

# JEFFERSON COUNTY

## BICYCLE AND PEDESTRIAN MASTER PLAN



# JEFFERSON COUNTY

## BICYCLE AND PEDESTRIAN MASTER PLAN

Developed for Jefferson County, Florida

By Renaissance Planning Group

with assistance from HDR Inc., Wendy Grey Land Use Planning LLC, and  
Carpe Diem Community Solutions



RENAISSANCE PLANNING GROUP



## ACKNOWLEDGEMENTS



The Jefferson County Bicycle and Pedestrian Master Plan was developed in collaboration with state, regional, and local governments and agencies; stakeholders from local organizations and businesses; and local residents.

A special thank you goes to the following entities for their involvement during the development of this Master Plan:

### Jefferson County Board of County Commissioners

- John Nelson, Chair
- Betsy Barfield, Vice Chair
- Benjamin “Benny” Bishop
- Hines Boyd
- Stephen Walker

### Federal, State and Regional Agencies and Organizations:

- Florida Department of Environmental Protection (FDEP) Office of Greenways and Trails (OGT)
- Florida Department of Transportation
- Capital Region Transportation Planning Agency (CRTPA)

### Local Government Agencies and Organizations:

#### Jefferson County

- Sheriff’s Office
- Chamber of Commerce
- Recreation Department
- Tourist Development Council
- School Board
- Planning Department
- Roads Department
- Office of the Clerk of the Court
- Office of the County Coordinator
- Economic Development Council

#### City of Monticello

- Office of the Mayor and City Council
- Local Planning Agency (LPA)
- Office of the Chief of Police
- Office of the Clerk and Treasurer
- Office of the City Manager
- Office of the Planning Director

#### Capital City Cyclists







*Pedestrian and Bicycle facilities connect people to places.*



# JEFFERSON COUNTY BICYCLE & PEDESTRIAN MASTER PLAN

## TABLE OF CONTENTS



<b>ACKNOWLEDGEMENTS</b>	3
<b>INTRODUCTION</b>	7
<b>THE PLANNING PROCESS</b>	9
The Planning Process	9
Vision Map – A Connected Bicycle and Pedestrian Network	9
Goals and Strategies	11
<b>EXISTING CONDITIONS</b>	13
Geography	13
Demographics	13
<b>CONTEXT INVENTORY &amp; ANALYSIS</b>	17
Data Collection and Assembly	17
Crash Data	17
Facility Inventory and Assessment	22
Assessment of Progress Toward Complete Streets	31
Policy Audit	31
<b>PUBLIC INVOLVEMENT</b>	51
Project Involvement	51
Stakeholder Meetings and Interviews	51
Online Public Survey	51
Public Workshop	52
Public Agency Meetings	52
<b>CONCEPT PLAN &amp; DESIGN STANDARDS</b>	55
Overview	55
Paved Shoulders	59
Bicycle Signage	59
Multi-use Trails / Shared-Use Paths	60
Bicycle Lanes	60
Road Diets	62
Sidewalks	63
Pedestrian Crossing Enhancements	65
<b>PROJECT PRIORITIES</b>	69
Project Recommendations	69
Project Descriptions	69
Project Priorities	82
<b>POLICIES &amp; PROGRAMS</b>	91
Overview	91
Education	91
Encouragement	92
Enforcement	94
Engineering	95
Evaluation	97
<b>COST ESTIMATING &amp; FUNDING SOURCES</b>	101
Cost Estimating	101
Funding Sources	102
<b>CONCLUSION</b>	107
<b>APPENDIX</b>	109





*An example of a creative solution near Pearl Street that enhances the accessibility of the park.*





## Introduction

Jefferson County was created in 1827, named after the early 19<sup>th</sup> Century United States President, Thomas Jefferson. Its geography is unique in that it connects with both the State of Georgia to the north and the Gulf of Mexico to the south. As a whole, Jefferson County is mostly rural with forested and agricultural lands and some rolling topography. It has a relatively low population at approximately 14,666 persons (2011) and a noticeable overall percentage of minority persons, consisting mostly of African-Americans, per 2010 US Census data.

The county seat and only incorporated municipality within the County is the City of Monticello, the name of which is also significant to the former president, as it was named after Thomas Jefferson's famous Virginia plantation and estate. The City of Monticello, north of Interstate 10, is the population center of the County with a rich history and quant historic streets and buildings. The City center includes a unique traffic circle at the intersection of two major state highways with the historic, century-old Jefferson County Courthouse building at the center. Monticello includes most of the business activity in the county along with most county-related government facilities and institutions. Notable unincorporated population centers in Jefferson County include Lloyd, Wacissa, Aucilla and Drifton. The Florida State capital, Tallahassee, is located approximately 30 miles west of Monticello in neighboring Leon County.

Jefferson County with its natural beauty and historic charm is a popular destination for recreational cyclists in the Florida Panhandle. The well-connected system of streets and destinations within and near the population center of Monticello allows the possibility for a robust non-motorized transportation network to provide flexibility and alternatives to residents and visitors alike to travel through and experience important assets of the City and County.

## Purpose

The Jefferson County Bicycle and Pedestrian Master Plan is an effort to create a vision and framework for a safe and robust bicycle and pedestrian infrastructure network that connects the City of Monticello, rural unincorporated communities in the County, other communities in the region, major employers, schools, and other desired destinations. This effort complements similar Capital Region Transportation Planning Agency (CRTPA) bicycle and pedestrian master plan projects previously completed in Leon County and in Wakulla and Gadsden Counties, and the Safe Routes to School project in Leon County.

The Jefferson County Bicycle and Pedestrian Master Plan identifies key destinations, routes and facilities, prioritize projects for future funding, and provides consistent design of bicycle and pedestrian infrastructure throughout the County.





*Signage helps ot communicate the county's vision and message for pedestrians and bicyclists.*





## The Planning Process

This master plan was developed under a comprehensive planning process utilizing a number of methods and techniques to obtain quantitative and qualitative information for analysis and consideration. This planning process included:

- Data collection
- Data analysis
- Field review
- Stakeholder interviews
- Online public survey
- Public workshop
- Countywide vision map
- Master plan goals and strategies
- MPO committee updates and input
- Joint county-city work session

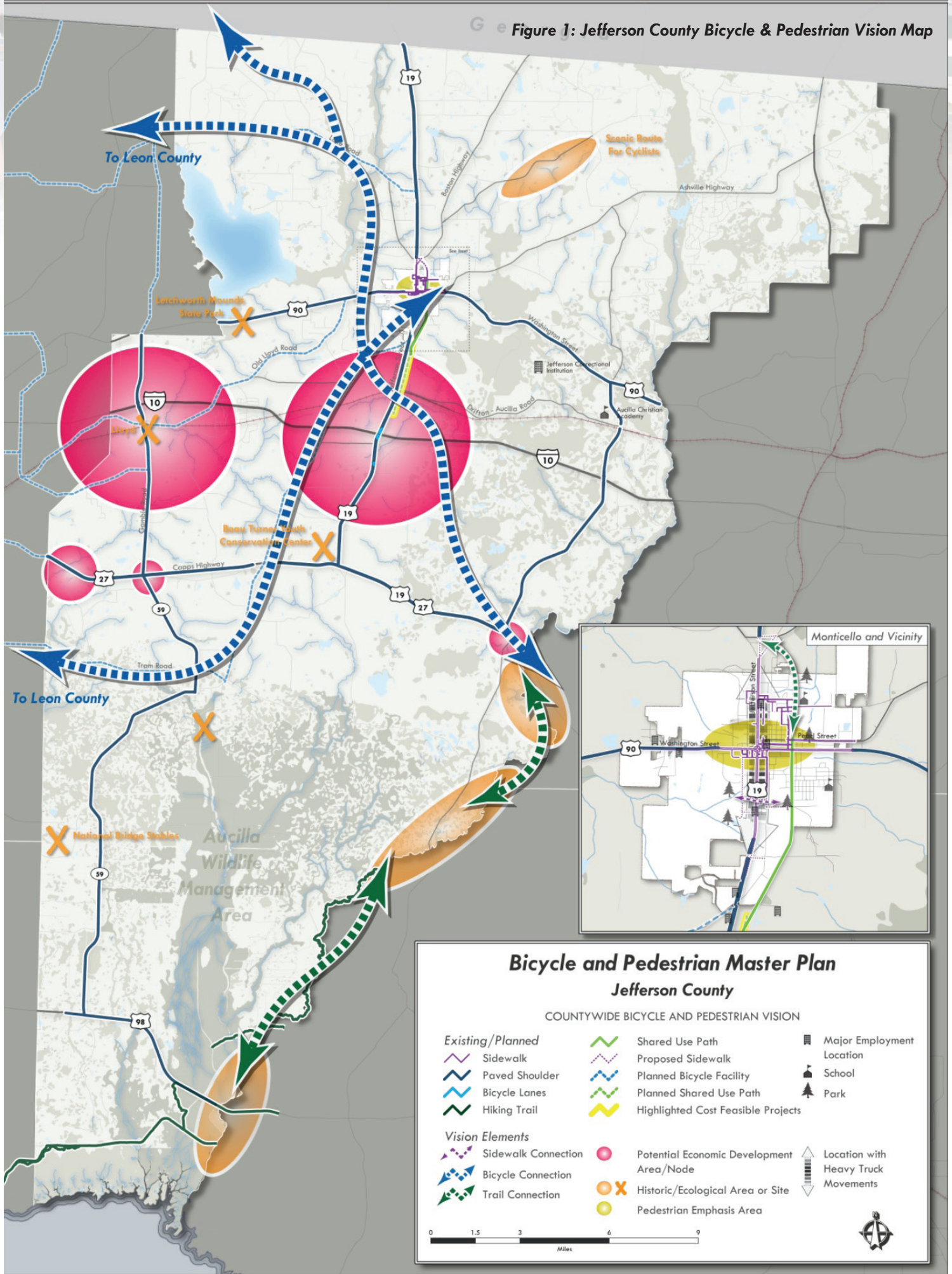
The development of the plan was influenced by many different people and organizations including local residents, business representatives, advocacy groups, and government agencies. This process was instrumental in developing the overall countywide bicycle and pedestrian network vision map, goals and strategies to guide project prioritization to implement the master plan.

## Vision Map: A Connected Bicycle and Pedestrian Network

The countywide vision map was developed with the idea of providing more mobility options within the County, specifically through the development of bicycle and pedestrian facilities. The development of such facilities should enhance walkability, expand bicycling opportunities, provide for better connectivity and mobility, and promote economic opportunities within the County. The recommendations of this master plan were developed in accordance with this vision. The Vision Map is included in the figure on the following page.



Figure 1: Jefferson County Bicycle & Pedestrian Vision Map





## Goals and Strategies

Five primary, overarching goals were established as the foundation for the master plan. With these goals in place, complimentary strategies were drafted as an approach to implementing the goals and to give guidance to setting the project recommendations and prioritization of the plan. The master plan goals and strategies are as follows:

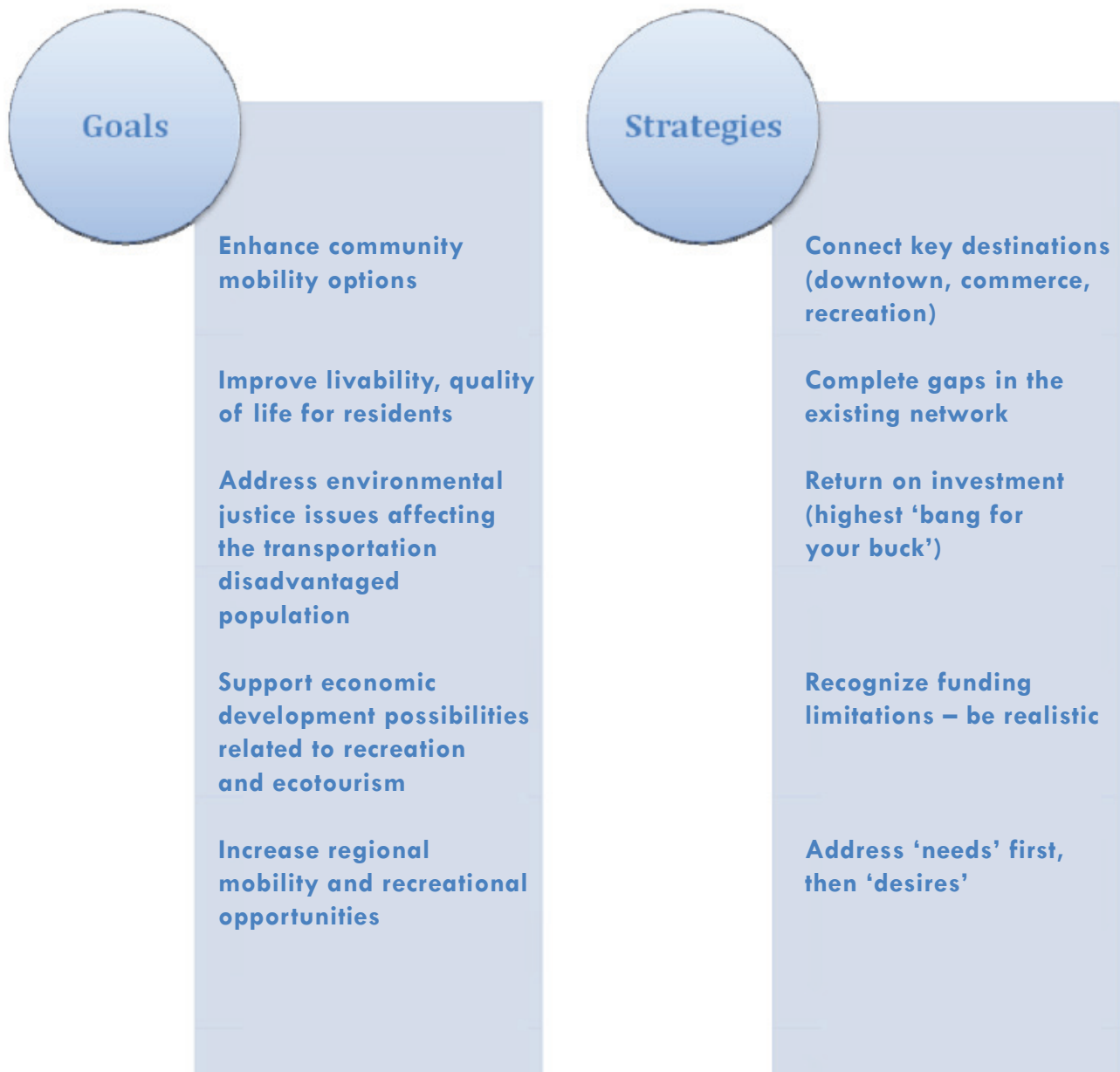


Figure 2: Jefferson County Goals & Strategies





*The Monticello Bike Trail is one of the county's valuable existing facilities.*





## Geography

Jefferson County includes approximately 637 square miles of area spanning from the Georgia State line southward to the Gulf of Mexico, and from Wakulla County and the major Florida Panhandle population and employment center of Leon County eastward to Taylor and Madison Counties. The County is mostly rural with forested and agricultural lands and some rolling topography. It is also rich with natural recreation and conservation areas including the Aucilla Wildlife Management Area, St. Marks National Wildlife Refuge, Middle and Upper Aucilla Conservation Areas, and the Wacissa Conservation Area. Jefferson County borders the eastern shore of Lake Miccosukee.

The City of Monticello is the county seat and only incorporated municipality within Jefferson County. Monticello is a small city at just over three square miles and a population of approximately 2,500. It includes a quaint, historic downtown along with many standing historic structures, some dating back to the 19<sup>th</sup> Century. Monticello is also the hub for business activity in the County along with most county-related government facilities and institutions. Notable unincorporated population centers in the County include Lloyd, Wacissa, Aucilla and Drifton.

The City of Tallahassee is located approximately 30 miles west of Monticello in neighboring Leon County. As the Florida State capital and largest city in the Florida Panhandle, Tallahassee is an important employment center and within a manageable, although lengthy automobile commuting distance from Monticello. A significant number of Jefferson County residents choose to live in the county and work in neighboring Leon County where employment opportunities are more plentiful.

## Demographics

Jefferson County has a relatively low population estimated at 14,666 persons, according to the 2011 Florida Statistical Abstract, published by the University of Florida Bureau of Economic and Business Research (BEBR). This represents an overall steady increase of around 14% since 2000; however, the population has been on a slight decline since the 2009 high for the decade of 14,772 persons. Projection estimates for the future vary widely. High-end growth estimates project a steady increase in population over the coming decades while low-end estimates project a slow but steady decline over the same period. Population projections for the County are shown in Figure 3.

Almost 19%, or one-fifth of the County population is 17 years of age or younger. This statistic is significant, as this age bracket is predominantly below the driving age. At the other end of the scale, 16.5% of the County population is 65 years of age or older. This is an age bracket where some individuals may experience a need for greater mobility options beyond a personal automobile. The age breakdown of the population is shown in Figure 4.

Approximately three-quarters (76%) of the County population travels to work alone by personal automobile and 15% carpool to work (Figure 5). Other travel mode shares were much lower with 2% walking and 1% using public transit. Also, 4% of the population works from home.





**Figure 3: Jefferson County Population Projections**

Source: Source: Bureau of Economic and Business Research (2012)

### Jefferson County Projected Population 2015 - 2040

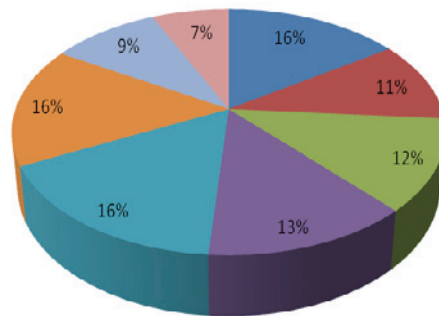


**Figure 4: Jefferson County Age Breakdown**

Source: Source: Florida Office of Economic and Demographic Research

### 2010 Jefferson County Population Percentage by Age

0 - 14 15 - 24 25 - 34 35 - 44 45 - 54 55 - 64 65 - 74 74+

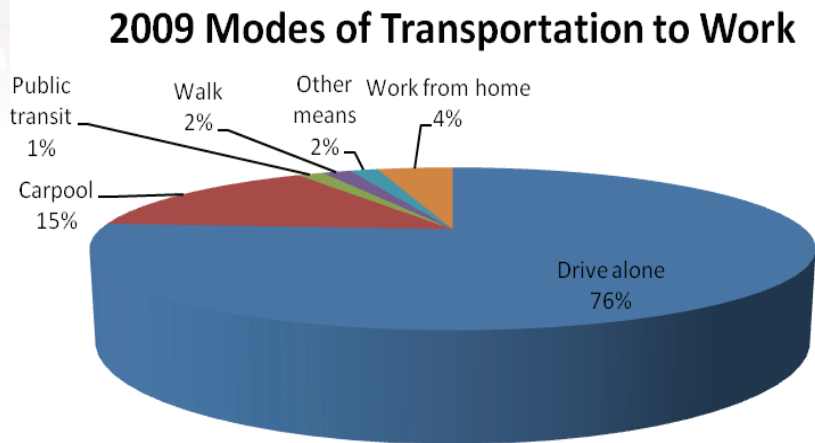






**Figure 5: Jefferson County Residents' Modes of Commuting to Work**

Source: [www.citymelt.com/county/Florida/Jefferson-County-FL](http://www.citymelt.com/county/Florida/Jefferson-County-FL) (Total modes: 5,867)



A significant percentage of the population is either below the legal minimum driving age or within an age bracket where additional mobility options become increasingly important. As the County struggles to maintain its population base or experience healthy population growth over the coming decades, additional modes of travel such as walking and bicycling should become more viable through the provision of supportive infrastructure and programs to encourage alternative transportation choices. Having such additional choices can make living in a small city or rural county more feasible and desirable for all segments of the population.





*The paved shoulders on US 19 are an example of an existing bicycle facility.*





The project team completed an assessment of the existing context for bicycling and walking through a number of exploratory tasks, including:

- Assembly of geographic information systems (GIS) data and field review to compile existing conditions data
- Map series conveying the conditions analysis results and countywide vision
- Facility inventory with identification of gaps, barriers, and potential opportunities
- Audit of existing policies related to non-motorized transportation
- Stakeholder interviews to further identify issues and opportunities

This Context Inventory and Analysis documents the results of these tasks, which together describe the engineering, education, encouragement, enforcement, equity, and evaluation components of the existing context for biking and walking in Jefferson County.

### Data Collection and Assembly

The project team conducted several general surveillance efforts including an informal field review during the kick-off project studio and an in-depth field visit for the facility inventory and stakeholder interviews. The data, photos and other information collected during the field visits are documented in the Facility Inventory and Assessment sub-section.

The project team also obtained GIS data from various governmental agencies, including Jefferson County, Capital Region Transportation Planning Agency (CRTPA), and the State of Florida's Office of Greenways and Trails. These data sets provided a foundation of information for both the County and the CRTPA region. From this information, the project team created a map series to show a comprehensive picture of the existing and planned pedestrian and bicycle network in Jefferson County.

### Crash Data

The project team screened crash data from the Florida Department of Highway Safety and Motor Vehicles (DHSMV) for crashes involving pedestrians or bicyclists. The crash data from DHSMV indicate that for the five years from 2006-2010, the following injuries and fatalities occurred: three bicyclists and eight pedestrians were injured, and one bicyclist and four pedestrians died. For 2011, the crash database shows two pedestrian injuries and zero bicyclist injuries; one of the two pedestrian injuries was fatal. While there were several pedestrian and bicyclist crashes in the County, mainly in the City of Monticello, there are not enough to show a distinct trend in location or cause. However, field review and discussions with residents and staff indicate a concern for bicycle and pedestrian safety.





### Countywide Bicycle and Pedestrian Map Series

The following maps feature the existing and planned bicycle and pedestrian facilities within Jefferson County, summarizing the information obtained from the GIS data assembly task. Planned facilities represent those in previously completed regional and local planning documents, including the CRTPA Regional Mobility Plan (RMP), the RMP Sector Plan for the City of Monticello, and the CRTPA Regional Trails Plan.

Using the GIS data obtained through the assembly effort and the information gathered through other outreach and exploratory efforts explained later in this chapter, the project team created a conceptual map to show the vision of a connected network for bicycle and pedestrian travel in Jefferson County. This vision map, shown in Figure 6, identifies focus areas for economic development, historic areas, ecological sites, and areas for pedestrian emphasis. The network within the vision map provides general connections between these areas.

Figure 7 shows an overview of existing and planned facilities within Jefferson County. Most of the major roads throughout the County have paved shoulders. For the most part, existing sidewalks are limited to within the Monticello city limits. The GIS data indicate existing bicycle lanes within the County are located at the interchange of US 19 and Interstate 10, and along a short (about 250 feet) segment along northbound US 19 at the deceleration lane for Jordan Road about one mile south of the interchange with Interstate 10. The Regional Mobility Plan identifies a number of planned bicycle facilities along lower speed roads in the northwestern portion of the County. These future facilities would connect Monticello to communities like Wacissa, Cody, Alma, Waukeelah, and others in Leon County. A planned shared use path from the southern Monticello city limits to the community of Drifton is highlighted as a cost feasible project which could be funded in the near term.

Figure 8 shows a closer view of the existing and planned facilities within and nearby the City of Monticello.

It also identifies notable trip attractors including major employment locations, schools, parks, government buildings, and the downtown/historic district. The GIS data indicate that sidewalks are located along some but not all of the roads in Monticello. A shared use path exists along Railroad Street, which parallels US 19. Approaching the heart of Monticello, paved shoulders transition into sidewalks. Additional sidewalks are planned just north of the city limits and within the central portion of the city south of US 90.



Figure 6: Jefferson County Bicycle & Pedestrian Vision Map

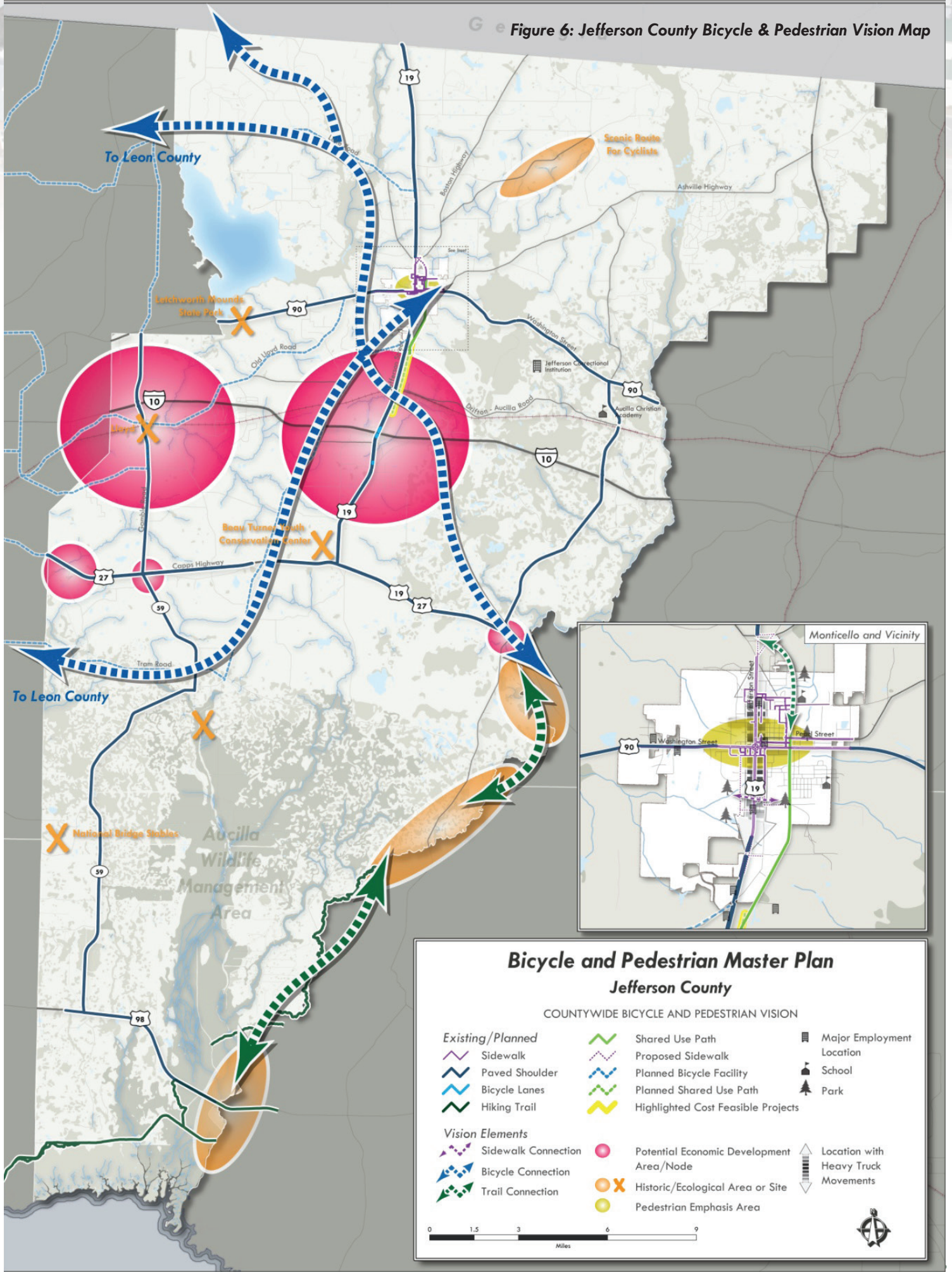
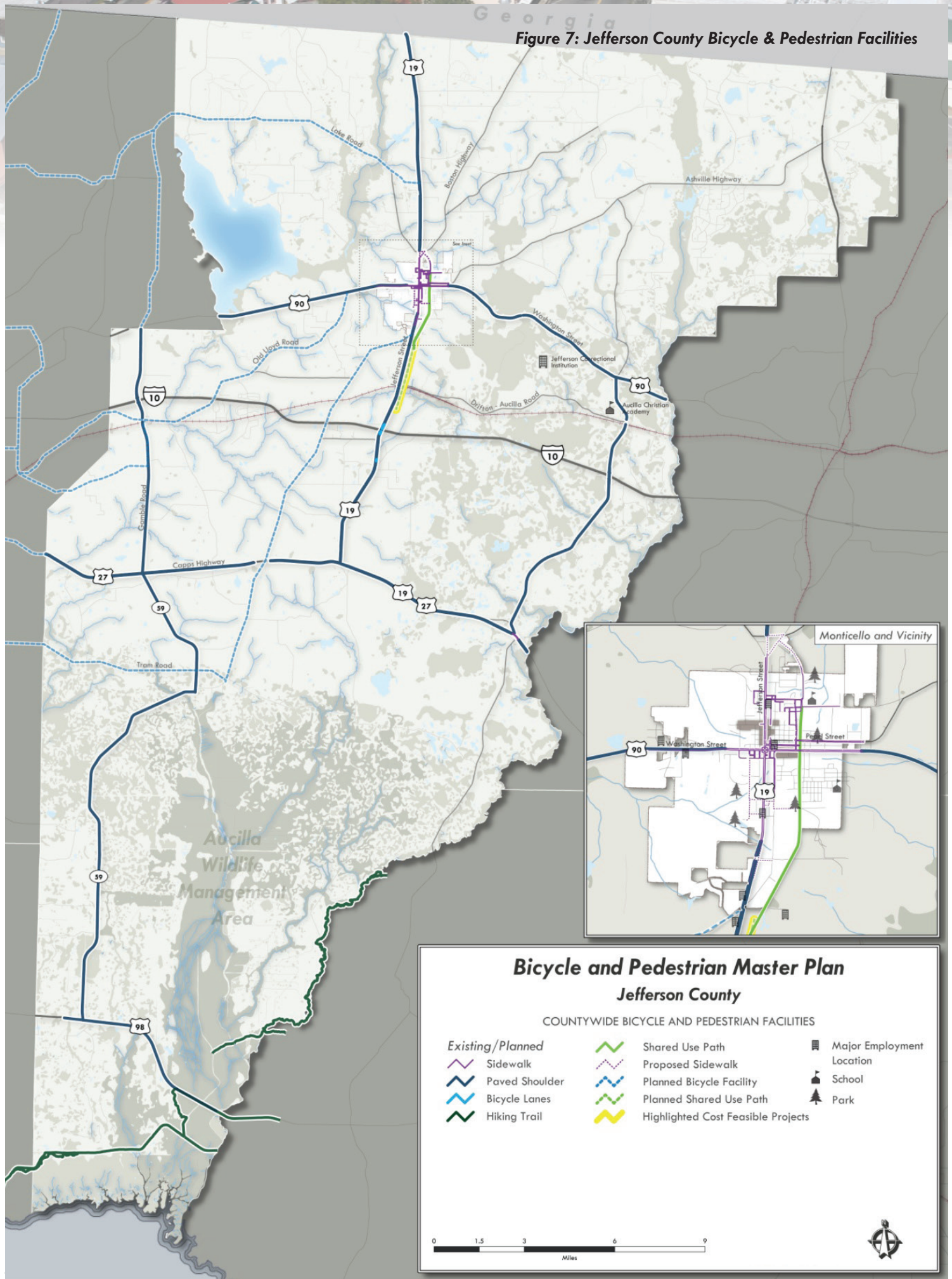
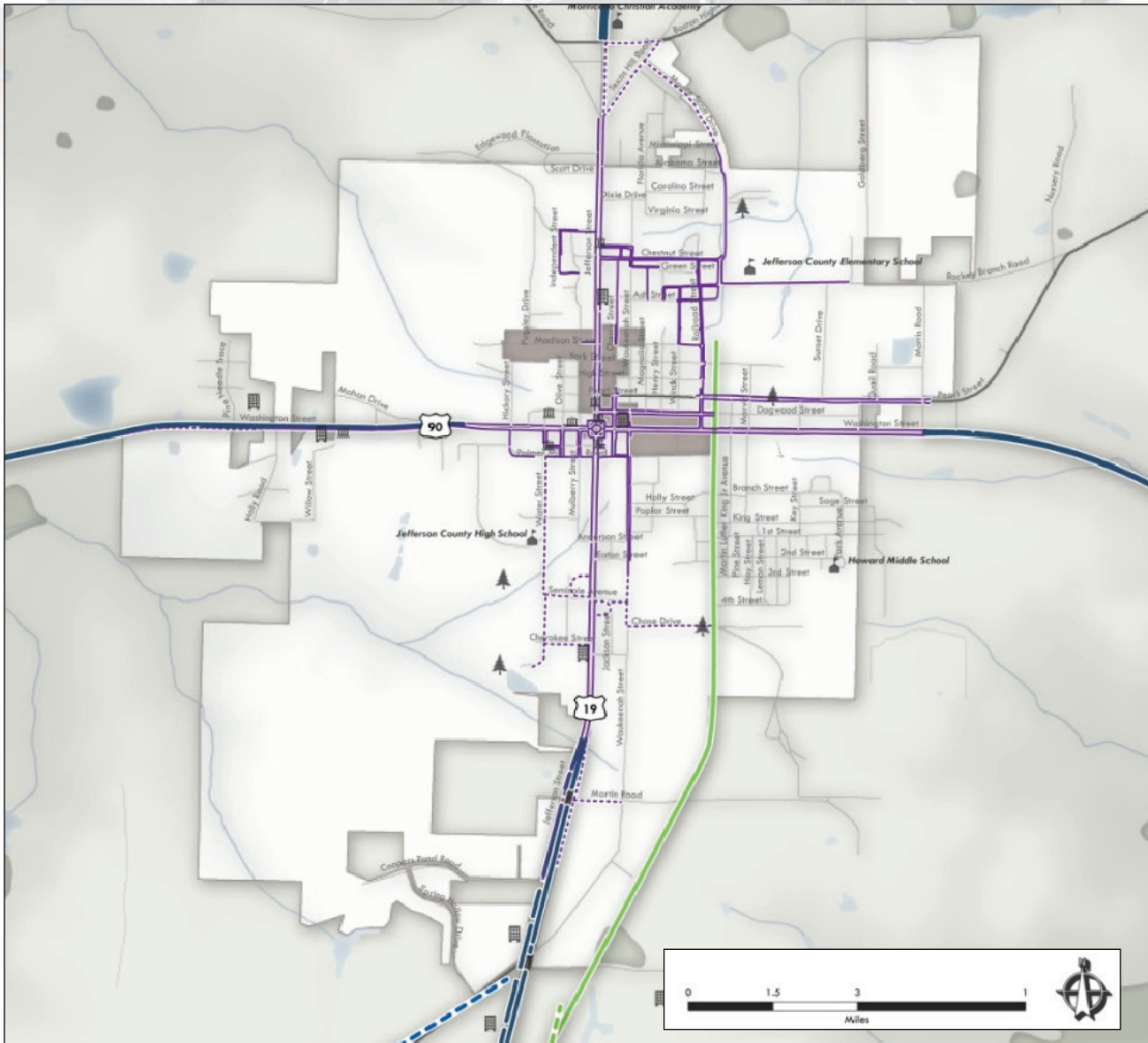




Figure 7: Jefferson County Bicycle & Pedestrian Facilities





## Bicycle and Pedestrian Master Plan

### Monticello and Vicinity

#### BICYCLE AND PEDESTRIAN FACILITIES

##### Existing/Planned

- Sidewalk
- Paved Shoulder
- Bicycle Lanes
- Hiking Trail
- Shared Use Path
- Proposed Sidewalk
- Planned Bicycle Facility
- Planned Shared Use Path

##### Notable Trip Attractors

- Major Employment Location
- School
- Park
- Government Buildings
- Historic District

Figure 8: Monticello and Vicinity Bicycle & Pedestrian Facilities





### Facility Inventory and Assessment

The project team conducted an in-depth field visit to review the existing facilities at a more detailed level and supplement the information from the GIS data assembly. The following subsections detail the existing facilities for non-motorized transportation, identify facility gaps and barriers to pedestrian and bicycle travel, and describe potential opportunities for improvements.

### Assessment of Existing Facilities and Gaps

#### Paved Shoulders and Bike Lanes

Jefferson County's existing bicycle facilities consist primarily of paved shoulders on the rural arterial roadways, including US 19, US 90, US 27, US 98, US 221, SR 59, and CR 257. The only missing sections of paved shoulders on the state roadway system in Jefferson County are as follows:

- US 90 on the approximate 0.6 mile section in the far western portion of Jefferson County (and west of the 2.5 mile section of Leon County in between the two Jefferson County sections, which also does not have paved shoulders).
- US 19 and US 90 through Monticello in the sections where the roadway has an urban typical section with curb and gutter.

The only designated bicycle lane that was observed in Jefferson County is located on E. Cherokee Avenue connecting US 19 South and Waukeenah Street in Monticello adjacent to the CVS store (south of the Courthouse). However, the bicycle lane is of substandard width (approximately 4 feet from face of curb), is only provided on one side of the street, and is marked in a way that seems to encourage wrong-way riding (the bike lane word marking is oriented against traffic flow of the adjacent travel lane). The CRTPA Regional Mobility Plan identifies a small portion of a bike lane along US 19 near Interstate 10. This lane, though not designated (marked/signed) as a bike lane, is a keyhole lane that provides a correctly designed 5-foot lane between the through lane and the exclusive right turn lanes at the Interstate 10 ramp intersections.

Many non-state roadways in the County are regularly used as part of recreational cycling routes, such as routes used by the Capital City Cyclists, but currently lack paved shoulders, including the following:

- CR 259/Waukeenah Highway
- CR 158/Old Lloyd Road
- Whitehouse Road
- Cherry Tree Road/Lloyd Creek Road
- Lake Road
- St. Augustine Road
- Barrington Road
- CR 257
- North Salt Road
- Bassett Dairy Road
- CR 149/Boston Highway
- CR 146/Ashville Highway
- Tram Road
- CR 158/Drifton-Aucilla Road
- Turkey Scratch Road



The paved shoulders on US 90 west of Monticello end at the Leon County line.



Poor and substandard existing bike lane on the E. Cherokee Avenue north of CVS connecting US 19 South with Waukeenah Street.



The existing Ike Anderson Trail in Monticello.





- Thompson Valley Road
- Beth Page Road
- CR 158B/Nash Road
- CR 158/Rabon Road

The addition of paved shoulders is currently considered on roadways during resurfacing projects and is typically justified based on safety concerns. The County has a programmed project to resurface CR 259 (Waukeenah Highway) and add paved shoulders between US 27 and SR 59 (\$1.47 million in FY 2011/12). It is not clear whether other currently programmed resurfacing projects include the addition of paved shoulders or not; these projects listed in the CRTPA Draft FY 2013- FY 2017 Transportation Improvement Program (TIP) include the following:

- \$1.37 million in FY 2013/14 for resurfacing CR 257/146 from US 90 to Ashville Highway (CR 146)
- \$1.41 million in FY 2013/14 for resurfacing Lloyd Creek Road from US 27 to Old Lloyd Road (CR 158)
- \$268,000 in FY 2014/15 for resurfacing CR 158A Old Lloyd Road from Leon Co line to SR 59 Gamble Road

The Jefferson County Community Traffic Safety Team (CTST) has identified priority locations for the addition of paved shoulders:

- CR 259 / Waukeenah Highway, from US 19 to US 27
- CR 158 / Old Lloyd Road, from US 90 to SR 59
- CR 146 / Ashville Highway (4 phases)
- CR 149 / Boston Highway (2 phases)
- Portions of US 90 West

The County Public Works Department is considering placement of signage to increase awareness of sharing the road along several roads in the County, including US 90, CR 158, SR 59, CR 257, and CR 259. Signage under consideration includes the “Share the Road” sign or the “Bicycles May Use Full Lane” (BMUFL) sign.

### Trails

Jefferson County has one paved shared use path, the Ike Anderson Trail, a 1.5-mile trail that travels north-south through the City of Monticello from Rocky Branch Road to Martin Road. The trail continues south from Martin Road for approximately 0.6 miles to Nacoosa Road as an unpaved trail.

### Sidewalks

The City of Monticello has existing sidewalks on a number of streets, particularly in the downtown area and on both sides of US 19 and US 90. However, there are a number of significant gaps, including the Water Street corridor, the area between the Ike Anderson Trail and US 19 near the Jefferson Square Shopping Center, and several streets that are part of the Jefferson County Chamber of Commerce’s Walking Tour of Monticello. The only other existing sidewalks in Jefferson County outside the City of Monticello include an approximate 0.3 mile section on both sides of US 27 within the limits of the urban curb and gutter typical section through Lamont.

Many roadways near Jefferson County Elementary School currently have substandard sidewalks. These sidewalks are located on the immediate edge of the street and only measure about four feet wide. Further, most of these



*An existing sidewalk on US 19 in downtown Monticello.*



*Cherry Street, looking south from York Street is a segment on the Walking Tour of Monticello, but lacks a sidewalk.*



*Vehicles parked on the substandard sidewalk on Wirick Street north of Madison Street.*





sidewalks were not constructed at a standard curb height, but are only elevated above street level by a couple of inches. Vehicles were observed parked on these substandard sidewalks in several locations.

Many sidewalks in the City of Monticello are in need of maintenance, rehabilitation, or enhancements to be in compliance with the Americans with Disabilities Act (ADA) requirements.

Based on the CRTPA TIP, currently programmed sidewalk projects include the following:

- \$380,648 in FY 2013/14 to construct a sidewalk along the south side of US 90 from Holly Road to Willow Street, to be constructed by the City of Monticello through a Local Agency Program (LAP) agreement with FDOT with federal funding.
- \$396,000 in FY 2015/16 (Safe Routes to School funding) for construction of 1,800 feet of sidewalk along the east side of Mamie Scott Drive from existing sidewalk at Mississippi Street to Texas Hill Road.

Other County planned (but unfunded) sidewalk projects include:

- US 19 South from Gulf Coast Lumber to Monticello Family Medical, which extends the existing sidewalk on the east side of US 19 by approximately 0.3 miles.
- Texas Hill Road sidewalk project (Safe Routes to School) – includes sidewalks on Texas Hill Road between US 19 and Boston Highway, on Boston Highway between US 19 and Texas Hill Road, and on US 19 between Texas Hill Road and Boston Highway. (This does not appear to be included in the currently programmed sidewalk project on Mamie Scott Drive.)



*The sidewalk near the junction of Cypress Street and Henry Street has a dangerous hazard in the walkway.*



*The roundabout at US 19 and US 90 sees a lot of truck traffic. The approaching streets are wide due to the angled parking.*



*This picture shows one of four crossing points to the Courthouse in the center of the roundabout.*

### **Design Standards Used by the City of Monticello and Jefferson County**

Both Jefferson County and the City of Monticello currently use FDOT's Florida Greenbook for design standards on their projects. The FDOT's Plans Preparation Manual provides additional guidance, including some more flexible standards for downtown areas. Finally, there are recommended street design typologies in the CRTPA's RMP that focus on providing multimodal access for all users within the appropriate context to encourage walkability.

### **Issues and Opportunities**

#### **Downtown Courthouse Area**

The Jefferson County Courthouse is located in the center of a single lane modern roundabout at the junction of US 19 and US 90. Concerns with this roundabout include the significant volume of truck traffic, and the pedestrian movements to and from the Courthouse which require crossing the circulating roadway (which is atypical of most roundabouts which only have pedestrian crossings on the outside of the roundabout, and not to and from the center). It can be difficult for drivers in the roundabout to see a pedestrian crossing from the inside of the roundabout, and in some locations, the visibility of pedestrian signage is blocked by trees and other obstructions.

While the geometric design of the roundabout is such that most large trucks have no issues negotiating the turns, there are infrequent occasions (about once a month according to stakeholder interviews) when an oversized truck will get stuck while negotiating the roundabout. There is not a good existing alternative route for trucks to bypass the downtown Monticello area and the existing





roundabout. A Monticello bypass has been studied on four previous occasions, but remains unlikely to move forward given the cost to build such a facility and because the existing roadway network can accommodate the existing and projected future traffic demand without capacity deficiencies.

There are current efforts to make enhancements to the pedestrian environment at the Courthouse roundabout and the blocks surrounding it. The County is preparing to have in-pavement pedestrian signs installed at the roundabout pedestrian crosswalks and is also looking to remark the crosswalks using a more visible ladder-style marking pattern (the stamped and colored asphalt markings have faded since they were first installed in the mid-2000s). Portions of US 19 North and US 90 (both east and west directions) within two blocks of the Courthouse have angled parking, which results in wide roadway crossings for pedestrians. Several intersections are being considered for the addition of curb extensions as part of a Transportation Enhancements grant application being championed by the CTST. Curb extensions extend the sidewalk or curb line out into the parking lane, which reduces the effective street width. They significantly improve pedestrian crossings by reducing the width of the roadway, improving the ability of pedestrians and motorists to see each other, and reducing the time that pedestrians are in the street. Curb extensions would also allow the existing pedestrian signs to be moved closer to the travel lanes where they would be more visible to motorists. With more visible signs, some existing signs could be removed; for example, pedestrian warning signs are currently used for the crossings on both the near and far side of each intersection, but having a visible sign at the near side crossing would eliminate the need for the second sign at the far side crossing.

It is important to note that curb extensions can impact other aspects of roadway design and operation such as street drainage, underground utilities, delivery access and garbage removal, street sweeper operation, and the turning movements of large vehicles including large fire trucks. Because the benefits of the curb extensions appear to outweigh the potential impacts (many of which can be adequately mitigated through appropriate design), it appears most feasible to move ahead with the curb extension concept in downtown Monticello.

It was observed that the angle of the parking had been changed at some point in the past to a shallower angle (it used to be approximately 45 degrees, but was reduced to approximately 30 degrees). It is assumed that this change was made to provide more width to the passing trucks and make it easier for motorists entering and exiting the angled parking. One issue with the current striping, however, is that the lines are not long enough to properly direct motorists into the parking spaces; because of the angle of the spaces, the lines on the left side of the vehicles do not extend to the back bumper of the vehicle. Consideration should be given to increasing the length of the parking stall lines. In addition, parking blocks should be considered to prevent vehicles from pulling too far forward onto the sidewalk; several vehicles were observed pulled too far forward.

One design element that could be used to mitigate drainage concerns with the curb extensions and create a stronger visual separation of the travel lane and parking lane is the use of a valley gutter (along with drainage grates), which would be located between the travel lane and parking lane/curb extensions. Valley gutters can sometimes allow the existing drainage infrastructure to remain in place. Valley gutters may also be considered to visually separate



*Some signage at the roundabout is blocked by trees, and some striping has worn away. A valley gutter could be used to better visually separate the circulating roadway from the adjacent parking area.*



*Potential curb extensions would shorten pedestrian crossing distances and allow pedestrian signage on road edges to be moved more into driver cone of vision, and also eliminate the pedestrian signs on the far side of each intersection.*



*A vehicle parked partially on the sidewalk in an angled parking space. The vehicle also extends well past the striped parking stall length.*





the circulating roadway of the roundabout with the paved parking areas on the outside of the roundabout in each quadrant of the intersection; the striping that is used to provide the separation today is worn and hardly visible.

### *Jefferson County Elementary School Area*

The student arrival period was observed at Jefferson County Elementary School on the morning of February 23, 2012. No students were observed riding bicycles to school despite the direct connection to the Ike Anderson Trail. Only five students were observed walking to school. The lack of students walking and bicycling can be attributed to two primary factors: first, the lack of pedestrian facilities and low quality/unsafe pedestrian environment, and second, the low number of students that live within a reasonable walking distance of the school.

The Jefferson County Schools Transportation Department confirmed that only those students living in the immediate school area walk to the campus. The current enrollment of the elementary school is approximately 610 to 615 students. About 230 (38%) of these students are provided courtesy busing to the school from within the 2-mile walk area due to safety concerns. Of the total school district enrollment (elementary school plus the middle/high school) of just under 1,100 students, about 800 (73%) are bused to school. Despite safety concerns, there are no areas that have been designated as hazardous walking areas in the County by the Department of Education. Jefferson County Schools had requested hazardous walking designation for crossings of US 90 and US 19, but traffic volumes were not at high enough levels to meet the criteria to warrant the designation.

During the elementary school area observations, there were a number of issues observed, as well as the potential for improvements in the area immediately around the elementary school campus, as follows:

- There are no crossing guards that help students cross the street at the elementary school; the County lacks sufficient funds to afford them. According to the County, the school does get assistance from the police at times, although this was not observed.
- The existing sidewalks on Rocky Branch Road and Mamie Scott Drive are in poor condition and are only separated from the edge of roadway by about four to five feet in a rural cross section with no curb and gutter.
- There are no marked crosswalks across any of the school driveways, including the driveways on Rocky Branch Road (parent drop-off loop entrance and exit, and bus loop entrance) and Mamie Scott Drive (bus loop exit and back of school access driveway).
- The driveway providing access to the back of the school from Mamie Scott Drive does not have a stop sign or stop bar at its exit.
- There is a marked (but unsigned) crosswalk across Rocky Branch Road just west of the parent drop-off loop exit, which is unnecessary because it does not connect to anything.
- The existing 3-way stop traffic control at the intersection of Mamie Scott Drive/Rocky Branch Road/Cypress Street is awkward. All directions are required to stop except for southbound Mamie Scott Drive. This intersection should be considered for all-way stop control, which would make vehicle movements more predictable and make it safer for crossing pedestrians and bicyclists.
- There are no marked crosswalks at the Mamie Scott/Rocky Branch/Cypress intersection, including the east leg of the intersection which



*A Jefferson County Elementary School student crossing Rocky Branch Road at Rhodes Street at an existing school crosswalk.*



*Sidewalks near the school are of substandard width, minimally separated from the roadway, and in poor condition. There is an unnecessary marked crosswalk across Rocky Branch Road, but no marked crosswalk across school driveway, as shown in the picture above.*



*The Rocky Branch Road/Cypress Street/Mamie Scott Drive intersection uses an unusual 3-way stop control.*





connects the northern terminus of the Ike Anderson trail to the sidewalk that continues on the east side of Mamie Scott Drive, or on the north leg of the intersection which should be marked as a school crossing. There is a marked school crossing across Mamie Scott Drive just north of this intersection at a midblock location, which seems unnecessary given the locations of the school entrances which better align with the intersections at Cypress and Chestnut Streets.

- There are non-standard school speed limit signs on both Rocky Branch Road and Mamie Scott Drive, which should be replaced with standard Manual on Uniform Traffic Control Devices (MUTCD) school speed zone signs. Consideration should be given to supplementing the standard signs with flashing beacons to be active during the speed-restricted arrival and dismissal time periods.
- All existing crosswalks in the area use transverse line markings. Consideration should be given to re-marking the crossings as noted herein with FDOT standard ladder-style markings, which are much more visible to drivers. In addition, consideration should be given to marking advance yield lines and providing corresponding signage.
- All existing school warning signs are standard yellow, but should be upgraded to fluorescent yellow-green color to be in compliance with the current MUTCD.



*The Ike Anderson Trail ends at Rocky Branch Road. However, there is no crosswalk connecting the trail to the sidewalk that continues on the north side of the intersection. If one was added, the stop bar would need to be shifted back.*



*A potential southern extension of the trail could be routed along the east side of US 19 South along the access-way currently used for mail delivery (note mailboxes turned inward towards access-way).*



*Existing sidewalk from the school to Jefferson County Recreation Park along Mamie Scott Drive, which could be enhanced and widened as a northern trail extension.*

### Trail Extensions & Connections

A northern extension of the Ike Anderson Trail to the Jefferson County Recreation Park (approximately 0.35 miles) appears feasible based on the Mamie Scott Drive cross-section. Although this section of road does have a minimal width sidewalk that connects from the existing northern trail terminus at Jefferson County Elementary School to the park, a wider trail connection to the County's largest recreational facility would be preferred.

A southern extension of the Ike Anderson Trail to Jefferson County Middle/High School has previously been considered, and is currently included in the CRTPA Regional Mobility Plan Priority Project List, Adopted FY 2013-2017, as priority #65 (extension of trail from existing end to Jefferson County HS) and is identified for funding in the amount of \$3.3 million for PD&E/Design/ROW. The following observations were made when reviewing the potential southern trail extension:

- Since the railroad corridor right-of-way has been abandoned in the section south of Nacoosa Road due to environmental concerns associated with the nursery, the most feasible trail connection would be along US 19.
- A paved connection from the existing southern paved trail terminus to US 19 (0.34 miles) could be provided on Martin Road. The CRTPA Regional Mobility Plan Priority Project List, Adopted FY 2013-2017, included a trail adjacent to Martin Road from US 19/S Jefferson Street to Ike Anderson Bike Trail as priority #T-12, with funding of \$219,142 identified for design and construction.
- Alternatively, the existing unpaved section of the trail between Martin Road and Nacoosa Road could be paved (0.56 miles), and a paved connection could be provided on Nacoosa Road to US 19 (0.20 miles).
- There appears to be sufficient right-of-way available on the east side of US 19 to construct a trail. There is an unpaved access way for mail delivery along much of US 19 south of Nacoosa Road to the railroad





bridge north of the high school (mailboxes are oriented inward from this access way).

- There may be potential to use the Old Drifton Road corridor, particularly south of Aucilla Highway. This section is paved and already has an at-grade railroad crossing which would avoid having to build a structure adjacent to the US 19 bridge to cross over the railroad. Further, the Old Drifton corridor ties into David Road at the high school entrance. However, the roadway is narrow (approximately one lane wide), and the corridor is not paved north of Aucilla Highway.
- Other trails and connectors that should be evaluated further include the following:
- Connection between the existing Ike Anderson Trail and the planned eco-park at Water Street and Seminole Street. This connection would also provide improved pedestrian and bicycle access to Jefferson Square Shopping Center for residents of the Roostertown area.
- A paved trail connector to the Ike Anderson Trail from the newer residential area on Elliott Drive / Melrose Drive should be considered.
- An abandoned railroad corridor currently owned by Progress Energy provides an opportunity to create a new trail with eventual linkage from Lamont to the west and northwest of Monticello, and connect to a southern extension of the Ike Anderson Trail.

### Potential New Sidewalks

Based on the site review and stakeholder meetings conducted, new sidewalks should be pursued for the following areas:

- On US 90, west of Holly Road. Extending the currently programmed sidewalk project another 300 feet to the west would provide a connection to an existing dentist office and daycare business. This extension should be evaluated to determine if it could be accommodated during construction of the programmed project.
- Where there are currently gaps in the sidewalks on streets in downtown Monticello on the route of the Chamber of Commerce's Walking Tour of Monticello, including sections of Madison Street, Cherry Street, High Street, Pearl Street, Magnolia Street, and Palmer Mills Road. This amounts to a total of approximately 0.5 miles of missing sidewalk.
- On Water Street from the old high school campus to the proposed new Monticello Pines planned unit development and the planned eco-park located at Water Street and Seminole Avenue. Monticello Pines is planned to have sidewalks internally, but does not have a requirement to build any sidewalks external to the development.
- In the Roostertown area on Martin Luther King Jr. Avenue and King Street, at a minimum. Both of these streets are relatively wide and have curb and gutter sections, which may be able to accommodate new sidewalks on the back of the existing curb. Alternatively, the roadway could be narrowed with curb and gutter reconstructed further inward and connected to the existing drainage structures. Due to tight right-of-way, it may not be feasible to construct sidewalks on other streets having rural sections in this neighborhood, although right-of-way widths should be confirmed.
- Sidewalks have been discussed in the community of Lloyd, including a potential connection on SR 59 from Old Lloyd Road to the Interstate 10 area.



*Water Street is a priority corridor to add sidewalks to connect between downtown Monticello and the planned eco-park at Seminole Street as well as to the proposed Magnolia Pines development.*



*Potential location to construct a new sidewalk on King Street, east of Martin Luther King Jr Avenue.*





It is noted that the CRTPA TIP identifies funding for FY 2012/13 in the amount of \$133,000 to construct bicycle/pedestrian projects in Jefferson County. All or a portion of this funding, if unallocated to date, could potentially be used for one or more of the projects listed above.

### Sharrows

It is noted that the CRTPA Regional Mobility Plan Priority Project List, Adopted FY 2013-2017, includes priority #T-2 for shared lane markings ("sharrows") at the following locations:

- US 90/W Washington Drive from Mahan Drive to MLK Jr Avenue
- S Water Street from Williams Street to US 90/W Washington Street

Installation of sharrows on these sections of US 90 and Water Street in downtown Monticello would be of benefit to bicyclists since these sections do not have paved shoulders and cyclists currently share the lane with motor vehicle traffic. Traveling eastbound on US 90 into Monticello, the paved shoulder ends at Mahan Drive; Share the Road signs should be reviewed for use at this location, at minimum, and consideration be given for installation of sharrows. Sharrows would also be the preferred bicycle facility on the downtown sections of US 19 in the areas that cannot accommodate the addition of a bicycle lane.

### Potential Road Diets

There are two sections of US 19, immediately north and south of downtown Monticello, as well as a section of US 90 east of downtown Monticello, which should be considered for potential road diets. A "road diet" describes a project to reduce the width of a street when it has an unnecessary number of through lanes or lanes with excessive width. The removal of unneeded travel lanes from a roadway provides space that can then be used for other uses and travel modes. The most common road diet projects involve converting a four-lane undivided roadway to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space is most commonly used to add bicycle lanes. A center landscaped median and/or pedestrian refuge islands can be used in place of the center two-way left turn lane in locations where driveways are sparse or absent; the median or refuge islands allow pedestrians to cross the street in one direction and one lane of traffic at a time making it much easier and safer to cross the road. Road diets encourage non-motorized travel modes through reduced vehicle speeds and safer conditions for bicyclists and pedestrians. Because only under-utilized travel lanes are removed, motor vehicle traffic typically moves along a road dieted corridor with similar efficiency and travel time. The cost of a road diet project can be minimized by simply re-striping a roadway during its normal maintenance cycle. No right-of-way acquisition would be required for road diets on any of the sections described in Monticello.

The benefits of road diets to these roadway sections in Monticello include:

- Enhanced gateway treatments which will help to inform travelers that they have arrived in Monticello and establish an enhanced sense of place.
- Reduced corridor speeds to appropriate levels (posted speeds are 25 and 35 mph) to establish calmer and less aggressive traffic flow.
- More accessible and safer pedestrian crossing opportunities, particularly at area destinations such as the Jefferson Square Shopping Center.
- Improved corridor aesthetics through additional landscaping in median



*The beginning of the urban section and end of paved shoulders on US 90, west of downtown Monticello. This location could have a Share the Road or Bikes May Use Full Lane sign, as well as sharrow markings to help cyclists transition from the shoulder to sharing the travel lane.*



*Potential road diet location on US 19 South.*



*Potential road diet location on US 90 East.*





islands.

- Opportunity to examine the possibility of re-designating the space of under-utilized on-street parking, potentially for wider pedestrian buffers or buffered bicycle lanes.
- For US 19 South, enhanced safety by merging northbound traffic into one lane sooner, prior to the immediate approach to the Courthouse and roundabout at US 90.



*Existing sight distance issue on High Street at US 19 North due to the large trees.*



*The trail crossing at US 90 is not very visible. There is an opportunity to improve signage, lighting, and potentially install a refuge island to facilitate crossing one direction and one lane at a time.*



*Area of potential pedestrian crossing enhancements on US 19 South near Cherokee Street and Jefferson Square Shopping Center (looking south)*

An average daily traffic volume range of 8,000 to 15,000 is generally considered to be ideal for four-lane to three-lane road diet projects. For the potential road diet sections, US 19 South has daily volumes of approximately 10,000 to 11,000, while US 19 North has a daily traffic volume of 5,500 and US 90 East has a daily volume ranging from 2,600 to 9,000 (source: FDOT 2010 Florida Traffic Information DVD). These roadways have experienced negligible growth over the last 10 years, and no significant growth is forecast in the future at this time. As such, each roadway has volumes that are within or below the ideal range for consideration of a road diet.

If bike lanes are implemented as part of a road diet on US 19 North, it is important to note that even in the existing two lane section immediately north of downtown (from Pearl Street to north of Madison Street), the roadway is currently wide enough (approximately 40 feet curb to curb) to stripe bike lanes. A secondary benefit of bike lanes on this portion of US 19 is they would improve sight distance for vehicles on the side streets by defining the available space vehicles have to pull further forward to see around the large trees located adjacent to the roadway. For the portion of US 19 at the roundabout and in the two blocks north to Pearl Street, the preferred bicycle treatment is the use of sharrows.

### **Pedestrian Crossing Enhancements**

During the site visit conducted, enhancements were noted to be needed at two primary midblock pedestrian crossing areas, as follows:

- US 90 at Ike Anderson Trail. This crossing is not very visible and not well lit. It could be improved with additional signage, new crosswalk markings, additional overhead lighting, and potentially an enhanced crossing treatment, such as rectangular rapid flashing beacons (RRFBs). This crossing would also benefit from a median island that could be implemented as part of a road diet project, or independently. According to Jefferson County School Superintendant, there was a school speed zone at this crossing at one time, but it was removed due to a complaint.
- US 19 South at Cherokee Street / Jefferson Square Shopping Center area. This is a significant area with potential for frequent pedestrian crossings, especially following development of the proposed nearby eco-park. Crossings are currently challenging in this area due to the five-lane cross section, the speed of traffic (posted speed is 35 mph but traffic was generally observed traveling faster), and a significant hill just north of Cherokee Street that limits sight distance of both drivers and pedestrians. This area would benefit from installation of median islands as part of a potential road diet or separate project. The road diet would also be beneficial in helping eliminate pedestrian vehicle conflict points and controlling motor vehicle speeds. Some access management in terms of turning restrictions or driveway consolidation may be needed in order to implement one or more median islands in this area. A flashing beacon





in this area was previously not approved by FDOT during review of the planned Dollar General project.

The existing Ike Anderson Trail is not well signed along the numerous intersecting cross streets. Even though many of the cross streets are minor with low traffic volumes, additional signs should be considered for installation to warn motorists of the potential for crossing pedestrians and bicyclists at these locations.

Another consideration is to ensure adequate lighting of all marked crosswalks, including midblock locations and those located at intersections. FHWA HT-08-053, The Information Report on Lighting Design for Mid-block Crosswalks, found that a vertical illumination of 20 lux in front of the crosswalk, measured at a height of five feet from the road surface, provided adequate detection distances in most circumstances. The same principal applies at intersections as well.

### Assessment of Progress Toward Complete Streets

A 2008 article in ITE Journal describes “complete streets” and policies to implement them, and states: “A complete street is a road that is designed to be safe for drivers, bicyclists, transit vehicles and users, and pedestrians of all ages and abilities. The Complete Streets concept focuses not just on individual roads but on changing the decision-making and design process so that all users are routinely considered during the planning, designing, building and operating of all roadways. It is about policy and institutional change.”

In terms of routine accommodation, FDOT has a statewide complete streets policy and typically does routinely consider all modes when planning and designing roadway projects for the state system. This has resulted in the inclusion of paved shoulders on all of the state roads in Jefferson County (except a section of US 90 West), as well as sidewalks on the state roads in more developed areas such as downtown Monticello. However, Jefferson County and the City of Monticello do not have complete streets policies. As such, County roads generally lack paved shoulders, and many streets within the more developed parts of the City of Monticello lack sidewalks.

Based on stakeholder interviews, which are described in further detail in the Stakeholder Interviews Summary section, the County and City acknowledge deficiencies in accommodating all modes of travel. The County is now considering the addition of paved shoulders during resurfacing projects in rural parts of the County to better accommodate recreational bicycle riders. Similar consideration is also needed for opportunities to piggyback on any other roadway-related projects to add other complete streets elements that may be needed such as sidewalks or bicycle facilities. The City and County should both consider developing and adopting complete streets policies into their Comprehensive Plan and Land Development Codes.

### Policy Audit

A key component of an effective bicycle and pedestrian program involves understanding the level of consistency of non-motorized transportation policies among the governmental agencies in the area. The project team conducted a policy audit to address policies and design standards used in the engineering, public works, and planning departments of Jefferson County and the City of Monticello relating to bicycle and pedestrian facility design, signage and markings, and project prioritization. Location-specific policies and development



*Area of potential pedestrian crossing enhancements on US 19 South near Cherokee Street and Jefferson Square Shopping Center (looking north)*



*The trail crossing is not signed at many cross street locations, and motorists may not be expecting crossing bicyclists or pedestrians.*





policies related to site plan treatments for bike and pedestrian travel and accessibility were also considered. The CRTPA's Regional Mobility Plan includes a number of goals, objectives, and policies related to multimodal transportation, including bicycle and pedestrian travel.

### **Jefferson County Comprehensive Plan**

#### **Existing Policies**

A substantial number of Comprehensive Plan policies address bicycle and pedestrian needs. The policies can be categorized as follows:

- Policies supporting land use patterns that facilitate bicycling and walking. Policies include the creation of mixed use land use categories and the recognition of traditional and historic communities built at a pedestrian scale. These policies are included in Table 1.
- Policies establishing minimum design standards to accommodate bicycles and pedestrians. Policies provide direction for the content of land development regulations. These policies are included in Table 2.
- Policies promoting bicycling and walking as a means of achieving public health and safety. These policies generally address access to open space, including coastal areas. These policies are included in Table 3.

#### **Policy Gaps**

Objectives and policies could be incorporated into the Comprehensive Plan to strengthen the concept of enhanced countywide bicycling and pedestrian networks. The following gaps were identified:

- The Plan lacks an objective that specifically addresses the benefits of countywide bicycle and pedestrian networks.
- The Plan does not specifically enable the development of road standards compatible with more pedestrian oriented communities, such as the Lloyd settlements and Traditional Communities.
- The Plan addresses the need to preserve adequate right-of-way for traffic flow (Transportation Policy T-3-1), but does not mention that the right-of-way should also provide for bicycles and pedestrians, as appropriate.
- The Plan does not contain a policy on the protection of Canopy Roads, although such roads are designated and protected in the Land Development Code. Canopy roads can contribute to the bicycling network.
- The County may wish to consider addressing bicycling as part of the County's economic development strategy. This approach could tie into Plan policies addressing historic preservation and access to the Gulf Coast.

#### **Discrepancies**

No discrepancies or internal inconsistencies were identified. The County should consider renaming the "Traffic Circulation Element" the "Transportation Element" to reflect that this element incorporates various modes of transportation.

#### **Other Notes**



Table 1: Jefferson County Comprehensive Plan Policies Supporting a Land Use Pattern that Facilitates Bicycling and Walking

POLICY	TEXT
<p><b>Future Land Use Element Policy FLU-1.2</b></p>	<p><b>MIXED USE SUBURBAN RESIDENTIAL (MUSR):</b>  This mixed use category is comprised of areas where suburban or exurban residential is the predominant type of use and includes many traditional communities. Infill development is particularly desirable and encouraged in these areas, particularly when community utilities become available.  All housing types will be allowed at a variety of densities with a maximum density of 4 units per acre utilizing individual septic tanks if on a community water system and up to 8 units per acre with community water and sanitary sewer. Parks and recreation uses are also appropriate. Non-residential use should not exceed 20 percent of the total area; intensity of such development, as measured by land coverage, should not exceed 65 percent impervious surface area.</p> <p><b>MIXED USE BUSINESS/RESIDENTIAL (MUBR):</b>  A mixed use category which provides for a variety of business types, including offices, retail, lodging, restaurants, services, commerce parks, shopping centers, or other similar business activities. Other uses may be allowed, consistent with the more intense development characteristics of this mixed use category, such as multi-family residential not to exceed 10 units per acre, medical facilities such as clinics, hospitals, nursing homes, public or private schools, churches or other similar uses, parks and recreation. The mix would allow for approximately a 60-40 split between business (60%) and residential (40%) uses within each mapped MUBR area. Intensity of business use, as measured by land coverage, should not exceed 80 percent impervious surface area. These MUBR areas will be required to be served by community utilities, therefore, new residential development shall not be less than one dwelling unit per acre. Residential development shall include 5% of contiguous land for open space.</p> <p><b>MIXED USE-INTERCHANGE BUSINESS:</b>  A mixed use category located at an interchange of I-10, with a variety of primarily commercial businesses. Appropriate commercial uses include: (1) tourist-oriented facilities such as restaurants, automotive service stations, motels, campgrounds, and the like; (2) region-serving retail complexes or office centers; (3) commerce parks; (4) facilities for the storage and distribution of foods and products including wholesale activity; (5) light manufacture of goods for distribution to other locations; and (6) truck stops. Intensity of use, as measured by impervious surface, shall not exceed 80 percent.</p> <p><b>CONSERVATION SUBDIVISIONS:</b>  A form of clustering residential development in the County's agricultural land use categories that concentrates buildings or lots on part of the site to allow the remaining land to be used for common open space, recreation, and preservation of environmentally sensitive features in perpetual Conservation Easements. The concentration of lots is facilitated by reduction in lot size. A conservation subdivision will consist of one or more cluster groups surrounded by common open space in Conservation Easements. The parcel on which a conservation subdivision is proposed must be 80 or more acres in size to ensure that the preserved open space be environmentally viable. Density bonuses for conservation subdivisions as provided above shall be 10% for every 15% of additional open space up to a maximum density bonus of 40% for a minimum of 70% open space meeting the requirements for conservation subdivisions in the Land Development Code. The primary requirement regarding the condition of the Open Space shall be that 50% of the Open Space area shall be otherwise developable lands with no environmental constraints. The County's requirements for conservation subdivisions shall be consistent with the following purposes: ...  Promote construction of convenient landscaped walking trails and bike paths both within the subdivision and connected to neighboring communities, businesses, and facilities to reduce reliance on automobiles; ....</p>





POLICY	TEXT
<b>Future Land Use Objective FLU-6</b>	<i>It is the intent of the county, as reflected on the Future Land Use Map, to encourage new development to occur primarily in a variety of mixed use concentrations, located in historic settlements as small nodes of development to support the surrounding rural and agricultural development, adjacent to and integrated with the City of Monticello, at major roadway intersections, or at interstate interchanges, specifically to serve the traveling public.</i>
<b>Conservation Policy C-1.1.3</b>	<i>Jefferson County shall encourage mixed use development patterns that promote the mixture of residential and workplaces to encourage pedestrian or bicycle use and/or transportation alternatives to automobiles.</i>

Table 2: Jefferson County Comprehensive Plan Policies Establishing Minimum Design Standards to Accommodate Bicycles and Pedestrians

POLICY	TEXT
<b>Future Land Use Policy FLU 5-5</b>	<i>In addition to standards on access management, the Land Development Code shall include standards for on-site circulation and parking, and where appropriate (such as mixed use areas), pedestrian and bicycle access and the needs, types and locations of interconnections between residential and commercial areas.</i>
<b>Transportation Objective T-4</b>	<i>Provisions shall be adopted in the Land Development Code which ensures safe and adequate movement of pedestrians and bicyclists.</i>
<b>Transportation Policy T-4-1</b>	<i>Adequate pedestrian circulation and safety shall be ensured as a component of highway system management, with accomplishment through traffic analysis and roadway improvements.</i> <ul style="list-style-type: none"><li><i>• Pedestrian movement and safety studies shall be conducted to determine high travel patterns and areas;</i></li><li><i>• Remedial actions shall be taken by the County to mitigate safety problems where conditions have been determined to be unacceptable;</i></li><li><i>• Sidewalks shall be provided where feasible and appropriate along all roadways</i></li></ul>
<b>Transportation Policy T-4-3</b>	<i>Bicycle facilities, pedestrian walkways, horse riding paths, and associated facilities shall be included as integral components of roadways, with priority of implementation being oriented to the establishment of networks along roadways between residential centers and schools, employment and retail commercial areas, and recreation and other public facilities as possible.</i>
<b>Transportation Policy T-4-4</b>	<i>The County shall review all proposed development for its accommodation of bicycle/horse riding and pedestrian traffic needs.</i>
<b>Transportation Policy T-7-2</b>	<i>The site plan review applicable to all development will ensure that adequate and safe on-site traffic flow and parking conditions will exist for pedestrians and motorized and non-motorized vehicles.</i>



Table 3: Jefferson County Comprehensive Plan Policies Promoting Bicycling and Walking as a Means of Achieving Public Health and Safety

POLICY	TEXT
<b>Conservation Policy C-1.1.1</b>	<i>Jefferson County shall promote programs on the health benefits derived from using bicycles and walking by encouraging citizens to use public pathways and at the same time reduce polluted emissions attendant with the use of their automobiles..</i>
<b>Housing Policy H-3-1.11</b>	<i>On an on-going basis, support local projects involving walking, bicycling, and driving tours to historic and archeological sites.</i>
<b>Coastal Management Element Objective CME-1.4</b>	<i>Ensure that provision for public access to the Gulf of Mexico through other counties adjacent to Jefferson County shall be coordinated between them and other agencies, such as Federal, State, and Regional; and shall be accomplished in a consistent manner in keeping with the public need; and that both efforts, coordination and accomplishment, will be enforced throughout the time frame of this plan.</i>
<b>Coastal Management Element Policy CME-1.4.1</b>	<i>Coordinate with the Federal and State governments and Wakulla and Taylor counties to ensure that the citizens of Jefferson County will have public access when needs are being provided for during any upgrading of existing access points or development of new access points to the County's coastal area from adjacent counties.</i>
<b>Recreation Policy R-1.1</b>	<i>The County will provide parking areas and bicycle racks for recreation sites.</i>
<b>Recreation Policy R-1.2</b>	<i>Bike paths and pedestrian walkways shall be built to provide access to recreation areas in accordance with site specific design features and the intended use of a particular site.</i>





The Comprehensive Plan calls for horse riding paths to be included, along with pedestrian and bicycling facilities, as integral part of roadways.

## Jefferson County Land Development Code

### Existing Policies

The Jefferson County land development code provides both policy direction (intent) regarding the significance of bicycle and pedestrian facilities and specific standards for the design and construction of those facilities.

### Intent

The Code specifically states that one intent of the land development code is to encourage bicycle and pedestrian travel.

### Development Standards

The code addresses the following standards, which are included in Table 4:

- Interconnections between developments
- Design of on-site parking and loading to address bicyclist and pedestrian safety
- Bicyclist and pedestrian access to development
- Shoulder construction
- Road cross sections
- Bicycle parking

### Policy Gaps

- 2.03.02: Traditional Communities. The code does not contain standards for development and redevelopment in Traditional Communities. Such standards could specifically address maintaining and enhancing the pedestrian scale of development.
- 2.03.03 B.1: Lloyd Historic Overlay. The code does not include standards that specifically address maintaining and enhancing the pedestrian scale of development.
- 2.05.02: Landscape buffers. The code does not consider allowing building and site design to ensure compatibility, in lieu of landscape buffers, in areas designated for mixed use pedestrian scale development.
- 5.02.02 A.5 & 6: Street design standards. The code does not include reference to bicycle and pedestrian interconnections in these standards.
- 9.02.03.D.14: General Development Review. The code does not include requirements to show sidewalks or pedestrian and bicycle circulation in on-site parking plan.

### Discrepancies

Although interconnections are encouraged (5.02.02A.5 & 6), the Code also



Table 4: Jefferson County Land Development Code Standards

POLICY	TEXT
<b>Objectives of Code (1.02.01 L)</b>	<i>Realize a pattern of locations of dwelling units, jobs, and other trip origins and destinations to encourage pedestrian and bicycle travel, to minimize vehicular trips and trip lengths, and to facilitate the operation of public and quasi-public transportation systems;...</i>
<b>Design Standards for Off-Street Parking and Loading Areas (5.02.03 E)</b>	<p>1.Location.</p> <p>a.Except as provided herein, all required off-street parking spaces and the use they are intended to serve shall be located on the same parcel.</p> <p>b.The Planning Commission may approve off-site parking facilities as part of the parking required by this Code if:</p> <p>(1)The location of the off-site parking spaces will adequately serve the use for which it is intended. The following factors shall be considered:</p> <p>(a)Proximity of the off-site spaces to the use that they will serve.</p> <p>(b)Ease of pedestrian access to the off-site parking spaces.</p> <p>(c)Whether or not off-site parking spaces are compatible with the use intended to be served, e.g., off-site parking is not ordinarily compatible with high turnover uses such as retail.</p> <p>(2)The location of the off-site parking spaces will not create unreasonable:</p> <p>(a)Hazards to pedestrians.</p> <p>(b)Hazards to vehicular traffic.</p> <p>(c)Traffic congestion.</p> <p>(d)Interference with access to other parking spaces in the vicinity.</p> <p>(e)Detriment to any nearby use.</p>
<b>Bicycle and Pedestrian Access (5.02.04)</b>	<p>1.Location.</p> <p>a.Except as provided herein, all required off-street parking spaces and the use they are intended to serve shall be located on the same parcel.</p> <p>b.The Planning Commission may approve off-site parking facilities as part of the parking required by this Code if:</p> <p>(1)The location of the off-site parking spaces will adequately serve the use for which it is intended. The following factors shall be considered:</p> <p>(a)Proximity of the off-site spaces to the use that they will serve.</p> <p>(b)Ease of pedestrian access to the off-site parking spaces.</p> <p>(c)Whether or not off-site parking spaces are compatible with the use intended to be served, e.g., off-site parking is not ordinarily compatible with high turnover uses such as retail.</p> <p>(2)The location of the off-site parking spaces will not create unreasonable:</p> <p>(a)Hazards to pedestrians.</p> <p>(b)Hazards to vehicular traffic.</p> <p>(c)Traffic congestion.</p> <p>(d)Interference with access to other parking spaces in the vicinity.</p> <p>(e)Detriment to any nearby use.</p>





POLICY	TEXT
<b>Street Design Standards – General Design Standards (5.02.02 A 5 &amp; 6)</b>	<p>5.The street layout in all new developments shall be coordinated with and interconnected to the street system of the surrounding area.</p> <p>6.Streets in proposed subdivisions shall be connected to rights-of-way in adjacent areas to allow for proper inter-neighborhood traffic flow. If adjacent lands are unplatted, stub outs in the new development shall be provided for future connection to the adjacent unplatted land.</p>
<b>Street Design Standards – Shoulders (5.02.02 D)</b>	<p>Shoulders, where required, shall measure at least four (4) feet in width and shall be required on each side of streets and shall be located within the right-of-way. Shoulders shall consist of stabilized turf or other material permitted by the Planning Official. Shoulders and/or drainage swales are required as follows:</p> <ol style="list-style-type: none"> <li>1.Shoulders are required on all residential access and residential subcollector streets.</li> <li>2.All residential collector streets shall provide four (4) foot wide shoulders on both sides of the street. Shoulders should be grass surfaced. In no case shall the shoulders be paved. Pedestrian or bicycle traffic areas that are paved shall have shoulders on both sides unless they are connected to the street paving. Then a shoulder is only required on the side not connected to the paving.</li> <li>3.Where shoulders are required by the Florida Department of Transportation.</li> <li>4.Collector streets where curbing is not required.</li> <li>5.Arterial streets where curbing is not required.</li> <li>6.Shoulders are not required when curbing is used.</li> </ol>
<b>Off-Street Parking and Loading – Number of Parking Spaces Required (5.02.03 B.7.c)</b>	<p>The following applies to bicycle parking:</p> <p>(k) Other bicycle parking devices may be used if it is established to the satisfaction of the Development Administrator that the standards below are met.</p> <p>(l) The rack or other facility shall:</p> <ol style="list-style-type: none"> <li>(a) Be designed to allow each bicycle to be supported by its frame.</li> <li>(b) Be designed to allow the frame and wheels of each bicycle to be secured against theft.</li> <li>(c) Be designed to avoid damage to the bicycles.</li> <li>(d) Be anchored to resist removal and solidly constructed to resist damage by rust, corrosion, and vandalism.</li> <li>(e) Accommodate a range of bicycle shapes and sizes and to facilitate easy locking without interfering with adjacent bicycles.</li> <li>(f) Be located to prevent damage to bicycles by cars.</li> <li>(g) Be consistent with the surroundings in color and design and be incorporated whenever possible into building or street furniture design.</li> <li>(h) Be located in convenient, highly-visible, active, well-lighted areas.</li> <li>(i) Be located so as not to interfere with pedestrian movements.</li> <li>(j) Be located as near the principal entrance of the building as practicable.</li> <li>(k) Provide safe access from the spaces to the right of way or bicycle lane.</li> </ol>



POLICY	TEXT
<b>Review of Site Development Plans – Application and Submittal Requirements–Development Review Requirements (9.02.03.D.14.f)</b>	<p><i>Proposed Development Activities and Design - Streets, parking and loading</i></p> <p>(1) <i>The layout of all streets, bike paths, and driveways with paving and drainage plans and profiles showing existing and proposed elevations and grades of all public and private paved areas.</i></p> <p>(2) <i>A parking and loading plan showing the total number and dimensions of proposed parking spaces, spaces reserved for handicapped parking, loading areas, proposed ingress and egress (including proposed public street modifications), and projected on-site traffic flow.</i></p>
<b>Review of Site Development Plans – Application and Submittal Requirements – Major Review Requirements 9.02.03.F.1 d &amp; f</b>	<p><i>A Master Plan or Planned Unit Development (PUD) is required for a Major Development, which is to be developed in phases. A Master Plan shall provide the following information for the entire development:</i></p> <p><i>a. Approximate location of proposed and existing streets and pedestrian and bicycle routes, including points of ingress and egress....</i></p> <p><i>f. A vicinity map of the area within five hundred (500) feet surrounding the site showing:</i></p> <p><i>(1) Land use designations and boundaries.</i></p> <p><i>(2) Traffic circulation systems.</i></p> <p><i>(3) Major public facilities.</i></p> <p><i>(4) Municipal boundary lines.</i></p>
<b>Street Design Standards (5.02.02) Tables and Figures</b>	<p><i>Figures</i></p> <p><i>5.02.02-A; B; C; and D</i></p> <p><i>Table 5.02.02-A</i></p>





states that “[r]esidential streets shall be arranged to discourage through traffic....” (5.02.02A.7) The code should specifically encourage bicycle and pedestrian traffic, even when automobile traffic is discouraged.

### City of Monticello Comprehensive Plan

A substantial number of Comprehensive Plan policies address bicycle and pedestrian needs both directly and indirectly. The policies can be categorized as follows:

- Policies supporting a land use pattern that facilitates bicycling and walking. The Plan establishes mixed use future land use categories. It strongly encourages new development to incorporate smart growth practices and emphasizes the importance of new development incorporating the City’s existing grid system. These policies are included in Table 6.
- Policies establishing minimum design standards to accommodate bicycles and pedestrians. The Plan contains specific standards (e.g., minimum sidewalk widths) as well as direction for standards in the land development code. These policies are included in Table 7.
- Policies promoting bicycling and walking as a means of achieving public health and safety. Policies address access to recreational facilities and improving safety conditions. These policies are included in Table 8.
- Policies that promote bicycling and walking as a means of improving environmental quality, including the reduction of greenhouse gases. These policies are included in Table 9.



Table 5: City of Monticello Comprehensive Plan Policies Supporting Land Use Patterns that Facilitate Bicycling and Walking

POLICY	TEXT
<b>Land Use Policy 1-10</b>	<p><i>Mixed-Use Office/Residential</i></p> <p>The mixed-use office/residential land use category applies to areas in which historic structures exist and allows single family dwellings, as well as business and professional offices as the primary non-residential use, excluding veterinarian offices. Residential uses and densities shall be the same as allowed for low density residential. In addition to offices, non-residential uses include a mix of pedestrian oriented uses allowed in the public, educational and recreational land use categories. Except as described below, any non-residential uses allowed in the mixed-use office/residential land use category may utilize only structures in existence on March 3, 1998. New structures intended specifically for non-residential uses shall be no larger than 5,000 square feet, and may not be placed on the site of a residential structure which existed on March 3, 1998. New non-residential uses shall be limited to an impervious surface ratio of 0.50. The distribution of the mix of uses shall be within the range of 40-60% Residential/40-60% non-residential.</p> <p>The establishment of all new non-residential uses in the office/residential land use category shall be approved only pursuant to a special exception process (from low density residential zoning) to be included within the City of Monticello Land Development Regulations.</p>
<b>Land Use Policy 1-11</b>	<p><i>Mixed-Use Business/Residential</i></p> <p>The mixed-use business/residential land use category allows all uses permitted within mixed use office/residential and also allows residentially-compatible commercial uses. Commercial uses which are incompatible with this category include, but are not necessarily limited to, restaurants with fast food counters or providing take out or drive through service, convenience stores, automobile fueling and service establishments, laundry and dry cleaning facilities. Residential densities shall be up to ten units per acre. Non-residential uses shall be limited to an impervious surface ratio of .75. New structures intended specifically for non-residential uses shall be no larger than 7,500 square feet. The distribution of the mix of uses shall be within the range of 40-60% Residential/40-60% non-residential. For undeveloped parcels greater than 25 acres in size not currently included within this category, the non-residential use component shall include a mix of commercial and recreational uses.</p> <p>In addition, non-residential uses as allowed herein shall be allowed only by the City's site plan approval process.</p>
<b>Land Use Policy 4-3</b>	<p>New development, to the extent possible, shall be located in areas with existing utilities as an effort to reduce infrastructure costs, increase infrastructure efficiency and reduce urban sprawl.</p>





POLICY	TEXT
<b>Land Use Policy 8-1</b>	<p>Master Planned Development - Master Planned Developments (MPD) are large scale projects that require a comprehensive analysis of a specified area of the City which is used to guide the timing, location, type and amount of future development. MPDs include developments that are mixed-use, large-scale, and may be located in new towns, highway corridors and interchanges, areas of rapid growth or land use changes, and areas with sensitive environmental resources or other areas where a comprehensive review is warranted. ...</p> <p>f.The proposed traffic circulation system in the MPD must incorporate the City's existing grid system as part of the proposed transportation system if feasible. Alternatively, the system can provide a different approach as long as it provides similar benefits of the grid system including minimizing traffic onto US 19 and 90 and providing multiple options for travel. Any traffic circulation approach must also consider natural features and existing resources both on and off site, compatibility with adjacent neighborhoods (if any) and community character.</p>
<b>Land Use Policy 10-1</b>	<p>The City encourages all new development (residential or commercial) to consider the following design elements or smart growth principles as part of the project's site design:</p> <ul style="list-style-type: none"><li>• Building placement – direct buildings toward the street especially in urban areas to encourage walkability. Alternatively, design the site to address the street through landscaping and other design features to avoid unbuffered parking areas along the street frontage.</li><li>• Direct parking beside or to the rear of the building to allow for building placement near the street. Alternatively, design the site to address the street through landscaping and other design features to avoid unbuffered parking areas along the street frontage.</li><li>• Design the site in consideration of all modes of transportation including the automobile, pedestrians and cyclists. Consider the safe movement and provision for all modes of transportation.</li><li>• Buffering – use landscaping to provide transition and hide undesirable areas. However, encourage mixture of land uses where possible and do not use landscaping to separate interaction of uses unless the use is undesirable by adjacent property owners.</li><li>• Encourage front porches rather than garages along the street</li><li>• Incorporate the City's existing grid pattern as part of new development including sidewalks, bike lanes and tree lined streets where feasible.</li><li>• Signage - Control signage and lighting to be more uniform and compatible with the City, to limit light pollution and sky glow and to be more energy efficient.</li></ul> <p>This policy does not restrict the City from adopting required development standards within the City's Land Development Code.</p>



Table 6: City of Monticello Comprehensive Plan Policies Establishing Minimum Design Standards to Accommodate Bicycles and Pedestrians

POLICY	TEXT
<b>Transportation Policy 1-2</b>	<i>The City shall provide local alternatives to US 19 and US 90 by protecting and extending the existing local grid street pattern. Local streets shall not be abandoned unless necessary for safety reasons. New streets will be required to connect to the existing street pattern as the land is developed.</i>
<b>Transportation Policy 1-3</b>	<i>New development must incorporate the City's existing grid system as part of the proposed transportation system if feasible. Alternatively, new development can provide a different approach as long as it provides similar benefits of the grid system including minimizing traffic onto US 19 and 90 and providing multiple options for travel. Any traffic circulation approach must also consider natural features and existing resources both on and off site, compatibility with adjacent neighborhoods (if any) and community character.</i>
<b>Transportation Policy 2-7</b>	<i>Marked pedestrian crossings shall be provided around the traffic circle surrounding the Courthouse, and within three blocks both north, east and west of the Courthouse.</i>
<b>Transportation Policy 3-4</b>	<i>In order to protect pedestrians in downtown, reduce vehicle speeds, promote economic development, and protect the character of the City Center, all existing parking spaces on US 90 and on US 19 north of US 90 shall remain, unless clearly shown that removal is necessary to resolve an existing safety hazard.</i>
<b>Transportation Policy 3-5</b>	<i>In order to reduce accidents and improve pedestrian safety, the City shall request that FDOT install a raised median on US 19 and US 90, where feasible, whenever a resurfacing occurs.</i>
<b>Transportation Policy 4-3</b>	<i>All new roads or reconstructed roads shall include either a sidewalk on at least one side or a paved shoulder on both sides.</i>
<b>Transportation Policy 4-5</b>	<i>All new sidewalks shall be a minimum of 5 feet wide, unless available right-of-way is less than five feet.</i>
<b>Transportation Policy 4-6</b>	<i>The City will develop a mobility plan for the City as follows: a)The City will identify on a map and evaluate the condition of the sidewalk and bicycle/pedestrian facilities within the City. b)The City will determine the location of key attractor and generators within the City c)The City will compare the existing bicycle and pedestrian facilities with the key areas (attractors and generators) in the City to determine where the critical gaps are located in the mobility system. d)The City will identify the gaps in the system, prioritize those needed facilities and incorporate those facilities into the City's capital improvement planning. e)The City will look for opportunities to have the private sector develop these needed facilities as new development is proposed within the City.</i>
<b>Transportation Policy 6-1</b>	<i>All new businesses or public facilities which require additional vehicle parking shall include bicycle parking near the main entrance. Vehicle parking requirements may be reduced by the City in coordination with additional bicycle parking facilities.</i>





POLICY	TEXT
<b>Transportation Policy 6-2</b>	<i>The City will have established a citizen's Bicycle and Pedestrian Advisory Committee to advise on any transportation matters. This Committee may be combined with a similar committee representing all of Jefferson County, if one exists.</i>
<b>Transportation Policy 6-3</b>	<i>Any new cul-de-sac streets shall include a bicycle/pedestrian connection to adjacent properties.</i>

Table 7: : City of Monticello Comprehensive Plan Policies Promoting Bicycling and Walking as a Means of Achieving Public Health and Safety

POLICY	TEXT
<b>Transportation Policy 3-3</b>	<i>The City shall participate as part of the Jefferson County Safety Team to identify and minimize unsafe locations.</i>
<b>Transportation Policy 3-5</b>	<i>In order to reduce accidents and improve pedestrian safety, the City shall request that FDOT install a raised median on US 19 and US 90, where feasible, whenever a resurfacing occurs.</i>
<b>Recreation and Open Space Policy 1-1</b>	<i>Bicycle racks shall be available at recreation sites. When land is available, the City shall also provide parking areas.</i>
<b>Recreation and Open Space Policy 1-2</b>	<i>Bike paths and pedestrian walkways shall be built to provide access to recreation areas including a bicycle trail parallel to Railroad Street.</i>

Table 8: : City of Monticello Comprehensive Plan Policies Promoting Improved Environmental Quality

POLICY	TEXT
<b>Land Use Objective 8</b>	<i>The City of Monticello will encourage large scale proposed developments to be designated "Master Planned Development" on the Future Land Use Map and to complete a comprehensive analysis of the project's impacts within the City. The City will also encourage the development to follow energy efficient town planning principles in order to reduce vehicle miles traveled (VMT) in the City and to reduce vehicle emissions by encouraging the use of other modes of transportation such as bicycle, pedestrian and ride sharing.</i>
<b>Conservation Policy 1-2</b>	<i>The City shall promote use of bike and pedestrian pathways to help reduce automobile pollution and reduce green house gas emissions.</i>



Table 9: City of Monticello Comprehensive Plan Policies Promoting Enhanced Bicycling and Pedestrian Facilities as Part of the City's Overall Economic Development Strategy

POLICY	TEXT
<b>Transportation Policy 1-4</b>	<i>In order to promote economic development and downtown revitalization, and maintain the minimum level of service standards, pedestrian/bicycle facilities, specifically sidewalks for all projects and encourage bicycle racks for commercial projects, shall be included in all development plans.</i>





- Policy that promote enhanced bicycling and pedestrian facilities as part of the City's overall economic development strategy, particularly related to downtown redevelopment. This policy is included in Table 10.

## City of Monticello Land Development Code

### Existing Policies

The Monticello land development code provides specific standards for the design and construction of bicycle and pedestrian facilities. The code addresses the following standards, which are included in Table 11:

- Interconnections between developments
- Shoulder construction
- Road cross sections
- Bicycle parking

### Policy Gaps

Intent: The code does not include explicit intent language stating the importance of bicycle and pedestrian mobility.

- 54.500: Parking Lot Design Criteria. This section does not include standards for safe bicycle and pedestrian access and circulation.
- 54.523(l): Connectivity: This section does not specifically reference bicycle and pedestrian connectivity.

### Discrepancies

Although interconnections are encouraged, the Code also states that “[r]esidential streets shall be arranged to discourage through traffic....” (see 54.523(a) 5,6,& 7). The code should specifically encourage bicycle and pedestrian traffic, even when automobile traffic is discouraged.



Table 10: City of Monticello Land Development Code Standards

POLICY	TEXT
<b>Planned Unit Developments 54-247 (4)</b>	<p><i>Final development plan.</i></p> <p><i>A final development plan or plans shall be drawn to an appropriate scale showing:...</i></p> <p><i>f.A circulation diagram showing vehicular and pedestrian movements including any special engineering features and traffic regulation devices needed.</i></p>
<b>Transportation Design Standards – Access Management 54.522(f)</b>	<p><i>Joint and cross access.</i></p> <p><i>(1)Adjacent commercial or office developments that are major traffic generators shall provide a cross access drive and pedestrian access to allow circulation between sites.</i></p>
<b>Transportation Design Standards – Access Management 54.522(k &amp; l)</b>	<p><i>(k)Shared access.</i></p> <p><i>Subdivisions with frontage on the state highway system shall be designed into shared access points to and from the highway. Normally a maximum of two accesses shall be allowed regardless of the number of lots or businesses to be served.</i></p> <p><i>(l)Connectivity.</i></p> <p><i>(1)The street system of proposed subdivisions shall be designed to coordinate with the existing, proposed, and planned streets outside of the subdivision.</i></p> <p><i>(2)Wherever a proposed development abuts unplatted land or a future development phase of the same development, street stubs shall be provided as deemed necessary by the city to provide access to adjoining properties or to logically extend the street system into the surrounding areas.</i></p> <p><i>(3)Collector and local residential streets shall connect with surrounding streets to permit the convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation.</i></p>
<b>Transportation Design Standards – Access Management 54-522(m)(2)</b>	<p><i>Site plan review checklist for transportation.</i></p> <p><i>(1)Subdivisions and site plan review shall address the following access considerations:...</i></p> <p><i>g.Does the pedestrian path system link buildings with parking areas, entrances to the development, open space and recreational and other community facilities?</i></p>
<b>Transportation Design Standards – Street Design Standards 54-523 (a) 5 &amp; 6</b>	<p><i>General design standards.</i></p> <p><i>(5)The street layout in all new developments shall be coordinated with and interconnected to the street system of the surrounding area.</i></p> <p><i>(6)Streets in proposed subdivisions shall be connected to rights-of-way in adjacent areas to allow for proper inter-neighborhood traffic flow. If adjacent lands are unplatted, stub outs in the new development shall be provided for future connection to the adjacent unplatted land.</i></p>
<b>Transportation Design Standards – Street Design Standards 54-523 (b)</b>	<p><i>Sidewalks.</i></p> <p><i>Sidewalks shall be provided along:</i></p> <p><i>(1)Arterial streets: Both sides.</i></p> <p><i>(2)Collectors: One side.</i></p> <p><i>(3)Local streets: One side. Sidewalks shall be designed and constructed in accordance with city standards and policies.</i></p> <p><i>(4)Where new development is adjacent to existing development with sidewalks, the new development shall be required to provide a connecting sidewalk.</i></p>





POLICY	TEXT
<b>Transportation Design Standards – Street Design Standards 54-523 (e)</b>	<p>Shoulders.</p> <p>Shoulders, where required, shall measure at least four feet in width and shall be required on each side of streets and shall be located within the right-of-way. Shoulders shall consist of stabilized turf or other material permitted by the development administrator. Shoulders and/or drainage swales are required as follows:</p> <p>(1) Shoulders are required on all residential access and residential subcollector streets.</p> <p>(2) All residential collector streets shall provide four-foot-wide shoulders on both sides of the street. Shoulders should be grass surfaced. In no case shall the shoulders be paved. Pedestrian or bicycle traffic areas that are paved shall have shoulders on both sides unless they are connected to the street paving. Then a shoulder is only required on the side not connected to the paving.</p> <p>(3) Where shoulders are required by the state department of transportation.</p> <p>(4) Collector streets where curbing is not required.</p> <p>(5) Arterial streets where curbing is not required.</p> <p>(6) Shoulders are not required when curbing is used.</p>







*Many of the stakeholder interviews focused on small improvements that may contribute to an overall safer network.*





## Project Involvement

This master plan was developed with the opportunity for extensive input and involvement from the general public, key community stakeholders, local and regional public agencies and elected officials, and business and economic development interests. Throughout the process, numerous elements of the public were asked to participate in the planning and decision making process, providing valuable local knowledge and resources to assure that this master plan is a true representation of the Jefferson County community. A range of strategies and tools were utilized to garner input from the public, including key stakeholder interviews, an online public survey, an advertised public workshop, and numerous public meetings with agency appointees and elected officials. Below includes descriptions of the public involvement activities conducted during the project.

## Stakeholder Meetings and Interviews

Stakeholder interviews were conducted with a cross section of people early in the process to gain initial input, local knowledge and thoughts on the development of the master plan. Below is a list of key stakeholders interviewed. Stakeholder interview notes are included in the appendix to this master plan.

- CRTPA staff
- Jefferson County Administrator
- Jefferson County Engineer
- Jefferson County Sheriff's Deputies
- Monticello Chief of Police
- Jefferson County Schools Superintendent
- Jefferson County Planning Director
- Jefferson County Roads Department staff
- Jefferson County Economic Development Council staff
- Jefferson County Tourist Development Council staff
- Monticello City Manager
- Monticello Clerk/Treasurer
- Local resident/business owner
- Capital City Cyclists members
- FDEP Office of Greenways and Trails (OGT) staff

## Online Public Survey

An online public survey was posted on the CRTPA website with a link from the Jefferson County website. The survey included four 'open ended' questions for participants to respond. The questions pertained to perceived issues, concerns, facility types and potential important destinations related to bicycling and walking in the County. A copy of the online survey results is included in the appendix to this master plan.





### **Public Workshop**

A public workshop was conducted at the Jefferson County library. The workshop was noticed via local newspaper and television, as well as CTRPA and Jefferson County websites. Local residents, merchants/businesses, churches, bike clubs, civic clubs, agencies, elected officials and community leaders were invited primarily through email. The intent of the workshop was to discuss bicycle- and pedestrian-related needs, identify a vision and set some of the priorities for the master plan. Copies of the workshop flyer and newspaper advertisement are included in the appendix to this master plan.

### **Public Agency Meetings**

A number of public agency meetings were held throughout the master plan process to keep the public informed, address questions and obtain valuable feedback to guide the project forward. Below is a list of the public agency meetings and presentations conducted for this master plan.

#### **CTRPA Technical Advisory Committee (TAC)**

Project consultants presented to the TAC on the status of the project and the planned next steps moving forward. Questions were solicited from meeting attendees after the presentation and project comment cards were distributed to gain further input.

#### **CTRPA Citizens Multimodal Advisory Committee (CMAC)**

Project consultants presented to the CMAC on the status of the project and the planned next steps moving forward. Questions were solicited from meeting attendees after the presentation and project comment cards were distributed to gain further input.

#### **Monticello Local Planning Agency (LPA)**

Project consultants presented to the LPA on the status of the master plan along with draft bicycle and pedestrian project recommendations. Meeting attendees asked questions and provided comments and feedback on a number of the project recommendations. Meeting attendees also received project comment cards to complete and return.

#### **Jefferson County Board of County Commissioners**

Project consultants presented to the Commission on the status of the master plan along with draft bicycle and pedestrian project recommendations. The group asked questions and provided comments and feedback on a number of the project recommendations. Meeting attendees also received project comment cards to complete and return.



### County-City Joint Work Session

While this master plan is a plan for Jefferson County at large, the County understands the importance of having the City of Monticello involved in project decision making throughout the process. Therefore, the Board of County Commissioners hosted an interactive joint work session with the City of Monticello, inviting elected officials, City staff and members of the public at large. The work session was focused primarily on gaining consensus on recommended projects and prioritization to complete the master plan. The work session was well attended and attendees provided the necessary information and feedback to finalize the master plan and associated project priorities.

### Jefferson County Board of County Commissioners

Project consultants presented the final Jefferson County Bicycle and Pedestrian Master Plan at a public hearing, requesting adoption of the plan by the Commission.

### CTRPA Technical Advisory Committee (TAC)

Project consultants presented the final Jefferson County Bicycle and Pedestrian Master Plan to the TAC for acceptance prior to adoption by the Jefferson County Board of County Commissioners.

### CTRPA Citizens Multimodal Advisory Committee (CMAC)

Project consultants presented the final Jefferson County Bicycle and Pedestrian Master Plan to the CMAC for acceptance prior to adoption by the Jefferson County Board of County Commissioners.

### CTRPA Board

Finally, project consultants presented the final, County-adopted Jefferson County Bicycle and Pedestrian Master Plan for adoption by the Board.





*Bicycle access on roads should be clearly annotated with standard markings.*





## Overview

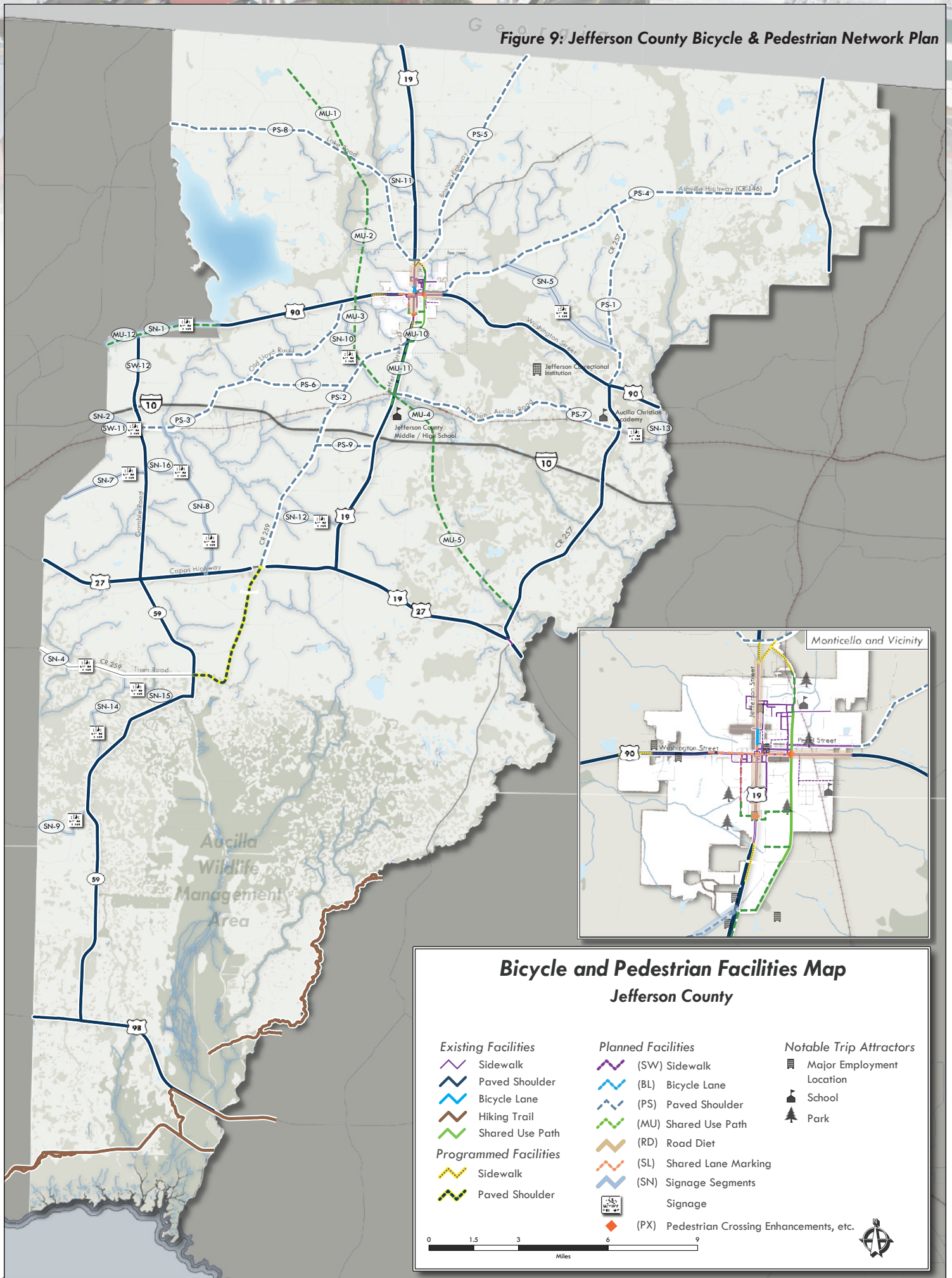
The Conceptual Network defines an overall vision for bicycle and pedestrian transportation in Jefferson County and the City of Monticello. Based on the Inventory and Analysis of Existing Conditions and refined with input from staff and the public, this Conceptual Network makes key connections to a range of destinations in the County, complementing existing sidewalks, trails, and paved shoulders, provides mobility and access, and begins to identify a hierarchy or typology of bicycle and pedestrian treatments that could be considered for the County's bicycle and pedestrian network.

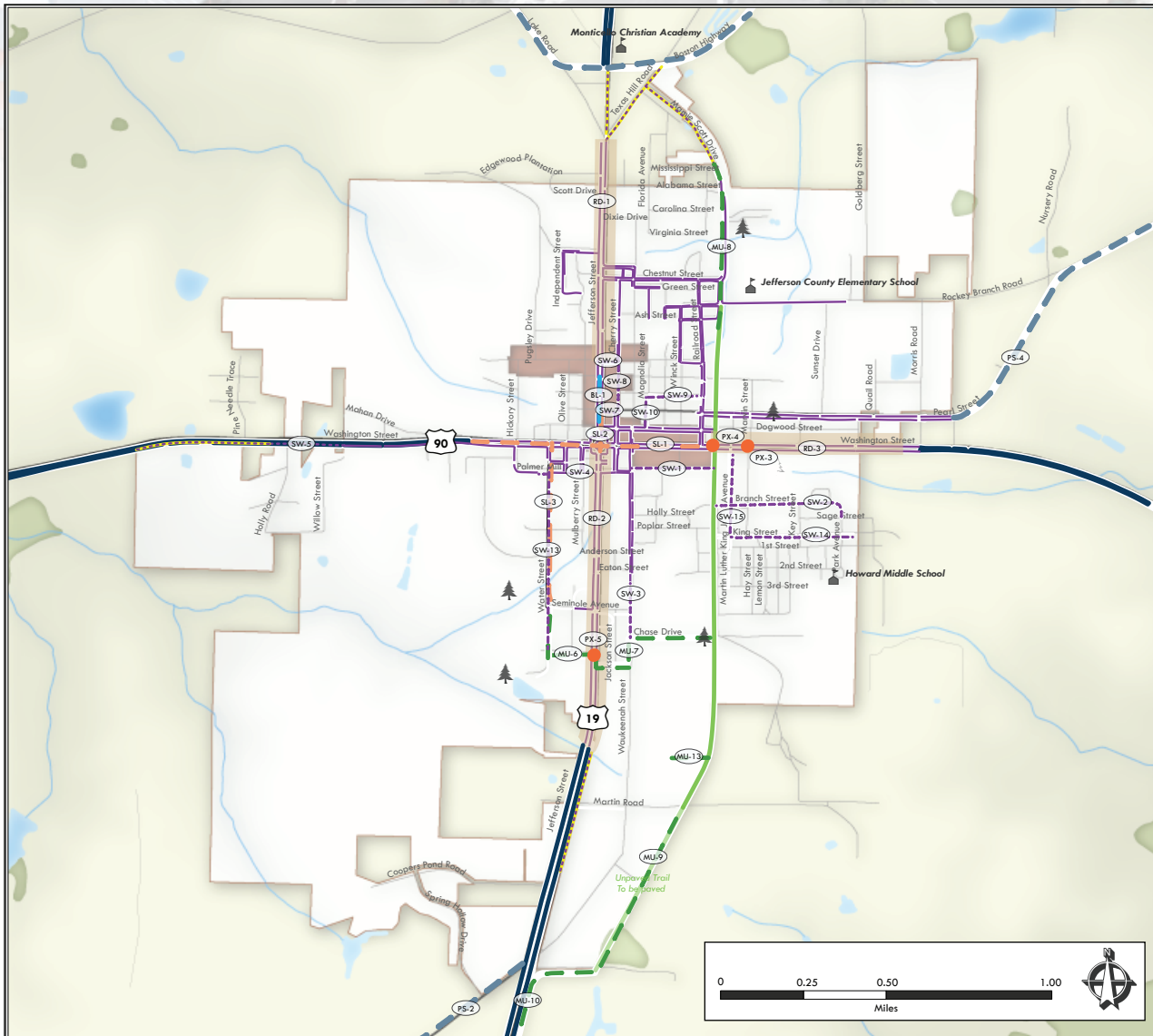
As shown on the bicycle and pedestrian facilities maps Figure 9 and 10, the Conceptual Network combines existing bikeable streets with facilities and treatments that will improve mobility, access and visibility for cyclists in the community. The Conceptual Network also focuses on increasing walkability in areas that are likely to attract pedestrian traffic, especially downtown Monticello. The Conceptual Network recognizes that most of the County's roadways, with the exception of Interstate 10, are part of the bicycle and pedestrian network, and that cyclists and pedestrians in the City and County do, in fact, currently operate on most the roads allowed under the statutes, from quiet cul-de-sacs to downtown streets to arterial roads, regardless of whether there is a separate facility. Cyclists especially have varying levels of skill and comfort related to bicycling in the roadway with traffic, and even very skilled cyclists operate on a variety of street types from busy arterials to quiet residential streets. A well-planned network should provide for a variety of on- and off-street route options suited to the needs of a variety of cyclist experience levels.

As such, the Conceptual Network identifies a series of facilities, including sidewalks, bike lanes, shared use paths, paved shoulders, signed roadways, and roadways which should be considered for modification (including potential alternative configurations) to improve conditions for walking and bicycling in the County and City. The Network provides connections to existing facilities and key destinations around the County, including parks, schools, government buildings and other attractors. In addition, the Network needs to connect the various areas in the County together, providing for bicycle travel to Lloyd, Wacissa, and Aucilla, providing recreational/touring loops, and connecting to the surrounding counties. The various components of the Conceptual Network and associated design standards are generally described below.



Figure 9: Jefferson County Bicycle & Pedestrian Network Plan





### Bicycle and Pedestrian Facilities Map Monticello and Vicinity

#### Existing Facilities

- Sidewalk
- Paved Shoulder
- Shared Use Path

#### Programmed Facilities

- Sidewalk

#### Planned Facilities

- (SW) Sidewalk
- (BL) Bicycle Lane
- (PS) Paved Shoulder
- (MU) Shared Use Path
- (RD) Road Diet
- (SL) Shared Lane Marking
- (SN) Signage Segments
- "Bike May Use Full Lane" Signage

- (PX) Pedestrian Crossing Enhancements, etc.

#### Notable Trip Attractors

- School
- Park
- Historic District

Figure 10: Monticello and Vicinity Bicycle & Pedestrian Network Plan



## CONCEPT PLAN & DESIGN STANDARDS





## Paved Shoulders

A paved shoulder is a portion of the roadway which has been delineated by edge line striping but generally does not include special pavement markings for the preferential use by bicyclists. Adding paved shoulders to a roadway can greatly improve bicycle accommodation, particularly on roadways with higher speeds or traffic volumes, and is perhaps the most effective bicycle-related improvement that can be made to the various rural roadways within Jefferson County. Paved shoulders provide numerous benefits, including to motorists, in three important areas: safety, capacity, and maintenance. In terms of safety, highways and roadways with paved shoulders have lower accident rates as paved shoulders provide space to make evasive maneuvers, accommodate driver error, add lateral clearance to roadside objects and hazards, and provide increased sight distance for through vehicles and vehicles entering the roadway. For capacity, paved shoulders provide space for disabled vehicles, mail delivery and bus stops, provide a space for bicyclists to ride at their own pace, and provide a greater effective turning radius for trucks. Finally, highways with paved shoulders are easier to maintain as the provided structural support to the pavement, discharge water further from the travel lanes thereby reducing undermining of the base and subgrade, and provide space for maintenance operations.

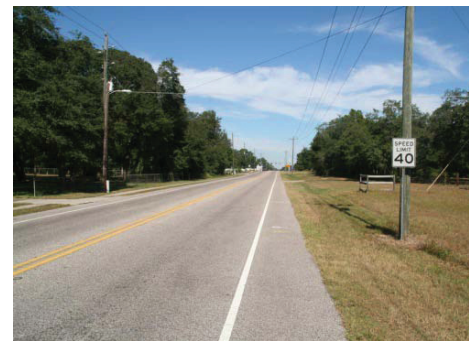
- The appropriate width of paved shoulders should be based on the roadway's context and conditions in adjacent travel lanes. Key considerations and width recommendations are as follows:
- On uncurbed cross sections with no vertical obstructions immediately adjacent to the roadway, paved shoulders should be a minimum of 4 feet wide to accommodate bicyclists.
- A minimum width of 5 feet is recommended from the face of guardrail, curb, or other roadside barrier to provide additional operating width (cyclists typically shy away from a vertical face).
- Wider paved shoulders should be considered on roadways with higher bicycle usage, high motor vehicle speeds (greater than 50 mph, considerable use by heavy vehicles/trucks, buses, or recreational vehicles (greater than 10%), or static obstructions at the edge of the roadway.

## Bicycle Signage

Bicycles May Use Full Lane (BMUFL) signs (R4-11) are similar to Share the Road signs, but provide an alternative message. They may be used on roadways where no bicycle lanes or adjacent shoulders usable by bicyclists are present and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side. These signs can be used in both rural and urban environments, and have the advantage of conveying a more specific message than Share the Road signs, which can be misconstrued by motorists as being directed towards bicyclists to "stay out of the way" of passing vehicles.

It is recommended that Jefferson County conform to the following general guidance on the use of Share the Road and/or BMUFL signs:

- The use of the signs should be limited to locations or corridors with issues or constraints, as described above, and should be limited to locations that do not have paved shoulders or other designated bicycle facilities. In specific locations with documented motorist courtesy or other issues on a roadway with a paved shoulder or designated bicycle facility, one or more Share the Road signs may be considered for installation (BMUFL signs are not to



*An example of a paved shoulder in Lake County, FL*



*Bicycle May Use Full Lane sign in Orlando, FL.*





be used in any case when there is a paved shoulder or designated bicycle facility).

- When used, signs are to be placed upstream of the constrained area, prior to intersection with a bicycle route, or following the intersection with a significant cross street; specific placement of signs will require engineering judgment.

### Multi-use Trails / Shared-Use Paths

Multi-use trails or shared-use paths are physically separated from motorized vehicle traffic by an open space or barrier and either within the roadway right-of-way or within an exclusive right-of-way. Multi-use trails may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. AASHTO recommends multi-use trails generally be 10 to 14 feet wide; pathways may be as narrow as 8 feet but only in rare circumstances with limited bicycle traffic, only occasional pedestrian traffic, horizontal and vertical alignments that provide safe and frequent passing opportunities, and where the path will not be subject to regular maintenance vehicle loadings which may cause pavement edge damage.

For further design guidance on multi-use trails, please refer to the AASHTO Guide for the Planning, Design and Operations of Bicycle Facilities, or to the FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Commonly known as the “Florida Greenbook”).

### Bicycle Lanes

Bicycle lanes are the portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. They are most appropriate and most useful on arterial and collector streets. Typically, unless traffic volumes are heavy, bicycle lanes are not needed on residential or local streets.

Bicycle lanes should be designed to the minimum standards contained in the AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities. The following are minimum or preferred characteristics:

- Minimum width (no curb and gutter) is 4 feet.
- Minimum width (with curb and gutter) is 5 feet measured from the face of curb. It is desirable to maintain a smooth longitudinal joint between the pavement and the gutter pan. However, if the joint is not smooth, 4 feet of rideable pavement surface should be provided.
- If a full-width bicycle lane cannot be provided, consider providing a wide curb lane/outside travel lane or use shared lane markings.
- If on-street parking is permitted, bicycle lanes should always be placed between the parking lane and the travel lane and have a minimum width of 5 feet. However, in areas with substantial parking volume or high turnover, bicycle lane widths adjacent to parking are often increased to 6-7 feet, while the parking width is limited to as little as 7 feet. A narrower parking lane encourages motorists to park closer to the curb. Providing 14 feet for the combined parking lane/bicycle lane is preferred as it allows cyclists to ride completely outside the “door zone”.
- Bicycle lanes should be designated by pavement markings and signs so that more bicyclists will recognize the lanes as an area of the roadway that has been set aside for them to ride, and that they are to ride with



Existing Ike Anderson Trail in Monticello, FL.



Example bicycle lane in Tempe, AZ.



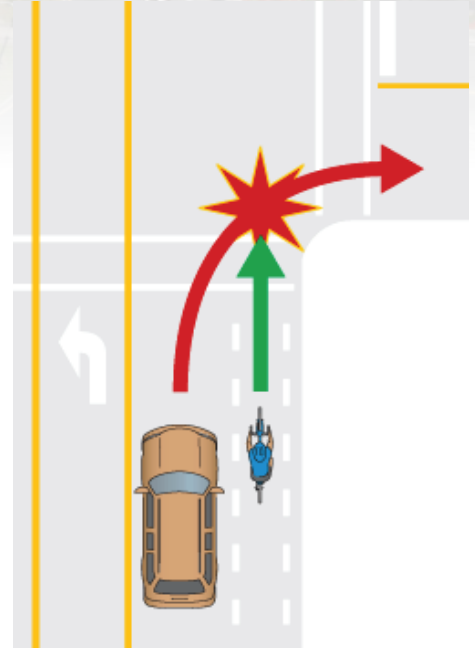
traffic when using the bike lane. Riding in the correct direction with traffic can be reinforced through the use of “WRONG WAY” and “RIDE WITH TRAFFIC” signs mounted so that they face bicyclists riding against traffic.

Bicycle lanes provide numerous benefits, including many for users other than bicyclists. Bicycle lanes:

- Are perceived to encourage bicycling. Studies have shown increased levels of bike commuting trips based on proximity to bicycle facilities.
- Serve as a symbol to many that “bicyclists belong on the road rather than the sidewalk”.
- Encourage more predictable behavior by both motorists and bicyclists.
- Allow motorists to pass bicyclists with less delay and with fewer passing conflicts.
- Increase border width to fixed objects.
- Increase turning radius into and out of intersections and driveways.
- Improve sight distances when exiting driveways.
- Serve as a buffer to sidewalks and pedestrians, which increase comfort of pedestrians and people exiting parked cars.
- Calm traffic (through narrower travel lanes).
- Improve turning for trucks and transit.
- Provide space for disabled vehicles, mail delivery, bus stops, and place for cars to pull into when emergency response vehicles pass.
- Provide structural support to the pavement.
- Discharge water further from the travel lanes.
- Accommodate driver error.
- Provide more intersection and safe stopping sight distance.

If not designed properly, bicycle lanes do have the potential to increase certain types of conflicts between bicycles and vehicles. The following cautions are provided to illustrate these potential hazards:

- Bicycle lanes at intersections and driveways that are placed to the right of potential right turning vehicle traffic encourage poor behavior by through bicyclists and right turning motorists and may cause conflicts (i.e., “right hooks”). Bicycle lane striping should be dashed for, at minimum, the last 50 feet prior to an intersection if there is no exclusive right turn lane placed to the right of the bicycle lane. Bicycle lane striping should also be dashed in front of major driveways (those with a significant right turning volume), but can remain solid across minor driveways. To prevent conflicts with right turning vehicles, bicycle lanes must always be placed to the left of exclusive right turn lanes.
- Extreme care should be used in providing sufficient bicycle lane width adjacent to parallel on-street parking. Bicyclists should never ride or be forced or encouraged to ride within 3 feet of a parked car (the “door zone”). Crashes involving a bicyclist and an opening car door have a high potential for serious injury and death. The AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities illustrates a combined parking lane/bicycle lane of 11 feet (measured from the curb face to the inside bicycle lane stripe), and recommends 13 feet for areas with “substantial parking turnover” (e.g. commercial areas); however, with these dimensions, a bicyclist who rides in the center of the bicycle lane will be within the “door zone.” Providing 14 feet for the combined parking lane/bicycle lane allows cyclists to ride completely outside the door zone.



The “right hook”.



An example of a bike lane located within the “door zone” of the adjacent parallel parking lane.



Providing a striped buffer between on-street parking and a bicycle lane is a potential design solution to encourage riding outside the “door zone”.

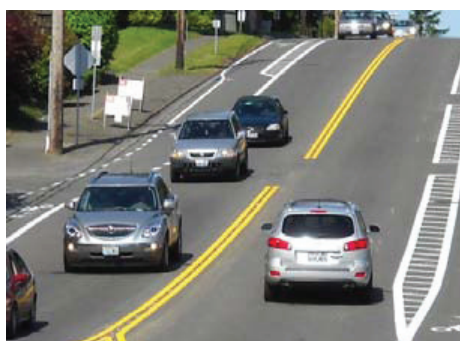




*This road in Panama City Beach, FL has 10-foot lanes (which easily accommodate large trucks) adjacent to 5-foot designated bike lanes (4 feet of asphalt, plus gutter pan).*



*A "road diet" project converted Edgewater Drive in Orlando, FL from a 4-lane undivided roadway to 2-lanes with center turn lane and bicycle lanes.*



*Example of a buffered bicycle lane in Seattle, WA.*

Designers should consider not striping a bicycle lane in places where right-of-way or pavement width are insufficient to provide 14 feet; shared lane markings can be used in lieu of bicycle lanes where insufficient width exists to provide a wide enough bicycle lane to ensure safety.

- Bicycle lanes often collect debris and broken glass, and are often overlooked in maintenance and repair, which can potentially make them (or sections of them) unusable. For this reason, it is important to establish a regular program of street sweeping and repair to ensure that bicycle lanes will be usable and free of debris, glass, and potholes.

There are a number of ways bicycle lanes can be implemented, including the following:

- Bicycle lanes (and pedestrian facilities) should be considered for implementation on all new roadway projects and resurfacing projects.
- Where possible, roadway lanes should be narrowed for inclusion of signed and marked bicycle lanes. Roadway lanes can be narrowed to 11 feet in nearly all cases, and can be narrowed to 10 feet on urban roadways having low volumes of truck traffic, generally less than 10%. Lanes as narrow as 10 feet can safely accommodate traffic on lower speed roadways. Generally, the outside lane of a roadway needs to be a minimum of 14 feet wide (not including gutter width) to include a standard signed and marked bicycle lane.
- Incorporate bicycle lanes (and other bicycle and pedestrian improvements) into larger funded projects.

On the proposed bicycle lane project on US 19 north, bicycle lanes can be added between Pearl Street and just north of Madison Street simply by adding bicycle lane stripes, markings, and signage. With this section of roadway having a curb to curb width of approximately 38 feet, bicycle lanes can be striped 7 feet out from the face of curb to provide 12-foot travel lanes.

## Road Diets

A "road diet" describes a project to decrease the number of lanes when a street has an unnecessary number of through lanes, which provides space that can then be used for other uses and travel modes. The three road diet projects proposed in Jefferson County on US 19 and US 90 consist of four-lane undivided roadways with on-street parking (and a small section on US 19 south of four-lane roadway with center left turn lane and no on-street parking). Within the limits of each project, the on-street parking usage is extremely low, traffic volumes are not high enough to require four travel lanes at any time during the day, and observed speeds making crossing the street very hazardous for pedestrians and bicyclists. Therefore, it is proposed to convert each roadway to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes.

Buffered bicycle lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane. Buffered bike lanes are allowed as per Manual on Uniform Traffic Control Devices (MUTCD) guidelines for buffered preferential lanes (section 3D.01). The buffered bike lane provides additional space between the cyclists and the motoring public, and provide greater space for bicycling without making the bike lane appear so wide that it might be mistaken for a travel or parking lane.



Because only under-utilized travel lanes are removed in a road diet project, motor vehicle traffic typically moves along modified corridor with similar efficiency and travel time. The cost of a road diet project can be minimized by simply re-striping a roadway during its normal maintenance cycle. No right-of-way acquisition is required for any of the proposed road diets in Monticello.

For each of the proposed road diet projects in Monticello, the width of the street is typically 63 feet from face of curb to face of curb. It is recommended that the road diet section include two 12-foot travel lanes, a 14-foot two-way center left turn lane, and 6-foot bicycle lanes (inclusive of gutter pan width). The bicycle lanes would typically be buffered from the adjacent travel lane by a striped buffer width of 6.5 feet. The use of this cross section allows for the roadway to simply be re-striping without having to reconstruct curb and gutter or address drainage facilities. At locations where midblock pedestrian crossings are proposed, such as near Cherokee Street on US 19 south, the bicycle lanes can be shifted inward taking the place of the striped buffer in order to provide 6.5-foot wide curb extensions on each side of the street. Along with provision of a median refuge island in the center two-way left turn lane, this provision shortens the exposed crossing distance for pedestrians and allows them to cross one direction of traffic at a time.

## Sidewalks

The orientation and alignment of sidewalks are important considerations so that the walk provides an access between destinations. Pedestrians, and in some cases bicyclists, are more exposed to the environment as the users of sidewalks. This makes them more aware of the effects of sidewalk design elements such as location, width, utility interferences, shading, plantings, and the presence of amenities. A narrow sidewalk abutting the curb not only gets diminished by sharing space with utility poles, but makes the user feel less secure because there is no buffer from traffic. Conversely, a planting strip with room for trees provides buffering and shade, but require more right-of-way and may interfere with utilities. Pedestrian comfort is increased if they are buffered from passing vehicles. Some of the elements that serve as buffers include planting strips and landscaping, bicycle lanes, and on-street parking. Walking can be encouraged if the perceived distance can be minimized. Some ways to shorten a perceived distance is to create direct connections between land uses, provide mid-block crossings, and offer amenities along the way, such as benches, landscaping, defined paving, shelters and other resting area type design features. These amenities are also important design elements for transit stops.

General design guidance for sidewalks includes the following:

- Sidewalks should be provided on both sides of all collector and arterial roadways, and should be provided on at least one side of all local streets, along with safe crossing locations. In any areas of the City where sidewalks have not been provided on local streets, sidewalks should be pursued where there is sufficient resident support.
- All sidewalks should have a minimum width of 5 feet, with 6 feet used if the sidewalk is placed at the back of curb. In areas where significant use is anticipated, such as primary walking routes near schools, retail areas, main streets, etc., minimum sidewalks widths should be increased to 8-10 feet, with wider facilities provided based on need. Additional space in urban areas can be used for street furniture, outdoor cafes, and shy distance from buildings.



Urban sidewalk example on retail street, Winter Park, FL.

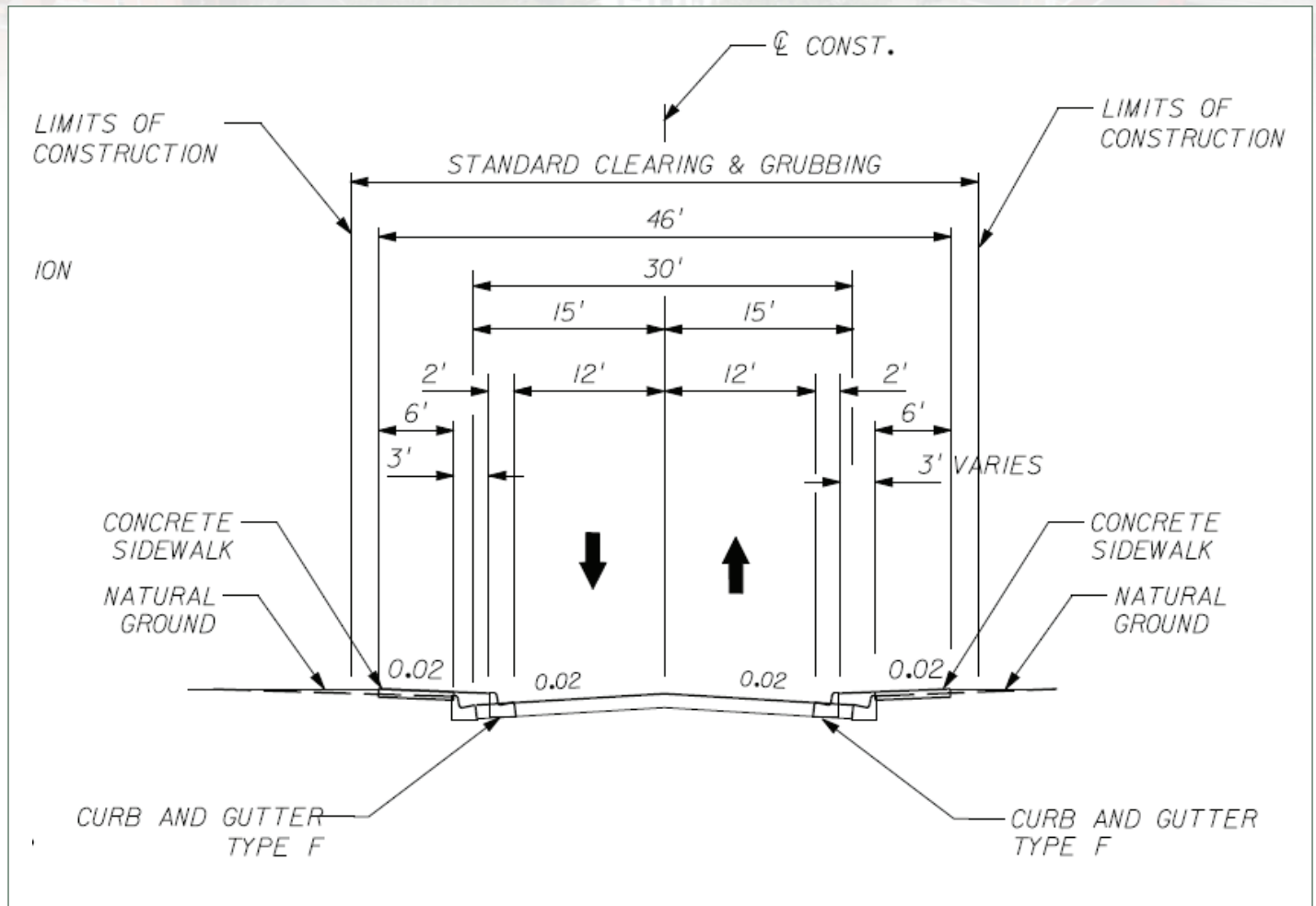


Sidewalk and landscaping buffer in Winter Park, FL.





Figure 11: Typical Sidewalk Section





- When possible, use planter strips with 6-foot widths (minimum) as a buffer between sidewalks and the roadway curb. If the roadway does not have curb and gutter, use a minimum sidewalk separation of 10 feet from edge of roadway, with sidewalk placement on outside of drainage (ditch/swale) preferred.
- In adding missing sections of sidewalks, prioritize the most needed locations first, such as near schools, transit stops, parks, hospitals, and waterfront areas.

While the recommended sidewalk construction on most streets will be straightforward, the proposed projects on Martin Luther King Jr. Avenue and King Street may be more complicated if the right-of-way is constrained and sidewalks cannot be located at the back of the existing curb. In this case, these two roadways (within the sections having curb and gutter) are wide enough to support construction of sidewalk on at least one side of the street within the existing roadway, while not narrowing travel lanes to less than 12 feet. This would require the construction of new curbing 6 feet into the roadway from the existing curb to provide for a 6-foot sidewalk which would be located at the back of the new curb. The construction of the new curb and gutter could be accomplished by saw-cutting the existing pavement to create a new edge of pavement / travel lane. The contractor would remove the pavement, curbing and inlet tops from the saw-cut line toward the right-of-way. The curb and sidewalk area would be rough graded to the proposed elevations. The new curb would be poured at the new edge of pavement and sidewalk placed at the appropriate offset from the back of curb. The contractor would then finish the grading and sod the work area. A conceptual diagram of this potential sidewalk construction is shown in Figure 11. Detailed planning-level project cost breakdowns are included in the Appendix for most pedestrian crossing enhancement (PX) project recommendations.

## Pedestrian Crossing Enhancements

Pedestrian crossing enhancements are proposed at existing and future trail crossings at both major and minor roadways, within the downtown County Courthouse area, and in the vicinity of Jefferson County Elementary School. Elements of the pedestrian crossing enhancements include high visibility crosswalk markings, advance yield lines, median refuge islands, curb extensions, rectangular rapid flashing beacons (RRFBs), and lighting.

### High-Visibility Crosswalk Markings

High-visibility crosswalks alert motorists to the potential pedestrian conflict areas, enhance motorists' recognition of intersections, increase motorists yielding to pedestrians, attract pedestrians to the best crossing places, and assist people with visual impairment in their crossings. Ladder style markings are preferred because they are more visible to motorists than transverse lines alone.

General design guidance for crosswalks and markings include the following:

- Crosswalks should typically be a minimum of 8-10 feet wide, although 12-foot widths are often preferred.
- Ramp and median openings should be as wide as the markings.
- Crossings need to be as close to the intersection as practicable (generally 2-10 feet). If ramps are set back further to match the tangent roadway section, then overly wide markings (12-20 feet wide) can be used to help draw motorists' attention to crossings.



*High-visibility ladder style crosswalk markings, Corpus Christi, TX.*



*Midblock crosswalk with median island, advance yield lines, yield here to peds sign, and in-street pedestrian crossing sign, Tampa, FL.*





- Crosswalks should be highly visible all times of the year. When thermoplastic is used it is helpful to add extra crushed glass content (increasing coefficient of friction as well as night visibility).
- Midblock or uncontrolled crosswalks markings may be supplemented with advance yield lines and additional signage such as Yield Here to Pedestrians (R1-5) and In-Street Pedestrian Crossing Signs (R1-6). Advance yield lines consist of a row of solid white isosceles triangles pointing toward approaching vehicles extending across the approach lanes and indicate the point at which yielding is required (placed 40 feet in advance of the crosswalk). In-street pedestrian crossing signs shall only be placed at the crosswalk location in the street on the center line, a lane line, or in the median (post mounted on the right or left side of the roadway is not permitted).
- All marked midblock crosswalks should be well lit, since pedestrians are being directed to cross at these are locations. Pedestrians can have difficulty in judging the speed of approaching cars at night when there are no street lights. An error in judgment by the pedestrian can easily result in a crash because even a driver with good eyesight can rarely see a pedestrian from more than 200 feet away, and a driver going 45 mph needs about 350 feet to see, react to and slow or stop for a pedestrian.



*Example of median refuge island with angled crossing.*



*Curb extensions, Venice, FL.*



*Closer view of the RRFBs mounted underneath the pedestrian warning sign.*

### **Raised Median Refuge Islands**

Providing median refuge islands at midblock pedestrian crossings separates conflicts in time and location by providing pedestrians a safe stopping point and allowing them to cross the roadway in two stages and cross one direction of traffic at a time. Angling the crossing through the median island at 45 degrees forces pedestrians to face towards traffic in the direction they are about to cross.

### **Curb Extensions**

Curb extensions move the curb line into the street, narrowing the street at intersections or midblock, and reallocating a portion of street space to pedestrians or ancillary uses such as landscaping, art, lighting, signage, and street furniture. They are most effective when used in areas with on-street parking. Benefits include reduced pedestrian crossing distance, enhanced visibility of pedestrian waiting to cross, and reduced traffic speeds.

### **Rectangular Rapid Flashing Beacons (RRFB)**

RRFBs are an experimental form of flashing beacon, although approved for interim use by FHWA. They use rectangular shaped high-intensity LED-based indications to supplement standard pedestrian warning signs at uncontrolled crossings. The beacons flash rapidly in a “flickering” patterns and greatly improve the percentage of motorists yielding to pedestrians at a midblock location (the City of St. Petersburg, Florida has documented a motorist yield rate of over 82% on four-lane roadways, compared to an average of only 11% with side mounted round flashing beacons). RRFBs may be considered for potential use at trail or other midblock crossing locations along US 90 and US 19 such as at the US 90/Ike Anderson Trail crossing and the proposed midblock crossing near US 19 and Cherokee Street; they are typically consider an optional treatment on low volume (less than 6,700 vehicles per day) and medium volume (6,700 – 12,000 vehicles per day) roadways, with speed and number of lanes other factors that are considered. The use of this device on a



state road will require review and approval by the FDOT Traffic Engineering and Operations Office and FHWA prior to implementation.





*Pedestrian crosswalk at intersections in the Downtown Courthouse area continue to be a priority.*





## Project Recommendations

Project recommendations were developed primarily based on the countywide vision and facilities maps. The maps include the full set of recommended projects that, along with the existing and programmed facilities identified, complete the Jefferson County bicycle and pedestrian network. Each recommended (“planned”) project is labeled on the maps with a unique project identifier that includes a project type prefix followed by a number. This same project identification label can be found on the associated “recommended projects by project type” list and “tiered project priorities” lists.

## Project Descriptions

Recommended projects fall into eight project category types: paved shoulders, roadway signage, multi-use trails/pathways, road diets, bicycle lanes, shared lane markings (aka ‘sharrows’), sidewalks, and pedestrian crossing enhancements. The following includes a complete list of recommended projects, organized by project type, along with brief descriptions. The pedestrian crossing enhancement projects are explained in greater detail due to their special complexity. The unique project identifier labels are also included for easy cross-reference with the facilities maps displayed in the Concept Plan and Design Standards chapter.

### Paved Shoulders

#### **(PS-1) CR 257/N Salt Rd** from US 90 to CR 146/Ashville Hwy

This improvement is approximately 6.5 miles in length and is a popular cycling segment. The addition of paved shoulders would add safety for both cyclists and drivers alike.

#### **(PS-2) CR 259/Waukeenah Hwy** from US 27 to US 19

This improvement is approximately 9.5 miles in length and is a popular cycling segment providing a north-south alternative route to US 19 between downtown Monticello and US 27. The addition of paved shoulders would add safety for both cyclists and drivers alike.

#### **(PS-3) CR 158/Old Lloyd Rd** from SR 59 to US 90

This improvement is approximately 8.8 miles in length and is a popular cycling segment between the west end of Monticello and State Road 59. The addition of paved shoulders would add safety for both cyclists and drivers alike.

#### **(PS-4) CR 146/Ashville Hwy** from St. Margaret Rd to US 221

This improvement is approximately 14.1 miles in length and is a popular cycling segment between downtown Monticello and US 221 toward the east end of the County. The addition of paved shoulders would add safety for both cyclists and drivers alike.

#### **(PS-5) CR 149/Boston Hwy** from US 19 to GA State Line

This improvement is approximately 8.1 miles in length and is also a popular cycling segment from Monticello to the Georgia State Line. The addition of paved shoulders would add safety for both cyclists and drivers alike.





## PROJECT PRIORITIES

**(PS-6) CR 158/Rabon Rd** from CR 158/Old Lloyd Rd to CR 259/Waukeena Hwy

This approximately 3.3-mile improvement would provide a desirable connection and additional safety between County Road 158/Old Lloyd Road and County Road 259/Waukeena Highway.

**(PS-7) CR 158/Drifton-Aucilla Rd** from US 19 to CR 257

This approximately 8.1-mile improvement would provide a valuable connection and additional safety along Drifton-Aucilla Road between US 19 and CR 257.

**(PS-8) Lake Rd** from Leon Co Line to US 19

This approximately 10.8-mile improvement would provide a valuable connection and additional safety from US 19 to the Leon County Line.

**(PS-9) CR 158B/Nash Rd** from CR 259/Waukeena Hwy to US 19

This approximately 1.9-mile improvement is a short, but useful east-west connection south of Interstate 10 between US 19 and Count Road 259/Waukeena Highway.

### Roadway Signage

**(SN-1) US 90** from Leon Co Line (west) to Leon Co Line (east)

This improvement is approximately 3.7 miles in length and is a popular cycling segment. "Bikes may use full lane" (BMUFL) signage is recommended for this segment, as an alternative to paved shoulders, due to concerns with protecting the roadway aesthetic created by the crape myrtle street tree canopy.

**(SN-2) CR 158/Old Lloyd Rd** from Leon Co Line to SR 59

This short 1.2-mile improvement would include BMUFL signage and is planned as an east-west connector south of Interstate 10 from SR 59 to the Leon County Line.

**(SN-3) US 90** from Mahan Dr to Ike Anderson Trail

This 0.8-mile project would traverse through the heart of downtown Monticello and include BMUFL signage in conjunction with shared lane (sharrow) markings (SL-1).

**(SN-4) CR 259/Waukeena Hwy** from Leon Co Line to SR 59

This improvement is approximately 5.3 miles in length and would include BMUFL signage spanning from SR 59 to the Leon County Line.

**(SN-5) Bassett Dairy Rd** from CR 257/N Salt Rd to CR 146/Ashville Hwy

This improvement is approximately 4.6 miles in length and would include BMUFL signage connecting County Road 257/ N Salt Road to County Road 146/Ashville Highway. It would provide a scenic bikeway alternative to US 90.

**(SN-6) Miscellaneous Locations**

This project includes BMUFL and Share the Road (STR) signage to address documented problem locations with existing paved shoulders.

**(SN-7) Whitehouse Rd** from Leon Co Line to SR 59

This 2.9-mile improvement would include BMUFL signage and is planned as an east-west connector between Interstate 10 and US 27, from SR 59 to the Leon County Line.

**(SN-8) Lloyd Creek Road** from US 27 to Old Lloyd Road

This improvement is approximately 5.3 miles in length and would include BMUFL signage connecting US 27 to Old Lloyd Road. It would provide a scenic bikeway alternative to SR 59.

**(SN-9) Natural Bridge Rd/Fanlew Rd** from Leon Co Line to SR 59

This 2.3-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-10) Casa Bianca Road** from CR 259/Waukeelah Hwy to CR 158/Old Lloyd Road

This 2.4-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-11) Green Road** from Lake Rd to US 19

This 1.1-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-12) Tyson Road** from CR 259/Waukeelah Hwy to US 19

This 2.2-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-13) Blue Lake Road** from CR 257 to US 90

This 2.6-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-14) Connell Rd/Brooks Rd/CR 206** from SR 59 to CR 259/Tram Road

This 3.8-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-15) Limestone Rd/CR 205** from Brooks Road/CR 206 to SR 59

This 1.7-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**(SN-16) Springfield Road** from SR 59 to Lloyd Creek Road

This 1.5-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.

**Multi-Use Trails / Pathways****(MU-1) Progress Energy Rail Trail I** from Georgia State Line to Lake Rd

This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 5.8 miles.

**(MU-2) Progress Energy Rail Trail II** from Lake Rd to US 90

This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 5.2 miles.





## PROJECT PRIORITIES

### **(MU-3) Progress Energy Rail Trail III** from US 90 to US 19

This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 3.8 miles.

### **(MU-4) Progress Energy Rail Trail IV** from US 19 to Thompson Valley Rd

This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 2.2 miles.

### **(MU-5) Progress Energy Rail Trail V** from Thompson Valley Rd to CR 257

This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 6.9 miles.

### **(MU-6) Water St Eco-Park Tr Connector** from Water St at Seminole Ave to US 19 at Cherokee St

This is one of two project segments within Monticello connecting the west and east sides of US 19 at an important retail/shopping destination. This particular segment is approximately 0.3 miles and is located west of US 19.

### **(MU-7) Water St Eco-Park Tr Connector** from US 19 at Cherokee St to Ike Anderson Trail at Chase Dr

This is one of two project segments within Monticello connecting the west and east sides of US 19 at an important retail/shopping destination. This particular segment is approximately 0.4 miles and is located east of US 19.

### **(MU-8) Ike Anderson Tr N Extension** from Rocky Branch Rd to Jefferson Co Recreation Park

This improvement is approximately 0.4 miles in length and would extend the Ike Anderson Trail northward from Rocky Branch Road to Mississippi Street near the recreation park where a sidewalk is programmed to continue northward to Texas Hill Road.

### **(MU-9) Ike Anderson Tr S Extension I** from Martin Rd to US 19 at Nacoosa Rd

This is one of three project segments spanning approximately 3.2 miles from the south end of the paved portion of the Ike Anderson Trail (at Martin Road) in Monticello southward to the Jefferson County Middle/High School campus. This particular segment includes the portion of the trail that is existing, but currently unpaved. It is approximately 0.8 miles in length.

### **(MU-10) Ike Anderson Tr S Extension II** from US 19 at Nacoosa Rd to US 19 at Drifton-Aucilla Rd

This is one of three project segments spanning approximately 3.2 miles from the south end of the paved portion of the Ike Anderson Trail (at Martin Road) in Monticello southward to Jefferson County Middle/High School campus. This particular segment extends from the southern terminus of the existing trail



(unpaved) to US 19 at Drifton-Aucilla Road and is approximately 1.7 miles in length.

**(MU-11) Ike Anderson Tr S Extension III** from US 19 at Drifton-Aucilla Rd to Jefferson Co MS/HS

This is one of three project segments spanning approximately 3.2 miles from the south end of the paved portion of the Ike Anderson Trail (at Martin Road) in Monticello southward to Jefferson County Middle/High School campus. This particular segment extends from US 19 at Drifton-Aucilla Road to the Jefferson County Middle/High School campus and is approximately 0.7 miles in length.

**(MU-12) US 90** from Leon Co Line (west) to Leon Co Line (east)

This improvement is approximately 3.7 miles in length and would provide a multimodal trail connection from the Leon County Line eastward through a brief portion of Leon County and back into Jefferson County. The project is proposed as an alternative to paved shoulders, due to concerns with protecting the roadway aesthetic created by the crape myrtle street tree canopy in this location.

**(MU-13) Elliot Dr Connector** from Elliot Dr at Melrose Dr to Ike Anderson Trail  
This improvement is a mere 0.04 miles, but would create a neighborhood connection to the Ike Anderson Trail.

## Road Diets

**(RD-1) US 19** from 0.1 mi north of Madison St to Texas Hill Rd

The project would convert this approximately 0.6-mile segment of US 19 to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes. The use of this cross section allows for the roadway to simply be re-stripped without having to reconstruct curb and gutter or address drainage facilities.

**(RD-2) US 19** from 0.25 mi south of E. Cherokee St to Courthouse Circle

The project would convert this approximately 0.9-mile segment of US 19 to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes. The use of this cross section allows for the roadway to simply be re-stripped without having to reconstruct curb and gutter or address drainage facilities.

**(RD-3) US 90** from Ike Anderson Trail to 0.1 mi west of St. Margaret Rd

The project would convert this approximately 0.6-mile segment of US 90 to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes. The use of this cross section allows for the roadway to simply be re-stripped without having to reconstruct curb and gutter or address drainage facilities.





## PROJECT PRIORITIES

### Bicycle Lanes

#### **(BL-1) US 19** from Pearl St to 0.1 mi north of Madison St

This includes a short segment (approximately one-quarter mile in length) in downtown Monticello north of US 90 from Pearl Street to just north of Madison Street. The project could be accomplished by simply adding bicycle lane stripes, markings, and signage; and due to the existing curb-to-curb roadway width, could be striped seven feet out from the face of curb to provide 12-foot travel lanes. Also, this project could be completed as part of a future resurfacing project.

### Shared Land Markings (i.e. Sharrows)

#### **(SL-1) US 90** from 0.05 mi east of Mahan Dr to Ike Anderson Trail

This improvement is approximately 0.8 miles in length through downtown Monticello. The installation of sharrow lanes through this segment would be of benefit to bicyclists since this section does not have paved shoulders and cyclists currently share the lane with motor vehicle traffic. At the west end, the existing paved shoulder along US 90 ends near Mahan Drive.

#### **(SL-2) US 19** from Courthouse Cir (south side) to Pearl St

This improvement is a mere 0.15 miles in length, but would be of benefit to bicyclists along this segment of US 19 in downtown Monticello, as the area cannot accommodate the addition of bicycle lanes.

#### **(SL-3) Water St** from Seminole Ave to US 90

This is an approximately 0.5-mile improvement through downtown Monticello. It would provide a north-south alternative to US 19 through downtown between business destinations at US 90 and near Seminole Avenue at US 19.

### Sidewalks

#### **(SW-1) Palmer Mills Rd** from Waukeenh St to Ike Anderson Trail

This improvement is approximately 0.25 miles in length and completes a sidewalk gap between downtown Monticello, southeast of the US 90/US 19 intersection, from Waukeenh Street to the Ike Anderson Trail. The right-of-way appears somewhat constrained; therefore, an easement to accommodate the sidewalk could be required. Also, the installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.

#### **(SW-2) Branch St** from Ike Anderson Trail to Sage Street

This improvement is approximately 0.4 miles in length and extends from the Ike Anderson trail eastward into the Roostertown area. The right-of-way appears somewhat constrained; therefore, an easement to accommodate the sidewalk could be required. Also, the installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.

**(SW-3) Waukeenhah St** from 200 ft north of Seminole Ave to Chase Dr

This improvement is approximately 0.12 miles in length and would complete a pedestrian gap from north of Seminole Avenue where the current sidewalk ends, southward to Chase Drive where a separate multi-use pathway facility (MU-7) is planned to connect US 19 to the Ike Anderson Trail. The right-of-way may be constrained in this area.

**(SW-4) Palmer Mills Rd** from 150 ft west of Water St to Water St

This short 150-foot improvement would fill a sidewalk gap along Palmer Mills Road west of Water Street in downtown Monticello.

**(SW-5) US 90** from 300 ft west of Holly Rd to Willow St

This improvement is approximately 0.23 miles in length and would fill a sidewalk gap along the south side of US 90 from the western terminus of the existing sidewalk at Willow Street, westward to approximately 300 feet west of Holly Road. A new sidewalk is current programmed for construction at the western terminus of this project and will extend westward to the City Limits of Monticello.

**(SW-6) Madison St** from US 19 to Cherry St

This short 0.06-mile improvement would connect Cherry Street to US 19 on the north side of downtown Monticello. Madison Street is part of the popular downtown Monticello historic walking tour route.

**(SW-7) Pearl St** from US 19 to Cherry St

This short 0.06-mile improvement would connect Cherry Street to US 19 on the north side of downtown Monticello. Pearl Street is part of the popular downtown Monticello historic walking tour route.

**(SW-8) Cherry St** from Pearl St to Madison St

This 0.14-mile improvement would complete a sidewalk gap along Cherry Street between Pearl Street and Madison Street on the north side of downtown Monticello. Cherry Street is part of the popular downtown Monticello historic walking tour route.

**(SW-9) High St** from Magnolia St to Railroad St

This improvement is approximately 0.15 miles in length and would provide a sidewalk connection between Magnolia Street and Railroad Street on the north side of downtown Monticello. High Street is part of the popular downtown Monticello historic walking tour route.

**(SW-10) Magnolia St** from Dogwood St to High St

This short improvement is approximately 0.09 miles in length and would provide a sidewalk connection between Dogwood Street and High Street on the north side of downtown Monticello. Magnolia Street is part of the popular downtown Monticello historic walking tour route.

**(SW-11) Old Lloyd Road** from Leon County Line to Main Street (Post Office)

This improvement is approximately 1.3 miles in length and would provide a sidewalk connection from the Leon County Line eastward to the post office along Main Street near the center of Lloyd. The project would also include a crosswalk at State Road 59. It should be noted that there appears to be constrained right-of-way along Old Lloyd Road near the east end of the project.





## PROJECT PRIORITIES

**(SW-12)SR 59** from CR 158/Old Lloyd Rd to 0.25 mi south of I-10 overpass  
This improvement is approximately 0.44 miles in length and would provide a sidewalk connection between the central population center of Lloyd and the retail commercial center along State Road 59 just south of Interstate 10.

**(SW-13)Water St (east side)** from Walnut St to Seminole Ave  
This improvement is approximately 0.5 miles in length and would connect Walnut Street, just south of US 90, to Seminole Avenue where a separate multi-use pathway facility (MU-6) is planned to continue to US 19 near a major shopping destination.

**(SW-14)King St** from Martin Luther King Jr Ave to Park Ave  
This improvement is approximately 0.33 miles in length and provides a pedestrian facility through the heart of the Roostertown area from Martin Luther King Jr Avenue to Park Avenue. The right-of-way appears somewhat constrained and building setbacks are shallow. The installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.

**(SW-15)Martin Luther King Jr Ave** from US 90 to King St  
This improvement is approximately 0.26 miles in length and provides a pedestrian connection between US 90 and King Street in the Roostertown area. The right-of-way appears somewhat constrained and building setbacks are shallow. The installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.

### Pedestrian Crossing Enhancements

#### **(PX-1 and PX-2) Downtown Courthouse Area**

- (PX-1) US 90 from Walnut St to Dogwood St; US 19 from Mulberry St to Cherry St.
- (PX-2) US 90 from Olive St to Mulberry St, and from Cherry St to Waukeena St; US 19 from Palmer Mill Rd to Walnut St, and from Dogwood St to Pearl St.

This project consists of intersection improvements in the vicinity of the Courthouse on US 90 from Olive Street to Waukeena Street and on US 19 from Palmer Mill Road to Pearl Street, encompassing two intersections each to the north, south, east, and west of the Courthouse roundabout, as well as improvements at the roundabout itself. Specific elements include curb extensions at eight intersections which extend from the curb to the edge of parallel or angle parking, high visibility crosswalks at all intersections within the project area, modifications to on-street parking, incorporation of valley gutters to visually separate travel lanes from parking areas, and roundabout entry markings. Figures 12a and 12b provides a concept of the improvements for this area.

During design for these projects, the angle used for angled parking should be reviewed as it may be possible to increase the angle to help narrow the roadway further without causing issues for passing trucks or motorists backing from parking spaces. The potential for back-in angle parking might also be



*Back-in angle parking in Austin, TX with adjacent instructional sign (blue sign above speed limit sign)*





Figure 12a: Jefferson County Courthouse Area - Existing Conditions

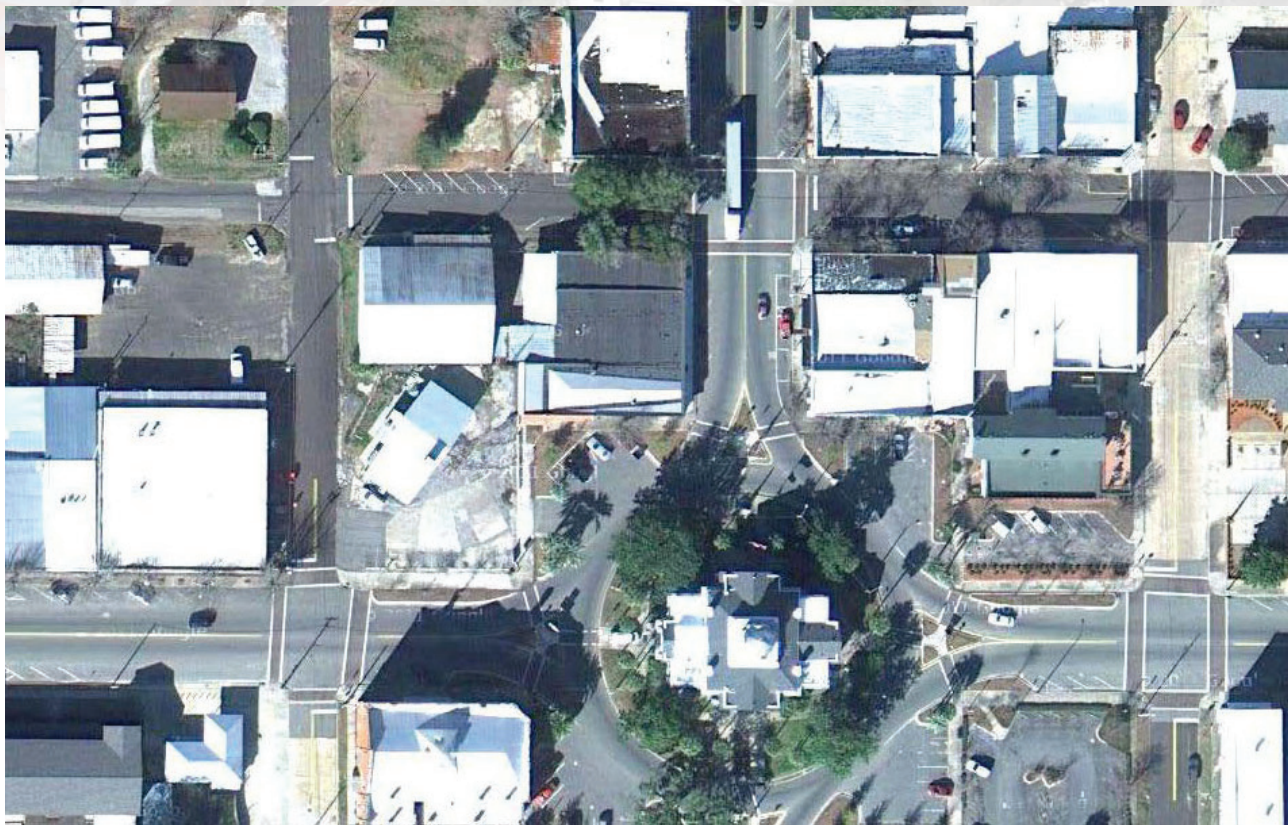
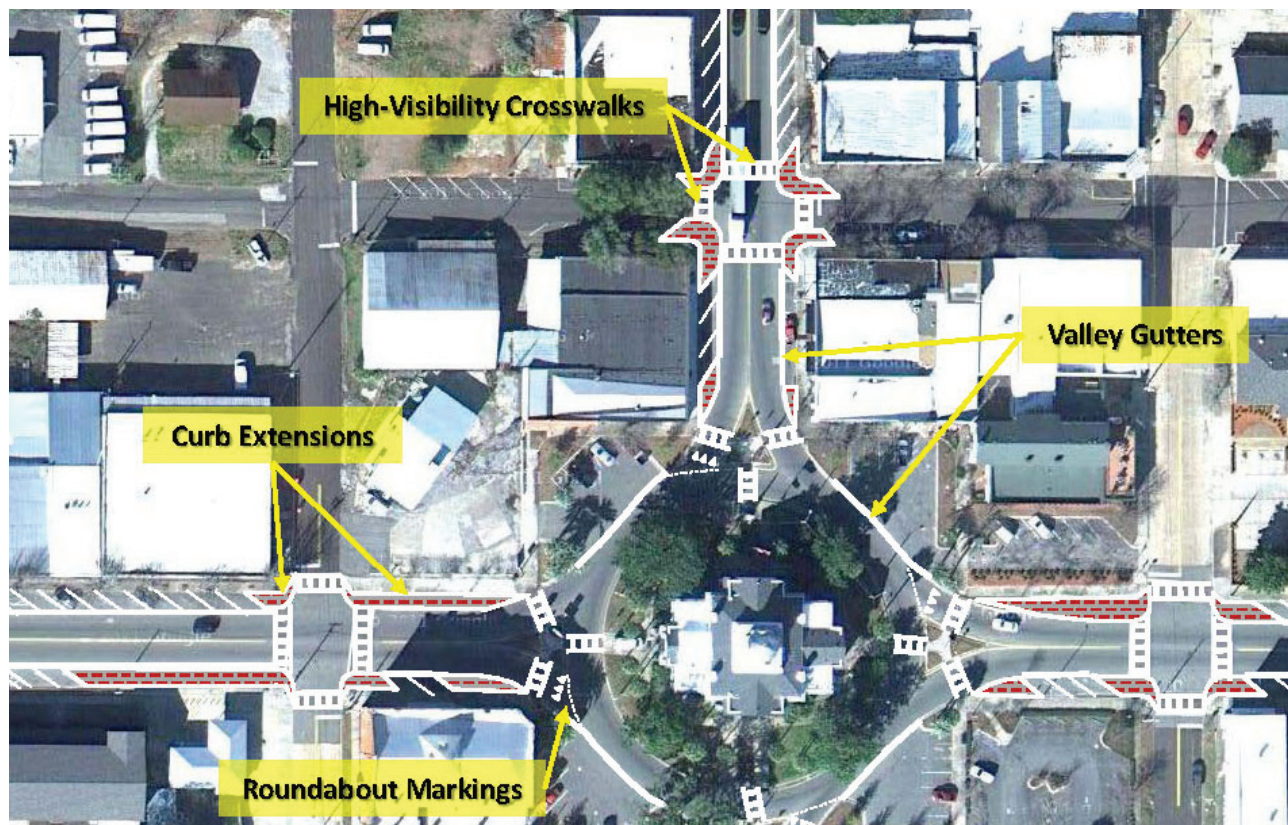


Figure 12b: Jefferson County Courthouse Area - Snapshot of Proposed Improvements







considered for the following reasons:

- The backing maneuvering required is similar to that for parallel parking, but involves half the effort
- Considered to be superior to straight-in diagonal parking because visibility is much improved for exiting and the driver controls the space while entering just as with parallel parking
- Provides direct access to vehicle trunks from the sidewalk, making it easier to load a vehicle
- When vehicle doors are opened, adults and children alike are naturally directed back towards the sidewalk, rather than into the street
- Safer for bicyclists: it is impossible for bicyclists to be “doored” unlike parallel parking, and drivers are able to see bicyclists easier and much sooner when exiting their parking stalls
- Has a traffic calming effect on vehicle speeds
- Documented reduction of crashes (Urban Transportation Monitor, June 11, 2004, “Conversion to Back-in Angle Parking Generally Successful: Results in Reduced Accidents, Benefits for Cyclists”)

There are potential issues with converting to back-in angle parking as well, as follows, although each can be addressed (see response to issue or strategy in parentheses):

- Drivers used to head-in angle parking may not realize they need to back into back-in angled spaces (this can be combated through the use of information signs)
- Driver skills may be too poor for them to successfully back into back-in angle spaces (the skills needed for back-in angle parking are no different than for parallel parking: like parallel parking, the driver enters the stall by stopping and backing; however, the movement is simpler and faster not requiring the front of the vehicle to be maneuvered against the curb)
- Most cars have more overhang on the rear, so with narrow sidewalks, the sidewalks will appear narrower (issue can be remedied by using a landscape buffer of 3-4 feet between the curb and sidewalk or use parking blocks within the stalls to limit the vehicle overhang allowed)
- Since all cars have exhaust pipes at the rear, consideration should be given as to whether or not to located back-in diagonal parking next to sidewalk cafes or other areas where people may linger (the Adams Morgan District of Washington, DC has back-in angle parking that runs for several blocks on one of the great eatery rows and works well; people do not leave their cars idling)
- Makes it harder to cut the grass in the adjacent buffer strip if provided
- Drivers looking back may not see street furniture as easily (a consideration is to have more clear space along the curb so that trees, poles, etc. are not struck by motorists backing in; also, parking blocks within the parking stalls help to appropriately set the backing limit)

The Courthouse area projects propose to use valley gutters to help visually distinguish the parking areas from the travel lanes. These gutters will be extended between curb extensions along the edges of the parking areas and also used as the borders of the parking areas on the outside edges in each of the four quadrants of the Courthouse roundabout.

- The proposed roundabout markings consist of two items:
- A wide dotted line across the lane entering the roundabout placed at the



Valley gutters in Estes Park, CO provide a visual separation between angled parking and the travel lanes.



Roundabout markings, Gainesville, FL.



edge of the circulating roadway

- A yield line indicating the point behind which vehicles are required to yield at the entrance to the roundabout

#### **(PX-3) US 90** near Marvin St

This project is to install a mid block pedestrian crossing along US 90 in the vicinity of Marvin Street. The crossing would accommodate increased north-south pedestrian traffic across US 90, per reports from Monticello city staff. The project would include high visibility crosswalk markings, advance yield lines, yield here to peds signs, lighting, and potentially RRFBs. While local residents could benefit from this crossing, it should be noted that an additional north-south crossing is proposed a couple blocks west of this location at the Ike Anderson Trail crossing at US 90 (PX-4). The latter crossing would accommodate both bicyclists and pedestrians utilizing the multi-use path. The County (and FDOT) will need to determine the feasibility of both locations as well as the practicability of including two such pedestrian crossings within such a limited distance along US 90.

#### **(PX-4) US 90** at Ike Anderson Trail

At the existing trail crossing at US 90, the roadway is transitioning between a two-lane undivided roadway with on-street parking to a four-lane undivided roadway with on-street parking. This will continue to be a transition point if the proposed US 90 road diet is implemented, as just east of the crossing is where designated buffered bicycle lanes will begin in the eastbound direction and end in the westbound direction; shared lane markings are proposed to the west of the bicycle lanes termini. With a curb to curb width at the crossing point of approximately 39 feet, it is proposed to have a 10-foot wide median island and travel lanes in each direction of 14.5 feet, which will be shared by bicyclists (see Figures 13a and 13b). The crossing is proposed to incorporate a median island, high visibility crosswalk markings, advance yield lines, yield here to peds signs, lighting, and potentially RRFBs.

#### **(PX-5) US 19** at Cherokee St/Jefferson Square Shopping Center

With the proposed road diet on US 19 south, this section would transform from a five-lane section to a three-lane section with buffered bicycle lanes. As discussed previously, at the crossing point, the bike lanes could be transitioned towards the travel lane (removing the buffer) to allow curb extensions to shorten the exposed crossing distance for pedestrians (see Figures 14a and 14b). Similar to the US 90 trail crossing, this location is proposed to have a median island (with angled crossing), high visibility crosswalk markings, advance yield lines, yield here to peds signs, lighting, and potentially RRFBs.

#### **(PX-6) Trailhead** at Aucilla Hwy/US 19 (SE corner)

This project would accommodate the proposed Progress Energy Rail Trail (MU-1 thru MU-5) on property near the southeast corner of US 19 and Aucilla Highway. The specific amenities and features included at this trailhead have not been determined at this point, but are anticipated to include an unpaved parking lot, picnic shelter with tables, restrooms, bike racks, staging area, lighting and signage. Also, property acquisition would be required for this project.





Figure 13a: US 90 at Ike Anderson Trail Crossing - Existing Conditions



Figure 13b: US 90 at Ike Anderson Trail Crossing - Proposed Improvements

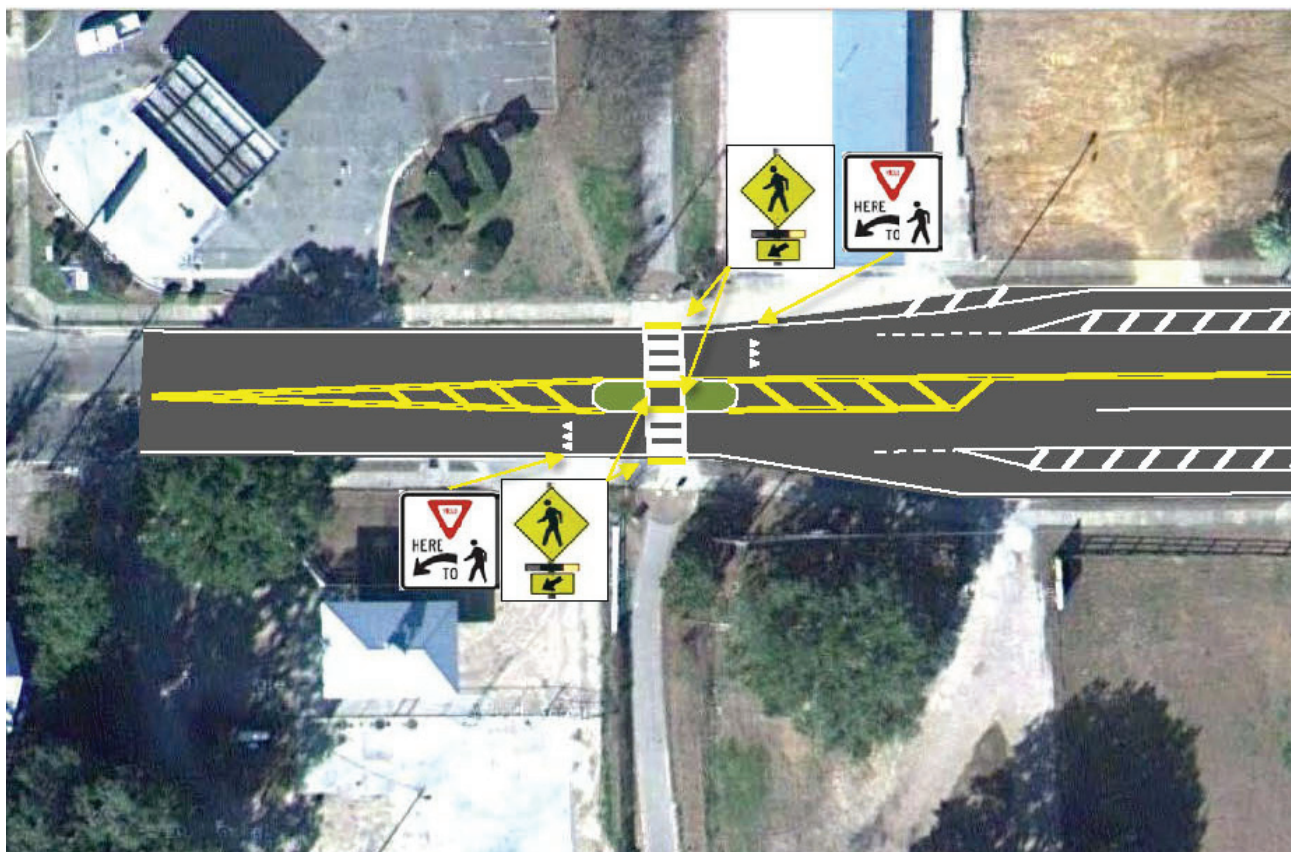






Figure 14a: US 19 South at Cherokee St. - Existing Configuration

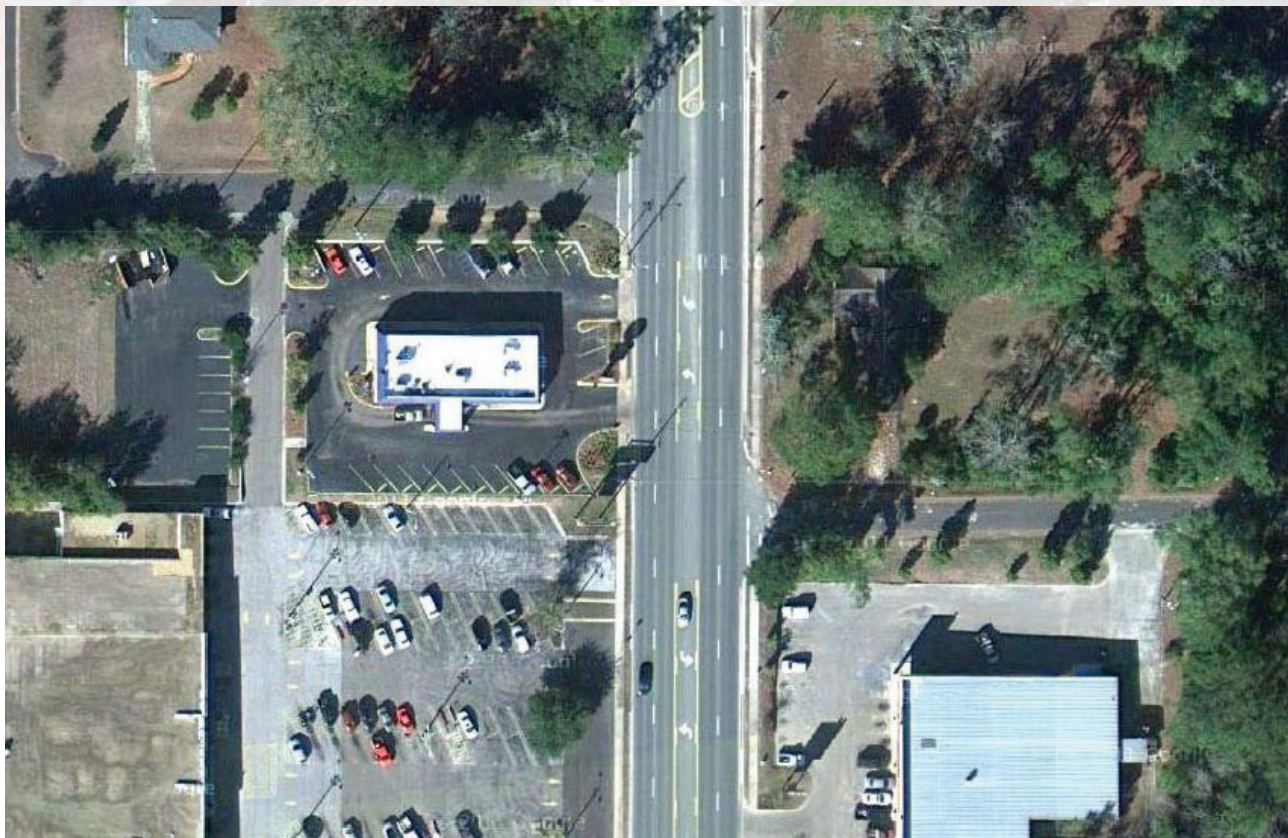
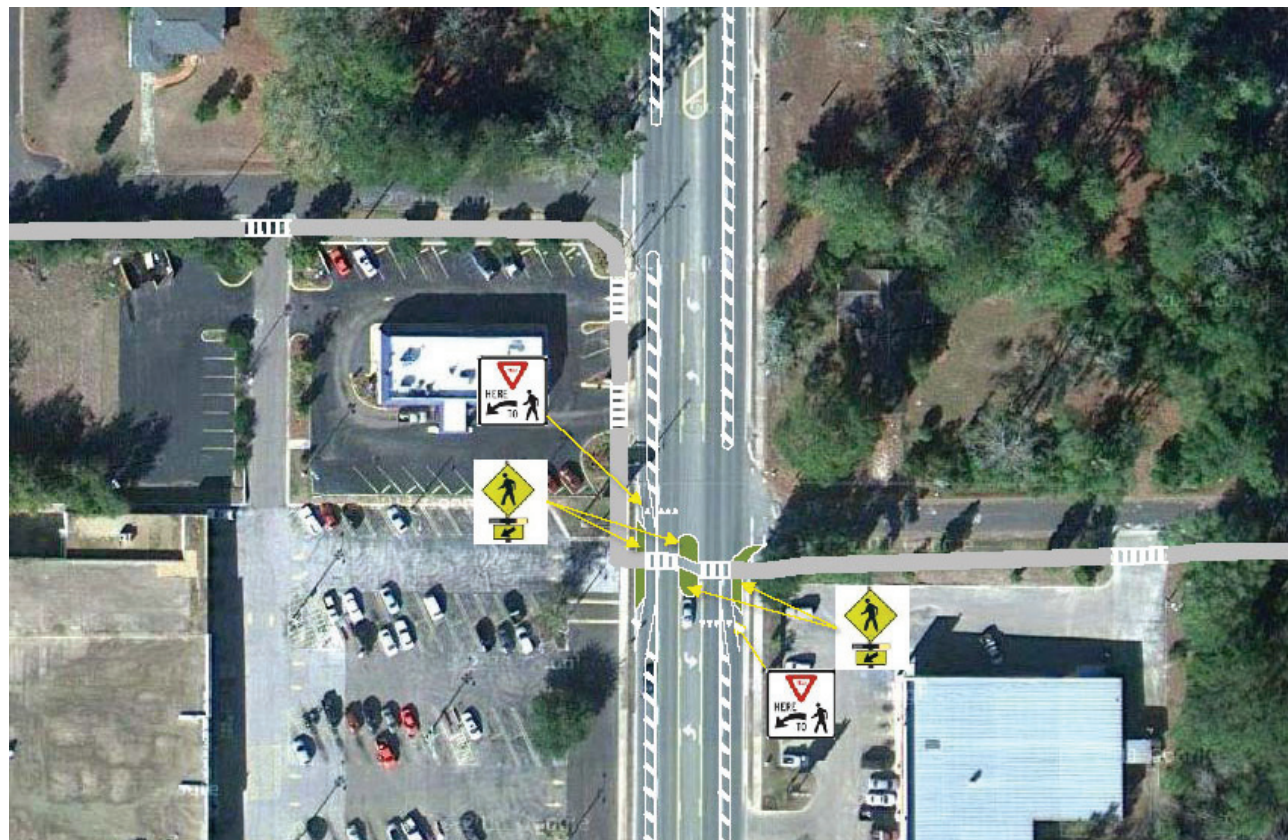


Figure 14b: US 19 South at Cherokee St. - Proposed Improvements







## PROJECT PRIORITIES

### **(PX-7) Jefferson Co ES Area** at various intersections

This project consists of various minor improvements to the immediate vicinity of Jefferson County Elementary School to improve conditions for students to walk or bicycle to school from the adjacent neighborhoods, including the following:

- Reconstructing the sidewalk on Rocky Branch Road between Mamie Scott Drive and Shady Lane to provide an standard width facility and adequate buffer to the edge of roadway
- Mark high-visibility crosswalks at all school driveways on Rocky Branch Road and Mamie Scott Drive
- Remove the existing marked crosswalk (transverse lines only) just west of the parent drop-off loop
- Change the Rocky Branch Rd/Mamie Scott Drive intersection to all-way stop control and mark high-visibility crosswalks on each approach
- Update all school crossing signs to fluorescent yellow-green
- Install MUTCD compliant school zone speed limit signs with flashing beacons and End School Zone signs on Rocky Branch Road and Mamie Scott Drive
- Install stop sign and mark stop line at northern school driveway exit onto Mamie Scott Drive
- Replace existing crosswalk markings with high-visibility crosswalk markings at Rocky Branch Road/Rhodes Street

### **(PX-8) Ike Anderson Trail** at various cross streets

This project simply would provide high-visibility crosswalks and W11-5 combined bicycle/pedestrian warning signs at six cross street locations: Chase Drive, Poplar Street, Holly Street, Dogwood Street, Pearl Street, and York Street.

## **Project Priorities**

The ranking order of recommended projects was determined by an assessment of the master plan goals and strategies as well as information obtained through public input and stakeholder interviews, and a joint county-city work session (described below).

Projects were initially ranked into tiered priority groups: Tier One, Tier Two and Tier Three. Approximately one-third of the total projects were included in each tier, providing a fairly equal distribution weight among the three priority groups. With these generalized rankings in place, a joint county-city work session hosted by the Jefferson County Board of County Commissioners was held to determine the final project prioritization order. In addition, work session participants were asked to provide specific rankings to the projects included in Tier One in order to give future guidance and direction to the Board of County Commissioners and the CRTPA for the funding of future projects as revenue sources are procured. (Projects in Tiers Two and Three remain generally ranked as listed.) The Tier One, Two and Three project priority lists, including planning-level cost estimates, are included in Table 11, 12, and 13 on the following pages.







Table 11: Project Facilities - By Priority Ranking (Tier 1)

MAP ID	ROADWAY	FROM	TO
PX-1	Downtown Courthouse Area	US 90 from Walnut St to Dogwood St; US 19 from Mulberry St to Cherry St	
PX-2	Downtown Courthouse Area	US 90 from Olive St to Mulberry St, and from Cherry St to Waukeenah St; US 19 from Palmer Mill Rd to Walnut St, and from Dogwood St to Pearl St	
SW-1	Palmer Mills Rd	Waukeenah St	Ike Anderson Trail
PX-3	US 90	Marvin St	
PS-1	CR 257/N Salt Rd	US 90	CR 146/Ashville Hwy
SW-2	Branch St	Ike Anderson Trail	Sage Street
PS-2	CR 259/Waukeenah Hwy	US 27	US 19
PS-3	CR 158/Old Lloyd Rd	SR 59	US 90
PX-4	US 90	at Ike Anderson Trail	
SW-3	Waukeenah St	200 ft north of Seminole Ave	Chase Dr
PX-5	US 19	at Cherokee St/Jefferson Square Shopping Center	
PS-4	CR 146/Ashville Hwy	St. Margaret Rd	US 221
MU-1	Progress Energy Rail Trail I	GA state line	Lake Rd
MU-2	Progress Energy Rail Trail II	Lake Rd	US 90
MU-3	Progress Energy Rail Trail III	US 90	US 19
MU-4	Progress Energy Rail Trail IV	US 19	Thompson Valley Rd
MU-5	Progress Energy Rail Trail V	Thompson Valley Rd	CR 257
PX-6	Trailhead	at Aucilla Hwy/US 19 (SE corner)	
PS-5	CR 149/Boston Hwy	US 19	GA state line
MU-6	Water St Eco-Park Trail Connector	Water St at Seminole Ave	US 19 at Cherokee St
MU-7	Water St Eco-Park Trail Connector	US 19 at Cherokee St	Ike Anderson Trail at Chase Dr
SN-1	US 90	Leon Co line (west)	Leon Co line (east)
SN-2	CR 158/Old Lloyd Rd	Leon Co line	SR 59
SN-3	US 90	Mahan Dr	Ike Anderson Trail
SW-4	Palmer Mills Rd	150 ft west of Water St	Water St
SW-5	US 90	300 ft west of Holly Rd	Willow St.
SW-6	Madison St	US 19	Cherry St
SW-7	Pearl St	US 19	Cherry St
SN-4	CR 259/Waukeenah Hwy	Leon Co line	SR 59
SW-8	Cherry St	Pearl St	Madison St
SW-9	High St	Magnolia St	Railroad St
SW-10	Magnolia St	Dogwood St	High St
SW-11	Old Lloyd Road	Leon County line	Main Street (Post Office)



DIST (miles)	PRIORITY	CST COST	NOTES
N/A	1A	\$291,000	4 intersections; curb extensions; crosswalk enhancements; valley gutters...
N/A	1B	\$233,000	4 intersections; curb extensions; crosswalk enhancements; valley gutters...
0.25	2	\$38,196	Constrained ROW; may need easement
N/A	3	\$77,000	popular ped crossing spot, especially for school children; would replace crossing at MLK
6.5	4	\$1,084,915	South side of road; include crosswalk at SR 59; may be constrained ROW (east end)
0.4	5	\$61,114	Constrained ROW; shallow building setbacks
9.5	6	\$1,585,645	
8.8	7	\$1,468,808	
N/A	8	\$66,000	Important trail crossing at major highway
0.12	9	\$18,334	Constrained ROW
N/A	10	\$83,000	Major shopping destination; challenging crossing
14.1	11	\$2,353,431	
5.8	12A	\$2,325,701	
5.2	12B	\$2,085,112	
3.8	12C	\$1,523,735	
2.2	12D	\$882,163	
6.9	12E	\$2,766,783	
N/A	12F	N/A	Unpaved parking, staging area, picnic shelter w/tables, signage
8.1	13	\$1,351,971	
0.3	14	\$120,295	Multimodal connection/crossing at major highway and shopping destination
0.4	15	\$160,393	Multimodal connection/crossing at major highway and shopping destination
3.7	16	\$2,220	BMUFL
1.2	17	\$720	BMUFL
0.8	18	\$1,440	BMUFL signs (in conjunction with Shared Lane Markings)
0.03	19	\$4,584	Downtown Monticello's primary pedestrian network
0.23	20	\$389,815	Add to adjacent programmed sidewalk project
0.06	21	\$9,167	Downtown Monticello's primary pedestrian network
0.06	22	\$9,167	Downtown Monticello's primary pedestrian network
5.3	23	\$3,180	BMUFL
0.14	24	\$21,390	Downtown Monticello's primary pedestrian network
0.15	25	\$22,918	Downtown Monticello's primary pedestrian network
0.09	26	\$13,751	Downtown Monticello's primary pedestrian network
1.3	27	\$198,619	South side of road; include crosswalk at SR 59; may be constrained ROW (east end)





Table 12: Project Facilities - By Priority Ranking (Tier 2)

MAP ID	ROADWAY	FROM	TO
<b>PS-6</b>	CR 158/Rabon Rd	CR 158/Old Lloyd Rd	CR 259/Waukeelah Hwy
<b>PS-7</b>	CR 158/Drifton-Aucilla Rd	US 19	CR 257
<b>PS-8</b>	Lake Rd	Leon Co line	US 19
<b>PS-9</b>	CR 158B/Nash Rd	CR 259/Waukeelah Hwy	US 19
<b>SN-5</b>	Bassett Dairy Rd	CR 257/N Salt Rd	CR 146/Ashville Hwy
<b>SN-6</b>	Miscellaneous Locations		
<b>SN-7</b>	Whitehouse Rd	Leon Co line	SR 59
<b>SN-8</b>	Lloyd Creek Road	US 27	Old Lloyd Road
<b>MU-8</b>	Ike Anderson Trail Northern Extension	Rocky Branch Rd	Jefferson Co Recreation Park
<b>MU-9</b>	Ike Anderson Trail Southern Extension I	Martin Rd	US 19 at Nacoosa Rd
<b>MU-10</b>	Ike Anderson Trail Southern Extension II	US 19 at Nacoosa Rd	US 19 at Drifton-Aucilla Rd
<b>MU-11</b>	Ike Anderson Trail Southern Extension III	US 19 at Drifton-Aucilla Rd	Jefferson Co MS/HS
<b>MU-12</b>	US 90	Leon Co line (west)	Leon Co line (east)
<b>BL-1</b>	US 19	Pearl St	0.1 mi north of Madison St
<b>SL-1</b>	US 90	0.05 mi east of Mahan Dr	Ike Anderson Trail
<b>SL-2</b>	US 19	Courthouse Cir (south side)	Pearl St
<b>SL-3</b>	Water St	Seminole Ave	US 90
<b>SW-12</b>	SR 59	CR 158/Old Lloyd Rd	0.25 mi south of I-10 overpass
<b>SW-13</b>	Water St (east side)	Walnut St	Seminole Ave
<b>SW-14</b>	King St	Martin Luther King Jr Ave	Park Ave
<b>SW-15</b>	Martin Luther King Jr Ave	US 90	King St
<b>PX-7</b>	Jefferson Co ES Area	various intersections	



DIST (miles)	PRIORITY	CST COST	NOTES
3.3	Tier 2	\$550,803	
8.1	Tier 2	\$1,351,971	
10.8	Tier 2	\$1,802,628	
1.9	Tier 2	\$317,129	
4.6	Tier 2	\$2,760	BMUFL
10	Tier 2	\$6,000	STR signs to address documented problem locations with existing paved shoulders
2.9	Tier 2	\$1,740	BMUFL
5.3	Tier 2	\$3,180	BMUFL
0.4	Tier 2	\$160,393	
0.8	Tier 2	\$320,786	
1.7	Tier 2	\$681,671	
0.7	Tier 2	\$280,688	
3.7	Tier 2	\$1,483,637	One side of roadway
0.25	Tier 2	\$2,640	Complete as part of future resurfacing project
0.8	Tier 2	\$6,720	Downtown 'main street'
0.15	Tier 2	\$1,260	Downtown 'main street'
0.5	Tier 2	\$2,000	Multimodal connector between shopping/business destinations
0.44	Tier 2	\$67,225	Constrained ROW; shallow building setbacks
0.5	Tier 2	\$76,392	
0.33	Tier 2	\$93,070	Constrained ROW; shallow building setbacks
0.26	Tier 2	\$72,570	Constrained ROW; shallow building setbacks
N/A	Tier 2	\$86,000	Mostly minor crossing improvements





Table 13: Project Facilities - By Priority Ranking (Tier 3 )

MAP ID	ROADWAY	FROM	TO
<b>SN-9</b>	Natural Bridge Road / Fanlew Road	Leon Co line	SR 59
<b>SN-10</b>	Casa Bianca Road	CR 259/Waukeena Hwy	CR 158/Old Lloyd Road
<b>SN-11</b>	Green Road	Lake Rd	US 19
<b>SN-12</b>	Tyson Road	CR 259/Waukeena Hwy	US 19
<b>SN-13</b>	Blue Lake Road	CR 257	US 90
<b>SN-14</b>	Connell Road / Brooks Road/CR 206	SR 59	CR 259/Tram Road
<b>SN-15</b>	Limestone Road/CR 205	Brooks Road/CR 206	SR 59
<b>SN-16</b>	Springfield Road	SR 59	Lloyd Creek Road
<b>MU-13</b>	Elliot Dr Connector	Elliot Dr at Melrose Dr	Ike Anderson Trail
<b>RD-1</b>	US 19	0.1 mi north of Madison St	Texas Hill Rd
<b>RD-2</b>	US 19	0.25 mi south of E. Cherokee St	Courthouse Circle
<b>RD-3</b>	US 90	Ike Anderson Trail	0.1 mi west of St. Margaret Rd
<b>PX-8</b>	Ike Anderson Trail	at various cross streets	



DIST (miles)	PRIORITY	CST COST	NOTES
2.3	Tier 3	\$1,380	BMUFL (dirt roads programmed to be paved)
2.4	Tier3	\$3,180	BMUFL (dirt roads programmed to be paved)
1.1	Tier3	\$660	BMUFL (dirt roads programmed to be paved)
2.2	Tier3	\$1,320	BMUFL (dirt roads programmed to be paved)
2.6	Tier3	\$1,560	BMUFL (dirt roads programmed to be paved)
3.8	Tier3	\$2,280	BMUFL (dirt roads programmed to be paved)
1.7	Tier3	\$1,020	BMUFL (dirt roads programmed to be paved)
1.5	Tier3	\$900	BMUFL (dirt roads programmed to be paved)
0.04	Tier 3	\$16,039	Feasibility: easement, acquisition?
0.6	Tier 3	\$595,989	From 4LU + parking to 3LU+bike lanes
0.9	Tier 3	\$893,984	From 4/5LU+some parking to 3LU+bike lanes
0.6	Tier 3	\$695,321	From 4LU + parking to 3LU+bike lanes
N/A	Tier 3	\$12,000	Enhanced crosswalk and signs at 6 minor street crossings





Local policies and programs can help to grow an active bicycle and pedestrian culture.





## Overview

This chapter describes the programs and policies recommended in this Master Plan using the six “Es” of bicycle and pedestrian planning as a guide; *Education, Encouragement, Enforcement, Engineering, Equity, and Evaluation*. These policy and program elements serve as the basis for a comprehensive bicycle and pedestrian strategy that contributes to:

- Enhanced community mobility options.
- Improved livability and quality of life for residents.
- Environmental justice for transportation disadvantaged individuals.
- Economic development benefits for individuals, business and public agencies.
- Economic development possibilities related to recreation and eco-tourism.
- Increased regional mobility and recreational opportunities.
- Increased community physical fitness and health.
- Reduced pollution and improved air quality.

The Bicycle and Pedestrian Master Plan proposes a combination of facility improvements, including:

- Installing sidewalks and completing sidewalk gaps.
- Installing roadway shoulders.
- On-road bicycle lanes.
- Shared-use paths.
- Roadway diets.
- Bikes May Use Full Lane signage.
- Other non-motorized mobility enhancements.

Such improvements are anticipated to complement the County’s existing resources and provide connections to desired destinations, such as downtown Monticello, schools, parks and recreation facilities, commercial areas, and future potential economic development areas. The following sections outline the program and policy elements that support the master plan.

## Education

With different modes using the same right-of-way, it is imperative that each user has at least a basic understanding of the rights and responsibilities of all users on the roadway. Bicyclists and pedestrians must understand their rights within the right-of-way and how to safely travel alongside vehicular traffic. Motorists also need to understand the legal rights and responsibilities of bicyclists and pedestrians. A wide variety of agencies and organizations may provide education programs targeted at bicyclists, pedestrians, and motorists of various ages.

### Public Education Initiatives

A variety of media, both traditional and new/social, can be used to educate the public about bicyclist and pedestrian safety, sharing the road, courtesy, economy and efficiency, including:

- A Safe Routes to School program in coordination with the Florida Traffic and Bicycle Safety Education Program, local schools, and school districts and incorporation of traffic and pedestrian safety into school curricula at various grade levels.
- Share the Road/bicycling public education campaigns in local newspapers, TV, radio, and other media.





- Coordination with utility providers to include information in utility bills (mailed and emailed) regarding bicycle and pedestrian activity.
- Public education campaigns for all ages of the general public regarding the rights and responsibilities of all roadway users.
- A program to provide bicycle safety equipment, including helmets, lights, reflectors, vests, other gear, and educational materials to all residents who are interested and successfully complete a safety training or orientation program.

### **Education, Training, and Coordination for Local Government Staff**

In order for the Master Plan to be effectively implemented, Jefferson County and City of Monticello staff from various departments should review the plan to gain a better understanding of how their departments can help with plan implementation. A comprehensive education program in coordination with the American Association of State Highway and Transportation Officials guidelines, the Jefferson County Health Department, the Jefferson County Community Traffic Safety Team and other community service organizations could be established to teach safe, courteous and useful practices in all situations and conditions. Educational efforts can serve to:

- Identify and provide training opportunities for County, City, and other agency staff on best practices in roadway facilities design and programs.
- Provide a comprehensive understanding of the needs of bicyclists and pedestrians and how to create a safe, multimodal transportation network within the region.
- Training opportunities should include both classroom sessions on on-road handling/traffic cycling skills and pedestrian safety precautions for staff members.
- Ensure interdepartmental coordination within and among Jefferson County and City of Monticello departments and others when planning and implementing roadway projects and programs to ensure that multi-modal uses are incorporated and that public awareness of multi-modal opportunities are available.

### **Encouragement**

Bicycling and walking are legitimate modes of transportation and important forms of personal mobility and independence. Having a connected network of on-street bicycle facilities and sidewalks that allows people to travel from one place to another without driving is the first step toward an active and healthy community. While some enthusiasts are more likely to use facilities once they have been installed, others tend to need a bit more encouragement and confidence-building before they are comfortable. Encouragement activities promote and raise awareness of multi-modal options and events. An important key to success of these activities is having a coordinated approach, a consistent message, and focused activities.

### **Bicycle and Pedestrian Advisory Committee**

A county-level Bicycle and Pedestrian Advisory Committee (BPAC) would ideally represent multiple facets of the community and coordinate between Jefferson County and City of Monticello staff on a wide range of bicycle and pedestrian issues facing the region, including implementation of the Bicycle and Pedestrian Master Plan. The committee would be charged with representing the needs and opinions of local residents, businesses, and others related to bicycle and



pedestrian issues, plans, programs, policies, and project implementation. Goals of the committee should include:

- Developing guidelines and a process for establishing a Bicycle and Pedestrian Advisory Committee, including committee composition, appointment process, purpose and responsibilities, staff liaison and coordination roles, and other details to ensure committee effectiveness.
- Monitoring planned facility implementation.
- Helping organize events and programs.

### **Bicycle and Pedestrian Coordinator**

A Bicycle and Pedestrian Coordinator would be the single point of contact for bicycle- and pedestrian-related initiatives, programs, policies, and projects within the County. While many departments and organizations will be involved in implementing and supporting various elements of the Master Plan, it is essential that a staff position be identified to coordinate and guide implementation. The Coordinator would work with Jefferson County and City of Monticello staff, the Bicycle and Pedestrian Advisory Committee, other governmental agencies, the business community, and the general public to create partnerships and fulfill the vision represented in this Master Plan. Considerations for establishing the position should include:

- Identification of key responsibilities of the Bicycle and Pedestrian Coordinator, such as to ensure that all facilities comply with the Americans with Disabilities Act, and identification of the appropriate department to house the position.
- Depending on budget constraints, the County may initially choose to reassign an existing position to focus on bicycle and pedestrian issues at least 50% of the time, moving to a full-time position over time when appropriate.
- Raise awareness of the position and responsibilities through City publications and electronic media.

### **Safe Routes to School Programs**

Safe Routes to School (SRTS) programs focus on a comprehensive approach to encouraging bicycling and walking to school. These programs are sustained efforts by parents, schools, community leaders and local, state, and federal governments to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. This may be accomplished through the provision of infrastructure (engineering) or via non-infrastructure programs (education, encouragement, enforcement). These programs make bicycling and walking to school a safer and more appealing transportation choice and encourage life-long healthy and active lifestyles. To promote this program, the City should incorporate the following procedures:

- Work with all Independent School Districts (ISD) that cover the City to establish comprehensive SRTS programs.
- Support the creation of SRTS programs at local elementary and middle schools, including school transportation assessments and walking/biking plans.
- Work with local schools to provide appropriate bicycling activities for children of different age groups.
- Assist with funding applications for SRTS projects identified through the programs.





### Bicycle and Pedestrian Events

Providing a wide range of opportunities for persons of all ages and abilities to walk or ride is essential to increasing multimodal awareness within the County. Community or social events provide opportunities for both new and experienced bicyclists and walkers to ride to the store, school, library, work, park, or just for fun. When combined with safety education materials and programs, the following events and informational materials can increase comfort and safety for all roadway users:

- The Seminole Cycling Classic is an opportunity to highlight the County's regional bikeway network and focus positive attention on the City of Monticello.
- Bicycling-related activities that support bicycling to promote healthy lifestyles such as Bike to Work Week, Bike Month, and/or Bike-In Movies.
- A wayfinding map of the City of Monticello and vicinity, regional routes and trails (online and fold-out brochure) showing existing bike routes, destinations, and links to the hike and bike trail network, once facilities are installed.
- The Watermelon Festival in the City of Monticello has many outdoor activities including beauty pageants, street dance, a melon run, sports events, and a parade, which expose festival goers to Monticello's pedestrian friendly environment.
- A county website illustrating future regional connection and planned facilities in collaboration with links to County and Monticello departments and organizations that are supporting new facilities.



*The Seminole Cycling Classic event is a regional draw and provides exposure for Monticello.*



*The Watermelon Festival is an annual celebration that encourages healthy and active behaviors for the city and its visitors.*

### Local Businesses

Public-private partnerships, whether formal or informal, can help encourage residents to walk or ride bicycles for short shopping trips or for work trips. Partnership opportunities include:

- Creating partnerships with local bicycle businesses and community organizations to promote bicycle and pedestrian-friendly events, such as the Watermelon Festival and the Seminole Cycling Classic.
- Seek sponsorship opportunities for safety, education, and awareness materials such as wayfinding maps and informative brochures.
- Encouraging employers to include quality/secure bicycle parking, showers, and lockers for employees who wish to walk, run, or bicycle to work. Consider modifications to the development standards to require or provide incentives for incorporation of these facilities in new development or redevelopment.

### Enforcement

A strong enforcement program is critical in Jefferson County, where many of the County's bicycle and, to a lesser degree, pedestrian facilities will be located on existing, and highly trafficked, regional roadways. Enforcement activities should strive toward three important objectives:

- Protect the bicyclist's right to operate on the roadway.
- Protect bicyclists and pedestrians from motorists.
- Ensure that bicyclists and pedestrians follow the rules and operate safely.

Taken together, activities that achieve these objectives represent a comprehensive enforcement program that sends a "share the road" message to all roadway users.



The Monticello Police Department can play a key role in creating a supportive atmosphere in the City through constant contact with other Jefferson County staff, City staff, and residents from all areas of the community. Law enforcement officers and other Police Department staff who interact with the public are familiar with traffic and bicycle laws and local traffic patterns. Officers will be able to reinforce correct motorist, bicyclist, and pedestrian behaviors and send a strong message to the community that walking and riding is a viable and accepted means of transportation.

### Coordination Efforts

As mentioned earlier, no one department has full responsibility for improving pedestrian and bicycle conditions. Law enforcement officials can provide linkages between other various County enforcement agencies, City departments, and community organizations to support education, encouragement and enforcement activities through:

- Coordination with other law enforcement agencies in the area to provide training and interpretation of bicycling and traffic laws and practices.
- Communication with other law enforcement agencies and bicycle advocacy groups to ensure understanding and agreement on existing bicycling-related regulations and practices.
- Sponsorship of and/or support of bicycling education programs and bicycling events with other County and City departments and private/community organizations.

### Enforcement Activities

Enforcement of traffic laws may incorporate a range of activities focused on raising awareness, improving behavior of all roadway users, and improving comfort and safety for bicyclists and pedestrians. Bicyclists, pedestrians, and motorists must be made aware of these rights and responsibilities and encouraged to act within the law. Enforcement efforts can include:

- Ensuring law enforcement staff (officers and other people who interact with the public) are aware of current rules of the road and bicycle-related laws.
- Conducting enforcement campaigns to encourage both motorists and bicyclists to follow laws and improve safety for all. These campaigns may include issuing citations or warnings, rewarding behavior that indicates awareness and consideration for the safety and rights of all roadway users, and should identify specific behaviors to target.
- Developing partnerships within community and business organizations to promote compliance with traffic laws and encourage considerations for all users.

### Crash Locations

There may be locations within the Jefferson County and the City of Monticello that experience greater numbers of bicycle- or pedestrian-related crashes. It is these locations that should be singled out for safety-related countermeasures. County staff is encouraged to undertake an examination of available crash statistics (types and locations) to determine possible interventions and strategies to reduce crashes.





## Engineering

The physical structure of the built environment is an important factor that influences whether walking and/or bicycling can be successful forms of transportation in a community. Lane widths, speed limits, pavement/sidewalk conditions, and crosswalks and intersection characteristics will affect perceptions of roadway safety and comfort for various users. Jefferson County's regional roadway system is currently used, and has many future opportunities, as a bikeway network. At both the county and city scale, it is important to adopt streetscape standards that ensure the safety of multimodal users on all roadways.

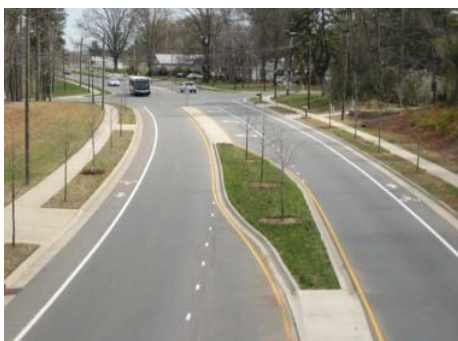
## Complete Streets

The goal of Complete Streets is to create a better environment for users of most modes of transportation: automobiles, bicyclists, pedestrians, and transit. Special attention should be given to designing facilities that accommodate the special needs of children, the elderly, and people with physical and visual disabilities. Florida Statute 335.065 states that, with noted exceptions:

*"Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into state, regional, and local transportation plans and programs. Bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any state transportation facility, and special emphasis shall be given to projects in or within 1 mile of an urban area."*

Adopting a county-wide Complete Streets policy will ensure that all applicable modes (automobile, bicycle, pedestrian, and transit) are included in roadway and community design. Successful Complete Streets policies include ten key elements:

- Includes a vision for how and why the community wants to complete its streets.
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses, emergency vehicles, and automobiles.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is understood by all agencies to cover all roads.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Directs that Complete Streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of the policy.



Complete Street projects provide safe access for all users.

## Bicycle Facility Design and Capital Improvements Planning

Many of Jefferson County's roads are currently being used for bicycling, but are lacking best practices for bicyclist and pedestrian safety. Reconstruction, retrofit, and rehabilitation projects are those roadway projects that do not involve the creation of a brand new road. One way to ensure good overall facility design is to accommodate multi-modal planning at the beginning of a



transportation improvement project so that it is integrated into the total design of the project at the outset, instead of being added at a later date and at a greater cost. City plans and policies can incorporate these goals by:

- Using national and state standards, as applicable, to guide design and installation of bicycle facilities and treatments. The American Association of State Highway and Transportation Office (AASHTO) and Florida State Greenbook standards and guidelines all provide detailed guidance for bicycle and pedestrian facilities design and usage.
- Integrating bikeways and sidewalks in typical sections and design standards will assist in the construction of these facilities.
- Evaluating key roadway resurfacing, reconstruction, and design projects for opportunities to incorporate multi-modal facilities and treatments, improve intersection crossings, and provide connectivity to the bicycle network and trail facilities.
- Installing appropriate bicycle and pedestrian facilities and treatments, including resurfacing, re-striping, right-of-way adjustments, and share-the-road signage, on roadways identified in the Bicycle and Pedestrian Concept Plan.
- Creating a wayfinding network of signed bicycle routes leading to key destinations within the community such as parks, community facilities, trails, schools, and shopping centers.
- Evaluating the success of new or modified roadway designs is an important aspect for the Engineering Department to consider when evaluating future projects. Recommendations for evaluation and performance measures can be found at the end of the Evaluation section.

### Bicycle and Pedestrian Supporting Facilities

Bicycle and pedestrian-related facilities that make it easier for residents to arrive at their destinations can be provided through a number of programs and policies. It is important to incorporate supporting facilities into programming, design, and construction at key locations, at regional destinations, and within downtown Monticello. The County should consider the following initiatives:

- Encourage the development of end-of-trip and bicycle parking facilities, especially at community resources (parks, cultural centers, schools, transit facilities), and other desired destinations (employment centers, shopping destinations) through development requirements and incentives.
- Install bicycle parking at destinations throughout the City, including libraries, parks, shopping centers, business districts, and transit stops.
- Install pedestrian-friendly streetscape furnishings, such as benches, waste receptacles, and lighting, along key corridors.



*Supporting facilities add comfort, safety, and improved aesthetic quality to streetscapes.*





### Evaluation

A key component to the successful implementation of the Master Plan is being able to evaluate the performance of programs, new or improved facilities, and other policy-based decisions. The County and City of Monticello should also be enabled to assess the progress of the Master Plan and its ability to meet future goals and objectives and make corrections as needed to support a bicycle and pedestrian-friendly community.

### Baseline Data

It is impossible to determine success without first knowing where you started. By collecting and compiling existing conditions information, the County and Monticello can determine whether conditions have improved over time. Baseline data, and performance measures used to track progress, may also be required for obtaining financial support from grants or other sources. Data collection includes establishment of baseline conditions for each of the Master Plan's objectives in order to establish updated conditions and evaluate progress against performance/evaluation measures at least every five years. Use this conditions update and evaluation to revise project lists, program delivery, and update the Master Plan over time.

### City Policies and Regulations

Adopting the Bicycle and Pedestrian Master Plan is just the first step toward creating a more bicycle-friendly community. Identifying potential locations for countermeasures and facilities complemented by changes to associated land development regulations, long-range planning policies, and other planning documents, will lead to the long-term success of the Master Plan and improved safety for bicyclists and pedestrians. Evaluating existing planning documents for opportunities to include proactive bicycle and pedestrian-oriented policies ensures future development and redevelopment efforts will incorporate human-scale development patterns and urban design characteristics that will encourage healthy and active behaviors. Policy consideration includes:

- Revisions to Comprehensive Plan policies and corresponding land development regulations/ordinances to encourage land use patterns and site design that support bicycling and walking.
- Development of form-based development regulations to maximize the comfort and safety of non-motorized users.
- Clearly defining responsibilities for ongoing implementation and coordination of the Master Plan (projects, programs, and policies) across County and Monticello departments and with various community organizations and stakeholders.

### Performance Measures

It is through the implementation and evaluation of policy and program objectives that Jefferson County and the City of Monticello will create a clear, comprehensive, and implementable approach to fully incorporate multimodal opportunities into the fabric of the community. A summary of recommended performance measures for each of the six "Es" are shown in the table below:



Table 14: Summary of Policy and Program Performance Measures

FOCUS AREA	PERFORMANCE MEASURES
<b>Education</b>	Number or percentage of key staff attending training of various types (by department, agency, etc.)
	Number of bicycle/motorist education programs offered to citizens, including those located in non-native English speaking neighborhoods, schools in low-income communities, and elderly citizens
	Number of attendees at bicycle/motorist safety education programs
	Number of school-age students receiving bicycle/traffic safety education
	Number of educational brochures/materials distributed to citizens
	Number of persons receiving bicycle safety gear
<b>Encouragement</b>	Number of bicycling-related new events initiated in the County
	Number of schools participating in Safe Routes to School programs
	Reduction in the Countywide obesity and diabetes rates, especially among youth
	Implementation of pedestrian- and bicycle-supportive maps and other public media
	Number of bike racks installed and subsequent usage
	Number of bike racks installed at various locations around the County by private entities
<b>Enforcement</b>	Reduced number of pedestrian- and bicycle-related crashes as a proportion of all crashes in the County
	Percentage of law enforcement officers receiving specific bicycle-related training
	Number of persons who received education and/or citations regarding pedestrian- and bicycle-related incidents
<b>Engineering</b>	Reduction in the number of pedestrian and bicycle network gaps throughout the County
	Adoption of pedestrian- and bicycle-friendly design guidelines into the County and City policies and standards
	Number of connectivity points between on-street facilities and off-road paths
	Miles of sidewalk, bicycle lanes/paved shoulders and pathway facilities installed
	Safety improvements at key intersections
	Number of bicycle parking spaces installed in the County at appropriate locations (and usage of these parking facilities)
	Number of businesses that install bicycle racks or other end-of-trip facilities
<b>Equity</b>	Workshops, training, and education sessions held, and the number of people from identified neighborhoods or community groups who attend
	Proportion of bicycle and pedestrian facilities, treatments, and wayfinding routes designated and installed by geographic area
	Number of mobility-related education events and programs offered to lower income, seniors, and other special needs populations within the County
<b>Evaluation &amp; Planning</b>	Changes to County and City policies and plans to support implementation of the Bicycle and Pedestrian Master Plan
	Amount of funding identified and allocated toward Bicycle and Pedestrian Master Plan implementation





*Future funding towards priority projects will enhance the safety, connectivity, and beauty of Monticello.*





## Cost Estimating

Planning-level cost estimates are included for each recommended project (with the exception of PX-6: Trailhead at Aucilla Highway/US 19). Estimates are based on typical development practices, depending on the project type recommended, and standard cost estimating figures commonly used. More detailed cost breakdowns are provided for pedestrian crossing enhancement projects PX-1 thru PX-5, PX-7 and PX-8, as these projects are more detailed in scope. General project unit cost estimates assumed for the majority of recommended projects are included in the table below.

Detailed project cost estimate breakdowns provided for pedestrian crossing enhancement projects PX-1 thru PX-5, PX-7 and PX-8, as mentioned above, can be found in the appendix to this master plan.

**Table 15: General Unit Cost Estimates**

PROJECT	ASSUMPTIONS	CST COST	SOURCE
Sidewalk (1 side)	5' width, 1 side	\$ 152,784	1
Sidewalk (2 sides)	5' width, both sides	\$ 302,293	1
Paved Shoulder	5' paved shoulder, both sides	\$ 166,910	1
Trail	12' multi-use trail, 1 side of roadway	\$ 400,983	1
Pedestrian Signal	Pedestrian activated signal per intersection, 4-way	\$ 11,264	1
Crosswalk	Pedestrian crosswalk per intersection, 12" white stripe (paint/thermo), 5 x 12' lanes all quadrants	\$ 2,645	1
Restripe	Milling & resurfacing (4L roadway) 5' sidewalk & curb & gutter, undivided, includes L & R turn lanes	\$ 993,315	1
BMUFL Signs	1 sign per mile per direction; \$300/sign	\$ 600	2
BMUFL Signs (urban)	3 signs per mile per direction; \$300/sign	\$ 1,800	2
Bike Lane Stripe	6" white stripe; \$1/lf	\$ 10,560	2
Shared Lane Marking Park	1 marking every 250' adjacent to on-street parking; \$200/marking	\$ 8,400	3
Shared Lane Marking	1 marking every 500' (approx. 0.1 mi) with no on-street parking; \$200/marking	\$ 4,000	3

1. *FDOT D-3 Preliminary Estimates Section Transportation Costs Annual Roadway Construction Cost, Revised December 2011. CEI (normally 15% of the construction cost) is not included.*

2. *Unit costs per FDOT Area 7 averages (07/2011 - 06/2012).*

3. *Based on unit cost per marking from City of Winter Park, FL project on Palmer Avenue*





## Funding Sources

Following the adoption of this master plan, the County and CRTPA will be in a better position to seek and procure funding for priority bicycle- and pedestrian-related projects in Jefferson County. The following is a list of potential funding sources for consideration in pursuit of accomplishing the project recommendations.

### Local/State level Funding sources:

#### VISIT FLORIDA Grants

VISIT FLORIDA is the state's official tourism marketing corporation created in 1996. VISIT FLORIDA is not a government agency, but rather a not-for-profit corporation that carries out the work of the Florida Commission on Tourism, which was created as a public-private partnership by the Florida Legislature in 1996. VISIT FLORIDA maintains the following grant programs:

- Cultural Heritage and Nature Tourism Grant Program: The Cultural Heritage and Nature Tourism (CHNT) Grant Program is a reimbursement program designed to provide funding for multi-county and multipartner marketing projects for the promotion of Florida's cultural heritage and nature tourism and education efforts.
- Advertising Matching Grants Program: VISIT FLORIDA administers an advertising matching grants program to publicize the tourism advantages of the State of Florida. This program is administered on behalf of the Florida Commission on Tourism, in cooperation with the Governor's Office of Tourism, Trade, and Economic Development. Notices of the grants program are sent out by the second Friday in March. The total for all grants under this program shall not exceed \$40,000 per year.

#### Office of Greenways and Trails - The Recreational Trails Program (RTP)

The Recreational Trails Program (RTP) is coordinated by the Office of Greenways and Trails. The RTP is a competitive program that provides grants for projects that provide, renovate, or maintain recreational trails, trailheads, or trail side facilities. The Florida Department of Environmental Protection (FDEP) administers the program in coordination with the U.S. Department of Transportation and the Federal Highway Administration (FHWA). Municipal or county governments, state or federal governmental agencies, recognized state and federal Indian tribal governments, and organizations approved by the State are eligible to apply. RTP grants have a minimum 20 percent local match. Applications must be submitted between March 15 and March 30 of the application year.

#### Small Cities Community Development Block Grant Program

The Community Development Block Grant Program is a federal program that provides funding for housing and community development. The U. S. Department of Housing and Urban Development distributes money to states participating in the Small Cities Community Development Block Grant program based on a formula developed by Congress. Florida has received between \$18 and \$35 million each year since 1983. The program has five preliminary categories:

- Housing
- Neighborhood Revitalization
- Commercial Revitalization



- Economic Development
- Section 108 Loan Guarantee Program

Applications for Economic Development grants may be submitted at any time. Applicants may apply for Housing, Neighborhood, or Commercial grants only if they have no open grants. Grant contracts are written for two-year periods. Applications must meet certain eligibility and national objective requirements, as listed below:

- To qualify under the Low-Moderate National Objective, at least 51 percent of the beneficiaries must be low and moderate income persons. The U. S. Department of Housing and Urban Development has defined a low and moderate income person as one whose total family income is at or below 80 percent of the area's median income.
- Under the Slum and Blight National Objective, the area must be a slum or blighted area as defined by state or local law.
- Activities funded under the Urgent Needs National Objective must alleviate existing conditions that pose a serious and immediate threat to those living in the area and are 18 months or less in origin. Additionally, the local government must demonstrate that it is unable to finance the activity on its own, and that other funding is not available.

#### ***Florida Community Trust's Florida Forever Grant Program***

Florida Communities Trust is a state land acquisition grant program that provides funding to local governments and eligible non-profit environmental organizations for acquisition of community-based parks, open space, and greenways that further outdoor recreation and natural resource protection needs as identified in local government comprehensive plans.

#### ***Florida Department of Transportation Enhancements***

The Transportation Enhancement Program (TEP) is a federal program administered by the Florida Department of Transportation (FDOT). This funding is intended for projects or features that go beyond what has been customarily provided with transportation improvements. This program is for projects that are related to the transportation system, but are beyond what is required through normal mitigation or routinely provided features for transportation improvements. TEP is not a grant program; rather, projects are undertaken by project sponsors and eligible costs are reimbursed. These funds can be used for streetscapes, signage, and roadway improvements.

#### ***Bikes Belong Coalition Grant Program***

This program assists in the development of bicycle facility projects by providing \$180,000 in grants each year. This program is administered by the Bikes Belong Coalition, which is a bicycle advocacy organization aimed at "putting more people on bikes more often."

#### ***Florida Recreation and Development Assistance Grant Program***

The Florida Recreation and Development Assistance Program provides grants for the acquisition or development of land for public outdoor use or for the construction or renovation of recreational trails. This program is administered by the Florida Department of Environmental Protection, Bureau of Design and Recreation Services.





### ***Bike Florida Mini-Grants***

This small-scale grant program is established through the sale of “Share the Road” specialty license plates to provide funds for bicycle and pedestrian programs. These grants provide assistance in the purchasing of equipment (such as road or trail signage, bike repair for educational programs), print materials (printing of bicycle safety information, safety signage for bicycle events, trail maps, etc.), or other safety-related projects. Helmet giveaway programs are not considered eligible. The program website can be found at [www.bikeflorida.org](http://www.bikeflorida.org).

### **National/Federal level funding sources:**

#### ***National Highway System Funding***

Funding Entity / Administrator: National Highway System Funding

Website: <http://www.fhwa.dot.gov/safetealu/factsheets/nhs.htm>

Eligibility: Funds may be used to construct bicycle transportation facilities and pedestrian walkways on land adjacent to any highway on the National Highway System, including Interstate highways.

Match Requirements: No.

Other Requirements: May be spent on any public highway or trail.

#### ***Surface Transportation Program (STP)***

Funding Entity / Administrator: FHWA

Website: <http://www.fhwa.dot.gov/safetealu/factsheets/stp.htm>

Eligibility: Funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways (including ADA compliance projects), or non-construction projects (such as maps, brochures, and public service announcements) related to safe bicycle use and walking; 10 percent of annual funds are dedicated to TE projects

Match Requirements: Most Federal-aid highway funding programs require a 20 percent State match of Federal funds

Other Requirements: State and/or local funds used to match Federal-aid highway projects may include in-kind contributions (such as donations). Projects need to be in the North Central Texas Council of Governments (NCTCOG) TIP to be eligible (<http://www.nctcog.org/trans/tip/>)

#### ***Transportation Enhancement (TE) Program (subset of STP)***

Funding Entity / Administrator: FHWA

Website: [http://www.fhwa.dot.gov/environment/transportation\\_enhancements](http://www.fhwa.dot.gov/environment/transportation_enhancements)

Eligibility: Program is run through a state-level TE Office. Competitive selection process, funds are distributed directly by the state TE Office.

Match Requirements: Individual TE projects under the STP can have a match higher or lower than 80 percent; typical local match is 20 percent; Funds from other Federal programs may also be used to match TE program funds.

Other Requirements: Projects may exceed the 80 percent Federal share provided the State program overall matches at the 80/20 level; Projects need to be in the NCTCOG TIP to be eligible; May be used on local roads.



### **Congestion Mitigation and Air Quality Improvements (CMAQ) Program (subset of STP)**

**Funding Entity / Administrator:** FHWA

**Website:** [http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](http://www.fhwa.dot.gov/environment/air_quality/cmaq/)

**Eligibility:** Only for local governments in non-attainment areas; Funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects (such as maps, brochures, and public service announcements) related to safe bicycle use.

**Match Requirements:** CMAQ typically covers 80 percent of the project cost, with the remaining 20 percent coming from the state, MPO or public/private partners.

**Other Requirements:** Coordination with MPO (NCTCOG) is strongly recommended to coordinate the application process; May be used on local roads.

### **Safe Routes to School Program**

**Funding Entity / Administrator:** Safe Routes to School Program

**Website:** [http://www.txdot.gov/safety/safe\\_routes/default.htm](http://www.txdot.gov/safety/safe_routes/default.htm)

**Eligibility:** Statewide competitive process; cost-reimbursement; Funds are apportioned to states based on their relative shares of total enrollment in primary and middle schools, but no state will receive less than \$1 million.

**Match Requirements:** No.

**Other Requirements:** 70-90% to Infrastructure projects; remainder to non-infrastructure

### **State and Community Highway Safety Grant (Section 402 funds)**

**Funding Entity / Administrator:** State and Community Highway Safety Grant (Section 402 funds)

**Website:** <http://safety.fhwa.dot.gov/policy/section402/>

**Eligibility:** Section 402 grants are provided to support state highway safety programs designed to reduce traffic crashes and resulting deaths, injuries, and property damage

**Match Requirements:** 100 percent federally funded

**Other Requirements:** State must submit a Performance Plan to be eligible for funds.

### **Transit Enhancement Activity Program**

**Funding Entity / Administrator:** Transit Enhancement Activity Program

**Website:** <http://www.fta.gov>

**Eligibility:** One percent set-aside of Urbanized Area Formula Grant funds designated for, among other things, pedestrian access and walkways, and "bicycle access, including bicycle storage facilities and installing equipment for transporting bicycles on mass transportation vehicles." 49 USC Section 5307(k)

**Match Requirements:** Bicycle-related transit projects are 90 percent Federal and may increase to 95 percent Federal for bicycle-related transit enhancement projects

**Other Requirements:** No.





### ***Job Access and Reverse Commute (JARC) Grants***

Funding Entity / Administrator: FTA

Website: [http://www.fta.dot.gov/grants/13093\\_3550.html](http://www.fta.dot.gov/grants/13093_3550.html)

Eligibility: State and public bodies; Capital, planning and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects - includes bicycle-related services

Match Requirements: The Federal share of eligible capital and planning costs may not exceed 80 percent of the net cost of the activity (50 percent for operating costs). Recipients may use up to 10 percent to support program administrative costs including administration, planning, and technical assistance, which may be funded at 100 percent Federal share. The local share of eligible capital and planning costs shall be no less than 20 percent of the net cost of the activity, and the local share for eligible operating costs shall be no less than 50 percent of the net operating costs.

Other Requirements: Funds pass from FTA to NCTCOG; Project must be in TIP to be funded

### ***Transportation, Community, and System Preservation Program (discretionary grants)***

Funding Entity / Administrator: FHWA

Website: <http://www.fhwa.dot.gov/tcsp/>

Eligibility: States, metropolitan planning organizations, local governments, and tribal governments are eligible for TCSP Program discretionary grants to plan and implement strategies which improve the efficiency of the transportation system, reduce environmental impacts of transportation, reduce the need for costly future public infrastructure investments, ensure efficient access to jobs, services and centers of trade, and examine development patterns and identify strategies to encourage private sector development patterns which achieve these goals.

Match Requirements: The Federal share payable shall be 80 percent.

Other Requirements: Applicants are strongly encouraged to coordinate applications with the State department of transportation and metropolitan planning organization to ensure proposals are consistent with statewide and metropolitan planning requirements.



## Conclusion

The Jefferson County Bicycle and Pedestrian Master Plan is the culmination of extensive data collection, review and analysis. It was formulated with extensive municipal, public and stakeholder input and involvement. As a result, this Master Plan provides the framework for a robust bicycle and pedestrian network, to be implemented over time, which will increase transportation mobility options for all population segments of the County. The bicycle and pedestrian conceptual network, project recommendations, and project prioritization schedule give practical direction to local municipal leaders to implement the plan and realize a more complete and diverse transportation system for Jefferson County.









## **Jefferson County Bicycle and Pedestrian Master Plan**

### **Stakeholder Interview Notes**

#### **1. Roy Schleicher/County Administrator, Alan Wise/Preble-Rish (County Engineer), another guy – see notes – Assistant Co Admin?**

##### Issues

- Fatality at post office (US 19 north)
- No traffic lights in County
- Too many signs

##### Opportunities

- Potential Connections – new park at end of Water Street, connections to/from Leon County
- Bulbouts in core 6 blocks, improved crossings
- Paved shoulders on 259 north of 27, Lake Micc, US90, Waukeendh Highway
- Connections to destinations

#### **2. City of Monticello – Emily Anderson/City Clerk, Steve Wingate/City Manager, Raymond \_\_\_/Title**

##### Issues

- Visibility issues with plants/trees at US90 crossing
- Very few people walk to school
- Curb issues at US 90

##### Opportunities

- Coordinate improvements with new development, such as Monticello Pines
- Improve crosswalks with ladder striping
- Gateway improvements

- Potential connections to Eco-park and north to GA (via Cotton Trail)
- Improvements to US 19
- Improvements to US90
  - US 90 E – consider road diet as 2035 volumes are less than 10,000 vpd
  - Improve crossing at the US90 trail
  - Change to share the road/sharrows

### **3. Planning/ED – Bill Telefson/County Planning Director, Julie Conley/EDC, Nancy Wideman/TDC**

Development opportunities include – Monticello Pines, Wacissa, some commercial development at US19/27, US 27 at 59 and US19

Past planning efforts (such as the future land use plan and FSU vision plan) have not been well-received. There is an economic development plan in the works.

Future transportation improvements could include 6 laning US 27 and US 19 to route truck traffic off I-75. This would include a bypass.

### **4. County Roads Department – David Harvey**

Issues

- SR 59 may not have paved shoulder
- Lamont has existing sidewalk at the post office
- Concern about sharing road – signage helps, but don't have money for signs all over

Potential Future Facilities:

- Look at Seminole Cycling Routes northeast of town
- Develop Whitehouse Rd with a separate bicycle route to/from Leon Co. There are issues with ROW, which would need coordination with land owners.
- "Goose Pasture" has potential for trailhead areas
- Abandoned RR ROWs from Lamont to GA.
- Add Share the road on Cherry/Llod Creek and SR59

### **5. Police Chief and two Sheriff's Deputies**



Issues:

- narrow roads,
- topography,
- golf carts
- kids not permitted to ride to school
- need to educate cyclists on how to ride
- Need pedestrian enforcement at courthouse

**6. Winston Lee, AICP, ASLA, local resident/business owner (walk around downtown, no notes)**

**7. Jefferson Co. Schools – Superintendent Brumfield**

Title 1 District

No Kids bike or walk to school (posted speed is 65mph on US 19), though some might use trail if extended south. Kids who live within 2 blocks of the school are bussed.

Trail crossing at US 90 used to include a school speed zone, but it was removed.

Can't afford crossing guards

Hazardous walking conditions. Sidewalk is needed from Courthouse west to City limits.

# JEFFERSON COUNTY BICYCLE & PEDESTRIAN MASTER PLAN

## PUBLIC WORKSHOP



A master plan for the future of bicycling and walking in Jefferson County is in progress. The master plan will identify safe and efficient locations to connect bicyclists and walkers to key destinations such as historic downtown Monticello, parks, schools, natural and historical sites, and more.

The master plan will include the following components:

- Detailed maps of recommended bicycle lanes, sidewalks, trails, and more
- Policies that support bicycling and walking
- Programs to increase awareness and safety
- Priorities for plan implementation

### Public Workshop

At this workshop, preliminary recommendations to improve conditions for bicycling and walking in Jefferson County will be shared with the community. These concepts build on the existing Regional Mobility Plan and are based on stakeholder interviews and extensive field review. We need your input on the needs and priorities for bicycle and pedestrian facilities and programs. You are encouraged to attend and to bring a friend.

*What places do you walk or bike?*

*What route do you want to use to get there?*

**TUESDAY, MAY 15, 2012**

**5:00 pm – 7:30 pm**

**Drop in anytime. Presentation at 6:00 pm.  
Jefferson County R.J. Bailar Public Library  
Community Room  
375 South Water Street, Monticello, FL**

#### For More Information:

Contact Lynn Barr, CRTPA, (850) 891-6801 or [lynn.barr@talgov.com](mailto:lynn.barr@talgov.com)  
or Jennifer Carver, Renaissance Planning Group, (850) 270-1926 x 402 or  
[jcarver@ciesthatwork.com](mailto:jcarver@ciesthatwork.com)

**[www.crtpa.org](http://www.crtpa.org)**

#### Sponsored by:



Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons requiring special accommodation under the Americans with Disabilities Act or those requiring language translation services, free of charge, should contact Lynn Barr at (850) 891-6801 at least three (3) days before the event.



## Jefferson County Bicycle and Pedestrian Master Plan Public Workshop

FOR IMMEDIATE RELEASE

May x, 2012

For more information contact:

Lynn Barr (name)

Mobility Coordinator (title)

850-891-6800 (phone #)

[Lynn.barr@talgov.com](mailto:Lynn.barr@talgov.com) (email)

---

### May 15 public workshop to focus on bicycle and pedestrian areas

**Monticello** - Jefferson County invites all residents, businesses, and stakeholders to attend a public workshop to provide input on the needs and priorities for bicycle and pedestrian facilities and programs. This public workshop will be held in an informal open house format with a presentation at 6:00 pm. Citizens attending the workshop will be able to review the materials, ask questions and submit comments. The public workshop is as follows:

**Tuesday, May 15, 2012**

**5:00 pm – 7:30 pm**

**Drop in anytime. Presentation at 6:00 pm.**

**Jefferson County R.J. Bailar Public Library Community Room**

**375 South Water Street, Monticello, FL**

The Capital Region Transportation Planning Agency (CRTPA), in coordination with Jefferson County and the City of Monticello, is developing the Jefferson County Bicycle and Pedestrian Master Plan. Emphasis will be placed on safe and efficient locations to connect bicyclists and walkers to key destinations. This plan will feature the following components:

- Detailed maps of recommended bicycle lanes, sidewalks, trails, and more
- Policies that support bicycling and walking
- Programs to increase awareness and safety
- Priorities for plan implementation

What would make Jefferson County & Monticello more bicycle- and pedestrian-friendly? What are the key bicycling/walking destinations in the County for families, commuters, or others? Where would you most like to see bicycle routes/trails, sidewalks, and crosswalks? What concerns do you have about bicycling and walking in the County?

Please visit the CRTPA web site at [http://www.crtpa.org/Jefferson\\_County\\_Bike\\_Ped.html](http://www.crtpa.org/Jefferson_County_Bike_Ped.html) to participate in a short questionnaire.

This public meeting is being held in compliance with the Americans with Disabilities Act (ADA). Anyone requesting special accommodations may call (850) 891-6800, at least 48 hours prior to the meeting. For more information on the CRTPA and local transportation planning initiatives, please visit [www.crtpa.org](http://www.crtpa.org) or call (850) 891-6800.

###



# Jefferson County Bicycle and Pedestrian Master Plan

## Web Survey Results

RespondentID	Collector ID	StartDate	EndDate	What would make Jefferson County & Monticello more bicycle- and pedestrian-friendly?	What are the key bicycling/walking destinations in the County for families, commuters, or others?	Where would you most like to see bicycle routes/trails, sidewalks, and crosswalks?	What concerns do you have about bicycling and walking in the County?
				<i>Open-Ended Response</i>	<i>Open-Ended Response</i>	<i>Open-Ended Response</i>	<i>Open-Ended Response</i>
1841643960	26281359	05/15/2012	05/15/2012	first, a leash law. we are always being chased by dogs, once by 5! a 2-ft plus shoulder on some designated bike-friendly roads would also be very helpful. the dogs keep me from riding there more than the lack of shoulders tho.	Not familiar enough with the county. I just love the countryside there.	on 90, so we could ride easily from our home at baum and buck lake. Canopy roads,	Dogs, lack of shoulders.
1828588683	26281359	05/06/2012	05/06/2012	More Bicycle and Pedestrian friendly paths. Lots of Bicycle path signs. Wider bicycle paths on the roads. lots and lots of Advertisement detailing Eco-Tours.	There is a brochure made by the TDC in Monticello that details a Historic Monticello Walking Tour. There should also be made available a Brochure for Historic Biking Tours. I would like that question above answered as well. We have no advertisement detailing any of these destinations in Monticello. How are people to know if it is not put out there.	19N, 19S, 90E, and 90W.	Safety. No bicycle paths to follow, save for one already designated, and is hidden out of the way. Need more Bicycle and Pedestrian Friendly commercial signs on streets and everything. I love the new Pedestrian crosswalk signs. We need more of these kind of signs to make people aware of what we have.
1823997829	26281359	05/02/2012	05/02/2012	Highway 90 in Jefferson County is the only part of 90 without shoulders. Any time a road is resurfaced, it really helps to have shoulders or bike lanes. Stop dangerous drivers and if a driver ever his a cyclists or pedestrian charge make them accountable. Last time I bicycled from Tallahassee to Greenville on a few cars passed me. But one on an empty roads missed me from behind by inches and gunned his engine to make his point. The rule of the road should be that those with the bigger vehicles should be held most accountable. Cars over bikes, bikes over pedestrians. The Bike Florida Ride brought \$10,000's to many small towns this year. We have to stop the few dangerous drivers making these big rides afraid to come here.	Wacissa River, Aucilla, Florida Hiking Trail, Courthouse, Opra House are great destinations. This may be the only county that stretches across Florida. Would be a great marketing tool to say "ride across Florida" bike ride....in one day. Lots of history tung oil, Spanish, Lloy train station, Mahan tree lined 90... Historic markers would help promote these things if placed all along bike routes.	The ones we use now are good. The Speghetti 100 has a great dirt ride from Miccusuki to Boston...	Bad drivers are not held accountable when the hit cyclists or pedestrians. They don't appreciate all the potential tourists dollars a big group ride could bring to the county. Get a Backroads or Vermont bicycling tour book. People pay \$300/day to bike ride in nice safe areas. Our area is as nice as anything in those brochures!!!!!!!
1823860810	26281359	05/02/2012	05/02/2012	1) a 4 "E" type bike/ped program that includes, education, encouragement, enforcement and engineering (facilities) with adequate funding 2) a full time bike/ped advocate on staff 3) paved shoulders on 2 lane roads where feasible (particularly continuous paved shoulders on Hiway 90, 59, 19, etc.) 4) sharrows on 2 lane roads that don't have bike lanes or paved shoulders 5) a bike shop in town/county 6) continuous sidewalks throughout downtown Monticello 7) curb cut ramps at all downtown intersections 8) a detailed map of bike friendly routes & internet mapping app to help cyclists map a route in County 9) school based bike/ped safety education program 10) bike law education program for enforcement officers 11) bike facility design education for ALL County & City staff who deal with roadway design 12) a "bike friendly Jefferson County" citizens' committee (include CoC and other civic orgs) 13) regular bike rides through the County to provide both exercise and business opportunities 14) encouragement of "green guide" type eco-tours that interface biking, hiking and river/lake boating	Wacissa & Aucilla Rivers, downtown locations, Lake Miccosukee, the dog track, parks, coast, most rural roads, etc	see above	none - its ALL good. Some improvements in facilities would be nice...

# Jefferson County Bicycle and Pedestrian Master Plan

---

## Recommended Bicycle and Pedestrian Facility Improvements

We appreciate your attendance and participation in today's meeting. Your comments are important to us and a valuable component of a strong master plan that adequately represents the interests of the community. Please take a moment to leave us your comments in the space provided below.

---

---

---

---

---

---

---

---

---

---

*You may return this comment sheet via fax (813-254-7742) or email ([sswearengen@ciesthatwork.com](mailto:sswearengen@ciesthatwork.com)) to Scott Swearengen, Renaissance Planning Group.*



**Jefferson County Bicycle & Pedestrian Master Plan -- General Unit Cost Estimates**

<b>Project</b>	<b>Assumptions</b>	<b>CST Cost</b>	<b>Source</b>
Sidewalk_1	5' width, 1 side	\$ 152,784	1
Sidewalk_2	5' width, both sides	\$ 302,293	1
Pvd_Shld	5' paved shoulder, both sides	\$ 166,910	1
Trail	12' multi-use trail, 1 side off roadway	\$ 400,983	1
Ped_Sig	Ped activated signal per intersection, 4-way	\$ 11,264	1
Xwalk	Ped crosswalk per intersection, 12" white stripe (paint/thermo), 5 x 12' lanes all quadrants	\$ 2,645	1
Restripe	Milling & resurfacing (4L roadway) 5' sidewalk & curb & gutter, undivided, includes L & R turn lanes	\$ 993,315	1
STR_Signs	1 sign per mile per direction; \$300/sign	\$ 600	2
STR_Signs_Urban	3 signs per mile per direction; \$300/sign	\$ 1,800	2
BL_Stripe	6" white stripe; \$1/lf	\$ 10,560	2
SLM_Park	1 marking every 250' adjacent to on-street parking; \$200/marking	\$ 8,400	3
SLM_No_Park	1 marking every 500' (approx. 0.1 mi) with no on-street parking; \$200/marking	\$ 4,000	3

1. FDOT D-3 Preliminary Estimates Section Transportation Costs Annual Roadway Construction Cost, Revised December 2011. CEI (normally 15% of the construction cost) is not included.

2. Unit costs per FDOT Area 7 averages (07/2011 - 06/2012).

3. Based on unit cost per marking from City of Winter Park, FL project on Palmer Avenue.

# LONG RANGE ESTIMATE

## Project PX-1: Downtown Courthouse Area Project Phase 1

Prepared by HDR Engineering, Inc.

Fiscal Year 2012

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$32,000.00	\$32,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$25,000.00	\$25,000.00
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00
522-1	CONCRETE SIDEWALK, 4" THICK	-	SY	\$30.00	\$0.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	609	SY	\$80.00	\$48,746.67
110-1-2	CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000.00
520-2-4	CONCRETE CURB, TYPE D	844	LF	\$13.00	\$10,972.00
120-6	EMBANKMENT	45	CY	\$10.38	\$468.51
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	1,320	LF	\$1.75	\$2,310.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	1,120	LF	\$3.86	\$4,323.20
0711-11-151	6" White Stripe	200	LF	\$1.00	\$200.00
	Concrete Valley Gutter	430	LF	\$13.00	\$5,590.00
	Drainage inlet at Curb Extension	16	EA	\$4,500.00	\$72,000.00
0527-1	Detectable Warning Pad	56	EA	\$350.00	\$19,600.00
SUB- TOTAL					\$242,210.38
CONTINGENCY (20%)					\$48,442.08
DESIGN FEES (10%)					\$29,065.25
CEI FEES (10%)					\$31,971.77
TOTAL ESTIMATED CONSTRUCTION COST (2012) :					\$290,652.45

### ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)



# LONG RANGE ESTIMATE

## Project PX-2: Downtown Courthouse Area Project Phase 2

Prepared by HDR Engineering, Inc.

Fiscal Year 2012

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$25,000.00	\$25,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$20,000.00	\$20,000.00
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00
	DESIGN SURVEY	1	LS	\$10,000.00	\$10,000.00
	SIGNING & PAVEMENT MARKING	1	LS	\$5,000.00	\$5,000.00
522-1	CONCRETE SIDEWALK, 4" THICK	-	SY	\$30.00	\$0.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	396	SY	\$80.00	\$31,644.44
110-1-2	CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000.00
520-2-4	CONCRETE CURB, TYPE D	636	LF	\$13.00	\$8,268.00
120-6	EMBANKMENT	29	CY	\$10.38	\$304.14
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	864	LF	\$1.75	\$1,512.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	800	LF	\$3.86	\$3,088.00
0711-11-151	6" White Stripe	760	LF	\$1.00	\$760.00
	Concrete Valley Gutter	640	LF	\$13.00	\$8,320.00
	Drainage inlet at Curb Extension	14	EA	\$4,500.00	\$63,000.00
0527-1	Detectable Warning Pad	32	EA	\$350.00	\$11,200.00
SUB- TOTAL					\$194,096.58
CONTINGENCY (20%)					\$38,819.32
DESIGN FEES (10%)					\$23,291.59
CEI FEES (10%)					\$25,620.75
TOTAL ESTIMATED CONSTRUCTION COST (2012) :					\$232,915.90

### ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)

**LONG RANGE ESTIMATE**  
**Project PX-3: Midblock Crossing of US 90 at Marvin St**  
*Prepared by HDR Engineering, Inc.*

**Fiscal Year 2012**

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$8,000.00	\$8,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$3,000.00	\$3,000.00
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00
	DESIGN SURVEY	1	LS	\$2,000.00	\$2,000.00
522-1	CONCRETE SIDEWALK, 4" THICK	-	SY	\$30.00	\$0.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	31	SY	\$80.00	\$2,480.00
110-1-2	CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000.00
520-2-4	CONCRETE CURB, TYPE D	68	LF	\$13.00	\$884.00
120-6	EMBANKMENT	-	CY	\$10.38	\$0.00
0527-1	Detectable Warning Pad	2	EA	\$350.00	\$700.00
	Rectangular Rapid Flashing Beacons	1	EA	\$15,000.00	\$15,000.00
0700-20-11	Single Post Sign	2	EA	\$300.00	\$600.00
	Overhead Lighting	2	EA	\$8,000.00	\$16,000.00
	Drainage inlet at Curb Extension	2	EA	\$4,500.00	\$9,000.00
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	196	LF	\$1.75	\$343.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	90	LF	\$3.86	\$347.40
<b>SUB- TOTAL</b>					<b>\$64,354.40</b>
<b>CONTINGENCY (20%)</b>					<b>\$12,870.88</b>
<b>DESIGN FEES (10%)</b>					<b>\$7,722.53</b>
<b>CEI FEES (10%)</b>					<b>\$8,494.78</b>
<b>TOTAL ESTIMATED CONSTRUCTION COST (2012) :</b>					<b>\$77,225.28</b>

**ESTIMATE BASIS AND ASSUMPTIONS:**

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)



# LONG RANGE ESTIMATE

## Project PX-4: Midblock Crossing of US 90 at Ike Anderson Trail

Prepared by HDR Engineering, Inc.

Fiscal Year 2012

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$7,000.00	\$7,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$3,000.00	\$3,000.00
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00
	DESIGN SURVEY	1	LS	\$2,000.00	\$2,000.00
522-1	CONCRETE SIDEWALK, 4" THICK	-	SY	\$30.00	\$0.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	40	SY	\$80.00	\$3,200.00
110-1-2	CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000.00
520-2-4	CONCRETE CURB, TYPE D	84	LF	\$13.00	\$1,092.00
120-6	EMBANKMENT	3	CY	\$10.38	\$31.14
0527-1	Detectable Warning Pad	2	EA	\$350.00	\$700.00
	Rectangular Rapid Flashing Beacons	1	EA	\$15,000.00	\$15,000.00
0700-20-11	Single Post Sign	2	EA	\$300.00	\$600.00
	Overhead Lighting	2	EA	\$8,000.00	\$16,000.00
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	108	LF	\$1.75	\$189.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	60	LF	\$3.86	\$231.60
SUB- TOTAL					\$55,043.74
CONTINGENCY (20%)					\$11,008.75
DESIGN FEES (10%)					\$6,605.25
CEI FEES (10%)					\$7,265.77
TOTAL ESTIMATED CONSTRUCTION COST (2012) :					\$66,052.49

### ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)

## LONG RANGE ESTIMATE

### Project PX-5: Midblock Crossing of US 19 at Cherokee St/Jefferson Square Shopping Center

*Prepared by HDR Engineering, Inc.*

Fiscal Year 2012

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$9,000.00	\$9,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$3,000.00	\$3,000.00
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00
	DESIGN SURVEY	1	LS	\$2,000.00	\$2,000.00
522-1	CONCRETE SIDEWALK, 4" THICK	-	SY	\$30.00	\$0.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	69	SY	\$80.00	\$5,520.00
110-1-2	CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000.00
520-2-4	CONCRETE CURB, TYPE D	150	LF	\$13.00	\$1,950.00
120-6	EMBANKMENT	3	CY	\$10.38	\$31.14
0527-1	Detectable Warning Pad	2	EA	\$350.00	\$700.00
	Rectangular Rapid Flashing Beacons	1	EA	\$15,000.00	\$15,000.00
0700-20-11	Single Post Sign	2	EA	\$300.00	\$600.00
	Overhead Lighting	2	EA	\$8,000.00	\$16,000.00
	Drainage inlet at Curb Extension	2	EA	\$4,500.00	\$9,000.00
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	108	LF	\$1.75	\$189.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	60	LF	\$3.86	\$231.60
<b>SUB- TOTAL</b>					<b>\$69,221.74</b>
<b>CONTINGENCY (20%)</b>					<b>\$13,844.35</b>
<b>DESIGN FEES (10%)</b>					<b>\$8,306.61</b>
<b>CEI FEES (10%)</b>					<b>\$9,137.27</b>
<b>TOTAL ESTIMATED CONSTRUCTION COST (2012) :</b>					<b>\$83,066.09</b>

#### ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)



# LONG RANGE ESTIMATE

## Project PX-7: Jefferson County Elementary School Area Improvements

Prepared by HDR Engineering, Inc.

Fiscal Year 2012

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$9,000.00	\$9,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$3,000.00	\$3,000.00
104- 20	EROSION CONTROL	1	LS	\$1,000.00	\$1,000.00
	DESIGN SURVEY	1	LS	\$2,000.00	\$2,000.00
522-1	CONCRETE SIDEWALK, 4" THICK	1,111	SY	\$30.00	\$33,330.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	-	SY	\$80.00	\$0.00
110-1-2	CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000.00
520-2-4	CONCRETE CURB, TYPE D	-	LF	\$13.00	\$0.00
120-6	EMBANKMENT	-	CY	\$10.38	\$0.00
0527-1	Detectable Warning Pad	20	EA	\$350.00	\$7,000.00
0700-20-11	Single Post Sign w/ Flashing Beacon	4	EA	\$500.00	\$2,000.00
0700-20-11	Single Post Sign	13	EA	\$300.00	\$3,900.00
	Overhead Lighting		EA	\$8,000.00	\$0.00
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	1,100	LF	\$1.75	\$1,925.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	900	LF	\$3.86	\$3,474.00
SUB- TOTAL					\$71,629.00
CONTINGENCY (20%)					\$14,325.80
DESIGN FEES (10%)					\$8,595.48
CEI FEES (10%)					\$9,455.03
TOTAL ESTIMATED CONSTRUCTION COST (2012) :					\$85,954.80

### ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)

# LONG RANGE ESTIMATE

## Project PX-8: Ike Anderson Trail Crossing at Various Minor Streets

Prepared by HDR Engineering, Inc.

Fiscal Year 2012

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
101- 1	MOBILIZATION	1	LS	\$1,000.00	\$1,000.00
102- 1	MAINTENANCE OF TRAFFIC	1	LS	\$3,000.00	\$3,000.00
104- 20	EROSION CONTROL	-	LS	\$1,000.00	\$0.00
	DESIGN SURVEY	-	LS	\$2,000.00	\$0.00
522-1	CONCRETE SIDEWALK, 4" THICK	-	SY	\$30.00	\$0.00
523-2	PATTERNED PAVEMENT, NON-VEHICULAR AREAS	-	SY	\$80.00	\$0.00
110-1-2	CLEARING & GRUBBING	-	LS	\$5,000.00	\$0.00
520-2-4	CONCRETE CURB, TYPE D	-	LF	\$13.00	\$0.00
120-6	EMBANKMENT	-	CY	\$10.38	\$0.00
0527-1	Detectable Warning Pad	2	EA	\$350.00	\$700.00
0700-20-11	Single Post Sign	12	EA	\$300.00	\$3,600.00
	Overhead Lighting	-	EA	\$8,000.00	\$0.00
0711-11-122	12" White Stripe (Crosswalk Outside Stripe)	288	LF	\$1.75	\$504.00
0711-11-125	24" White Stripe (Crosswalk Inside Stripe)	300	LF	\$3.86	\$1,158.00
SUB- TOTAL					\$9,962.00
CONTINGENCY (20%)					\$1,992.40
DESIGN FEES					\$5,000.00
CEI FEES					\$2,500.00
TOTAL ESTIMATED CONSTRUCTION COST (2012) :					\$11,954.40

### ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
  - The mobilization costs are based on 15% of the construction cost
  - Embankment to 1 ft depth
  - No R/W Impact
  - No specialized landscaping (beyond sodding)
  - Utility relocations by others
- SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011 - 06/2012)