



*"On any given day, hundreds of pedestrians can be observed in downtown Aiken and in areas of North Augusta. Sidewalks and crosswalks have existed in the downtown areas in many cases since the early history of the cities. Both North Augusta and Aiken have taken steps to preserve and improve the pedestrian friendliness of their central business districts and North Augusta has implemented an impressive network of pedestrian friendly Greeneways."*

## Existing Conditions

### Overview

This chapter provides an overview of the major components of the bicycling and walking environments of the urbanized area of Aiken County. The data required to assess existing conditions was collected primarily by gathering existing regional geographic information systems (GIS) data, requesting local information from Aiken County, conducting field work, and soliciting public input. Provided data was synthesized into regional databases, mapped with GIS, and analyzed through nonspatial and spatial tools, including spatial modeling. Additional analysis of existing conditions is provided in Chapters 4 and 5 which summarize the quantitative and qualitative needs of bicyclists and pedestrians in the region.

An overview of the primary sources for analyzing the existing conditions of the urbanized area of Aiken County is provided below. Figures 3-1 and 3-2 depict the existing bicycling and walking conditions in Aiken County.

### Data Inventory and Background Review

The consulting team requested that ARTS, Aiken County, and its municipalities provide data related to the bicycling and walking environment of Aiken County. Specifically, the consulting team requested that each agency provide specific data related to the following broad categories of existing conditions:

- Transportation (such as streets, bus stops, sidewalks, and traffic signal locations)
- Land use and ownership (such as parcel boundaries, and zoning designations)
- Points of interest (such as schools, parks, airports, and retail centers)

- Physical geography (such as wetlands and topography)
- Administrative and jurisdictional boundaries (such as city and county borders)

Additionally, a review of all relevant plans or planning documents related to bicycle and pedestrian activity in the region supplemented the data inventory. Appendix A provides the full review of documents and other information obtained from local governments across the region.

### Field Investigation

The project team identified priority corridors and locations for field review, totaling more than 100 miles of roadway. Field work allows for roadway characteristics that may present opportunities or constraints for bicycle and pedestrian facilities, such as pavement width, shoulders, right of way, and driveways, to be inventoried and mapped. Areas targeted for field investigation are corridors and locations with:

- high bicycle and/or pedestrian traffic,
- key connectors between areas of high bicycle and/or pedestrian traffic,
- areas of high bicycle and/or pedestrian collisions,
- and primary corridors for accessing destinations, such as commercial land uses, transit centers, parks, trails, and schools or colleges.

Additionally, at the project kick-off meeting, the steering committee noted a strong interest in providing connectivity between Augusta, GA and Aiken, SC. The corridors and locations prioritized for field review addressed the need for establishing regional connectivity between neighboring GA and SC communities, as well

Figure 3-1: ARTS/Aiken Existing Conditions

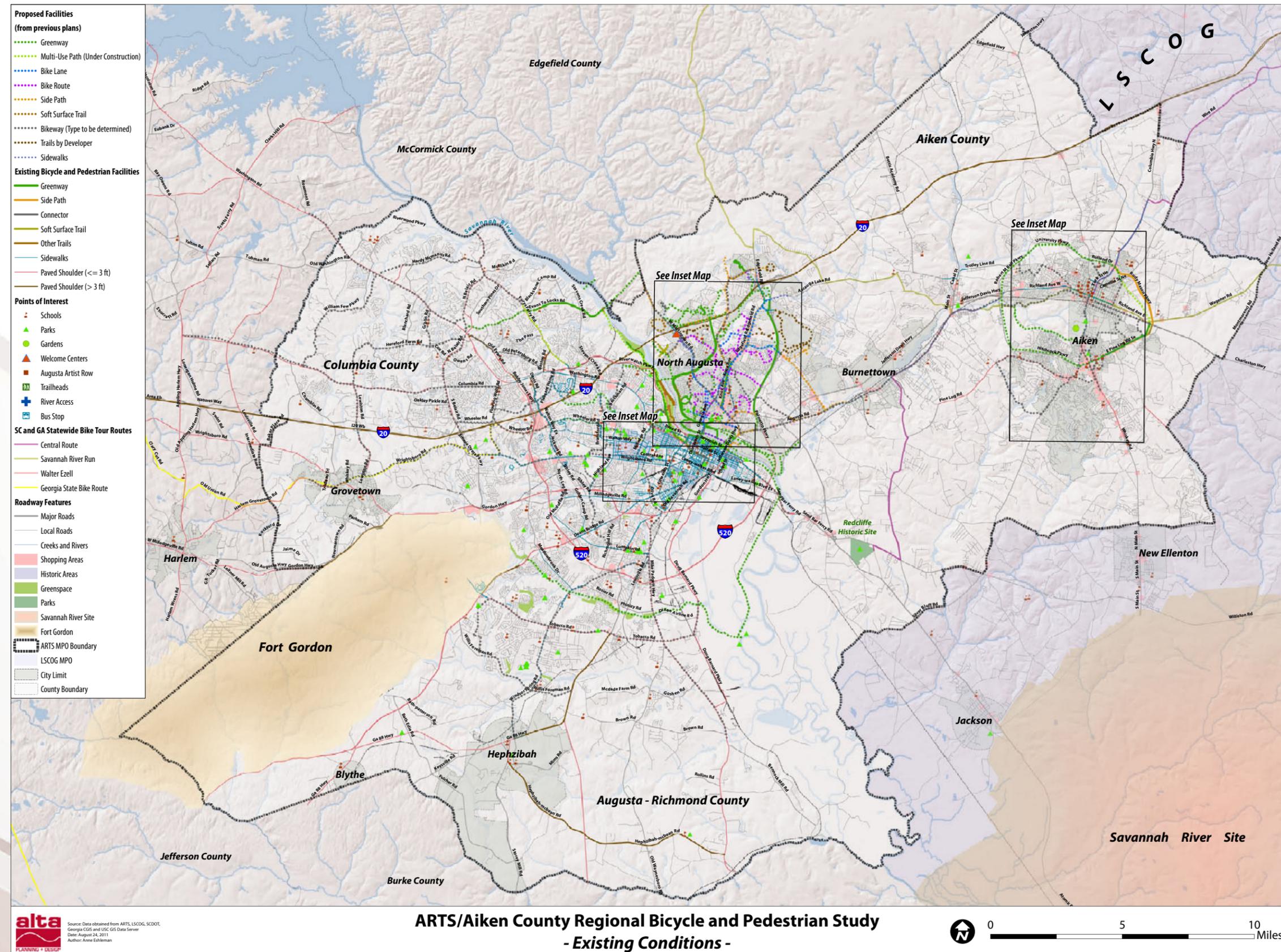
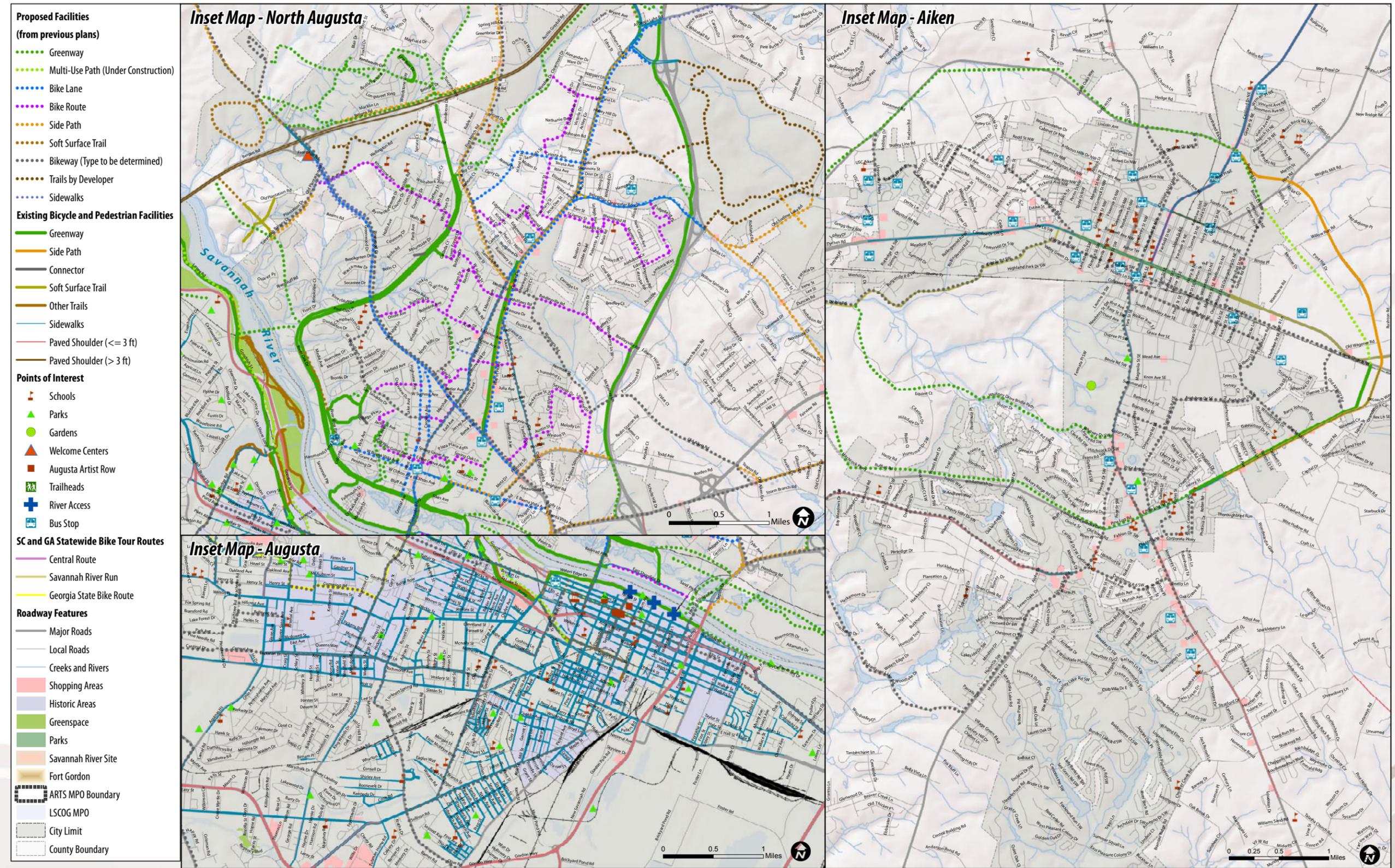


Figure 3-2: ARTS/Aiken County Existing Conditions Inset Maps



**alta** Source: Data obtained from ARTS, LSCOG, SCDOT, Georgia CGIS and USC GIS Data Server  
 Date: August 24, 2011  
 Author: Anne Eshleman

**ARTS/Aiken County Regional Bicycle and Pedestrian Study**  
**- Existing Conditions - Inset Maps -**



as the need for localized connectivity in urban environments.

### Public Outreach

Extensive public outreach is essential to developing a regional bicycle and pedestrian plan that addresses the needs of community members. For this report public input acquired during multiple public workshops, targeted focus groups, booths at community events, and via the project website was analyzed to identify issues and constraints to bicycling walking in the urbanized area of Aiken County. Chapter 5 summarizes the results of the public outreach process.

## Bicycle Infrastructure

### Overview

Multi-use trails, such as the North Augusta Greenway and the path along E. Pine Log Road, have been the primary investment in bicycling facilities in the urbanized area of Aiken County. The “Greenway” is a popular 7 mile regional greenway trail along a former rail line right-of-way in North Augusta. The land for the North Augusta Greenway was purchased by the City under former mayor Thomas W. Greene, for whom the trail is named. These facilities provide a good foundation for a bicycle facility network. 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, and narrow roadways with little or no shoulders. There is also limited connectivity between existing facilities and some barriers to connectivity exist, notably cul de sacs that do not connect adjacent neighborhoods.

### Strengths of Existing Bicycle Conditions

**Multi-use paths:** Within the urbanized area of Aiken County, 18.4 miles of greenways (including the Greenways of North Augusta) provide bicycling and walking opportunities for both recreation and transportation and have led to increased public support for investment in bicycling and walking infrastructure.

**Paved shoulders:** The portion of Aiken County within the ARTS region bears 8.9 miles of rural

roads with paved shoulders. On many rural roads, paved shoulders are an appropriate tool for improving the safety of bicycling conditions.

### Roadway Network Opportunities

**Downtown grid network:** Streets within the downtown areas of North Augusta and Aiken are on a good grid system for all transportation modes and many have low automobile speeds.

**Roadway/lane widths (Figure 3-3):** Many roadways throughout the region are wide enough to offer bicycle lanes or other bicycle facilities without the need to add additional pavement width.

**Low-volume roads (Figure 3-4):** The urbanized area of Aiken County has numerous residential areas with low-volume streets, low-speed travel, and inviting streetscapes. This type of existing network is suitable for bicycling activity, in particular, and often, walking, as well.

### Deficiencies of Existing Bicycle Conditions

**Lack of connectivity (Figure 3-5):** Though the City of North Augusta continues to develop Greenway segments that improve overall trail connectivity, existing bicycling facilities are currently disconnected, or in some cases, isolated. The development of residential subdivisions that do not have a connected street grid has added further challenges to connectivity.

**Lack of signage:** Limited to no signage is available to direct bicyclists from one existing bicycle facility to another or to identify preferable routes for bicyclists.

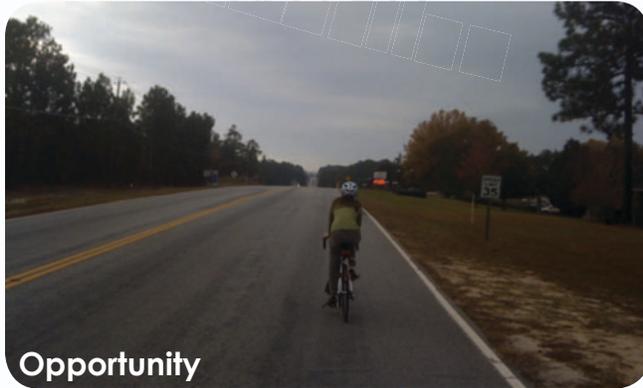
### Roadway Network Constraints

**Connectivity issues:** There is a lack of connectivity between existing facilities and destinations.

**High-volume, high-speed roadways (Figure 3-6):** There are several wide high-volume commercial roadways in Aiken County with high speeds and little shoulder where bicyclists are not safe. These roadways are, at times, the only connection to numerous commercial, retail, and office destinations. Whiskey Road is a prime example.

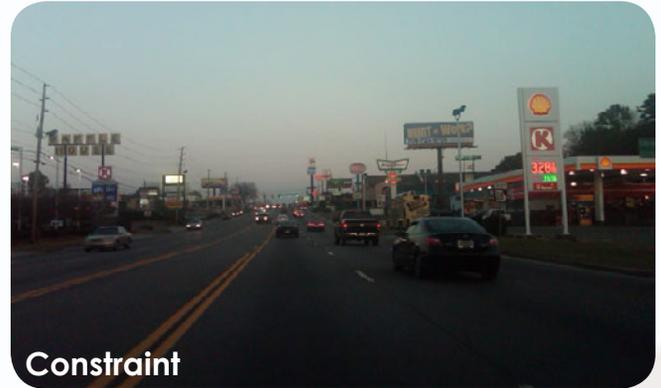


## Photo Inventory of Existing Bicycling Conditions



**Opportunity**

**Figure 3-3:** Many roadways throughout the county are wide enough to offer bicycle lanes or other bicycle facilities without the need to add additional pavement width.



**Constraint**

**Figure 3-4:** There are several wide high-volume commercial roadways in Aiken County with high speeds and little shoulder where bicyclists are not safe. Whiskey Road is a prime example.



**Opportunity**

**Figure 3-5:** Residential areas with low-volume streets, low-speed travel, and inviting streetscapes are suitable for bicycling activity in particular, and often walking as well.



**Constraint**

**Figure 3-6:** There are also many roadways throughout the region 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.



**Opportunity**

**Figure 3-7:** Though the City of North Augusta continues to develop Greenway segments that improve overall trail connectivity, existing bicycling facilities are currently disconnected, or in some cases, isolated.



**Narrow roadways and lanes (Figure 3-7):** There are also many roadways throughout the region 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. Banks Mill Road in the City of Aiken is one example.

**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. Additionally, curb-cuts that stretch beyond standard ingress and egress width add to the hazardous conditions, making it difficult for a bicyclist to predicate motor vehicle turning movements.

**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.

## *Pedestrian Infrastructure*

### **Overview**

The urbanized area of Aiken County features some areas that are pedestrian-friendly, and other areas that are not pedestrian-friendly. On any given day, hundreds of pedestrians can be observed in downtown Aiken and in areas of North Augusta. Sidewalks and crosswalks have existed in the downtown areas in many cases since the early history of the cities. Both North Augusta and Aiken have taken steps to preserve and improve the pedestrian friendliness of their central business districts and North Augusta has implemented an impressive network of pedestrian friendly Greenways. Additionally, many intersections in the region have countdown signals and ADA accessible curb ramps. This is not the case for all intersections, however.

### **Strengths of Existing Pedestrian Conditions**

**Sidewalks (Figure 3-8):** Downtown environments have a pedestrian-friendly sidewalk infrastructure and buffered sidewalks exist near some schools.

**Some enhancements in place:** Many intersections already contain functional pedestrian elements including pedestrian-activated countdown signals. Streetscape improvements that affect the pedestrian environment are in place in many areas, as well.

**Downtown (Figure 3-9):** The downtown environment Aiken, in particular, provides very pedestrian-friendly infrastructure. Sidewalks are wide and allow space for streetscape amenities, and pedestrian refuges exist at many downtown street crossings. Moreover, active storefronts and first-floor retail create an inviting ambiance for pedestrians.

**Multi-use paths (Figure 3-10):** Aiken County communities have begun to significantly invest in greenways (and Greenways) to provide transportation and recreation options for areas of existing and future development.

### **Deficiencies of Existing Pedestrian Conditions**

**Lack of overall connectivity (Figure 3-11):** 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 adequate pedestrian infrastructure.

**Inadequate crossing facilities (Figure 3-12):** Incomplete crossing facilities are commonplace lacking high-visibility crosswalks, adequate curb ramps, and countdown signals.

**Sidewalk condition:** Existing sidewalk, in many locations, is cracking, overgrown, or otherwise in need of repair.

**Driveway access management (Figure 3-13):** There are a number of 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.

## *Policy Review*

The existing conditions for bicycling and walking in the urbanized area of Aiken County is impacted by existing codes, ordinances, and regulations. Appendix B of this Plan provides



## Photo Inventory of Existing Pedestrian Conditions



**Opportunity**

**Figure 3-8:** Downtown environments have a pedestrian-friendly sidewalk infrastructure and buffered sidewalks exist near some schools.



**Constraint**

**Figure 3-11:** 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 adequate pedestrian infrastructure.



**Opportunity**

**Figure 3-9:** Downtown Aiken provides very pedestrian-friendly infrastructure. Active storefronts and first-floor retail create an inviting ambiance for pedestrians.



**Constraint**

**Figure 3-12:** Incomplete crossing facilities are commonplace lacking high-visibility crosswalks, adequate curb ramps, and countdown signals (right of image).



**Opportunity**

**Figure 3-10:** Aiken County communities have begun to significantly invest in greenways (and Greenways) to provide transportation and recreation options for areas of existing and future development.



**Constraint**

**Figure 3-13:** Many 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.



a comprehensive review of development requirements related to bicycle and pedestrian facilities for Aiken County, the City of Aiken, and the City of North Augusta. As shown in Appendix B, the review was not limited to land development ordinances of each jurisdiction; some of these jurisdictions also have design guidelines associated with streets and North Augusta has a recently-completed Greenway, Pedestrian, and Bicycle Master Plan, which was reviewed, as well.

Key findings of the review are as follows:

- None of the jurisdictions researched have a Complete Streets Policy nor guidelines specific to Complete Streets, although North Augusta includes Complete Streets principles in its Comprehensive Development Ordinance (CDO)
- Both North Augusta and Aiken incorporate Form Based coding – citywide in North Augusta and in the Downtown District for Aiken
- All communities still seem to have design guidelines geared primarily toward movement of vehicular traffic; however, North Augusta includes Complete Streets principles in text and tables, though has not yet followed through in design details or illustrative sections
- None of the jurisdictions have explicit state-of-the-art guidance on the design and implementation of bicycle and pedestrian facilities in the form of a stand-alone set of design guidelines, although the topic is referenced in several of the documents reviewed
- While the jurisdictions regulate block size and connectivity ( motorized and non-motorized), only the guidelines written by North Augusta would consistently result in walkable communities, and only in TND “use

pattern” areas. In the City of Aiken, adding additional pedestrian-scale connectivity within long blocks is left to the discretion of planning and zoning staff rather than being required. The allowable maximum length of dead-end streets is also problematic for all but the City of North Augusta, where it has not been specified. However, Aiken, County and North Augusta do discourage the building of cul-de-sacs wherever possible

- None of the jurisdictions reviewed considered elements such as multi-modal level of service as criteria for development review, although North Augusta does prioritize traffic mitigation measures for new development approvals that includes multi-modal measures
- None of the jurisdictions reviewed included any strategy for sidewalk or bicycle facility retrofits on existing facilities and
- The jurisdictions have variable approaches to regulating automobile and bicycle parking. In no location is bicycle parking required by default, and in all but North Augusta, minimum automobile parking requirements appear to be excessive. Waivers to these minimums, tend to be limited to very small geographies in relation to the overall size of the jurisdictions.

The policy evaluation indicates that Aiken County and its municipalities could benefit from guidance and direction related to strengthening many areas of policy. This concerns, in particular, the areas of complete streets, bicycle, and pedestrian facility requirements and enhancements within the context of development ordinances. Additional guidance geared toward retrofit of existing facilities is also recommended. Policy recommendations to address these opportunities are provided in Chapter 6.

**Table 3-1: Designated communities near Aiken County <sup>1</sup>**

State	Bicycle Friendly Communities	Walk Friendly Communities
South Carolina	Bronze: Charleston, Columbia, Greenville, Spartanburg  Silver: Hilton Head	None

<sup>1</sup> List of designated communities is current, as of January 2012



## Bicycle and Walk Friendly Community Assessment

### Overview of Bicycle and Walk Friendly Community Designations

The Bicycle Friendly Community (BFC) and Walk Friendly Community (WFC) programs are two national initiatives intended to encourage cities and towns across the country to improve the bicycling and pedestrian environments in their community and to recognize communities who are successfully doing this. The programs provide communities with invaluable resources related to bicycle and pedestrian planning and also generate positive media attention at the national and local level for communities who earn a designation.

The BFC program is administered by the League of American Bicyclists, a national bicycling advocacy organization based in Washington, D.C. Since the program began, the League has received 490 applications and awarded 190 communities with "bicycle-friendly" status. In 2011, the Pedestrian and Bicycle Information Center, based in Chapel Hill, NC, announced the development of the WFC Program. There are currently 21 "walk-friendly" designated communities around the country (as of November 2011). Table 3-1 lists BFC and WFC designated communities in Georgia and South Carolina.

Both the WFC and BFC program use the five "E's" of bicycle and pedestrian planning as the framework for identifying successful biking and walking communities. The five "E's" are: Engineering, Encouragement, Education, Enforcement, and Evaluation. Each program has its own detailed questionnaire that a city or town must complete online in order to apply for recognition. Four levels of award designation are possible: Bronze, Silver, Gold, and Platinum. Both programs offer an Honorable Mention category, as well.

Currently, there are no BFC or WFC designated communities in the ARTS region. Opportunities to apply for designation are shown in Table 3-2.

**Table 3-2: Review cycles and due dates for BFC and WFC programs.**

Review Cycle	Bicycle Friendly Community Due Dates	Walk Friendly Community Due Dates
Spring Awards	February 17, 2012	January 19, 2012
Fall Awards	July 2012 <sup>2</sup>	June 15, 2012

## Achieving Bicycle and Walk Friendly Community Designations

A BFC is described as a community that "welcomes cyclists by providing safe accommodation for cycling and encouraging people to bike for transportation and recreation."<sup>2</sup> In order to achieve Bronze level status as a BFC, a community is expected to show a strong commitment to bicycling, even if that commitment is in its early stages. Bronze communities have "room to grow" and show potential for more successes in bicycle friendliness, but important steps in the right direction are already being taken.

The League of American Bicyclists offers the following summary of characteristics that can be found in a Bronze level BFC:

- *Engineering Community* recently implemented a policy to engineer streets with the consideration of bicyclists and/or is beginning to develop a trail network. Facilities conform to the currently recognized safety standards.
- *Education Community* holds bicycle safety events, provides opportunities for bicycle education.
- *Encouragement Community* hosts a Bike to Work Day or community ride.
- *Enforcement Officers* are familiar with laws relating to bicyclists.
- *Evaluation & Planning* The community is familiar with and responsive to the needs of

<sup>1</sup> A specific application due date for July 2012 is not yet available, as of January 2012.

<sup>2</sup> Source: [http://www.bikeleague.org/programs/bicyclefriendlyamerica/communities/bfc\\_about.php](http://www.bikeleague.org/programs/bicyclefriendlyamerica/communities/bfc_about.php)



cyclists. A bicycle master plan or chapter in another document has been developed and approved. Bicycle mode share is above average for U.S. communities.<sup>3</sup>

To achieve a designation level higher than Bronze, significant advances within each of the five E's must occur. An honorable mention may be awarded to a community that shows its potential to fit the characterization of a Bronze community in the near future. In particular, a community that has not yet had time to realize the full impact of important recent successes would be a likely candidate for an honorable mention award.

While there is no clear benchmark that identifies communities within the four levels of BFC designation, Table 3-3 outlines the average bicycle mode share found among designated BFCs around the country.

**Table 3-3: Average bicycle mode share among designated Bicycle Friendly Communities<sup>4</sup>**

BFC Award Level	Average Bicycle Mode Share
Platinum	9.71%
Gold	5.20%
Silver	2.82%
Bronze	1.10%

Similarly, a WFC is described as “a city or town that has shown a commitment to improving walkability and pedestrian safety through comprehensive programs, plans and policies.”<sup>5</sup> A community seeking Bronze level status as a WFC should fit a characterization similar to that of a Bronze level BFC, though relevant to pedestrian programs and infrastructure.

### *Assessment of the City of Aiken*

This Plan includes completed applications for the BFC and WFC programs for the City of Aiken. Blank copies of the BFC and WFC applications are included in appendix c. By design, the process of filling-out the detailed questionnaires is an educational tool for communities seeking a national designation. Communities not only learn the variety of

programmatic, policy, and infrastructure initiatives that contribute to becoming bicycle- and walk-friendly, but also learn the areas in which the community excels or needs improvement. Table 3-4 outlines strengths and opportunities for the City of Aiken.

The infrastructure and non-infrastructure recommendations of the Plan, provided in Chapters 6 and 7 respectively, are based on the BFC and WFC assessments, as well as other analysis. Chapter 8 includes prioritized action steps and a timeline for the City of Aiken to pursue the BFC and WFC designations.

3 Source: League of American Bicyclists, Scoring Guidelines for Local Reviewers, 2010.

4 Source: League of American Bicyclists, staff report.

5 Source: www.walkfriendly.org.



**Table 3-4: Assessment of three BFC and WFC applications**

Community	Bicycle Friendly Community Application Highlights	Walk Friendly Community Application Highlights
<b>City of Aiken</b>		
Successes	<p>The Aiken Bicycle Club is an asset to the City of Aiken and recreational cycling is a relatively popular form of exercise in the area.</p> <p>Aiken’s Public Safety Office ensures that all officers receive bicycle training and maintains a bike patrol program, which has participated in bicycle rodeos.</p> <p>A local chapter of Eat Smart Move More SC and Safe Routes to School are active programs in the community, and a board member of Palmetto Cycling Coalition also serves as an advocate in Aiken.</p> <p>A League Cycling Instructor lives in Aiken.</p> <p>The local option sales tax provides an important source of funding that is already in place.</p>	<p>The City of Aiken has a base of citizens supportive of walking and pedestrian infrastructure.</p> <p>Additionally, Aiken is successfully engaging the senior citizen and retired populations of the community.</p> <p>A local chapter of Eat Smart Move More SC and Safe Routes to School are active programs in the community.</p> <p>The downtown has a well-designed pedestrian wayfinding signage program.</p> <p>The infrastructure of downtown and nearby neighborhoods is friendly to pedestrians.</p> <p>The municipal code supports a walkable environment in downtown and requires sidewalks in many new road projects.</p> <p>The local option sales tax provides an important source of funding that is already in place.</p>
Opportunities	<p>Improvements are needed within all five E’s.</p> <p>The City of Aiken has the necessary institutional infrastructure needed to excel in each category.</p>	<p>Improvements are needed within all five E’s.</p> <p>The City of Aiken has the necessary institutional infrastructure needed to excel in each category.</p>