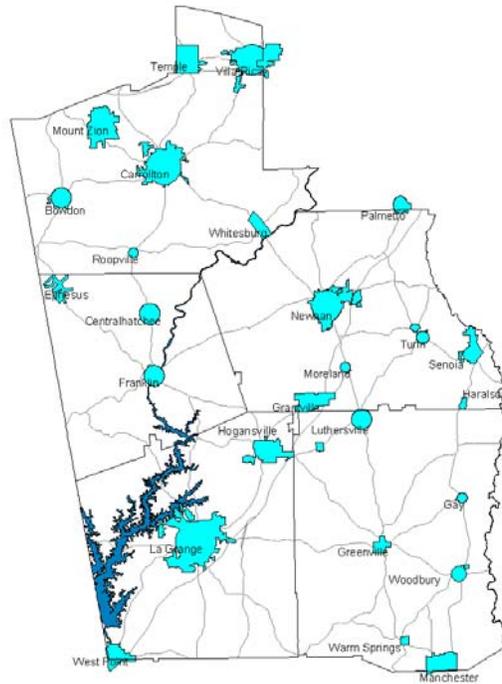


FINAL

**Chattahoochee-Flint
Bicycle and Pedestrian Plan**



**As Adopted By
the
Chattahoochee-Flint Regional Development Center
May 2005**

Acknowledgements

This publication was produced by the staff of the Chattahoochee-Flint Regional Development Center working with a group of dedicated volunteers serving as the Planning Advisory Committee, or PAC and the region's elected and appointed officials. The names of those serving on the PAC and the RDC Board of Directors are included in the Appendices to this report. For further information about the Regional Bicycle and Pedestrian Plan, or to obtain copies, please contact the following individuals:

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Chattahoochee-Flint RDC Bicycle and Pedestrian Plan

I. Executive Summary

Under authorization from the Georgia Department of Transportation, the Chattahoochee-Flint Regional Development Center is responsible for producing a regional bicycle and pedestrian plan encompassing the counties of Carroll, Coweta, Heard, Meriwether and Troup counties as well as the 27 cities that lie within those five counties. The plan includes discussion of the public participation process, plan goals and objectives, an inventory of existing and proposed facilities and programs oriented towards pedestrian and bicycle transportation, an assessment of the current pedestrian and bicycle transportation network, recommendations for making improvements to the pedestrian and bicycle network as well as programs, and an implementation strategy that lays out specific actions to be taken with information on who is responsible, the costs involved, and the relative timeframe during which the project will proceed.

This plan recognizes the fact that the transportation network consists of more than highways, railroads, and airports. By focusing upon pedestrian and bicycling forms of transportation, it is hoped that significant improvements can be made to the regional transportation network while also benefiting the health of the region's residents.

Public involvement is a crucial component to any planning process. It is through the rigorous review of goals, objectives, plans and policies that the public is made aware of their needs and gets to communicate their desires for programs and projects. The public involvement process for the Chattahoochee-Flint Regional Bicycle and Pedestrian Plan relies upon the intensive work of a broad-based Project Advisory Committee (PAC) and extensive contact with the public. The PAC consists of nineteen individuals that represent bicycle enthusiasts; elected officials and local, state and federal agency personnel. Each of the five counties in the Chattahoochee-Flint region has representation on the PAC.

The PAC developed a survey form, which was distributed to all 32 local governments within the CFRDC region, every library in the five county region, and through area bicycle shops. In addition, the surveys were administered individually in 2004 to guests attending the Taste of Newnan on April 22nd, the Carrollton Mayfest Celebration on May 1st, and the West Point Lake Coalition

'Tour de Lake' event on May 15th. Over the ten-week collection period, 376 responses were received. For the entire survey, the results indicate that easily the most severe impediment to walking and bicycle riding was the lack of facilities, followed by too much distance between destinations, too much traffic, and the participants' lack of time, in that order. From these results one can conclude that many more people in the region would ride or walk regularly if more facilities were available to them, particularly in the more urban reaches of the region. Further study is needed to identify specifically what types of facilities would have the most impact. CFRDC staff and the PAC used the survey results to develop a set of goals and objectives for the Regional Bicycle and Pedestrian Plan. These goals and objectives were presented to a number of civic and professional groups and local government officials during the planning process.

The **Goals** are to:

1. Increase public awareness of bicycling and pedestrian needs in the region;
2. Promote regional inter-connectivity; and
3. Support the development of a regional greenway system.

The plan **Objectives** are to:

1. Incorporate bicycle and pedestrian needs in local transportation and recreation plans;
2. Include state and regional network in local government comprehensive plans;
3. Map bicycle-friendly routes;
4. Promote and establish Bicycle Safety events;
5. Encourage the use of helmets;
6. Provide better training in the rules of the road;
7. Strongly encourage that schools be located in or near residential areas;
8. Adopt sidewalk and maintenance programs;
9. Adopt better drainage grate design standards, and
10. Enhance the discussion of cyclists in the Georgia Drivers' Education Manual.

The plan proposes the following **Performance Measures**:

1. Establish at least one mixed-use facility in every local jurisdiction;
2. Establish at least five miles of designated pedestrian and bicycle facilities for every 1,000 persons within the region;
3. Reduce the % of trips made by vehicle which are under one-half mile in length; and
4. Conduct 'walkability' and 'bikeability' surveys within each municipality.

The five counties of the Chattahoochee-Flint Regional Development Center lie within the Piedmont geologic province of the State of Georgia. This topography and area climate is generally suited to cycling and pedestrian activities, and in many cases offers outstanding opportunities for scenic routes. Given the suitability of the area's topography and climate, there are numerous opportunities for the residents to participate in organized bicycle and pedestrian events throughout the year but primarily during the spring, summer and fall seasons.

A lower percentage of the workers 16 years old and over in the region walk or bicycle to work than for the State as a whole.

The region is facing development pressures most heavily in those areas lying immediately adjacent to the Atlanta metropolitan area and along the I-85 Interstate Highway corridor. The provision of pedestrian and cycling facilities in these areas is at the same time the most needed and the most challenging to produce. The region also has significant opportunities to provide some regional bicycling and pedestrian facilities through the wise development of its major conservation areas, notably McIntosh Reserve in Carroll County, the South Chattahoochee Bend State Park in Coweta County, and the Chattahoochee River/West Point Lake corridors that lie within this region. The Flint River and Little Tallapoosa River corridors also offer some potential for cycling and pedestrian activities, but on a more local scale.

The major trip activity centers for the plan are considered to be the communities within the region, since these are the locations for regional retail, health, recreational and employment services. The plan also accommodates the locations of national, state, regional and local park facilities because recreational pursuits continue to drive most of today's bicycle and pedestrian travel. Within the communities, the emphasis on improving the pedestrian facilities will focus primarily on tying the central business districts, schools, shopping centers and major employers to nearby residential areas.

Policies are in place at the federal, state and local government levels that promote the use of bicycling and walking as legitimate forms of transportation. These policies deserve careful consideration in the design and funding of the regional transportation network. Several plans exist within the region that promise to develop regional and locally significant pedestrian and bicycle facilities. These are often a part of an overall greenspace protection effort. Sadly, though, most of the region's local governments still do not require the construction of sidewalks or have on-going sidewalk maintenance programs.

Education and awareness programs for the general public is lacking within the region. More must be done to acquaint the public with pedestrian and bicycle safety issues.

There are over 1,000 miles of bicycle facilities existing or proposed for the Chattahoochee-Flint region. The network consists of 118 miles of State designated bikeways, 181 miles of regional routes including one Scenic Byway, 530 miles of designated inter-city routes and over 350 miles of recognized recreational routes. These are mapped and shown in Appendix A.

There are approximately 317 miles of sidewalks within the five-county region and 58 miles of off-road pedestrian trails and paths. An extensive effort is taking place along the Chattahoochee River to create a continuous greenway, including pedestrian paths, which will extend from Helen in North Georgia all the way to Columbus, Georgia. The Chattahoochee Hill Country Alliance is working diligently to this end in Carroll and Coweta counties while the Trust for Public Lands is acquiring properties in Heard and Troup Counties. In addition, a number of properties are being purchased for passive recreation use by the local governments. When these projects and other planned walking paths and sidewalk projects are finished, there will be an additional or improved 85 miles of sidewalks and off-road trails within the Chattahoochee-Flint area. These facilities are mapped and shown in Appendix A.

It is anticipated that the State and local governments will work in tandem over the next twenty years to develop a cohesive, seamless bicycle and pedestrian network within the Chattahoochee-Flint region. The initial efforts will be to have the State designate and improve its State Bicycle Routes throughout the five-county region, while the local governments will develop requirements for sidewalks and develop annual sidewalk maintenance programs. Eventually, the regional and Inter-city routes will be signed and developed appropriately with a mix of State and local funds, while the local governments will concentrate on improving the routes designated for recreational use as resources and circumstances permit. Even though some grant monies are available from the state and federal governments, the off-road trails and sidewalks projects are largely paid for by the general operating fund of the local governments. The overall cost of these bicycle and pedestrian improvements is as follows, shown by county:

Table 1 – Summary of Bicycle & Pedestrian Plan Costs

Location	State/Federal Routes	Local Government Routes
Sidewalk and Off-Road Pedestrian Facilities		
Carroll		\$22,900,000
Coweta		\$470,000
Heard		\$9,949,700
Meriwether		\$1,311,500
Troup	\$3,307,400	\$1,805,000
Bicycle Facilities		
Carroll	\$773,200	\$9,370,500
Coweta	\$3,200,000	\$7,386,200
Heard	\$0	\$2,802,500
Meriwether	\$3,711,200	\$4,250,500
Troup	\$2,075,000	\$4,992,700



II. Introduction

General Plan Background

Under authorization from the Georgia Department of Transportation, the Chattahoochee-Flint Regional Development Center is responsible for producing a regional bicycle and pedestrian plan encompassing the counties of Carroll, Coweta, Heard, Meriwether and Troup counties as well as the 27 cities that lie within those five counties. The plan is to be completed by the end of June, 2005. The plan includes discussion of the public participation process, plan goals and objectives, an inventory of existing and proposed facilities and programs oriented towards pedestrian and bicycle transportation, an assessment of the current pedestrian and bicycle transportation network, recommendations for making improvements to the pedestrian and bicycle network as well as programs, and an implementation strategy that lays out specific actions to be taken with information on who is responsible, the costs involved, and the relative timeframe during which the project will proceed.

Purpose

Significant recognition is being given to the fact that transportation and health issues are inter-related. Nationally, it has been determined that:

1. Commuting takes an average of 71 minutes a day per vehicle
2. 59% of all trips under ½ mile in length are taken in a vehicle
3. 23% of all adults are considered obese
4. 74% of parents want their children to be able to walk to school

The issue of obesity in the American public has been noted in recent articles and the news media. It has been noted by the Centers for Disease Control that *"Physical inactivity contributes to numerous physical and mental health problems and is responsible for an estimated 200,000 deaths per year."*¹

Several studies have been conducted to determine what factors play a significant role in increasing the activity levels of a population. *"43% of people with safe places to walk within ten minutes of home met recommended activity levels, while just 27% of those without safe places to walk were active enough."*² A summary of these studies by ActiveLiving Research concludes the following:

"The research shows that people walk and bicycle more in neighborhoods that have mixed use, higher density, connected streets and pedestrian facilities. Current research is exploring the details of walkable design and the impact on young people, older adults, low-income people and those with disabilities.

While the studies conducted to date have limitations, the consistency of the findings indicates that a true relationship exists between the way we build our communities and active living through active transportation.”³

Increasing the mobility of people and goods has been a national goal for transportation since the initial adoption of the Intermodal Surface Transportation Efficiency Act in 1991, and the subsequent adoption of the Transportation Equity Act for the 21st Century in 1998. This plan recognizes the fact that the transportation network consists of more than highways, railroads, and airports. By focusing upon pedestrian and bicycling forms of transportation, it is hoped that significant improvements can be made to the regional transportation network while also benefiting the health of the region’s residents.

Public Involvement Process

Public involvement is a crucial component to any planning process. It is through the rigorous review of goals, objectives, plans and policies that the public is made aware of their needs and gets to communicate their desires for programs and projects. The public involvement process for the Chattahoochee-Flint Regional Bicycle and Pedestrian Plan relies upon the intensive work of a broad-based Project Advisory Committee (PAC) and extensive contact with the public.

The PAC consists of nineteen individuals that represent bicycle enthusiasts; elected officials and local, state and federal agency personnel. Each of the five counties in the Chattahoochee-Flint region has representation on the PAC. The list of members is included in the Appendices to this report. The PAC will have held at least four meetings during the planning process. Minutes of these meetings are also available in the Appendices to this report.

The PAC sought additional public involvement through the conduct of a survey. The survey questions were developed by the PAC and posted on a 4 x 6 index card (see card layout in the Appendix). These cards were distributed to all 32 local governments within the CFRDC region, every library in the five county region, and through area bicycle shops. In addition, the surveys were administered individually in 2004 to guests attending the Taste of Newnan on April 22nd, the Carrollton Mayfest Celebration on May 1st, and the West Point Lake Coalition ‘Tour de Lake’ event on May 15th. Over the ten-week collection period, 376 responses were received. Responses were received from residents of 8 Georgia counties, one Alabama county, and from other unspecified locations in Alabama and Georgia. Over 200 responses came from Carroll County respondents. The respondents were predominately middle-aged (defined as aged 19-65 by the survey). For the entire survey, the results indicate that easily the most severe impediment to walking and bicycle riding

was the lack of facilities, followed by too much distance between destinations, too much traffic, and the participants' lack of time, in that order. Not surprisingly, upon closer examination, the responses gained in the more rural counties indicated that distance between destinations played as much a role in not doing more walking and cycling in their areas, as did the lack of facilities. Large percentages of those responding said that they do not now walk (31.8%) or ride bicycles (57.5%) on any regular basis. From these results one can conclude that many more people in the region would ride or walk regularly if more facilities were available to them, particularly in the more urban reaches of the region. Further study is needed to identify specifically what types of facilities would have the most impact. CFRDC staff and the PAC used the survey results to develop a set of goals and objectives for the Regional Bicycle and Pedestrian Plan.

These goals and objectives have been presented to a number of public groups. Presentations were made to the Parent-Teacher Organization leadership of the Carrollton City Schools, the Newnan Kiwanis Club, and to the Carroll County Planning Commission. The draft goals and objectives were presented during a series of meetings set up in each of the five CFRDC member counties. These meetings were organized to discuss and develop regional transportation project and issue priorities. Though highway and local road concerns dominated the discussions at these meetings, a number of comments supporting the need for bicycle and pedestrian facilities were made. The presentation before the Carroll County Planning Commission resulted in that body recommending that the County's new comprehensive plan include the proposed goals, objectives, strategies and routes of the regional bicycle and pedestrian plan. A draft of the full comprehensive plan is being sent out for regional and statewide review as a result of the affirmative vote taken by the Carroll County Board of Commissioners on December 7, 2004.

The draft plan, goals, objectives and strategies were also reviewed by local government staff and PAC members, as a prelude to submitting the draft plan to the Georgia Department of Transportation for review.

A public hearing before the Board of Directors of the Chattahoochee-Flint Regional Development Center will be scheduled to occur prior to the final adoption of this plan.

III. Goals and Objectives

The Planning Advisory Committee discussed the plan's goals and objectives during the course of three meetings that took place on March 22, April 5 and August 3, 2004. The latter meeting took place after getting the results of an extensive regional needs survey. The survey effort took place during April, May and June 2004 and involved the mailing of survey forms to all 32 local governments, regional library branches, and area bicycle retail and repair outlets. In addition, individual surveys were administered at three regional events: the Taste of Newnan on April 22nd, Carrollton Mayfest on May 1st, and the West Point Lake Coalition Tour de Lake event on May 15th. In all, approximately 1,000 survey instruments were distributed over a ten-week period, and 376 responses were received for a 37.6% response rate. Using this information, a listing of goals and objectives was developed which the Committee recommended be presented at several public venues during the months of September and October 2004. These goals and objectives are as follows:

Goals

1. Increase Public Awareness
2. Promote Regional Inter-City Connections
3. Support Development of Greenways
 - ❖ Chattahoochee Hill Country
 - ❖ Chattahoochee Greenway in Heard County
 - ❖ Troup County recreation open space mapping
 - ❖ City of Carrollton greenbelt plan

Objectives

1. Incorporate bicycle and pedestrian needs in local transportation and recreation plans
2. Include bicycle-friendly routes
3. Promote and establish Bicycle Safety events
4. Encourage the use of helmets
5. Provide better training in the rules of the road
6. Strongly encourage that schools be located in or near residential areas
7. Adopt side walk and maintenance programs
8. Adopt better drainage grate design standards
9. Enhance the discussion of cyclists in the Georgia Drivers' Education Manual

Performance Measures

1. Establish at least one mixed-use facility in every local jurisdiction.
2. Establish at least five miles of designated pedestrian and bicycle facilities for every 1,000 persons within the region.
3. Reduce the % of trips made by vehicle which are under one-half mile in length.
4. Conduct 'walkability' and 'bikeability' surveys within each municipality.

Recreation planning is underway in Luthersville at present. Transportation plans are an integral part of the new planning requirements for every community. Each community in the CFRDC region will have to adopt a comprehensive plan between now and October 2008. Adoption of these goals and objectives will be encouraged as these new comprehensive plans are developed and adopted.

1U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. (1996). Physical activity and health: A report of the Surgeon General. Washington, DC: Government Printing Office.

2 Powell, K.E., Martin, L., Chowdhury, P.P. (2003). Places to walk: convenience and regular physical activity. American Journal of Public Health, 93, 1519-1521.

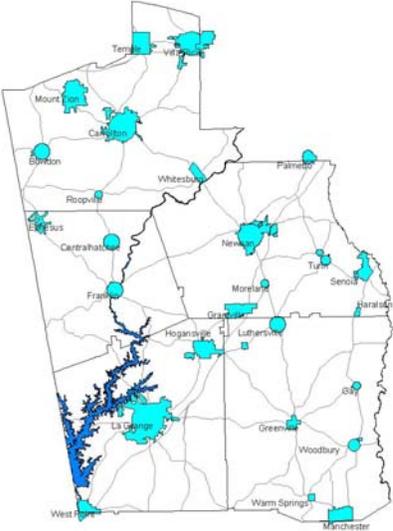
3 (McCain, Barbara. (January 2004). Designing for Active Transportation. ActiveLiving Research. P. 3)

IV. Existing Conditions Analysis

Regional Overview

Climate Conditions

The five counties of the Chattahoochee-Flint Regional Development Center lie within the Piedmont geologic province of the State of Georgia. The terrain is largely rolling in nature, with elevations lying between 575 and 1500 feet above sea level. The highest elevations lie in north and west Carroll County as well as around the City of Manchester at the extreme south end of the region. The lowest areas lie along the river bottoms of the Chattahoochee and Flint rivers as they course through the region. The region reports averages of 51 inches of rain per year and an annual average temperature of 62 degrees with typical averages of 43 degrees in January and 79 degrees in July. This temperate climate provides ample opportunities throughout the year for outdoor activities such as walking and cycling.



Population Characteristics

The five counties served by the Chattahoochee-Flint Regional Development Center (Carroll, Coweta, Heard, Meriwether and Troup) plus their 27 municipal governments are located west and south of the core metropolitan Atlanta counties. As of the 2000 Census, there are 268,808 residents living on the 2,154 square miles that make up the region.

The 2000 population of the region is 75.8 % white, 22.3 % black, 1.9 % other, and there are 2.4 % that claim Hispanic ethnicity.

Development pressures in both Coweta and Carroll Counties, exacerbated by sprawl from Atlanta, impact the housing markets and infrastructure capacity in both counties. Coweta’s population growth rate over the past twenty years has more than doubled that of the State of Georgia as a whole (127.2% for the County versus 49.9% for the State of Georgia during the period 1980-2000). Carroll County, lying to the north and west of Coweta County and also lying within the designated metropolitan Atlanta area, has experienced positive growth rates in comparison to the state average as well (54.9% for the same 20-year time frame). In spite of its lack of access to the Interstate Highway system, Heard County with a population less than 12,000 people, has experienced a robust growth pattern during this 20-year period (68.9%). The growth rates for Meriwether and Troup Counties have remained consistently

lower than that of our other counties and the State (6.1% and 17.6%, respectively, for the aforementioned timeframe).

The population growth rate for the CFRDC region as a whole for the 1980 to 2000 period was 55.1%. The 2002 Georgia County Guide projections place the CFRDC region's growth through 2010 at a slightly higher rate than the state average (25.3% and 21.8%, respectively), forecasting that our region will continue to experience development pressures for the near future. Indeed, the planning staffs of both Carroll and Coweta counties estimate that the population of each of these two counties has already surpassed the 100,000 mark in the four years since the 2000 Census.

Another development influence reflects the historically agricultural character of the region. Agricultural areas were more likely to have depressed educational attainment levels, lower wages, and lower population levels which resulted in lower levels of infrastructure such as roads, water and sewage disposal. This resulted in few job opportunities and those that did exist tended to rely less upon education skills and favored physical abilities. Thus the area economy tended to transfer from agricultural into textiles during the 1900's. According to the 2000 Census, 25.6% of the population over 25 years of age have not completed the requirements for a high school diploma. While better than the 39% figure from the 1990 Census, it is evident that in the past many adults in the region did not have the literacy skills necessary to advance into jobs that would result in increasing their standard of living. The legacy from this has had serious impacts upon several areas within this region. In recent years as most of the textile jobs have been leaving to go overseas, there have been significant plant closings and layoffs in the region. These layoffs and closings have primarily impacted western Carroll County, Heard County, Meriwether County, and Troup County.

Another impediment to the region's overall economic recovery is the lack of infrastructure. Owing to its agrarian nature, the provision of public water and sewer services is very unevenly allocated throughout the five counties. The lack of adequate infrastructure is being addressed incrementally, though, and over time will improve substantially.

There are signs the region as a whole is overcoming these economic impediments. The reason lies in the fact that people continue to move in to take jobs in the metropolitan area. Also, the younger residents tend to be more educated. And several communities have made substantial investments not only in the more traditional water and sewer utilities but are also getting heavily involved in the provision of telecommunications services as well. This means that the past impediments to entrepreneurial growth in the region are rapidly being eliminated.

The region provides four post secondary education institutions to meet the needs of its residents and prospective employers with a combined enrollment of approximately 16,000 students. In addition, six other institutions of higher education are available within a 50-mile radius.

The top ten employers are in the manufacturing and service sectors of the economy. Three of the top ten employers are educational systems, one is a hospital, another is a distribution facility, and the rest are in manufacturing.

Commuting Statistics

As Table 2 shows, the 2000 Census reports that 1.3% of the workers aged 16 years and over, or slightly more than 1400 people, in the CFRDC region currently bicycle or walk to work. This percentage is lower than that found for the state (1.8%) and the nation (3.3%) as a whole. The largest number of people who cycle or walk to work live in Carroll County and the smallest number live in Heard County.

The average travel time to work within the CFRDC region is 27 minutes for those residents who work outside the home. The residents from Meriwether and Heard counties spent, on average, more time commuting to work than did any of the residents from other CFRDC counties (31.2 and 37.5 minutes, respectively). The state and national averages for commuting to work are 27.7 and 25.5 minutes, respectively.

While the county averages overall are within the general range of state and national standards, it is interesting to note that every county except Troup had percentages higher than the state or national average of workers that traveled 60 minutes or more to get to work each day. This probably indicates the influence of metropolitan Atlanta upon the workforce in four of this region's five counties.

Table 2. Means of Transportation and Carpooling for Workers 16 years of age and older

	United States	U.S. %	Georgia	GA %	Carroll	Coweta	Heard	Meriwether	Troup	CFRDC	CFRDC %
Workers 16 years and older	128,279,228	100%	3,832,803	100%	39730	43506	4448	8893	26339	122916	100%
Car, Truck or Van - Drove Alone	97,102,050	75.7%	2,968,910	77.5%	31384	35290	3265	6807	20728	97474	79.3%
Car, Truck or Van - Carpooled	15,634,051	12.2%	557,062	14.5%	6168	6111	1009	1584	4255	19127	15.6%
Public Transportation	6,067,703	4.7%	90,030	2.3%	111	176	9	45	440	781	0.6%
Motorcycle	142,424	0.1%	3,055	0.1%	61	29	0	6	14	110	0.1%
Bicycle	488,497	0.4%	5,588	0.1%	67	65	0	2	51	185	0.2%
Walked	3,758,982	2.9%	65,776	1.7%	738	216	41	108	264	1367	1.1%
Other Means	901,298	0.7%	33,396	0.9%	290	351	33	106	234	1014	0.8%
Worked at Home	4,184,223	3.3%	108,986	2.8%	911	1268	131	235	353	2898	2.4%
Mean Travel Time to Work (mins.)	25.5		27.7		28	29.7	37.5	31.2	21.1	27.0	
% Traveling 60 mins or more		8.0%		9.3%	13%	10%	19%	12%	6%		10.5%
Per capita income, 1999	21,587		21,154		17,656	21,949	15,132	15,708	17,626	18,808	
% Below Poverty Level, Individuals		12.0%		12.6%	13%	8%	13%	17%	14%		12.0%
Population	281,421,906		8,186,453		87,268	89,215	11,012	22,534	58,779	268,808	
Square Miles (Land Area)	3,537,422.00		57,906.00		498.9	442.6	296	503.3	413.9	2154.7	
Population Density/Sq. Mi. of Land	79.56		141.37		174.92	201.57	37.20	44.77	142.01	124.75	

Prepared by Chattahoochee-Flint RDC using Census 2000 data

Patterns of Development

The map below is a product of the Southern Crescent Regional Plan, created under state law for this area of the State of Georgia. The map illustrates the generalized land use throughout the Southern Crescent region, which includes the five counties of Carroll, Coweta, Heard, Meriwether, and Troup. The map combines the traditional land use categories into the four general categories of Developed, Developing, Rural, and Conservation. This classification scheme allows a more effective regional presentation of major trends, and the categories are defined as follows from the State of Georgia's Minimum Planning Standards and Procedures for Regional Plans:

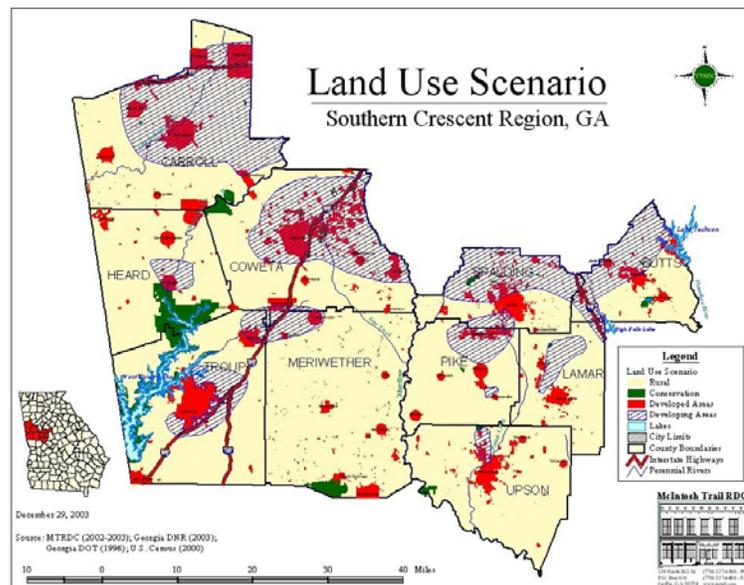
Developed – areas where “urban” services are already being provided.

Developing – areas that will require provision of new urban services.

Rural – areas not expected to require provision of urban services.

Conservation – areas to be preserved in order to protect an important resource or environmentally sensitive area.

As is evident from the map, the region is facing development pressures most heavily in those areas lying immediately adjacent to the Atlanta metropolitan area and along the I-85 Interstate Highway corridor. The provision of pedestrian and cycling facilities in these areas is at the same time the most needed and the most challenging to produce. The region also has significant opportunities to provide some regional bicycling and pedestrian facilities through the wise development of its major conservation areas, notably McIntosh Reserve in Carroll County, the South Chattahoochee Bend State Park in Coweta County, and the Chattahoochee River/West Point Lake corridors that lie within this region. The Flint River and Little Tallapoosa River corridors also offer some potential for cycling and pedestrian activities, but on a more local scale.



Major trip generators

Activity Centers

The major trip activity centers for the plan are considered to be the communities within the region, since these are the locations for regional retail, health, recreational and employment services. The plan also accommodates the locations of national, state, regional and local park facilities because recreational pursuits continue to drive most of today's bicycle and pedestrian travel. Within the communities, the emphasis on improving the pedestrian facilities will focus primarily on tying the central business districts, schools, shopping centers and major employers to nearby residential areas.

Community Facilities

Outside of Coweta County, the region contains few designated bike routes. With few exceptions, trail facilities are located in state and regional parks and are maintained by several of the recreation departments. The sidewalk networks, where they exist, are maintained by the cities primarily.

In recognition of the role that recreation plays in bicycle use, in particular, the PAC worked to identify those existing networks of roads already used for recreational cycling. These routes are mapped and made a part of the regional network. By doing so, it is hoped that future improvements to the designated roadways will accommodate the reasonable needs of cyclists and pedestrians that use those routes.

Safety Issues in General

In 2001, there were 728 bicycling fatalities and 45,000 bicycling injuries resulting from traffic crashes in the United States.¹ During the same year in Georgia, there were 724 cyclists injured and 20 deaths from a bicycling incident.²

While these numbers continue to decrease from year to year, bicyclist fatalities still account for 2 percent of all traffic fatalities as well as 2 percent of all traffic injuries. Among a majority of those killed, the most serious injuries are to the head, so it's important for bicyclists to wear helmets. Helmet use has been estimated in one study to reduce head injury risk by 85 percent.³ Nineteen states and the District of Columbia have helmet laws applying to young bicyclists; none of these laws applies to all riders. Local ordinances in a few states do require some or all bicyclists to wear helmets. A nationwide phone survey estimated that state helmet use laws increase the probability that a rider will wear a helmet by 18 percent.⁴ Helmets are important for riders of all ages, especially because adult bicyclists represent more than three-quarters of bicycle deaths.

Responsibility for serious collisions between bicycles and motor vehicles corresponds to rider age. (Responsibility refers to crash initiation, not necessarily legal culpability.) Young riders through age 12 most often are responsible for their crashes, and then probable responsibility decreases with age. Older riders more often aren't responsible for their crashes. (Insurance Institute for Highway Safety).

In 2001, there were 4,882 pedestrian fatalities and 78,000 pedestrian injuries resulting from traffic crashes in the United States. On average, a pedestrian is injured in a traffic crash every 7 minutes and killed in one every 111 minutes.⁵ In Georgia, there were 1,908 pedestrians injured and 158 pedestrian deaths in the same year.⁶

Pedestrians are the second largest category of motor vehicle deaths, after occupants. Although the number of pedestrian deaths has decreased dramatically over the past two decades, they still account for 11 percent of motor vehicle deaths nationally. The problem is worst among the elderly.

Pedestrian deaths are primarily an urban problem. Many pedestrians are killed at crosswalks, sidewalks, median strips, and traffic islands. Physical separations like overpasses, underpasses, and barriers can reduce the problem. Increased illumination and improved signal timing at intersections also can be effective. Because traffic speeds affect the risk and severity of pedestrian crashes, reducing speeds could reduce pedestrian deaths.

Vehicle factors count, too, because the most serious injuries often result from pedestrians being thrown onto the hoods, windshields, or tops of vehicles. Serious injuries to people's head, pelvis, and legs are common, and the severity of such injuries could be mitigated by improving vehicle designs and materials.⁷

It has been noted that pedestrian overpasses only work in certain design settings due to the tendency of the public to avoid climbing stairs to reach overhead crosswalks. Traffic calming techniques that place pedestrian safety islands in the medians, slow down overall vehicular speeds and reduce pedestrian exposure in the lanes of vehicular travel (use of bulb-outs at intersections, for example) can be effective at reducing pedestrian injuries and fatalities.



Existing Bicycling and Walking Events

The Chattahoochee-Flint region is home to many cycling and pedestrian events. The following list is by no means exhaustive, but indicates the level of activities sponsored by area groups for bicyclists and pedestrians.

West Point Lake Coalition Tour de Lake

The inaugural event was scheduled May 15, 2004 and scheduled separate rides for bicycles and motorcycles. Established as a fund-raising event for the West Point Lake Coalition, the bicycle portion of the event included mapped rides of 25-, 50- and 100-miles that took advantage of the Troup and Heard County scenery in and around West Point Lake. The annual event is expected to grow rapidly.

Lewis Grizzard and Catfish Memorial Bike Race

This annual event has been held in Moreland and surrounding areas of Coweta County for eight years. The ride takes place in October and is sponsored by the

Newnan-Coweta County Chamber of Commerce. Named for famed southern writer Lewis Grizzard, the ride traverses the area where the author grew up. The ride route covers 65 miles and is advertised as a "Metric Century".

West Georgia Escape

The bike rides take place the first and third Saturdays of each month. Routes of 20-, 30-, 40- and 52-miles are provided those that attend the event. The rides take advantage of the rural, rolling terrain of south Carroll and north Heard counties.

The West Georgia 100

The West Georgia 100 takes place on the first Sunday of every June. Benefiting the American Heart Association, the event offers 100, 66, 50, 25, and 10 mile options. Well supported, the event describes a circle around Carrollton, entirely on beautiful rolling Carroll County roads.

Bike Ride Across Georgia (BRAG)

This annual event has taken place since 1980. The ride is designed to accommodate beginning as well as advanced cyclists and bills itself as an educational and recreational activity for the whole family. During its 24-year history, BRAG has traversed the Chattahoochee-Flint region six times.

Dodge Tour de Georgia

The Dodge Tour de Georgia® is an annual, world-class, professional cycling stage race combined with a series of city festivals across Georgia. Proceeds from the event benefit the Georgia Cancer Coalition, a statewide network of people and organizations working together to fight cancer. Dodge Tour de Georgia is owned, operated and financed by a not-for-profit foundation, the Georgia Partnership for Economic Development (GPED). Dodge Tour de Georgia is sanctioned by the Union Cycliste Internationale and USA Cycling. During its two years in existence, the event has traversed the Chattahoochee-Flint region each year and has made major stops in LaGrange and Carrollton.

March of Dimes Walk

These walking events are held annually in four cities (Carrollton, Franklin, LaGrange, Newnan) and benefit the efforts of the March of Dimes charities.

Carrollton Triathlon

An annual race event in July that takes place at Lakeshore Park and the Lake Carroll area of the City.

American Cancer Society Relay for Life

These walking events are held annually throughout the region and benefit the efforts of the American Cancer Society charity.



Existing Policies and Plans

Federal Government⁸

United States Department of Transportation

The United States Department of Transportation (USDOT) is responsible for transportation policies and spending programs at the federal level. Past policies and programs of the USDOT and the Federal Highway Administration (FHWA), such as the Interstate Highway System, have had tremendous influence on the national transportation system. FHWA works with Departments of Transportation (DOT's) in each state to implement policies and programs.

In 1991, Congress passed landmark transportation legislation that set a new direction for transportation policy. The Intermodal Surface Transportation Efficiency Act (ISTEA) recognized the importance of bicycling and walking in creating a balanced transportation system. Key provisions included in ISTEA regarding bicycling and walking include:

- A ten percent set aside of Surface Transportation Program funding for transportation enhancements, including facilities for bicycling and walking;
- The opening of numerous other funding programs to pay for bicycle and pedestrian facilities;
- The requirement that all States and MPOs prepare long range transportation plans that include bicycling and walking; and
- The requirement that each state appoint a bicycle and pedestrian coordinator.

Following the adoption of ISTEA, the U.S. Department of Transportation published the National Bicycling and Walking Study (NBWS) in 1994. The NBWS translated the recognition of nonmotorized travel embodied in ISTEA into two specific goals: to double the percentage of trips made by foot and bicycle while simultaneously reducing the number of crashes involving bicyclists and pedestrians by 10 percent.⁹

The Transportation Equity Act for the 21st Century (TEA-21), signed into law on June 9, 1998, carries forward the same programs for bicycling and walking established in ISTEA, and also included several new and stronger directives. Important policies and statements included in TEA-21:

- State and MPO long range plans are to "provide consideration of strategies that will increase the safety and security of the transportation system for motorized and nonmotorized users."
- Bicyclists and pedestrians shall be given "due consideration" in State and MPO plans.
- Bicycle and pedestrian facilities are to "be considered, where appropriate, with all new construction and reconstruction of transportation facilities."

TEA-21 also requires that the Secretary of Transportation to assure that bicycle and pedestrian linkages are maintained and improved, stating that:

- "The Secretary of Transportation shall not approve any project or take any regulatory action that will result in the severance of an existing major route, or have an adverse impact on the safety of nonmotorized transportation traffic and light motorcycles, unless such project or regulatory action provides for a reasonable alternate route or such a route already exists;" and
- "in any case where a highway bridge deck being replaced or rehabilitated with federal financial participation is located on a highway on which bicycles are permitted to operate at each end...and the Secretary determines that the safe accommodation of bicycles can be achieved at reasonable cost, the such bridge shall be so replaced".

In February 1999 FHWA issued a Guidance Memorandum regarding the bicycle and pedestrian provisions of TEA-21. A copy of the Memorandum can be viewed on the FHWA website at Pedestrian and Bicycle Information Center <http://www.bicyclinginfo.org/bc/index.htm>. The memorandum is extremely supportive of bicycling and walking and clearly establishes that these modes are an important component of the transportation system, stating that:

- "To varying extent, bicyclists and pedestrians will be present on all highways where they are permitted and it is clearly the intent of TEA-21 that all new and improved transportation facilities be planned, designed, and constructed with this fact in mind";
- "We expect every transportation agency to make accommodation for bicycling and walking a routine part of their planning, design, construction, operations and maintenance activities";
- "Bicycling and walking ought to be accommodated as an element of good planning, design and operation."

The guidance also clarified the meaning of "due consideration" stating that:

- A presumption that bicyclists and pedestrians will be accommodated in the design of new and improved transportation facilities:
- The decision NOT to accommodate them should be the exception not the rule
- Must be exceptional circumstances for denying access through design or prohibition.

Americans with Disabilities Act (ADA)

Administered by the Department of Justice, ADA prohibits State and local governments from discriminating against people with disabilities in all programs, services, and activities. ADA also prohibits discrimination against people with disabilities in public transportation provided by public entities. The ADA Accessibility Guidelines do not currently address sidewalks and trails, the United States Access Board is working to develop the guidelines. FHWA published [Designing Sidewalks and Trails for Access, Part I of II: Review of Existing Guidelines and Practices](#)¹⁰, in 1999 and recommends that this document be used when considering how best to accommodate persons with disabilities in public rights of way.

State of Georgia¹¹

State Bicycle Laws

In Georgia, as in most states, the bicycle is legally a "vehicle". This classification means that general vehicular traffic law applies to the operation of a bicycle. However the vehicular code and various regulations include many specific qualifications for specific classes of vehicles. Wherever the code or regulation uses the phrase "vehicle" that section applies to all vehicles, including bicycles. When the term "motor vehicle" is used, that portion does not apply to bicycles. The following excerpts from the Georgia Code Annotated are those subsections of the traffic law that deal specifically with bicycle operation.



40-6-290

The provisions of this part applicable to bicycles shall apply whenever a bicycle is operated upon a highway or upon any path set aside for the exclusive use of bicycles, subject to those exceptions stated in this part.

40-6-291

The provisions of this chapter that apply to vehicles, but not exclusively to motor vehicles, shall apply to bicycles, except that the penalties prescribed in subsection (b) of Code Section 40-6-390, subsection (c) of Code Section 40-6-391, and subsection (a) of Code Section 40-6-393 shall not apply to persons riding bicycles.

40-6-292

(a) A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto and shall allow no person to ride upon the handlebars.

(b) No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.

(c) No person shall transport a child under the age of one year as a passenger on a bicycle on a highway, roadway, bicycle path, or sidewalk; provided, however, that a child under the age of one year may be transported on a bicycle trailer or in an infant sling so long as such child is seated in the bicycle trailer or carried in an infant sling according to the bicycle trailer's or infant sling's manufacturer's instructions, and the bicycle trailer is properly affixed to the bicycle according to the bicycle trailer's manufacturer's instructions or the infant sling is properly worn by the rider of the bicycle according to the infant sling's manufacturer's instructions and such child transported in a bicycle trailer or infant sling is wearing a bicycle helmet as required under paragraph (1) of subsection (e) of Code Section 40-6-296.

(d) No child between the ages of one year and four years shall ride as a passenger on a bicycle or bicycle trailer or be transported in an infant sling unless the child is securely seated in a child passenger bicycle seat, bicycle

trailer, or infant sling according to the child passenger bicycle seat's, bicycle trailer's, or infant sling's manufacturer's instructions and the child passenger seat or bicycler trailer is properly affixed to the bicycle according to the child passenger bicycle seat's or bicycle trailer's manufacturer's instructions or the infant sling is worn according to the infant sling's manufacturer's instructions.

(e) Violation of subsections (c) and (d) of this Code section shall not constitute negligence per se nor contributory negligence per se or be considered evidence of negligence or liability.

(f) No person under the age of 16 years failing to comply with subsections (c) and (d) of this Code section may be fined or imprisoned.

40-6-293

No person riding upon any bicycle, coaster, roller skates, sled, or toy vehicle shall attach the same or himself to any vehicle upon a roadway.

40-6-294

(a) Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, except when turning left or avoiding hazards to safe cycling, when the lane is too narrow to share safely with a motor vehicle, when traveling at the same speed as traffic, or while exercising due care when passing a standing vehicle or one proceeding in the same direction; provided, however, that every person operating a bicycle away from the right side of the roadway shall exercise reasonable care and shall give due consideration to the other applicable rules of the road. As used in this subsection, the term "hazards to safe cycling" includes, but is not limited to, surface debris, rough pavement, drain grates which are parallel to the side of the roadway, parked or stopped vehicles, potentially opening car doors, or any other objects which threaten the safety of a person operating a bicycle.

(b) Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles.

(c) Whenever a usable path has been provided adjacent to a roadway and designated for the exclusive use of bicycle riders, then the appropriate governing authority may require that bicycle riders use such path and not use those sections of the roadway so specified by such local governing authority. The governing authority may be petitioned to remove restrictions upon demonstration that the path has become inadequate due to capacity, maintenance, or other causes.

(d) Paths subject to the provisions of subsection (c) of this Code section shall at a minimum be required to meet accepted guidelines, recommendations, and criteria with respect to planning, design, operation, and maintenance as set forth by the American Association of State Highway and Transportation Officials, and such paths shall provide accessibility to destinations equivalent to the use of the roadway.

(e) Electric assisted bicycles as defined in Code Section 40-1-1 may be operated on bicycle paths.

40-6-295

No person operating a bicycle shall carry any package, bundle, or other article which prevents him from keeping at least one hand upon the handlebars.

40-6-296

(a) Every bicycle when in use at nighttime shall be equipped with a light on the front which shall emit a white light visible from a distance of 300 feet to the front and with a red reflector on the rear of a type approved by the Department of Public Safety which shall be visible from a distance of 300 feet to the rear when directly in front of lawful upper beams of headlights on a motor vehicle. A light emitting a red light visible from a distance of 300 feet to the rear may be used in addition to the red reflector.

(b) Every bicycle sold or operated shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level pavement.

(c) No bicycle shall be equipped or operated while equipped with a set of handlebars so raised that the operator must elevate his hands above his shoulders in order to grasp the normal steering grip area.

(d) No bicycle shall be equipped, modified, or altered in such a way as to cause the pedal in its lowermost position to be more than 12 inches above the ground, nor shall any bicycle be operated if so equipped.

(e)(1) No person under the age of 16 years shall operate or be a passenger on a bicycle on a highway, bicycle path, or sidewalk under the jurisdiction or control of this state or any local political subdivision thereof without wearing a bicycle helmet.

(2) For the purposes of this subsection, the term "bicycle helmet" means a piece of protective headgear which meets or exceeds the impact standards for bicycle helmets set by the American National Standards Institute (ANSI) or the Snell Memorial Foundation.

(3) For the purposes of this subsection, a person shall be deemed to wear a helmet only if a helmet of good fit is fastened securely upon the head with the straps of the helmet.

(4) No bicycle without an accompanying protective bicycle helmet shall be rented or leased to or for the use of any person under the age of 16 years unless that person is in possession of a bicycle helmet at the time of the rental or lease.

(5) Violation of any provision of this subsection shall not constitute negligence per se nor contributory negligence per se or be considered evidence of negligence or liability.

(6) No person under the age of 16 failing to comply with any provision of this subsection may be fined or imprisoned.

40-6-297

(a) It shall be unlawful for any person to sell a new bicycle or a pedal for use on a bicycle unless the pedals on such bicycle or such pedals are equipped with

reflectors of a type approved by the Department of Public Safety. The reflector on each pedal shall be so designed and situated as to be visible from the front and rear of the bicycle during darkness from a distance of 200 feet. The commissioner of public safety is authorized to promulgate rules and regulations and establish standards for such reflectors.

(b) This Code section shall not apply to any bicycle purchased prior to July 1, 1972, by a retailer for the purpose of resale.

40-6-298

(a) It is a misdemeanor for any person to do any act forbidden or fail to perform any act required in this part.

(b) The parent of any child and the guardian of any ward shall not authorize or knowingly permit such child or ward to violate any of the provisions of this part.

40-6-299

The Board of Public Safety is authorized to promulgate rules and regulations to carry this part into effect and is authorized to establish regulations for any additional safety equipment or standards it shall require for bicycles.

State Pedestrian Laws¹²

40-6-21

(a) The following meanings shall be given to highway traffic signal indications, except those on pedestrian signals:



(1) Green indications shall have the following meanings:

(A) Traffic, except pedestrians, facing a CIRCULAR GREEN signal may proceed straight through or turn right or left unless a sign at such place prohibits either such turn. Vehicular traffic turning shall yield the right of way to approaching vehicles. Vehicular traffic must stop and remain stopped to allow a pedestrian to cross the roadway within a crosswalk when the pedestrian lawfully within the intersection or an adjacent crosswalk at the time such signal is exhibited is upon the half of the roadway upon which the vehicle is traveling, or when the pedestrian is approaching and is within one lane of the half of the roadway on which the vehicle is traveling or onto which it is turning. For the purposes of this subparagraph, 'half of the roadway' means all traffic lanes carrying traffic in one direction of travel;

(B) Traffic, except pedestrians, facing a GREEN ARROW signal, shown alone or in combination with another indication, may cautiously enter the intersection only to make the movement indicated by such arrow or such other movement as is permitted by other indications shown at the same time. Such vehicular traffic shall stop and remain stopped to allow a pedestrian lawfully within an adjacent crosswalk to cross the roadway within a crosswalk when the pedestrian is upon the half of the roadway upon which the vehicle is traveling, or when the pedestrian is approaching and is within one lane of the half of the

roadway on which the vehicle is traveling or onto which it is turning. For the purposes of this subparagraph, 'half of the roadway' means all traffic lanes carrying traffic in one direction of travel. Vehicular traffic shall yield the right of way to other traffic lawfully using the intersection; and

(C) Unless otherwise directed by a pedestrian signal, pedestrians facing any green indication, except when the sole green indication is a turn arrow, may proceed across the roadway within any marked or unmarked crosswalk;

(2) Steady yellow indications shall have the following meanings:

(A) Traffic, except pedestrians, facing a steady CIRCULAR YELLOW or YELLOW ARROW signal is thereby warned that the related green movement is being terminated or that a red indication will be exhibited immediately thereafter when vehicular traffic shall not enter the intersection; and

(B) Pedestrians facing a steady CIRCULAR YELLOW or YELLOW ARROW signal, unless otherwise directed by a pedestrian signal, are thereby advised that there is insufficient time to cross the roadway before a red indication is shown, and no pedestrian shall then start to cross the roadway; and

(3) Steady red indications shall have the following meanings:

(A) Traffic, except pedestrians, facing a steady CIRCULAR RED signal alone shall stop at a clearly marked stop line or, if there is no stop line, before entering the crosswalk on the near side of the intersection or, if there is no crosswalk, before entering the intersection, and shall remain standing until an indication to proceed is shown, except as provided in subparagraphs (B), (C), and (D) of this paragraph;

(B) Vehicular traffic facing a steady CIRCULAR RED signal may cautiously enter the intersection to make a right turn after stopping as provided in subparagraph (A) of this paragraph. Such vehicular traffic shall stop and remain stopped to allow a pedestrian to cross the roadway within a crosswalk when the pedestrian is upon the half of the roadway upon which the vehicle is traveling, or when the pedestrian is approaching and is within one lane of the half of the roadway on which the vehicle is traveling or onto which it is turning. For the purposes of this subparagraph, 'half of the roadway' means all traffic lanes carrying traffic in one direction of travel. Vehicular traffic shall yield the right of way to other traffic lawfully using the intersection;

(C) Traffic, except pedestrians, facing a steady CIRCULAR RED signal, after stopping as provided in subparagraph (A) of this paragraph, may make a right turn but shall stop and remain stopped for pedestrians and yield the right of way to other traffic proceeding as directed by the signal at such intersection. Such vehicular traffic shall not make a right turn against a steady CIRCULAR RED signal at any intersection where a sign is erected prohibiting such right turn;

(D) Traffic, except pedestrians, facing a steady CIRCULAR RED signal, after stopping as provided in subparagraph (A) of this paragraph, may make a left turn from the left-hand lane of a one-way street onto a one-way street on

which the traffic moves toward the driver's left but shall stop and remain stopped for pedestrians and yield the right of way to other traffic proceeding as directed by the signal at such intersection. Such vehicular traffic shall not make a left turn against a steady CIRCULAR RED signal at any intersection where a sign is erected prohibiting such left turn;

(E) Unless otherwise directed by a pedestrian signal, pedestrians facing a steady CIRCULAR RED signal alone shall not enter the roadway;

(F) Traffic, except pedestrians, facing a steady RED ARROW signal indication may not enter the intersection to make the movement indicated by such arrow and, unless entering the intersection to make such other movement as is permitted by other indications shown at the same time, shall stop at a clearly marked stop line or, if there is no stop line, before entering the crosswalk on the near side of the intersection or, if there is no crosswalk, before entering the intersection, and shall remain standing until an indication to make the movement indicated by such arrow is shown; and

(G) Unless otherwise directed by a pedestrian signal, pedestrians facing a steady RED ARROW signal indication shall not enter the roadway.

(b) In the event an official traffic-control device signal is erected and maintained at a place other than an intersection, the provisions of this Code section shall be applicable except as to those provisions which by their nature can have no application. Any stop required shall be made at a sign or marking on the pavement indicating where the stop shall be made, but, in the absence of any such sign or marking, the stop shall be made at the signal.

40-6-22

(a) Whenever special pedestrian-control signals exhibiting the words WALK or DON'T WALK or symbols so directing a pedestrian are in place, such signals shall indicate as follows:

(1) WORD OR SYMBOL MESSAGE WALK — Pedestrians facing such signal may proceed across the roadway in the direction of the signal. Every driver of a vehicle shall stop and remain stopped for such pedestrians; and

(2) FLASHING OR STEADY DON'T WALK — No pedestrian shall start to cross the roadway in the direction of such signal, but any pedestrian who has partially completed his crossing on the WALK signal shall proceed to sidewalk or safety island while the DON'T WALK signal is showing.

40-6-90

(a) A pedestrian shall obey the instructions of any official traffic-control device specifically applicable to him, unless otherwise directed by a police officer.

(b) Pedestrians shall be subject to traffic and pedestrian control signals as provided in Code Sections 40-6-21 and 40-6-22.

(c) At all other places, pedestrians shall be accorded the privileges and shall be subject to the restrictions stated in this chapter.

40-6-91

(a) The driver of a vehicle shall stop and remain stopped to allow a pedestrian to cross the roadway within a crosswalk when the pedestrian is upon the half of the roadway upon which the vehicle is traveling, or when the pedestrian is approaching and is within one lane of the half of the roadway on which the vehicle is traveling or onto which it is turning. For the purposes of this subsection, 'half of the roadway' means all traffic lanes carrying traffic in one direction of travel.

(b) No pedestrian shall suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close that it is impractical for the driver to yield.

(c) Subsection (a) of this Code section shall not apply under the conditions stated in subsection (b) of Code Section 40-6-92.

(d) Whenever any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass such stopped vehicle.

40-6-92

(a) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right of way to all vehicles upon the roadway unless he has already, and under safe conditions, entered the roadway.

(b) Any pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided shall yield the right of way to all vehicles upon the roadway if he uses the roadway instead of such tunnel or crossing.

(c) Between adjacent intersections at which traffic-control signals are in operation, pedestrians shall not cross at any place except in a marked crosswalk.

(d) No pedestrian shall cross a roadway intersection diagonally unless authorized by official traffic-control devices. When authorized to cross diagonally, pedestrians shall cross only in accordance with the official traffic-control devices pertaining to such crossing movements.

40-6-93

Notwithstanding other provisions of this chapter, every driver of a vehicle shall exercise due care to avoid colliding with any pedestrian upon any roadway, shall give warning by sounding his horn when necessary, and shall exercise proper precautions upon observing any child or any obviously confused, incapacitated, or intoxicated person.

40-6-94

The driver of every vehicle shall yield the right of way to any blind pedestrian who is carrying a walking cane or stick white in color or white tipped with red or who is accompanied by a guide dog.

40-6-95

A person who is under the influence of intoxicating liquor or any drug to a degree which renders him a hazard shall not walk or be upon any roadway or the shoulder of any roadway. Violation of this Code section is a misdemeanor and is punishable upon conviction by a fine not to exceed \$500.00.

40-6-96

(a) Where a sidewalk is provided, it shall be unlawful for any pedestrian to walk along and upon an adjacent roadway.

(b) Where a sidewalk is not provided but a shoulder is available, any pedestrian walking along and upon a highway shall walk only on the shoulder, as far as practicable from the edge of the roadway.

(c) Where neither a sidewalk nor a shoulder is available, any pedestrian walking along and upon a highway shall walk as near as practicable to an outside edge of the roadway, and, if on a two-lane roadway, shall walk only on the left side of the roadway.

(d) Except as otherwise provided in this chapter, any pedestrian upon a roadway shall yield the right of way to all vehicles upon the roadway.

(e) No pedestrian shall enter or remain upon any bridge or approach thereto beyond the bridge signal, gate, or barrier after a bridge operation signal indication has been given.

(f) No pedestrian shall pass through, around, over, or under any crossing gate or barrier at a railroad grade crossing or bridge while such gate or barrier is closed or is being opened or closed.

40-6-97

(a) No person shall stand in a roadway for the purpose of soliciting a ride.

(b) Except as provided in Code Section 40-6-97.1, no person shall stand on a highway for the purpose of soliciting employment, business, or contributions from the occupant of any vehicle.

(c) No person shall stand on or in proximity to a street or highway for the purpose of soliciting the watching or guarding of any vehicle while parked or about to be parked on a street or highway.

40-6-97.1

Municipal or county governments are authorized to adopt ordinances for the issuance of permits for the solicitation of contributions on streets and highways within the geographic jurisdiction of such governments to charitable organizations registered in accordance with Code Section 43-17-5 and to

charitable organizations exempt from such registration in accordance with Code Section 43-17-9.

40-6-98

No vehicle shall at any time be driven through or within a safety zone.

40-6-99

(a) Upon the immediate approach of an authorized emergency vehicle making use of an audible signal meeting the requirements of Code Section 40-8-94, and visual and audible signals meeting the requirements of Code Section 40-6-6 or a vehicle belonging to a federal, state, or local law enforcement agency making use of visual and audible signals meeting the requirements of Code Section 40-6-6, every pedestrian shall yield the right of way to the authorized emergency vehicle or law enforcement vehicle.

(b) This Code section shall not operate to relieve the driver of an authorized emergency vehicle from the duty to drive with due regard for the safety of all persons using the highway nor from the duty to exercise due care to avoid colliding with any pedestrian.

Southern Crescent Regional Plan

The Southern Crescent Regional Plan is a document which identifies developmental opportunities and constraints for a ten-county area of which the Chattahoochee-Flint area is included. The Technical Staff Report identifies and maps areas within the region that need growth management, are major transportation corridors, are rural and economically disadvantaged, or are environmentally and culturally sensitive. The Work Program for the plan seeks the conversion of several abandoned railways into multi-use trails. The plan also supports tourism as a means to provide economic benefits to the depressed rural areas while at the same time preserving the area's cultural and natural resources.

Southern Crescent Regional Greenspace Plan

During 2002, a joint effort was undertaken to map opportunities for greenspace preservation and to educate the local government officials and resident citizens about the means available for preserving open space. The toolkit developed in the process will benefit those local governments seeking to acquire, preserve and maintain open space networks within their respective communities. The project was a joint venture of the Chattahoochee-Flint and McIntosh Trail Regional Development Centers, the Regional Advisory Council and the Georgia Department of Community Affairs, with funding provided by the Urban and Community Forestry Program of the Georgia Forestry Commission.

Transportation Plans

CFRDC Regional Transportation Priorities

For the past three years, the Chattahoochee-Flint RDC staff and the organization's member governments have identified regionally significant transportation projects and promoted these projects with area legislators and with the GDOT Board members. Thus far, no non-motorized have been recognized as regionally significant in this process.

Troup County

In the early 1990's, Troup County and the City of LaGrange participated in a joint transportation study of that County. The emphasis in the plan was on vehicular transportation, however, so no non-motorized routes were identified as a result of the effort. An effort is underway to update this plan, which will hopefully also include some consideration of pedestrian and bicycle modes of travel.

Local Comprehensive Plans and Regulatory Controls

Table 3 indicates the status of bicycle and pedestrian plans and regulatory requirements within the Chattahoochee-Flint region. The survey, taken in March 2004, indicates a wide range of planning and regulatory treatment of pedestrian and bicycle facilities exists within the region.

Table 3 – Survey of Chattahoochee-Flint Member Governments, Spring 2004

Member Government	Any Bike or Pedestrian Plan?	Are Sidewalks required in new developments?	Is there an on-going bicycle or sidewalk maintenance/expansion program?	Contact Person Name & Telephone Number
Carroll County	Not in county. Chatt Hill Country	No	No	Amy Goolsby 770.830.5861 x355
Bowdon	No	Yes	No	Stacy Folds 770.258.8980
Carrollton	Part of Greenspace plan	Yes	No	Tracy Dunnivant 770.830.2000
Mount Zion	Yes	No	No	Teresa Ferguson 770.832.1622
Roopville	No Answer			
Temple	No	Yes	No	Pat Cook 770.562.3369
Villa Rica	Yes in 2 years	No	Yes	Jane Chastain 678.785.1002
Whitesburg	No	No	No	Kay Johnson 770.832.6692
Coweta County	Bike Plan & Chatt Hill Country	No	No	Sandra Parker 770.254.2606
Grantville	Yes	Yes	Yes	Doug Bennett 770.583.2289
Haralson	No	No	No	Janice Camp 770.599.3985
Moreland	No	Yes	Yes	Jimmy Hayes 770.251.3428
Newnan	Part of County plan	Yes	Yes	Cletus Phillips 770.254.2354
Senoia	Yes	No	Yes	Murray McAfee 770.599.3679
Sharpsburg	Long Range	Yes	Yes	Wendell Staley 770.252.4521
Turin	No	No	Yes	Paulette Brown 770.599.0777

Member Government	Any Bike or Pedestrian Plan?	Are Sidewalks required in new developments?	Is there an on-going bicycle or sidewalk maintenance/expansion program?	Contact Person Name & Telephone Number
Heard County	Chattahoochee Greenway plan Frolona Loop study underway	No	No	Donna Lackey 706.675.0560
Centralhatchee	No	Not Sure	No	Marcia Gann – 770.854.5801
Ephesus	No	No	No	Linda Yearwood 770.854.8616
Franklin	Franklin Greenway	No	Yes	Myra Braswell 706.675.6623
Meriwether County	Meriwether-Pike Scenic Byway	No	No	Ron Garrett 706.672.4714
Gay	No	No	No	Sharon Richmond 706.538.6097
Greenville	No	Not Sure	No	Johnnie Owens 706.672.1216
Lone Oak	Left Message			
Luthersville	No	Yes	No	Cynthia Moore 770.927.6885
Manchester	No	Not Sure	Yes	Kathy Storey 706.846.3141
Warm Springs	No	Yes	No	Richard Owens 706.655.9096
Woodbury	No	Yes	No	Angel Fowler 706.553.2011
Troup County	Grant Applied For	No	Yes	Mike Dobbs 706.883.1610
Hogansville	No	Yes	No	Dianne Carter 706.637.8629
LaGrange	No	Yes (Depends On Zoning)	No	Lee Newman 706.883.2060 or 2056
West Point	TPL Property proposal	No	No	Joel Wood 706.645.3520

Note: The following communities received FY 2004 TE funding from Georgia Department of Transportation for projects with bicycling or pedestrian components: Heard County, Hogansville, Manchester, Sharpsburg, Troup County, and West Point.

Local Open Space and Recreation Plans

At least one local government within each county in the Chattahoochee-Flint region has recognized the importance of open space for the quality of life of its citizens and environment. The following Open Space and Recreation plans are recognized in the development of the Chattahoochee-Flint Regional Bicycle and Pedestrian Plan:

Heard County Greenway Corridor Master Plan 2001

This ambitious effort seeks to establish a greenway along the entire length of the Chattahoochee River as it courses through Heard County. The first phase of this route was opened to the public in 2004. In combination with the Franklin Greenway, there are now almost two miles of paved, ADA-accessible multi-use path open to public use.

Carroll County Joint Greenspace Plan (Carroll County, Carrollton, Bowdon, Roopville, Villa Rica and Whitesburg) 2004

The participating local governments intend to acquire greenspace for the purpose of improving quality of life through provisions of passive recreation areas and providing alternative transportation (including greenway connections to connect residential areas).

Carroll County Passive Recreation Master Plan, Request for Proposals Issued December 2004

Carroll County is seeking proposals to do a master plan for four 150-acre tracts that are to be established as open space and passive recreation areas for the community. These tracts include land at McIntosh Park, Blackjack Mountain, the Folds House, and Sharps Creek.

Passive Recreation and Greenspace Strategy for Troup County 2004

Conducted in 2003/2004, the plan inventoried existing facilities, surveyed citizens, and looked for opportunities to improve and expand passive recreation programs and facilities within the County. The user survey discussed in the Existing Conditions Section indicates there is an interest in passive recreation, particularly walking and biking trails among Troup County Parks and Recreation Department (TCPRD) facility users. Furthermore as described above, there are several opportunities to expand walking and biking trails on or adjacent to TCPRD facilities.

Chattahoochee Hill Country/PATH Foundation Trail Master Plan 2003 (Carroll, Coweta counties)

The Path Foundation, working with residents of an area known as the Chattahoochee Hill Country, representatives of Coweta, Carroll, Fulton and Douglas county governments, local landowners and outdoor enthusiasts, completed the Chattahoochee Hill Country Regional Greenway Trail Master Plan in September of 2003. The four county governments jointly funded the master

plan to determine if a four-county recreational trail system could be designed connecting existing greenspaces. The proposal envisions a non-motorized transportation system that focuses upon the Chattahoochee River corridor as it passes beside and through Fulton, Douglas, Carroll and Coweta counties. The proposal includes the conversion of the existing Highway 16 bridge that crosses the Chattahoochee River between Carroll and Coweta counties to strictly non-motorized access, once the DOT has completed and opened the new Highway 16 bridge to vehicular traffic. This would provide safe and secure access to the trail leading to Whitesburg, McIntosh Reserve and Chattahoochee Bend State Park. The non-motorized multi-use trail system is designed to minimize impact to the landscape and maximize the rural experience (PATH Foundation Trail Master Plan).

Meriwether-Pike Scenic Byway (initiative underway 2004)

A committee of volunteers has been working to establish a Scenic Byway that will also have multi-use trail possibilities along portions of an abandoned railway. The route would connect the Gay, Concord, Molena, Woodbury, Manchester and Warm Springs communities in Meriwether and Pike counties.

Better Hometown and Main Street Communities

In general, those communities designated as Better Hometown and Main Street communities seek to foster a quality of life experience within their downtown commercial areas. This generally entails strong support for a pedestrian environment that accommodates people of all ages regardless of handicap. These communities within the Chattahoochee-Flint region were designated Better Hometown or Main Street communities by the Georgia Department of Community Affairs in the year noted:

Carrollton (Main Street) 1985

LaGrange (Main Street) 1994

Manchester (Better Hometown) 1997

Newnan (Main Street) 1986

West Point (Better Hometown) 2001

West Carrollton Quality Growth Resource Team Report June 2003

In June of 2003, the West Carrollton area was visited by a Quality Growth Resource Team sponsored in part by the Georgia Department of Community Affairs. This team of diverse experts recommended several action steps to be taken to improve the community and its opportunities to relate to the surrounding neighborhoods and activity centers, including Downtown Carrollton and the State University of West Georgia. Among these action steps is the development of improved pedestrian corridors along Alabama and Maple Streets as well as within the immediate neighborhood.

Existing Education Programs and Efforts

Education programs are irregularly produced within the five county region. The only known annual event is the effort undertaken by the Carrollton Optimist organization in conjunction with that City's Mayfest celebration. Children up to age 13 are provided an opportunity to participate in safety checks and evaluated on their riding skills as they traverse an obstacle course.

¹ Pedestrian and Bicycle Information Center <http://www.bicyclinginfo.org/bc/index.htm>

² Governor's Office of Highway Safety 2001 Fact Sheet. State of Georgia.

³ Thompson, R.S., Rivara, F.P. and Thompson, D.C. 1989. A case-control study of the effectiveness of bicycle safety helmets. *New England Journal of Medicine* 320:1361-67.

⁴ Rodgers, G.B. 2002. Effects of state helmet laws on bicycle helmet use by children and adolescents. *Injury Prevention* 8:42-46.

⁵ Pedestrian and Bicycle Information Center <http://www.bicyclinginfo.org/bc/index.htm>

⁶ Governor's Office of Highway Safety 2001 Fact Sheet. State of Georgia.

⁷ Insurance Institute for Highway Safety,
http://www.hwysafety.org/safety_facts/fatality_facts/peds.htm

⁸ Pedestrian and Bicycle Information Center <http://www.bicyclinginfo.org/bc/index.htm>

⁹ Federal Highway Administration. National Bicycling and Walking Study: Five Year Status Report by the U.S. Department of Transportation. 1999. U.S. Government Printing Office.
<http://www.fhwa.dot.gov/environment/bikeped/study.htm>

¹⁰ Federal Highway Administration. Research and Guidance report: Designing Sidewalks and Trails for Access, Parts 1 and II. 2001. U.S. Government Printing Office.
<http://www.fhwa.dot.gov/environment/bikeped/tranmemo.htm>.

¹¹ Governor's Office of Highway Safety. <http://www.gohs.state.ga.us/main.html>

¹² Governor's Office of Highway Safety. <http://www.gohs.state.ga.us/main.html>

V. Existing Facilities Analysis and Needs Assessment

Bicycle Facilities

Users defined

It has long been recognized that cyclists have different degrees of ability based upon their age and experience (AASHTO Guide for the Development of Bicycle Facilities, 1991). The design of bicycle facilities should take into account the particular abilities of the users. In 1994, the Federal Highway Administration classified bicyclists into three distinct categories to aid in the design of bicycle facilities¹:



Group A – Advanced Bicyclist

Experienced riders who can operate under most traffic conditions. These riders are best served by direct access to destinations usually by way of the existing street and highway systems. These riders seek opportunities to operate at maximum speed with minimal delays and interference from other modes of travel, which means having sufficient room to avoid the need to change lanes when passing or being passed by another cyclist or vehicle. Shared use paths, bike lanes, and shared roadways are typically suitable facilities for such riders.

Group B – Basic Bicyclist

These are casual or new adult and teenage riders who are less confident of their ability to operate in traffic without provisions for bicycles. The basic bicyclist prefers comfortable access to destinations, preferably by a direct route, using either low-speed, low traffic volume streets or designated bicycle facilities such as shared use paths.

Group C – Children

This classification of rider includes pre-teen riders whose roadway use is initially monitored by adults. Their preferred destinations include schools, recreation facilities, and local shopping nearby or adjacent to residential areas. The ideal facilities for these riders are low volume residential streets with low motor vehicle speeds and designated, well-marked shared use paths.

Definition of Bicycle Facilities

In Georgia, as in most of the United States, bicycles are legally classified as vehicles and are legally allowed on most public roads, with the exception of Interstate Highways and many toll roads. Roadways must be designed to allow bicyclists to ride in a manner consistent with the vehicle code.

There are several different approaches used to provide bicycle transportation routes. The approach taken is based upon a number of considerations such as amount of anticipated use and the abilities of cyclists and pedestrians, the amount and type of vehicle traffic on the road, and whether there are any physical and/or fiscal limitations. The following describes the approach used by the Oregon Department of Transportation² and reflects the commonly used approaches and standards concerning bicycle facilities in this country:

Shared Roadways

There are no specific bicycle standards for most shared roadways; they are simply the roads as constructed. Shared roadways function well on local streets and minor collectors, and on low-volume rural roads and highways. Mile per mile, shared roadways are the most common bikeway type.



Figure 10: Shared roadway

Shared roadways are suitable in urban areas on streets with low speeds - 40 km/h (25 MPH) or less - or low traffic volumes (3,000 ADT or less, depending on speed and land use).

In rural areas, the suitability of a shared roadway decreases as traffic speeds and volumes increase, especially on roads with poor sight distance. Where bicycle use or demand is potentially high, roads should be widened to include shoulder bikeways where the travel speeds and volumes are high.

Many urban local streets carry excessive traffic volumes at speeds higher than they were designed to carry. These can function as shared roadways if traffic speeds and volumes are reduced. There are many

"traffic calming" techniques that can make these streets more amenable to bicycling on the road (see page 159 for more discussion of traffic calming and its effect on bicycling and walking).

Wide Curb Lanes

A wide curb lane may be provided where there is inadequate width to provide the required bike lanes or shoulder bikeways. This may occur on retrofit projects where there are severe physical constraints, and all other options have been pursued, such as removing parking or narrowing travel lanes. Wide curb lanes are not particularly attractive to most cyclists; they simply allow a motor vehicle to pass cyclists within a travel lane.

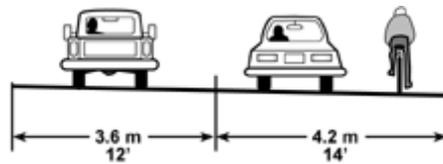


Figure 11: Wide curb lane

To be effective, a wide lane must be at least 4.2 m (14 ft) wide, but less than 4.8 m (16 ft). Usable width is normally measured from curb face to the center of the lane stripe, but adjustments need to be made for drainage grates, parking and the ridge between the pavement and gutter. Widths greater than 4.8 m (16 ft) encourage the undesirable operation of two motor vehicles in one lane. In this situation, a bike lane or shoulder bikeway should be striped.

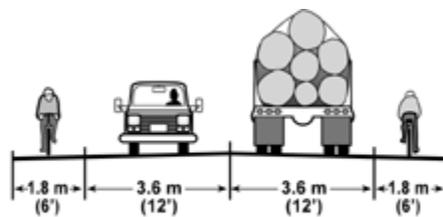
Shoulder Bikeways

Paved shoulders are provided on rural highways for a variety of safety, operational and maintenance reasons:

- ❖ Space is provided for motorists to stop out of traffic in case of mechanical difficulty, a flat tire or other emergency;
- ❖ Space is provided to escape potential crashes;
- ❖ Sight distance is improved in cut sections;
- ❖ Highway capacity is improved;
- ❖ Space is provided for maintenance operations such as snow removal and storage;
- ❖ Lateral clearance is provided for signs and guardrail;
- ❖ Storm water can be discharged farther from the pavement; and
- ❖ Structural support is given to the pavement.

	ADT under 250	ADT 250-400	ADT 400- DHV* 100	DHV 100-200	DHV 200-400	DHV over 400
Rural Arterials	1.2 m (4 ft)	1.2 m (4 ft)	1.8 m (6 ft)	1.8 m (6 ft)	2.4 m (8 ft)	2.4 m (8 ft)
Rural Collectors	0.6 m (2 ft)	0.6 m (2 ft)	1.2 m (4 ft)	1.8 m (6 ft)	2.4 m (8 ft)	2.4 m (8 ft)
Rural Local Route	0.6 m (2 ft)	0.6 m (2 ft)	1.2 m (4 ft)	1.8 m (6 ft)	1.8 m (6 ft)	2.4 m (8 ft)

*DHV (Design Hour Volume) is the expected traffic volume in the peak design hour (usually at commuter times); usually about 10% of ADT in urban areas, higher on rural highways with high recreational use (beach access, ski resorts, etc.)



Min: 3.5 m (5') against curb, parking or guardrail, 1.2 m (4') open shoulder

Figure 12: Shoulder bikeway

Width Standards

In general, the shoulder widths recommended for rural highways in the ODOT Highway Design Manual serve bicyclists well. The above table should be used when determining roadway shoulder widths.

When providing shoulders for bicycle use, a width of 1.8 m (6 ft) is recommended. This allows a cyclist to ride far enough from the edge of pavement to avoid debris, yet far enough from passing vehicles to avoid conflicts. If there are physical width limitations, a minimum 1.2 m (4-ft) shoulder may be used. Shoulders against a curb face, guardrail or other roadside barriers must have a 1.5 m (5-ft) minimum width or 1.2 m (4 ft) from the longitudinal joint between a monolithic curb and gutter and the edge of travel lane.

On steep grades, it is desirable to maintain a 1.8 m (6-ft), (min. 1.5 m [5-ft]) shoulder, as cyclists need more space for maneuvering.

Note: many rural roads are 8.4 m (28 ft) wide, with fog lines striped at 3.3 m (11 ft) from centerline. The remaining 0.9 m (3 ft) should not be considered a shoulder bikeway (min. width 1.2 m {4 ft}); these are still considered shared roadways, as most cyclists will ride on or near the fog line.

Pavement Design

Many existing gravel shoulders have sufficient width and base to support shoulder bikeways. Minor excavation and the addition of 75-100 mm (3-4") of asphalt concrete is often enough to provide shoulder bikeways. It is best to widen shoulders in conjunction with pavement overlays for several reasons:

- ❖ The top lift of asphalt adds structural strength;
- ❖ The final lift provides a smooth, seamless joint;
- ❖ The cost is less, as greater quantities of materials will be purchased; and
- ❖ Traffic is disrupted only once for both operations.

When shoulders are provided as part of new road construction, the pavement structural design should be the same as that of the roadway.

On shoulder widening projects, there may be some opportunities to reduce costs by building to a lesser thickness. 50-100 mm (2-4") of asphalt and 50-75 mm (2-3") of aggregate over existing roadway shoulders may be adequate if the following conditions are met:

- ❖ There are no planned widening projects for the road section in the foreseeable future;
- ❖ The existing shoulder area and roadbed are stable and there is adequate drainage or adequate drainage can be provided without major excavation and grading work;
- ❖ The existing travel lanes have adequate width and are in stable condition;
- ❖ The horizontal curvature is not excessive, so that the wheels of large vehicles do not track onto the shoulder area (on roads that have generally good horizontal alignment, it may be feasible to build only the inside of curves to full depth); and
- ❖ The existing and projected ADT and heavy truck traffic is not considered excessive (e.g. under 10%).

The thickness of pavement and base material will depend upon local conditions, and engineering judgment should be used. If there are short sections where the travel lanes must be reconstructed or widened, these areas should be constructed to normal full-depth standards.

The Joint between the Shoulders and the Existing Roadway

The following techniques should be used to add paved shoulders to roadways where no overlay project is scheduled:

1. **Saw Cut:** A saw-cut 0.3 m (1 ft.) inside the existing edge of pavement provides the opportunity to construct a good tight joint. This eliminates a ragged joint at the edge of the existing pavement.

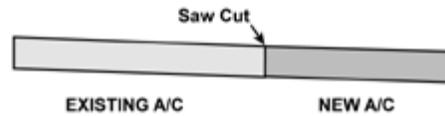


Figure 13: Saw-cut joint

2. **Feathering:** "Feathering" the new asphalt onto the existing pavement can work if a fine mix is used and the feather does not extend across the area traveled by bicyclists.

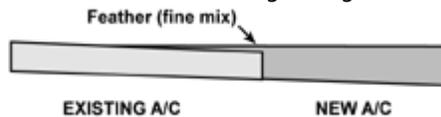


Figure 14: Asphalt feathering

3. **Grinder:** Where there is already some shoulder width and thickness available, a pavement grinder can be used to make a clean cut at the edge of travel lane, grade the existing asphalt to the right depth and cast aside the grindings in one operation, with these advantages:

- ❖ Less of the existing pavement is wasted;
- ❖ The existing asphalt acts as a base;
- ❖ There will not be a full-depth joint between the travel lane and the shoulder; and
- ❖ The grindings can be recycled as base for the widened portion.

New asphalt can then be laid across the entire width of the shoulder bikeway with no seams.

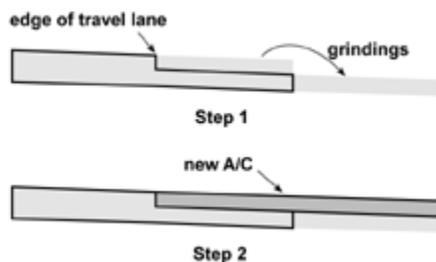


Figure 15: Grinding out existing A/C

Gravel Driveways and Approaches

Wherever a highway is constructed, widened or overlaid, all gravel driveways and approaches should be paved back 4.5 m (15 ft) to prevent loose gravel from spilling onto the shoulders.

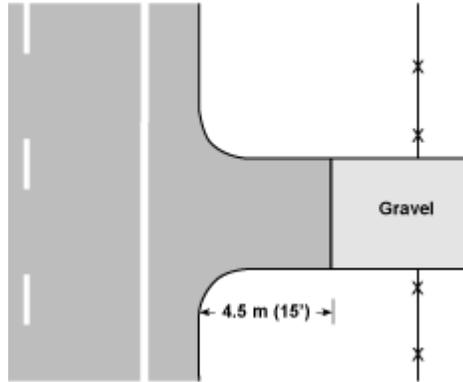


Figure 16: Paved driveway apron

Bike Lanes

Bike lanes are provided on urban arterial and major collector streets. Bike lanes may also be provided on rural roadways near urban areas, where there is high potential bicycle use.

Bike lanes are generally not recommended on rural highways with posted speeds of 90 km/h (55 MPH): at channelized intersections, the speeds are too high to place a through bike lane to the left of right-turning vehicles (see chapter 4, Intersection Design). Shoulder bikeways, striped with a 100 mm (4") fog line, are the appropriate facility for these roads.

Bike lanes are one-way facilities that carry bicycle traffic in the same direction as adjacent motor-vehicle traffic; bike lanes should always be provided on both sides of a two-way street.

Well-designed urban arterials should have paved shoulders. Bike lanes are created by using a 200 mm (8") stripe and stencils. Motorists are prohibited from using bike lanes for driving and parking, but may use them for emergency avoidance maneuvers or breakdowns.

Width Standards

The standard width of a bike lane is 1.8 m (6 ft), as measured from the center of stripe to the curb or edge of pavement. This width enables cyclists to ride far enough from the curb to avoid debris and

drainage grates, yet far enough from passing vehicles to avoid conflicts. By riding away from the curb, cyclists are more visible to motorists than when hugging the curb.

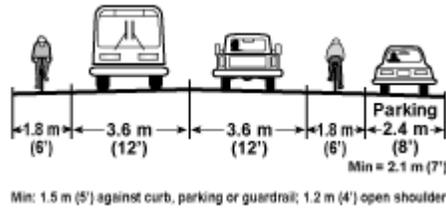


Figure 17: Bike lane standards

The minimum bike lane width is 1.2 m (4 ft) on open shoulders and 1.5 m (5 ft) from the face of a curb, guardrail or parked cars. A clear riding zone of 1.2 m (4 ft) is desirable if there is a longitudinal joint between asphalt pavement and the gutter section. On roadways with flat grades, it may be preferable to integrate the bike lane and gutter to avoid a longitudinal joint in the bike lane.

Bike lanes wider than 1.8 m (6 ft) may be desirable in areas of very high use, on high-speed facilities where wider shoulders are warranted, or where they are shared with pedestrians. Care must be taken so they are not mistaken for a motor vehicle lane or parking area, with adequate marking or signing.

A bike lane must always be marked with pavement stencils and a 200 mm (8") wide stripe. This width increases the visual separation of a motor vehicle lane and a bike lane. It is a legal requirement in Oregon (OAR 734-20-055). Refer to page 145 for bike lane marking standards. If parking is permitted, the bike lane must be placed between parking and the travel lane, and have a minimum width of 1.5 m (5 ft).

Bike Lanes on One-way Streets

Bike lanes on one-way streets should be on the right side of the roadway, except where a bike lane on the left decreases the number of conflicts (e.g., those caused by heavy bus traffic or dual right-turn lanes), if cyclists can safely and conveniently return to the right.

Bicycle Parking and Storage Facilities

Facilities designed for use by bicyclists to enable them to store their equipment while not in use. These facilities include bicycle racks, lockers, and in some cities include showers and leasing operations.

Existing Bicycle Facilities

Chattahoochee Greenway (City of Franklin)

The City of Franklin maintains a 1.1-mile concrete shared use path that winds along the Chattahoochee River. The facility presently connects the City's downtown area with Heard County Industrial Park and offices of the Chattahoochee-Flint Regional Development Center.

Heard County Greenway Phase One

This section of a proposed regional greenway consists of a 1.0 mile ADA-accessible multi-use trail along the Chattahoochee River and is located in the City of Franklin and Heard County. The project links adjacent residential and commercial communities with Torchbearers Park and Riverside Park facilities and the downtown core of the City of Franklin. The project cost is \$1.26 million.

Coweta County Bike Routes

A system of signed shared roadways designated by Coweta County for bicyclists. The system is oriented toward the recreational use of bicycles and was developed in 2002.

Planned Bicycle Facilities

State and Regional Facilities

State Bicycle Routes

5 - Chattahoochee Trace

The 408-mile long route begins at Lookout Mountain in northwest Georgia and ends at Lake Seminole in extreme southwest Georgia. The route crosses Carroll, Coweta and Meriwether counties in the Chattahoochee-Flint region. The route links the cities of Bremen, Carrollton, Whitesburg, Newnan, Grantville, Lone Oak, Greenville, and Warm Springs within the CFRDC region.

15 - Central

This 327 mile route traverses the State from the City of Acworth in Cobb County outside of Atlanta to Florida. Only 2.8 miles of the route crosses the CFRDC region at the very northeast corner of Coweta County.

45 - Little White House

This 124-mile route begins in Atlanta and runs in a southerly direction to Ellerslie in Harris County. Portions of the route traverse Coweta and

Meriwether counties. The route links the cities of Senoia, Woodbury and Warm Springs within the CFRDC region.

In total, there are 118 miles of state bicycle route located within the CFRDC region.

Scenic Corridors

Chattahoochee-Flint Heritage Highway

The 155-mile route traverses four west central Georgia counties – Coweta, Troup, Meriwether and Harris. The route seeks to highlight the recreational, cultural and historic aspects of the region and bring tourism expenditures to the local economies. The route connects area courthouses, recreational resources such as West Point Lake, the Chattahoochee River and Callaway Gardens, historic sites such as the Little White House, and area museums such as the Male Academy in Newnan and the Chattahoochee Valley Art Museum in LaGrange. A bicycle route brochure supports this route which was developed and paid for through the use of Transportation Enhancement funding from the Georgia Department of Transportation. Scenic Byway designation is being discussed for this route.

Meriwether-Pike Scenic Byway

The proposed route begins and ends in Warm Springs and ties in the communities of Gay, Molena, Woodbury and Manchester. Along the route lie the Little White House (residence of President Franklin Roosevelt), a National Fish Hatchery, historic church buildings, a grist mill, and a nearby covered bridge designed by former slave Horace King.

State Parks

Chattahoochee Bend State Park

The State of Georgia has acquired approximately 3,000 acres along the Chattahoochee River in northwest Coweta County for the eventual development of a state park to named the Chattahoochee Bend State Park. As yet there are no development plans in place to determine the extent of multi-use and pedestrian trails to be established on the property.

Local Government Facilities

Browns Mill Battlefield (Coweta County)

The Battle of Browns Mill is a significant Civil War Battle that occurred in Coweta County during the Atlanta Campaign. Coweta County recently purchased a 104-acre tract that covers the area of the battle's most intense fighting. This purchase was made possible by funding through the Georgia Community Greenspace Program. The 104-acre tract, located two miles southwest of the Coweta County seat of Newnan, is slated for development as a public passive-recreation area. The Master Plan calls for 2.4 total miles of interpretive trails on the site.

Lower Fayetteville Road Bike/Pedestrian Path (Coweta County)

This trail will extend from Lower Fayetteville Road to Lora Smith Road and connect 435 residential units with two schools. The shared use path is planned to be eight feet in width and will extend for 20,000 lf. The approximate project cost is \$2.26 million.

Senoia Multi-Use Trail (Coweta County)

The multi-use trail is to be 1.1 miles long and provides connectivity to major destinations within the City of Senoia, accesses the Little White House Statewide Bicycle Route (# 45), and provides for safe and convenient pedestrian and bicycle use. The multi-use trail provides access to downtown shopping, two recreational facilities, a senior center, city government offices and the library. The project is funded through GDOT Congestion Mitigation/Air Quality funding because it will help achieve air quality standards for Coweta County and the metropolitan Atlanta area by reducing the reliance of area residents upon the automobile. The projected cost of the project is \$454,628.

Youngs Mill Bicycle Route (Troup County)

This 3700' project includes the construction of a non-motorized bike and pedestrian trail across Young's Mill Bridge, which will be refurbished with lighting and landscaping along the trail corridor. The trail connects a major Troup County road with several residential subdivisions. The project cost is \$270,600.

Inter-city and Recreational Routes

In accordance with the goals and objectives of the Chattahoochee-Flint Regional Bicycle and Pedestrian Plan, a connected system of routes is being proposed. These routes augment and support the State Bicycle Routes and the proposed Scenic Byways, but also provide inter-city connectivity and address the extensive recreational riding needs that

exist within the region. A road segment may have more than one route type depending upon its relationship to the entire network. Thus, recreational routes may, and often do, traverse segments of roadway that are designated as State Routes, Regional Routes or Inter-City Routes. These routes were mapped using input from PAC members, data from existing sponsored rides within the region, and the information provided by the bicycle routes analysis of the Multi-Modal Transportation Planning Tool developed jointly by GDOT and Georgia Tech.

Table 4 lays out the mileage of existing and proposed bicycle routes by type of bicycle route and by county:

Table 4. Bicycle Route Mileage by County and Totals

County	State Route	Regional Routes / Scenic Byways	Inter-City Routes	Recreational Routes
Carroll	23.7	N/A	146.4	141.2
Coweta	55.0	42.9	112.8	113.9
Heard	N/A	N/A	71.6	14.4
Meriwether	39.4	74.5	122.9	7.6
Troup	N/A	63.6	76.5	76.8
TOTALS	118.1	181.0	530.1	353.9

Pedestrian Facilities

Pedestrian Needs Defined

Pedestrian needs are based upon the age of the participant, the purpose of the trip, and the terrain over which the trip is made. "Pedestrian needs are diverse, but one thing remains the same—pedestrians need a safe, interesting, and inviting environment."³ In general,



pedestrians need the following: safe streets and walking areas, convenience, access to nearby places to walk, visibility, comfort and shelter along the way, an attractive and clean environment, access to transit where it exists, visual appeal along the route, and opportunities for social interaction. Acceptable walking distances vary based upon the nature of the trip. Planners strive to place community facilities, parks and other popular destinations for recreational trips within ¼

mile from the origin of most pedestrian travel. Site designers try to place parking within 300 feet of building entrances for commuters and shoppers. Commuters will walk ½ mile to a train or light rail station. The desirable width of a path or sidewalk that allows two people to walk together or to pass each other comfortably is six feet. A “spatial bubble” is needed by pedestrians to feel safe when walking. This is an unobstructed area ahead of the person whose length varies dependent upon the nature of the trip. The distance ahead varies from a low of six feet at a public event to a distance of up to 35 feet for those taking pleasure walks. This factor is an important one to consider when determining the visual quality of a route for pedestrians.

Users Defined

Studies⁴ have divided the pedestrian into one of four groups to aid in the design of facilities. These four groups are as follows:

Children

Ages 0-18 years, this group is prone to dash out in front of oncoming traffic. Well-marked routes and clear visibility of adjacent vehicular traffic are key design considerations for routes used by this group. “Safe Routes to Schools” is a federal initiative geared to meeting the needs of this population segment.

Adults

The least vulnerable of the pedestrian groups, key design considerations are access and distance between points of interest, comfort and safety along the route, and visual appeal of the route.

Senior Adults

Research shows that people over the age of 60 walk more as a group than any other age classification. Design considerations for older adults include the following:

- ❖ Reducing roadway crossing distances
- ❖ Increasing signal timing to allow for slower walking speeds.
- ❖ Clear signals and easy to read signs along the route
- ❖ The existence of a ‘safe harbor’, or refuge area, along the route of a roadway crossing to allow a senior adult to pause as they cross busy multi-lane thoroughfares
- ❖ Use of traffic calming techniques to slow down approaching vehicles
- ❖ Adequate shelter and shade along the route
- ❖ Presence of handrails
- ❖ Smooth walking surfaces and longer clear zones to aid feelings of comfort and safety

People with Disabilities

People with disabilities need facilities that focus on eliminating barriers. Given the lower stamina and mobility of these individuals, the following design features are considered helpful:

- ❖ Curb cuts and ramps
- ❖ Tactile (changes that can be felt) warning devices such as raised concrete and embossed symbols on elevator and signal buttons
- ❖ Easy-to-reach buttons to activate signals or elevators
- ❖ Audible warnings and message systems
- ❖ Raised and Braille letters for communication
- ❖ Signal timing that uses lower than average walking speeds to determine intervals between signal changes
- ❖ Maximum grades of 1:20 with cross slopes of 1:50
- ❖ The presence of safe harbors, or refuge areas, along the pedestrian route crossing wide roadways
- ❖ Reduced roadway crossing distances
- ❖ Traffic calming measures
- ❖ Availability of handrails
- ❖ Smooth walking surfaces and longer clear zones to aid feelings of comfort and safety

On the issue of signal timing, GDOT currently uses a measure of four feet/second to time their pedestrian signals. Many advocates of the elderly and disabled are suggesting that the use of three feet/second at timed crosswalks would better suit the elderly and disabled segments of the population.

Definition of Pedestrian Facilities

Shared Use Path

A facility physically separated from motor vehicle traffic by an open space or barrier and either within the roadway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, joggers, skaters, wheelchair users and other non-motorized modes of travel. Shared use paths are appropriate in corridors not well served by the street system (if there are few intersecting roadways), to create short cuts that link destination and origin points, and as elements of a community trail plan. For purposes of organization, these facilities are discussed above in the bicycle section.

Sidewalks

The portion of a street or highway right-of-way designed for preferential or exclusive use by pedestrians.

Off-Road Path

Paths not surfaced with asphalt or Portland cement concrete and located away from road rights-of-way.

Existing Pedestrian Facilities

Table 5 establishes the mileage of pedestrian facilities found within each county. The information was gained through field collection and a survey of the local governments themselves. Following the table, there is some narrative explanation about what was found in each jurisdiction.

Table 5: Existing Pedestrian Mileage by County

COUNTY	SIDEWALK	OFF-ROAD PATH
Carroll	66.0	30.3
Coweta	112.0*	9.3
Heard	2.6	2.7
Meriwether	35.4	1.9
Troup	101.2	13.8
TOTAL	317.2	58.0

*estimated

Existing Sidewalks

The sidewalk facilities were in large part mapped in FY 2004 using funding from the Georgia Department of Transportation. Areas having sidewalks are shown on the mapping included in Appendix A.

Existing Off-Road Pedestrian Facilities

The off-road facilities presently available to the region's residents are discussed below and are listed by county. Mapping of these facilities is included in Appendix A.

Local Government Facilities

City of Bowdon Walking Path (Carroll County)

The City maintains a ¼ mile path at its recreation offices and adjacent to the Copeland Hall community center.

City of Carrollton Nature Trail System (Carroll County)

The City maintains approximately nine miles of walking trails located at six sites throughout the city limits. Four of the sites (Lakeshore, Longview, Knox and Optimist parks) contain a short walking path of ¼ and ½ mile lengths. The East Carrollton trail system has approximately 4.0 miles of off-road trails. The State University of

West Georgia maintains a trail system of approximately 3.5 miles on its campus.

City of Mount Zion (Carroll County)

A ¼ mile track is maintained adjacent to the City's Community Building.

City of Villa Rica (Carroll County)

The City maintains one mile of off-road path within its city park.

City of Whitesburg (Carroll County)

The City maintains a three-quarter mile path in its city park.

John Tanner State Park (Carroll County)

This 138-acre facility hosts a variety of outdoor activities including one ¼ mile nature trail and a one mile loop trail around its two lakes.

McIntosh Reserve (Carroll County)

This 464-acre park lies on the Chattahoochee River in southeastern Carroll County. The site of a famous Indian uprising that became a part of the infamous Trail of Tears, the facility has 17 miles of hiking and equestrian trails as well as interpretive and picnic areas.

Shiloh Methodist Church (Carroll County)

The Church constructed a walking trail that includes a covered bridge and interpretive signage about the trees and shrubbery along the route. The trail is approximately ¾ mile in length.

City of Newnan (Coweta County)

The City maintains approximately 5.0 miles of walking paths within the city limits.

Coweta County Fairgrounds

The James E. McGuffey Nature Center maintains three interpretive trails that are each approximately one mile in length.

Town of Moreland (Coweta County)

The Town has a ¾ mile walking path.

Vernon Hunter Recreation Center Walking Path (Coweta County)

The Coweta County Recreation Department maintains a one-half mile walking path at this recreation facility.

Heard County

The County is actively developing a greenway that will eventually extend from the City of Franklin all the way to West Point Lake, a distance of over 20 miles. At present, the County has one mile constructed, with Phase II in the design and development stage. The route begins at the end of the Franklin trail and then goes further south to link two parks, Torchbearer's Park and the Riverside Recreation area. The route follows the course of the Chattahoochee River through Franklin and provides trail users with a separate grade crossing at U.S. Highway 27.



City of Centralhatchee (Heard County)

The City maintains a quarter-mile long walking path.

City of Ephesus (Heard County)

The City has a one-third mile path that winds through the school property.

City of Franklin (Heard County)

This City has an extensive network containing 1.1 miles of paved, ADA-accessible multi-use path that connects the Heard County Industrial Park at the north end of the City with the downtown commercial area.

City of Gay (Meriwether County)

The residents take advantage of a quarter-mile track built adjacent to a school in the community.

City of Manchester (Meriwether County)

The City maintains pedestrian trails around each of the two lake sites used for recreation. The approximate length of these trails is 1.4 miles total.

City of Woodbury (Meriwether County)

The City maintains a quarter-mile pedestrian trail at the school site.

Troup County Parks and Recreation Department

This County Department indicates that it maintains 2.8 miles of walking trail throughout its system of parks and associated school sites.

West Point Lake Nature Trails (Troup County)

The U.S. Army Corps of Engineers maintains approximately 11 miles of trails within the limits of its management area centered around West Point Lake.

Planned Pedestrian Facilities

Many local governments are actively planning for the construction of additional pedestrian facilities within their jurisdictions, some of which will serve a larger region or even the entire State.

State and Regional Facilities

Chattahoochee Riverwalk Regional Park (Troup/Harris Counties)

The Trust for Public Lands acquired a 178-acre, undeveloped forested tract situated on the Chattahoochee River within the city limits of West Point, Georgia. . The park site is situated approximately 3 miles downstream from West Point Lake, a 25,900-acre impoundment and dam created for hydroelectric power, flood control and recreation by the U.S. Army Corps of Engineers and approximately 2 miles upstream from the Georgia DOT Welcome Center at I-85. The park site is bordered by: U.S. Highway 29 and a residential property development to the southeast; a power line easement to the northeast; undeveloped wooded land to the north; a railroad and commercial properties to the south; and, the Chattahoochee River to the west.

The park site alone buffers nearly a mile of river frontage. The large park site will connect, via 7.2 miles of riverfront greenway (the proposed Chattahoochee River Riverwalk), an existing active recreation park and anchor a new city/county River Park with public boat launch, additional hiking trails and scenic overlooks. With additional planned acquisitions, the New River Park will extend approximately 5 miles along the Chattahoochee River from the Georgia DOT Welcome Center at I-85 and link to West Point Lake, a major 2,600 acre USCOE recreational resource with 11 miles of trails and over 500 miles of shoreline.

Local Government Facilities

Blackjack Mountain (Carroll County)

Carroll County acquired this 304-acre site for the purpose of developing a passive recreation area to serve the needs of its growing population. An RFP is currently being sought for the development of a master plan for this and other sites within Carroll County.

Carroll County Recreation Complex

A multi-purpose trail is planned for the site that could be built when the multi-purpose gym facility is constructed. No design for the multi-purpose path exists at present.

City of Carrollton greenbelt (Carroll County)

The City of Carrollton is creating a greenbelt that will encircle the City limits. When completed, the greenbelt will contain 13.8 miles of pathways and multi-use trail that will connect the greenway with residential areas, schools, government offices, and retail shopping.

City of Villa Rica Recreation Department (Carroll County)

The City is developing two new city parks and expects to have approximately 2.5 additional miles of pedestrian trails when the parks are finished. The majority of this new trail mileage will take place in the park being developed around the site of an old gold mine, one of the first in this country. In addition, there is a proposal to move City Hall to some vacant property more central to the historic downtown. If that happens, it is proposed to connect the Historic Downtown with the newer residential developments around Mirror Lake to the east with a greenway that will contain a multi-use path.

Folds House (Carroll County)

This 147-acre site has been purchased by Carroll County and will be developed as a passive recreation site for the community. The site served initially as a residence then as home to a local private school for approximately twenty years. A Conceptual Plan for the site seeks to restore the existing structures and to put in place pedestrian trails and picnic areas.

Sharps Creek (Carroll County)

Approximately 263 acres has been purchased on behalf of Carroll County as part of its on-going efforts to improve and protect the drinking water supplies within the Little Tallapoosa River watershed. The intent is to use the site as an environmental buffer and for passive recreation. An RFP is currently being sought for the development of a master plan for this and other sites within Carroll County.

South Mount Zion Recreation Complex (Carroll County)

The City seeks to develop a 28-acre site immediately adjacent to John Tanner State Park. The site will include approximately 3,000 lf. of footpath as well as two ball fields, a concessions area and restrooms, a playground, some picnic areas and open play space. The trail portion

is estimated to cost approximately \$6,500 in cash and in-kind services to construct.

City of Grantville Sidewalk Improvements (Coweta County)

The project will improve existing sidewalks and add new sidewalks, all of which will be ADA-accessible. The project will link the school with adjacent residential neighborhoods. The projected cost is \$80,000 and the total length of the project is 6,000 lf.

City of Sharpsburg Master Plan (Coweta County)

The City is undertaking an extensive effort to plan its growth over the next twenty years. Included within this effort is the planned imposition of greenspace requirements upon future developers. The City's goal is to have multi-use paths and trails within this greenspace that could eventually connect the City with the cities of Senoia and Peachtree City.

City of Sharpsburg Sidewalk and Streetscape Project (Coweta County)

The project will install sidewalks for the first time along Terrentine Road and Main Street in the heart of the town. Approximately 3,960 lf of concrete sidewalk, along with pedestrian crossings, period lighting, traffic calming measures and landscaping will be installed as a result of this \$390,000 project. The project will access the newly-designated Coweta County Bicycle Network as it traverses the City.

City of Franklin Downtown Multi-Use Trail Facilities and Streetscape

In addition to creating a Welcome Center from an historic building, the project will reconstruct all unimproved sidewalks along the north, south and east borders of the city square. The project will also improve the sidewalks within the downtown park. These improvements will afford maximum access to the downtown from the adjacent Chattahoochee Greenway. The total project cost, including construction of the sidewalks, is estimated to be \$311,502.

Heard County Greenway

A Master Plan for a 22-mile greenway along the Chattahoochee River has been developed and development guidelines adopted by Heard County. As envisioned, the full route will connect the City of Franklin with West Point Lake and provide opportunities for hiking and equestrian activities as well as bicycles in the more densely-settled reaches of the route. The total construction cost is estimated to be \$18.5 million, part of which was constructed as Phase One, listed above under Bicycle paths.

Wau-Tau Greenway Trail (Heard County)

This one mile, soft surface trail will parallel the existing Chattahoochee Greenway in Franklin, Georgia and provide a fishing pier/overlook. The project is funded through a grant by the Recreational Trails program and is currently in design phase.

Meriwether County Workforce Development Center site

The County is developing a variety of uses for vacant land located across from one of the school system's two high schools. Along with post-secondary training facilities and commercial and industrial uses, the County is making plans to put pedestrian paths on the site to tie in these new facilities with the surrounding land uses.

City of Luthersville (Meriwether County)

The City intends to develop a walking trail along with additional recreation facilities on a site within the City limits. A master recreation plan is now underway to help determine recreational needs for this community.

City of Manchester Downtown Streetscape (Meriwether County)

Streetscape improvements include installation of decorative sidewalks, benches and provisions for ADA-accessibility. The total estimated project cost is \$1.227 million.

Warm Springs City Office Expansion (Meriwether County)

The City intends to purchase additional properties located adjacent to its current site on the grounds of an abandoned school. With the additional acreage, the City intends to develop a short walking path of approximately one-quarter mile in length.

City of Hogansville Streetscape Project, Phase II (Troup County)

The project will install 3,850 lf of new concrete sidewalk and associated landscaping along the west side of US 29/SR 14. At a projected cost of \$305,000, the project provides pedestrian connectivity between the downtown commercial center, the city's only grocery store, and an adjacent residential subdivision.

West Point Pedestrian Enhancement Project (Troup County)

The project as originally designed would renovate 3,852 lf of existing sidewalk in the downtown commercial area, relocate all utilities underground, and add ADA-accessible ramps and appurtenances. The projected cost of these improvements is \$1.5 million.

Strengths, Weaknesses, Opportunities and Constraints Analysis

Issues Identified Through Surveys

CFRDC Regional Survey

A survey instrument was developed with input from the Chattahoochee-Flint RDC Bicycle and Pedestrian Plan Advisory Committee members. The survey questions were placed on an index card measuring 4"x 6". A thousand cards were printed which could be mailed back in response. These cards were distributed to all 32 local governments within the CFRDC region, every library in the five county region, and through area bicycle shops. In addition, the surveys were administered individually to guests attending the Taste of Newnan on April 22nd, the Carrollton Mayfest Celebration on May 1st, and West Point Lake Coalition 'Tour de Lake' event on May 15th. Over the ten-week collection period, 376 responses were received. Responses were received from residents of 8 Georgia counties, one Alabama county, and from other unspecified locations in Alabama and Georgia. Over 200 responses came from Carroll County respondents. The respondents were predominately middle-aged (defined as aged 19-65 by the survey). For the entire survey, the results indicate that easily the most severe impediment to walking and bicycle riding was the lack of facilities, followed by too much distance between destinations, too much traffic, and the participants' lack of time, in that order. Not surprisingly, upon closer examination, the responses gained in the more rural counties indicated that distance between destinations played as much a role in not doing more walking and cycling in their areas, as did the lack of facilities. Large percentages of those responding said that they do not now walk (31.8%) or ride bicycles (57.5%) on any regular basis.

TCPRC User Survey Results

During the month of May 2004, the Troup County Parks and Recreation Department conducted a user survey among volunteers participating in the programs at the Troup County Parks and Recreation Complex to determine level of interest in greenspace and passive recreation as well as satisfaction with current facilities and programs. Thirty-nine survey forms were completed. While not a true statistical sample, the following results do indicate a strong interest in greenspace protection and connective bike and walking trails:

The results of the survey are as follows:

Level of interest in the preservation of greenspace in Troup County:

Very Interested	32%
Moderately Interested	59%
Not Interested	8%
No Answer	5%

Estimated frequency of use for future bike and pedestrian trails linking parks, schools, libraries and other facilities:

Very Frequently	38%
Sometimes	51%
Rarely	11%
Never	%

When asked what type of passive recreation they would like offered in protected areas, users gave the following responses:

Walking Trails	64%
Horse Trails	32%
Bike Trails	68%
Wildlife Trails	32%
Bird Watching	24%
Nature Trails	46%

From the results of these two surveys, one can conclude that many more people in the region would ride or walk regularly if more facilities were available to them, particularly in the more urban reaches of the region.

Other Issues to Consider

It has been properly noted that, without adequate support infrastructure, dollars spent in the construction of bicycle and pedestrian facilities will fail to achieve the purpose of getting people to use alternate forms of transportation. The following discussion identifies elements that have to be addressed as part of the overall design of a bicycle and pedestrian network.

Issues Facing Cyclists

Drainage Grates and Utility Covers

Drainage grates are very hazardous to cyclists. The design of the grate raises two issues: the width and orientation of the bars; and the

edge formed between the pavement and the grate itself. The width of the bars often leaves a gap that is just wide enough to allow a bicycle tire to fit between them. When the grate is laid out with the bars parallel to the line of travel, the bicycle tire can get trapped and cause the cyclist to spill from the bicycle onto the pavement and in front of oncoming traffic. Secondly, if the grate is not level with the pavement, traversing the grate while traveling can result in a sudden jolt to the rider causing a temporary loss of control, or the rider will be forced to swerve into the lane of traffic in order to avoid the road hazard. For these reasons, the AASHTO and other bicycle facility design manuals call for grates to be installed perpendicular to the road's direction of travel and flush with the surrounding pavement. This problem is more intensive in the urban areas where grates are used to remove runoff from extensively paved surfaces.

Pavement Surface

A satisfactory pavement surface also provides incentives to ride more. Asphalt is the preferred road surface, followed by concrete and tar-and-gravel surfaces. Smoother riding surfaces reduce rider fatigue and make for a more enjoyable transportation experience. In addition, the pavement surfaces must be well-maintained. Potholes and roadside debris are difficult on automobiles, and very dangerous to cyclists because their presence forces the cyclist to veer around the obstacle and into the adjacent lane of oncoming travel.

Bridges

Bridges are of concern since these are often not designed with any additional width to accommodate non-motorized forms of travel. Cyclists and pedestrians are often forced to use the lanes devoted to vehicle travel in order to make it across the bridge structure. Designing bridge structures to accommodate pedestrians and cyclists can add substantially to the overall construction cost of such structures.

Lack of Bicycle Parking Facilities

It is important that both the departure and destination points for a bicycle trip have means available to store or park the bicycle. Ranging from simple bicycle racks to a full-fledged sheltered storage facility equipped with showers for the cyclists, these facilities serve a basic requirement of providing safe storage of the bicycle when not in use.

Lack of Signage

The traveling public needs directional signage to aid them in reaching their destination safely. Adequately marked routes not only aid the

cyclist but give the motorist notice that the roadway is shared by cyclists on a regular basis.

Connectivity

To be viable as a transportation mode, users of bicycles must be able to get *TO* a destination. This requires connectivity between destination points. The Planning Advisory Committee seeks to lay out a system that emphasizes connections to the State Bicycle Routes within the region, inter-city routes between municipalities, and recreational use, in that order.

A. State Bicycle Routes

There are approximately 118 miles of the State Bicycle Routes traversing the five-county region. Connections to these routes will allow cyclists to access the entire State of Georgia along routes that eventually will be signed and improved for the use of cyclists.

B. Inter-City Routes

The PAC feels strongly that inter-city routes need to be developed in order for it to become more feasible for area residents to consider using the bicycle as an alternate mode of travel to work or school. A system of these routes is laid out on the regional mapping that will provide access to each municipality within the region from at least one other municipality.

C. Regional Routes

Recognizing that recreational riding is the predominant reason for bicycle use, the PAC identified existing and potential routes for Scenic Byways within this plan as targets for improvements to aid the comfort and safety of cyclists.

Better education

Little to no emphasis is placed upon educating cyclists and motorists about the laws and proper riding techniques concerning bicycles. There is no program of education in the public schools, and the State Drivers' License Manual gives but a scant mention of the rights of cyclists to use of the state's roadways. As identified in the conduct of this plan, there are almost no on-going education programs to teach children about the safe use of bicycles on the streets and roads of this state.

Another target of education is the staff of the local governments themselves. After all, these are the people that maintain the area roadways, approve the design of new developments, and implement

plans for public facilities and improvements. The effective implementation of this plan relies upon making incremental improvements to the existing road network over time as resources permit. Without an educated public works/utilities/streets maintenance staff, many of these incremental improvements will not get made.

Issues Facing Pedestrians

Lack of Facilities/Incomplete Network

As evidenced by the recent effort to map all sidewalks within the five-county Chattahoochee-Flint region, the availability of sidewalks is not universal. Those that do exist often lack connectivity to desired locations.

Physical Obstacles

Maintenance of the existing sidewalks is a major issue, particularly for seniors and younger children, the two groups that are most likely to use such facilities. Without adequate maintenance the sidewalks become uneven due to encroachment of tree roots, poor management practices connected with utility repairs, and general wear. Included with maintenance of the actual sidewalk is management of the clear zones along the sides and above the sidewalk. Landscaping must be periodically pruned, signage must be carefully installed, and impediments such as fencing and mailboxes must be addressed.

Pedestrian Crossings

Pedestrian crossings are essential to safety of the pedestrian where their route intersects a roadway, railway or a natural impediment such as streams and rivers. These are often lacking or are not properly designed and marked. Another issue is the distance a pedestrian must travel to reach the other side. Longer distances, such as those found on four-lane highways or streets, need to be designed so that the exposure of the pedestrian to on-coming traffic is minimized, either through the provision of a pedestrian 'island' in the middle of the roadway or through adequate timing of the crossing signal to allow pedestrians to make it all the way across in a safe manner without unnecessary hardship. Yet another issue is the distance between crossings. The guidance available for sidewalk design states a number of criteria for determining the need for a mid-block crossing of a roadway. For example, mid-block crosswalks are often advisable when the distances between crossings at the ends of a block exceed 300 feet, or where there is a school present.⁵

Use of Sidewalks by Bicyclists, Skateboards, and Skates

It is not uncommon for sidewalks to be used by cyclists, especially those that are younger in age. Most parents prefer that their younger children use the sidewalks when riding their bikes. This causes conflicts with those people that are walking, as the cyclists can appear rather suddenly and without much noise to warn of their approach. For these reasons, many urban areas and central business districts will forbid the use of sidewalks by cyclists, skateboarders and skaters.

Signage

Adequate signage is necessary. Signage provides safety in letting the traveling public know that pedestrian traffic is present along the route being traveled. Signage can be instrumental in providing way-finding assistance, providing information about an area and its significance, and encouraging the use of walking as a means of travel.

Traffic Signals

Proper signals greatly improve pedestrian safety. Those that are timed to account for pedestrian use of a crosswalk are needed in order to give the pedestrian adequate time to cross the roadway. Pedestrian-actuated signals serve several purposes, including giving the pedestrian some ability to cross the roadway in a timely manner and by signifying to the traveling public that pedestrians use the area.

Sidewalk Buffers

Separation of the pedestrian from adjacent vehicular traffic adds significantly to the comfort level experienced by those walking along a route. Such separation not only adds substantially to the safety of the pedestrian, but also makes the experience much more enjoyable, meaning that the person will be more likely to walk this route again. Treatment of sidewalk buffers with landscaping can serve to make the area much more aesthetically attractive to pedestrians and motorists alike.

Streetscapes

Streetscape refers to the layout of the street and all its elements, which together create the environment into which the pedestrian travels. Maintenance of the adjacent properties, visual sight distances, available lighting, and proximity to motor vehicle traffic all combine to leave either a welcoming or foreboding atmosphere for the pedestrian traveling that route.

Illumination

Adequate lighting along the route is a primary safety concern for pedestrian travel. Not only does the pedestrian feel safer personally, but the presence of the lighting also greatly aids the visibility of the pedestrian to the passing motorist.

Lack of Traffic Calming Measures

Several studies have shown that the physical design of the street can greatly impact the safety of the pedestrian. Techniques that slow down traffic while making pedestrian travel safer through physical design improvements to the roadway are called "traffic calming" techniques. These techniques include:

- ❖ Roundabouts
- ❖ Traffic circles
- ❖ Speed Humps and Tables
- ❖ Narrowed street or street section widths
- ❖ Bulb-outs at intersections
- ❖ On-street parking
- ❖ Textured pavement before and at crosswalks
- ❖ Pavement markings
- ❖ Landscaping
- ❖ Traffic circles exist in the cities of Roopville and Whitesburg. Bulb-outs, textured pavement and raised speed tables exist in the three larger cities of Carrollton, Newnan and LaGrange as well as in Hogansville and West Point.

ADA Considerations

The American with Disabilities Act (ADA) requires that access be provided to those that are handicapped in all projects that receive federal funds. Standards are established which dictate the use of access ramps at intersection corners and entries into and out of public buildings. Certain maximum grades are required on sidewalks and other areas of pedestrian use so as to allow for the use of wheelchairs. And guidance is given on the surface materials that can be placed along routes used by those that are most vulnerable in this society.

¹ Federal Highway Administration. *Selecting Roadway Design Treatments to Accommodate Bicyclists*. 1994. U.S. Government Printing Office. Washington, D.C.

² Oregon Department of Transportation. *Oregon Bicycle Pedestrian Plan: Facility Design Standards*. 1995. ODOT.

³ Georgia Department of Transportation. *Pedestrian and Streetscape Guide*, September 2003, p. 12.

⁴ Georgia Department of Transportation. *Pedestrian and Streetscape Guide*, September 2003.

⁵ Georgia Department of Transportation. *Pedestrian and Streetscape Guide*. September 2003. page 148.

VI. Summary Conclusions

Recommendations

1. Identification of New Bicycle Routes

The attached mapping done for each county and for the Chattahoochee-Flint region as a whole reflects the existing and planned bicycle and pedestrian facilities. The bicycle facilities shown reflect the proposed network of State Routes, Regional Routes, Inter-City Routes, and Recreational Routes. The mileage by type of Route is as follows:

Type of Route	Mileage
State Route	118.0
Regional Route	181.0
Inter-City Route	530.1
Recreational Route*	353.9

*Routes that do not share use with another class of bicycle facility.

For the purposes of the regional plan, the following approach to implementing a regional bicycling network is suggested:

- ❖ Rely on shared roadways to form the bulk of the network
- ❖ Target major physical improvements for the routes along State, Regional and Inter-city routes.

See Table 6 below for breakdown of costs per county to make needed improvements to the proposed system.

In the short-term, add "Share the Road" signage to the inter-city network. Long-term, add signage to all the recreationally used routes.

Encourage the State of Georgia to implement Bike Lanes along the designated State Bicycle Routes.

Seek the creation of Bike Lanes and Shoulder Bikeways along Inter-city routes in the long-term.

2. Identification of New Pedestrian Facilities

For the pedestrian network, the planned improvements within the region total approximately 85 miles, of which 81.1 miles consists of new off-road facilities such as trails and walking paths, and 4.2 miles of existing sidewalk rehabilitation or extensions. Tables 7 and 8 identify costs for these improvements. The emphasis should be on tying together residential areas with nearby activity centers such as schools, shopping and recreation.

3. Prioritize Areas in Need of Improved Pedestrian Access, Infrastructure and Amenities

As would be expected given the general characteristics of pedestrians and the mix of local governments that have sidewalk ordinances in place, the most demand for sidewalks and pedestrian paths is within the region's municipalities. Connectivity of existing sidewalk infrastructure is a major concern from the standpoint of having too many separate sections of sidewalk and not enough sidewalks in the immediate vicinity of such destinations as schools and neighborhood shopping areas. Also, having these types of destinations within easy walking distance remains an obstacle to the increased use of pedestrian travel.

The growth pressures within the designated "developed" and "developing" areas promotes the need to address these pedestrian access issues now rather than wait and retrofit a pedestrian system over a previously established road network. The communities in Carroll and Coweta counties without any pedestrian paths or walks should begin planning now to incorporate such facilities into future development through the use of the SPLOST funds, local bond issues and grants.

4. Programs to Increase Bicycle Ridership and Walking, Improve Safety, Promote Education and Health, and Outreach/Marketing Strategies

There are very few bicyclist and pedestrian training classes offered within the region. Civic clubs should be encouraged to sponsor 'bike-a-thons' or 'Walk to Work' days as a means of educating people about and marketing these modes as alternative forms of transportation and healthy lifestyle activities. Those municipalities that have adopted the use of bike patrols within their Police forces should make use of these officers as an excellent means of conducting outreach and marketing for the community and promote the safe use of the existing trails and routes. Many communities find that the outreach through the use of bicycle and foot patrols affords excellent results not only in reducing crime but also improving overall good relations between the city and the citizens it serves.

Short-term and Long-term Implementation Strategies

The following approach to implementing a regional bicycling and pedestrian network is suggested:

1. Short Range (0-5 years)

- ❖ Incorporate bicycle and pedestrian needs in community plans. Coordinate plans with the development of the greenspaces within the region.
- ❖ Install signage along all state routes and on regional routes.
- ❖ Install "Share the Road" signage along the inter-city network.
- ❖ Encourage the State of Georgia to improve the discussion of cycling in the Driver's Education Manual.
- ❖ Encourage the State of Georgia to implement Bike Lanes along the designated routes in the following order of priority:
 - ❖ State Bicycle Routes
 - ❖ Regional Routes, once they achieve designation as a Scenic Byway
 - ❖ Conduct 'Bikeability' and 'Walkability' Surveys of municipalities and areas being targeted for cycling and pedestrian use.
- ❖ Instruct local government and utility staffs on AASHTO and state standards for bicycle and pedestrian facilities so that as they maintain public streets, sidewalks and utilities the final project is bicycle- and/or pedestrian-friendly.
- ❖ Require that maintenance and improvements to county roads and city streets include consideration of the bicycle. Design sidewalks with appropriate clear zones to separate pedestrians from vehicular traffic. Mount any storm drainage grates flush with the surface of the roadway and require that the local government and developers use grates approved for cycling.
- ❖ Hold at least one public education workshop annually in each county on the rules of the road for motorists and cyclists of all ages.
- ❖ Develop user-friendly guides to the use of pedestrian and bicycling facilities within the region.
- ❖ Plan for at least one pedestrian facility in each local government of the region.
- ❖ Develop funding sources for greenway projects within the region.

2. Medium Range (3-7 years)

- ❖ Include provisions for bicycle and pedestrian facilities within local development codes.
- ❖ Adopt annual sidewalk and bikeway maintenance schedules.
- ❖ Add "Share the Road" signage to all the recreationally used routes.
- ❖ Encourage the State of Georgia to implement Bike Lanes along the designated routes in the following order of priority:
 - ❖ Inter-City Routes that travel along state highways
 - ❖ Recreational Routes that travel along state highways

- ❖ Require sidewalks between residential subdivisions and within ½ mile of a school.
 - ❖ Construct pedestrian facilities so that at least one facility exists within every jurisdiction within the region.
 - ❖ Begin construction of planned greenway paths/trails within the region.
3. Long Range (8 years and longer)
- ❖ Seek the creation of Bike Lanes and Shoulder Bikeways along those portions of the city and county maintained roads that are located along Inter-city routes.
 - ❖ Require schools be located in areas accessible to bicycle traffic.
 - ❖ Construct sidewalks between residential subdivisions and within ½ mile of a school.
 - ❖ Complete construction of planned greenway paths/trails within the region.
 - ❖ Work toward the designation of five miles of pedestrian and bicycle routes for every 1,000 persons living within the region.

Plan Costs

The proposed bicycle facility construction costs are broken out by which jurisdiction is responsible for making the proposed improvements. For example, the State is responsible for those costs needed to improve the State Bicycle Network. The Inter-City and recreational routes would be local government responsibilities. There could be limited State involvement in the Regional, Inter-City and recreational routes where such routes use portions of State highways, but the extent of this involvement is undetermined at this time.

Table 6. Bicycle System Improvements

Responsible Party	Mileage	Projected Costs
State	118.13	\$3,849,000
Regional	181.00	\$5,897,500
Carroll	287.59	\$9,370,500
Coweta	226.69	\$7,386,200
Heard	86.01	\$2,800,000
Meriwether	130.45	\$4,250,500
Troup	153.23	\$4,992,700

Costs for sidewalk improvements are usually paid by the local governments, except where sidewalks are being added alongside an improvement to an urban section of State Highway. None of the improvements identified in this plan are along a proposed State Highway project, so therefore all the following costs would be borne by the general fund of the local governments themselves, unless the jurisdictions were able to secure grants such as those that are available through the Georgia Department of Transportation's Transportation Enhancement program or the Community Development Block Grant program administered by the Georgia Department of Community Affairs. These totals reflect the costs of known sidewalk projects that are being undertaken by the local governments, and do not include the costs to private contractors whose subdivisions are being developed in the region's jurisdictions that require the construction of sidewalks at the private developer's expense.

Table 7: Sidewalk Facility Improvements

Local Government	Mileage	Projected Costs
Coweta County		
Grantville	1.10	\$80,000
Sharpsburg	0.75	\$390,000
Heard County		
Franklin	0.10	\$312,502
Meriwether County		
Manchester	0.30	\$1,227,000
Meriwether County	0.50	\$31,680
Troup County		
Hogansville	0.73	\$305,000
West Point	0.73	\$1,500,000

A significant number of the region's local governments recognize the value that off-road trails and walking paths add to their quality of life, and as a result there is expected to be more than double the number of miles of off-road trails within the region during the next twenty years.

Table 8: Off-Road Pedestrian Facility Improvements

Local Government	Mileage	Projected Costs
Carroll County		
Carroll County	35.0*	\$16,077,600
Carrollton	13.8	6,339,168
Mount Zion	0.50	229,680
Villa Rica	2.50	264,000
Heard County		
Heard County	20.0	9,187,200
Meriwether County		
Greenville	0.25	26,400
Warm Springs	0.25	26,400
Troup County		
West Point/Troup County	7.20	3,307,400

Cost estimates for the proposed bicycle and pedestrian improvements were developed from a number of sources. The costs for bicycle route improvements were estimates based upon software provided by the Georgia Transportation Institute located at the Georgia Institute of Technology. The computed cost for improvement to the State Bicycle Network within the region comes directly from the software. The average cost per mile for State Route improvements (\$32,582.75) was used to derive the Regional, Inter-City and recreational routes cost estimates. The pedestrian improvement costs were developed by looking at a number of sources for sidewalk and trail cost information. For each of the funded sidewalk projects, the project cost includes the amount of the jurisdiction's grant total. For those project not funded as of yet, the figure reflects an estimated construction cost of \$12.00 per linear foot, exclusive of any engineering or acquisition expenses. For off-road trail projects, a cost estimate of \$20.00 per linear foot was used for un-paved footpaths such as a walking path. For paved off-road trails, such as multi-use paths, the figure used is \$87.00 per linear foot. These figures are derived from conversations with area contractors or reflect existing project totals where the project is already funded.