dates from the 1970s and 1980s, a time when sidewalks were not normally constructed in residential subdivisions. However, all new subdivisions are required to have bicycle and pedestrian facilities. The City also has its own system of bicycle and pedestrian trails, and, like the other municipalities, has been taking advantage of grants to add to the system.

## **9.3 Current and Future Issues**

### **9.3.1 National Current and Future Issues**

As already described, the national-level picture for cycling and walking are positive. New construction is required to consider cycling and walking, and additional funding streams have been made available. However, there is still much work to be done in retro-fitting the many neighborhoods and commercial areas that were developed in the era when the automobile was the primary transportation element considered in design. Existing programs are a welcome start, but the deficiencies remain extensive.

### **9.3.2 Statewide and Regional Current and Future Issues**

SCDOT's 2008 Comprehensive Multimodal Long Range Transportation Plan recognizes cycling and walking as modes of transportation. The statewide plan notes that SCDOT works collaboratively with local jurisdictions to identify suitable bicycle improvements (such as shoulders or restriping with bike lanes) to incorporate in highway projects, as well as to identify funding for these projects. However, local support from MPOs, particularly in advance of the project design process, is seen as critical to implementing bicycle and pedestrian improvements. The responsibility is therefore on MPOs and municipalities to bring pedestrian and bicycle issues to the table during project discussions.

### **9.3.3 Current and Future Issues in the RFATS Study Area**

#### *9.3.3.1 Area-Wide Issues*

Figure 9.1 shows the existing and proposed greenways in the RFATS Study Area. Figure 9.2 shows the existing and proposed bicycle routes in the RFATS Study Area.

Table 9.3 lists the trails currently planned for construction using Enhancement or CMAQ funds. In addition, one of the current TIP projects is to replace the US 21 bridge over the Catawba River. The replacement bridge will include bicycle/pedestrian facilities and lighting. Construction is due to begin in late 2009.

The **Complete the Streets** program is focused on changing the way most roads are planned, designed, and constructed by engaging transportation planners and engineering professionals to consistently design their road projects with all users in mind. At this time, RFATS staff are preparing to receive training from the South Carolina Department of Health & Environmental Control (SCDHEC) on how to proceed with the incorporation of the program's guidelines and planning principles.

### 9.3.3.2 *Issues in Individual Jurisdictions*

**York County** is currently working on a Bicycle Accommodation Plan to be adopted in the near future. The Bicycle Accommodation Plan is likely to represent an important step forward in planning for bicycle transportation within the rural parts of the RFATS Study Area.

The County's current greenways plan includes elements of the **Carolina Thread Trail Program**, a regional system of trails connecting North and South Carolina that will eventually reach 15 counties. The actual location of the Carolina Thread Trail will be determined over time as communities plan their trails and work with neighbors to target points of connection. Within and around the RFATS Study Area, the proposed connections include:

- York to downtown Rock Hill and the Catawba River.
- A branch from the York-Rock Hill connection, heading north to Allison Creek, Nanny's Mountain and on into Gaston County.
- Pineville to Fort Mill, the Catawba River, the Catawba Indian Nation, Lesslie and on into Chester County.

The City of **Rock Hill** Trails and Greenways Master Plan proposes extensive new facilities, comprising 27 miles of greenway trails, 32 miles of multipurpose trails, and 21 miles of sidewalks.

The 15 proposed multi-purpose trails will connect major destinations and serve as the backbone of the trail and greenway system. They are expected to be the most heavily used trails in the system, and will be built to accommodate a wide range of potential users. It is hoped that they will attract users from across the region, making Rock Hill a destination for trail enthusiasts.



The ten proposed greenway trails will connect major destinations to parks, open spaces, and other natural amenities. As well as serving recreational trips, they are also intended to showcase the city's environmental resources as well as being an educational

resource. The Catawba River will be the spine of the system, and will form a portion of an ‘outer loop’ greenway surrounding the city. Greenway trails will connect this loop to other trails and destinations.

Finally, the plan identifies 15 new sections of sidewalk that will act as part of the trail system by connecting trails to each other and to neighborhoods.

Revenue is expected to come from the city’s operating budget and other local sources, as well as state and federal grants. Overall, approximately \$3.5 million in potential funding is identified for a ten-year period; of this, \$1.9 million is already programmed, leaving \$1.6 million for additional projects to be selected from among those in the plan. The Trails and Greenways Master Plan also recognizes, however, that other roads need to be retrofitted with sidewalks, which should be installed on new streets and when property is developed alongside an existing road without a sidewalk. The plan also suggests that areas close to schools should be given priority for retrofitting sidewalks.

The City is also working towards designation as a Bicycle Friendly Community. The Bicycle Friendly Community Program is an effort sponsored by the League of American Bicyclists that recognizes municipalities that actively support bicycling. According to this program, a Bicycle Friendly Community is one that provides safe accommodations for cycling and encourages its residents to cycle for transportation as well as recreation.

In early 2008, the City of Rock Hill began the process to secure this designation and has completed a number of steps towards this end. Staff from the City’s Park, Recreation and Tourism Department have arranged for bicycling safety classes; conducted a joint bike route survey with Winthrop University; identified possible bike rack locations in Downtown Rock Hill; and participated in a initiative undertaken by York County to locate and prioritize bike lanes to be considered in the next Pennies for Progress funding cycle.

The **Fort Mill** Comprehensive Plan pays strong attention to improving bicycle and pedestrian facilities. Goals include improved design standards, increased connectivity, and increased accessibility. Initial steps will include studying the existing sidewalk network and developing an improvement plan.



**Table 9.3: Planned Trails Funded as Enhancements or Through CMAQ**

Ref.	Applicant – Project Name	Fiscal Year	Amount Approved	Federal Dollars	Source	Project Status
1	York County - Winthrop Farm/York Tech Bikeway Phase II	2004-05	\$130,000	\$100,000	TEP	Construction set for Fall 2008 / Spring 2009 by Rock Hill Public Works Department
2	York County - Airport Bike Trail Loop Phase II	2005-06	\$140,000	\$110,000	TEP	Construction complete Fall 2008 by SCDOT
3	City Of Tega Cay - Amber Woods Dr To Watertrace Sidewalk Project	2007-08	\$123,744	\$98,995	TEP	Proposed project for FY 2008-2009
4	York County - South Pointe Trails	2005-07	\$525,000	\$382,500	CMAQ	Project construction is complete; submitting request for final reimbursement
5	City Of Rock Hill - Rawlinson Road Trails (Phase I)	2005-07	\$500,000	\$400,000	CMAQ	Project drawings will complete by end of September; construction set for late Fall 2008
6	City Of Tega Cay - Gardendale Trail Project	2008-09	\$562,920	\$450,336	CMAQ	Proposed project for FY 2008-2009; funding reallocation from Stonecrest project FY 07-08

TEP = Transportation Enhancement project

CMAQ = Congestion Mitigation and Air Quality Improvement project

**Project descriptions:**

Project #1 is a bike / multi-purpose trail connecting Winthrop University and the York Tech campus.

Project #2 is an extension of existing pedestrian bicycle route along Airport Road from Museum to Homestead.

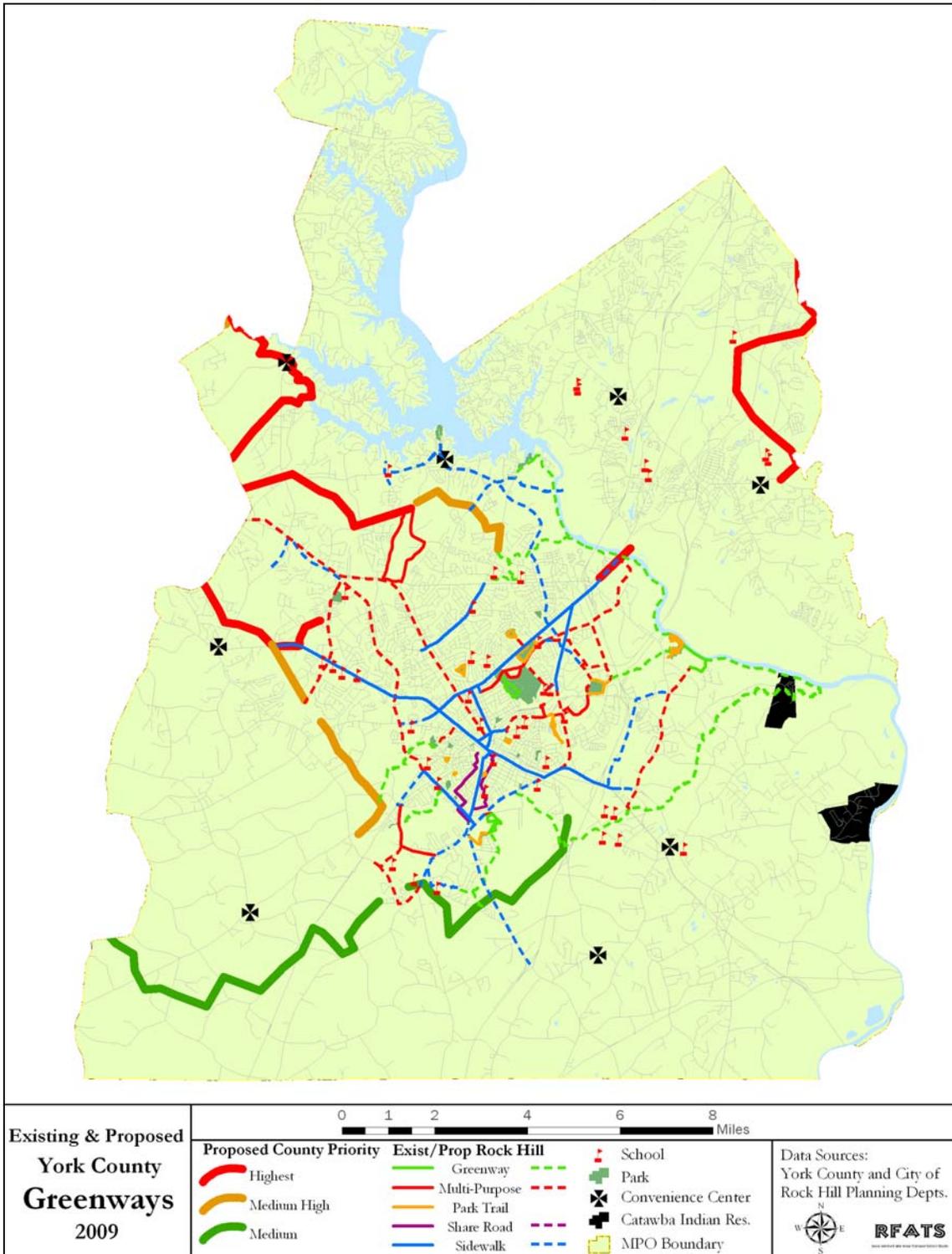
Project #3 is a pedestrian facility that will link one of Tega Cay's largest neighborhoods with Turner Field – one of the city's largest recreation facilities.

Project #4 is a bicycle / pedestrian improvement project that will connect existing / proposed sidewalk and the trail networks to South Pointe High School.

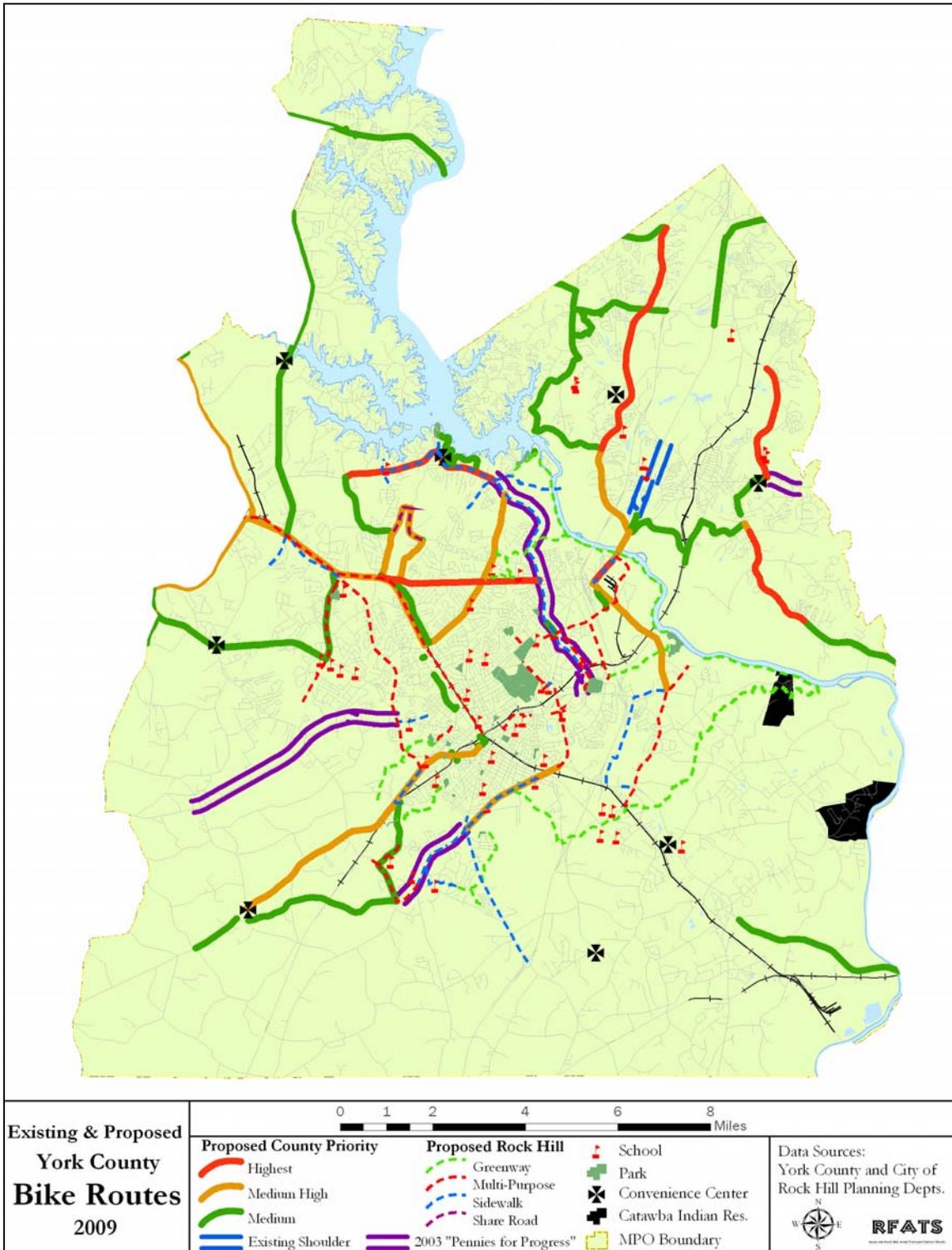
Project #5 is a bicycle / pedestrian improvement that will link the recently completed Airport Loop Trail with centers of education and recreation.

Project #6 is a pedestrian improvement project that will construct 50,000 sq ft of walking trails in and around the Gardendale / Lake Ridge development.

Figure 9.1 York County Greenways



**Figure 9.2 York County Bike Routes**



## 9.4 Stakeholder Input

A number of bicycle and pedestrian stakeholders were contacted for their input during the long range transportation plan process, including:

- Rock Hill Bicycle Club,
- City of Rock Hill Greenway and Trails Committee,
- Trust for Public Lands,
- Nation Ford Land Trust, and
- Catawba Valley Land Trust.

The public participation process identified several bicycle and pedestrian concerns:

- Need for bicycle and pedestrian lanes to be added during highway improvements,
- Bicycle and pedestrian access across the Catawba River,
- Bicycle and pedestrian safety concerns, and
- Need for better bicycle signage.

## 9.5 Summary and Recommendations

### 9.5.1 Summary of Key Points

- Walking and cycling are increasingly recognized as an important element in the overall transportation system.
- Planning for these aspects of the system is generally led by the municipalities and York County, with specific programs in place.
- There is a growing network of sidewalks and trails.

### 9.5.2 Recommendations

- RFATS should examine the existing and potential role of walking and cycling in providing connections between municipalities and throughout the RFATS Study Area. This will likely involve assembling existing data on bicycle and pedestrian facilities and identifying potential connectors that would help to develop a regional system.
- RFATS should continue to work with communities and the Carolina Thread Trail organization to ensure access to the trail system from both sites of the proposed bridge across the Catawba River.
- RFATS should consider the scope for attracting funding for small-scale regional schemes such as signage.
- RFATS should support communities' efforts toward designation as Bicycle Friendly Communities.