

September 16, 2019



AGENDA ITEM 7 C

MONTICELLO BIKE TRAIL EXTENSION FEASIBILITY STUDY

TYPE OF ITEM: Discussion

STATEMENT OF ISSUE

This item seeks approval of the Monticello Bike Trail Feasibility Study (see ***Attachment 1***) including the study's recommended alternative ("Alternative Option 1").

CRTPA COMMITTEE ACTIONS

The CRTPA's two (2) committees (Citizen's Multimodal Advisory Committee (CMAC) and Technical Advisory Committee (TAC)) met on September 3, 2019 and recommended the CRTPA accept the Monticello Bike Trail Feasibility Study and recommended Alternative Option 1.

RECOMMENDED ACTION

Option 1: Accept the Monticello Bike Trail Feasibility Study and recommended Alternative Option 1.

BACKGROUND

Initiated in late 2018, The Monticello Bike Trail Feasibility Study was developed by the CRTPA's planning consultant Kimley-Horn (KHA). The study analyzed the feasibility for extending the existing Monticello Bike Trail south to the Jefferson County Middle/High School (approximately 2 miles) as identified in both the Jefferson County Bicycle and Pedestrian Master Plan as well as the CRTPA 2040 Regional Mobility Plan.

As a background, the current Monticello Bike Trail begins at Jefferson Elementary School at Rocky Branch Road and continues for approximately 2 miles south to Nacoosa Road (Monticello City Limit). The southernmost portion of the trail (Martin Road and Nacoosa Road) is unpaved and is approximately .55 miles in length.

The feasibility study assessed opportunities for the Trail's southern extension consistent with the promotion of connectivity between local neighborhoods, places of interest, and schools. Furthermore, the study identifies the potential of the Trail to provide a connection to larger, regional trail networks proposed in the vicinity.

As detailed in the study,

“While the main purpose of this trail extension is to connect the City of Monticello to the Jefferson County Middle/High School, the potential for future connectivity to larger, more regionally expansive trail systems is high. Jefferson County offers visitors nature-focused recreation activities, historical sites, local businesses, and restaurants.

Regional trails that are being considered and are included in the Florida Department of Environmental Protection (FDEP) Office of Greenways and Trails Land Trail Priorities are:

- Tallahassee-Monticello Greenway Corridor, that runs along U.S. 90 west of Monticello
- Lake City to Monticello Corridor, which is also on U.S. 90 but east of Monticello
- Georgia to Cross City Corridor, which heads south along U.S. 19, past the limits of this proposed extension.

These potential future trails support the need for the Monticello Bike Trail extension to provide better connectivity to the economic center of the county.”

Ultimately, the feasibility study identified three (3) potential alternatives associated with the southern extension of the trail. All trail alternatives (1, 2, and 3) provide a connection between the current Monticello Bike Trail limit and Jefferson County Middle/High School and all begin at the southern terminus of the existing paved trail. Additionally, all alternatives either continue along the unpaved section to Nacoosa Road or head west on Martin Road and all alternatives use US 19 for a portion of the proposed extension. Furthermore, none of the alternatives require the acquisition of right-of-way. One of the identified constraints associated with the identification of the alternatives was the need to avoid use of the US 319 bridge (FDOT Bridges 540008 & 540048) over the railroad due to insufficient width to safely accommodate the addition of a trail.

The following details the trail alternatives:

- **Trail Alternative 1** – This alternative proposes use of the existing unpaved section of the Monticello Bike Trail from Martin Road to Nacoosa Road (with shared lane markings and signage to be installed on Nacoosa Road to U.S. 19). At U.S. 19, a multi-use path within the existing right of way on the east side of the corridor is proposed until the trail reaches Aucilla Highway where it will continue with shared lane markings along the roadway east, to Horne Road, until the entrance of Jefferson County Middle/High School. Shared lane markings will be placed along the entrance road to the school. The feasibility report recommends Alternative 1 as the preferred alternative.

- **Trail Alternative 2** – Alternative 2 proposes starting on the paved section of the Monticello Bike Trail where it ends at Martin Road. On Martin Road, the trail proceeds west with shared lane markings to US 19. Once on U.S. 19, the trail will follow the same proposed route southward as detailed above in Alternative 1.
- **Trail Alternative 3** – Alternative 3 proposes using less of U.S. 19 than Alternatives 1 & 2 through use of Old Drifton Road. The route could either begin at Martin Road and head west to U.S. 19 or the trail could continue south on the existing unpaved section of the trail to Nacoosa Road where it would head west to U.S. 19. Like the Alternatives 1 & 2, this alternative would include a multi-use path on the east side of U.S. 19. However, unlike the other two alternatives that continue to Aucilla Highway, Alternative 3 proposes using Old Drifton Road (located approximately 0.5 miles north of Aucilla Highway) and continuing along Horne Road to end at the school.

Additional information related to the above alternatives is provided in the report including benefits/challenges associated with each alternative as well as cost estimates.

NEXT STEPS


Pursuant to approval of the study's preferred alternative, next steps associated with the Monticello Trail Extension include environmental documentation. Given that no right-of-way is required, next steps will ultimately be less lengthy than if the project required such right-of-way.

OPTIONS

- Option 1: Accept the Monticello Bike Trail Feasibility Study and recommended Alternative Option 1.
(Recommended)
- Option 2: Provide other direction.

ATTACHMENT

Attachment 1: Monticello Bike Trail Feasibility Study



MONTICELLO BIKE TRAIL EXTENSION FEASIBILITY STUDY

MAY 2019

Prepared for



Prepared by

Kimley»Horn



MONTICELLO BIKE TRAIL FEASIBILITY STUDY

Introduction

The Capital Region Transportation Planning Agency (CRTPA) is completing a trail feasibility study to determine a route for extending the Monticello Bike Trail south to the Jefferson County Middle/High School. This extension was identified in the Jefferson County Bicycle and Pedestrian Master Plan as a potential trail extension and connector. A feasibility study is designed to assess the practicality of a proposed trail or project, with consideration to various aspects including engineering, the environment, major barriers, and right of way limitations. Feasibility studies determine if the project is constructible from the outset of the process. These elements are outlined in more detail below.



Photo 1: Existing paved trail in Monticello

Currently, the existing Monticello Bike Trail begins at Jefferson Elementary School on Rocky Branch Road and continues for approximately two miles south to Nacoosa Road, which is also the Monticello city limit. A portion of the trail that is about .55 miles in length between Martin Road and Nacoosa Road exists but is unpaved. The trail at its current extent is shown in **Figure 1**. Several opportunities for the extension have been assessed and are detailed in this report. If feasible, the key purpose of extending the Monticello Bike Trail is to promote connectivity among local neighborhoods, places of interest, and schools. There is also potential to connect to the larger, regional trail network proposed in this area.

Currently, the existing Monticello Bike Trail begins at Jefferson Elementary School on Rocky Branch Road and continues for approximately two miles south to Nacoosa Road, which is also the Monticello city limit. A portion of the trail that is about .55 miles in length between Martin Road and Nacoosa Road exists but is unpaved. The trail at its current extent is shown in **Figure 1**. Several opportunities for the extension have been assessed and are detailed in this report. If feasible, the key purpose of extending the Monticello Bike Trail is to promote connectivity among local neighborhoods, places of interest, and schools. There is also potential to connect to the larger, regional trail network proposed in this area.

In Jefferson County, nearly 13.9% of the population was estimated to be below the poverty level as of 2017 (American Community Survey 5-Year Estimates, 2013-2017). Other estimates put the 2017 percentage of individuals in poverty in Jefferson County closer to 18% (US Census Small Area Income and Poverty Estimates (SAIPE), 2017; Florida Legislature Office of Economic and Demographic Research, 2019).

Impoverished populations typically report high spending in the area of transportation due to lack of access and high costs, especially in rural areas of the country (Federal Highway Administration NHTS, 2014). Alternative transportation options can alleviate this issue by offering basic, safe connections for access to important locations and services in the area. As the county seat of Jefferson County, the City of Monticello is an excellent candidate for alternative transportation options for its residents and could be the multi-modal center of a system that connects various parts of the County.



Photo 2: Trail signage near Jefferson Elementary School



Figure 1: Current Extent of the Monticello Bike Trail

Regional Trail Network Importance

The development of this extension of the Monticello Bike Trail presents the opportunity for significant economic and recreational benefits to both residents and visitors in the region. While the main purpose of this trail extension is to connect the City of Monticello to the Jefferson County Middle/High School, the potential for future connectivity to larger, more regionally expansive trail systems is high. Jefferson County offers visitors nature-focused recreation activities, historical sites, local businesses, and restaurants. Regional trails that are being considered and are included in the Florida Department of Environmental Protection (FDEP) Office of Greenways and Trails Land Trail Priorities are:

- Tallahassee-Monticello Greenway Corridor, that runs along U.S. 90 west of Monticello
- Lake City to Monticello Corridor, which is also on U.S. 90 but east of Monticello
- Georgia to Cross City Corridor, which heads south along U.S. 19, past the limits of this proposed extension.

The routes were developed through input gathered by FDEP. These potential future trails support the need for the Monticello Bike Trail extension to provide better connectivity to the economic center of the County. These regional trail connections are depicted in **Figure 2**.

Existing Conditions

The Monticello Bike Trail currently extends from Jefferson Elementary School on Rocky Branch Road, south to Nacoosa Road. The section from Rocky Branch Road to Martin Road is a paved, multi-use path. From Martin Road south to Nacoosa Road, the trail continues for about .55 miles, but is natural surface. The total length of the trail is approximately 2.10 miles, including the unpaved section from Martin Road to Nacoosa Road. Although mostly paved, the trail is relatively unkept and underutilized. The trail was originally intended to provide alternative transportation options to students attending Jefferson Elementary School, but in recent years, the school has closed due to financial issues and low attendance. These students now attend class at the Jefferson County Middle/High School. Currently, the middle/high school is only accessible from U.S. 19, or a local unpaved road, Horne Road. With many of the students living in Monticello enrolled at Jefferson County Middle/High School, the need for a safe, alternative transportation option for accessing the school is essential. Located on the east side of Monticello, and serving a now closed school, the trail does not connect places of interest at its current extent. An extension of the trail will provide more connectivity and will likely attract more usage from local residents and visitors from other places. This trail extension was identified in the Jefferson County Bicycle and Pedestrian Master Plan, and the 2040 Regional Mobility Plan.



Photo 3: Existing, paved trail in Monticello

As a community interested in integrated biking into the local culture, Jefferson County and the City of Monticello have hosted numerous bicycling related events in recent years. These events include the annual Monticello Bike Fest, the Dirty Pecan dirt/gravel ride, and rides that explore Monticello's canopy roads and historic sites. A trail extension would support these local efforts.

Supporting Projects

In recent years, Jefferson County has gained momentum in creating a viable bicycle network for both recreation and alternative transportation opportunities, with guidance from the 2012 update of the Jefferson County Bicycle and Pedestrian Master Plan. Improvements to the City of Monticello have included the addition of some limited bicycle facilities, such as paved shoulders for bicycle use on both U.S. 19 and U.S. 90 heading into town, as well as the current extent of the Monticello Bike Trail. Longer range projects are currently being considered by local government officials, all of which would provide significant support and connectivity opportunities to the Monticello Bike Trail extension and beyond. The inset in **Figure 2** shows recommendations for regional connections from the Monticello area.

Potential Trailhead and U.S. 90 Connection to Tallahassee

County leadership is currently looking at designating a city-owned parcel on West Palmer Mill Road as a trailhead for a future bicycle route development. The future bicycle route would potentially include U.S. 90, which would be a scenic, highly popular connection from Monticello to Tallahassee. The Monticello Bike Trail could connect to the trailhead via West Palmer Mill Road, using shared lane use markings, making an easy east-west connection to facilities such as restrooms and water. It would also give the trail connectivity to a larger network, and potentially attract more bicyclists and visitors to Monticello and other destinations within Jefferson County.

U.S. 19 Bike Path/Trail Project

U.S. 19 has been identified in the Florida Department of Transportation (FDOT) Five Year Work Program for Jefferson County for a bike path/trail. If funds become available, the project is slated to begin in 2021 and be executed by the year 2023. It is expected to run along U.S. 19 from Nacoosa Road to Jefferson County Middle/High School. Currently, there is an issue regarding the availability of right of way going over the bridge on U.S. 19 to the school. This feasibility study outlines other alternatives for making this connection which may be considered.

Duke Energy Corridor

Through discussions with county Commissioner Betsy Barfield, a potential trail from the border of Georgia along the Duke Energy corridor was identified. The Duke Energy corridor is made up of an old railbed that extends south and continues through neighboring counties, offering a partially cleared and unused area to create an extensive trail. Efforts are underway to address concerns raised during public outreach regarding conflicting uses for this corridor, however, the identification and interest in this potential route illustrates the importance of a trail system to elected officials and their constituents in Jefferson County.

Monticello Bike Trail Extension Alternatives

Three trail alternatives (1, 2, and 3) have been identified as potential connections between the current Monticello Bike Trail limit and Jefferson County Middle/High School. They begin at the terminus of the existing paved trail, and either continue along the unpaved section to Nacoosa Road or head west on Martin Road. Purchase of public or private property is not anticipated for any of the alternatives. All of the alternatives are along U.S. 19 for varying distances, and anything planned along U.S. 19 will require coordination with the current residents and the United States Postal Service in Jefferson County. Mailboxes and a path for the mail delivery vehicle are located within the existing right of way and may conflict with a multi-use path along the corridor.

Other alternatives were considered, but ultimately, were not included in this report as they are not feasible at this time. An additional alternative that included a route along an old railbed through a privately-owned tree nursery was evaluated but did not move forward after stakeholder outreach determined that the route would not be feasible. The three trail alternatives that have been identified as feasible options are described below and depicted within **Figures 3, 4, and 5**.



Photo 4: U.S. 19 bridge with limited right of way

General Conditions and Considerations

Land Use

Each of the trail alternatives will traverse the following three land use types:

- Agricultural (AG-5)
- Industrial
- Mixed Use-Business/Residential

None of the three alternatives are anticipated to negatively affect the land uses or the character of the area. The trail alternatives will provide increased access between neighborhoods in and surrounding Monticello, and Jefferson County Middle/High School, which now hosts elementary aged students as well. Increased access to education and recreation facilities may greatly improve the safety and cohesion of the neighborhoods in the area. **Figure 3** depicts the three alternatives and the surrounding land uses.

Environmental

Much of the area surrounding the Monticello Bike Trail and the potential extension area is agricultural in nature, with light residential and industrial development. The natural features maintained in this area, because of such limited development, create favorable conditions for a multi-use path and could potentially attract users from all over the state, and the country.

The alternatives were not found to be within or near any species consultation areas, nor were any wildlife observations reported in the area according to data maintained by the Florida Fish and Wildlife Conservation Commission (FWC).

Flood Zone and Wetlands

Each of the proposed alternatives is primarily located within Flood Zone X, indicating a moderate flood hazard area susceptible to a 500-year flood event. The end section of each alternative along Horne Road may cross through an area of Flood Zone A. The shared lane use markings and multi-use path are not expected to have any negative impacts on the flood zones.

National Wetlands Inventory (NWI) data was used to identify known wetlands in the project area. There are very few wetlands present along most of the alternative routes, however, wetlands are present around Old Drifton Road/Horne Road and the school property. In this location, a road already exists, and the proposed facility will be on-street shared lane markings, so impacts to wetlands are not anticipated. A wetland evaluation will be conducted during the environmental phase of design. **Figure 4** depicts the three routes, flood zones, and the locations of known wetlands in the area.

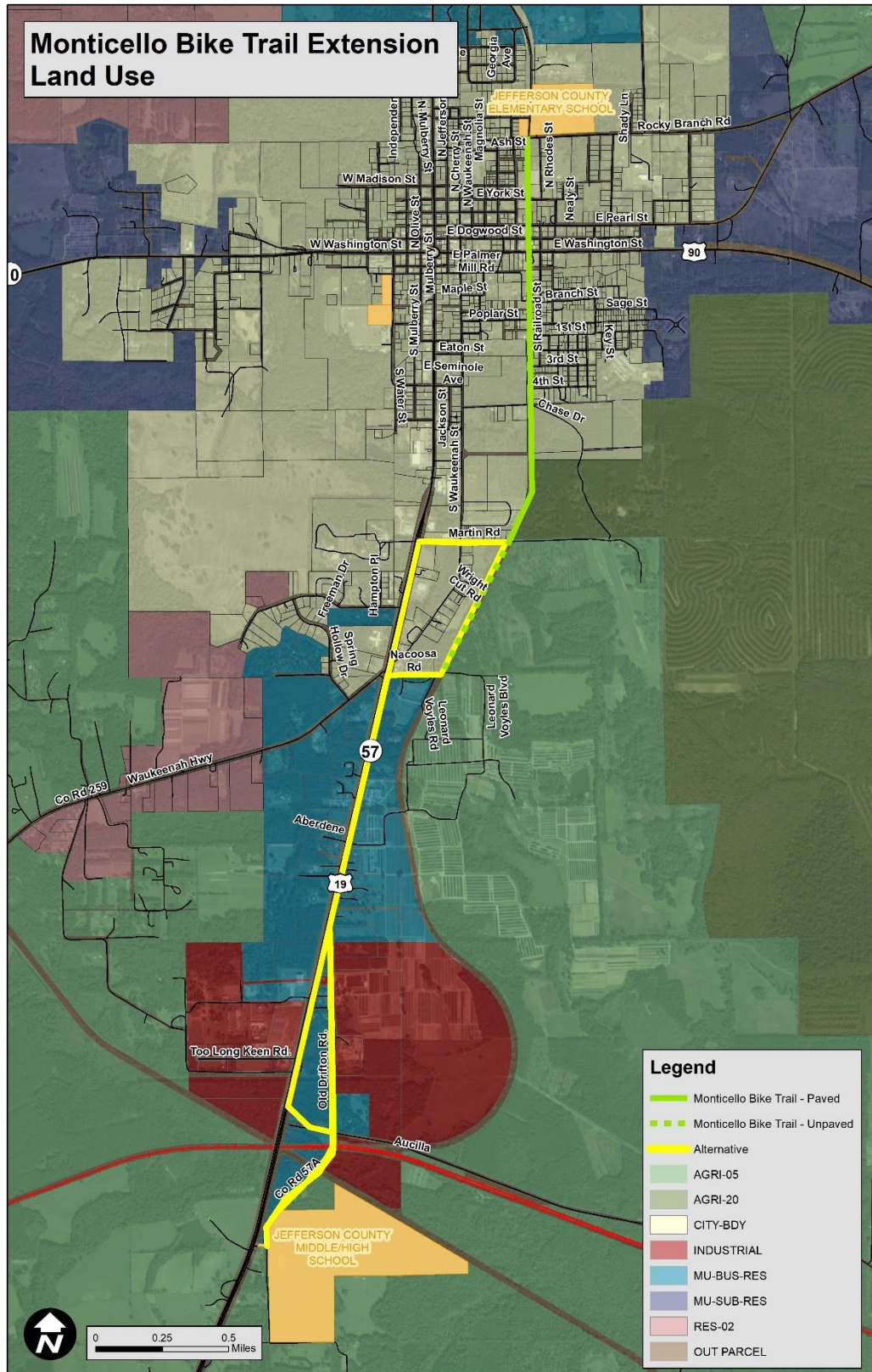


Figure 3: Land Use (Data Source: Jefferson County, retrieved 2019)

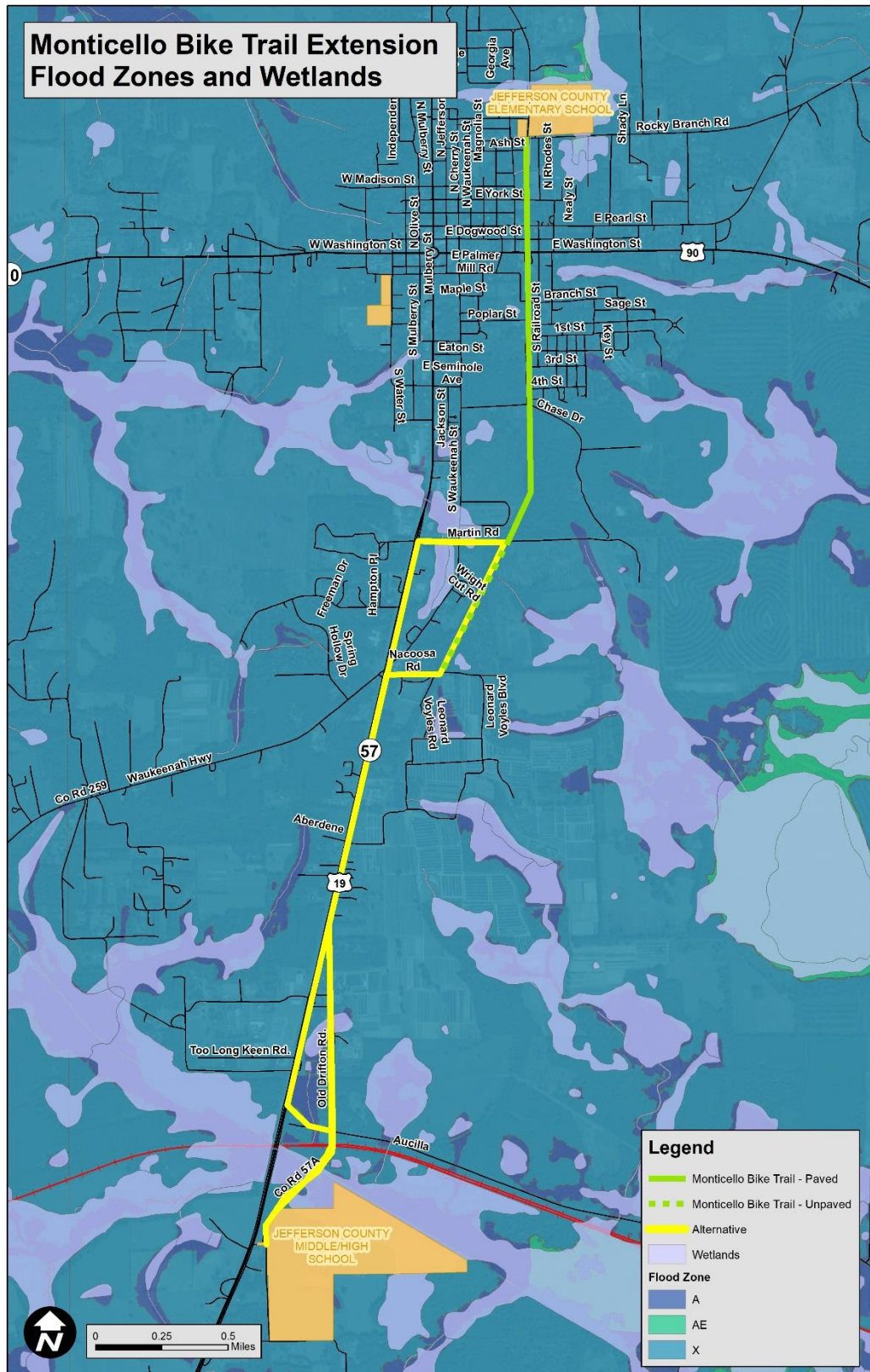


Figure 4: Flood Zone and Wetlands (Wetlands: USFWS, 2018. Flood Zones: FEMA, 2017)

Historic and Cultural

Available State Historic Preservation Officer (SHPO) data was mapped to locate any known historic or culturally significant resources near the trail alternatives. While several historic districts, structures, and a cemetery exist within the City of Monticello, no impacts to these sites are expected by the extension of the Monticello Bike Trail. Along the proposed routes, several SHPO structures have been identified, but are currently associated with private residences and were not evaluated by SHPO for the National Registry of Historic Structures (NRHS) or were deemed ineligible. Because this project is anticipated to be limited to existing right of way, no historical structures are anticipated to be disturbed. A cultural resource assessment will be completed during the environmental phase of design to ensure no unknown resources will be impacted by the preferred trail alignment. **Figure 5** depicts the three alternative routes and depicts SHPO resource groups, cemeteries, bridges, and structures.



Photo 5: Monticello Bike Trail sign at Trailhead at Jefferson Elementary School

Roadway Connections



Photo 6: Aucilla Highway, potential location for shared lane markings

Each of the trail alternatives proposes the use of roadways to minimize the purchase of or impacts to private properties. By using the existing road network, there is no anticipated need for parcel acquisition or access easements, decreasing the potential cost. Several connections are planned as transition points from multi-use paths into shared lane markings on the existing residential roadways. Because of the low speeds and low traffic volumes on these roadways, shared lane markings can be used to provide a more cost feasible option for the trail alternatives in lieu of costly property acquisition.

Constraints

In evaluating potential alternatives for the Monticello Bike Trail extension, some constraints were identified that affected possible alternatives for connecting to the school. The bridge on U.S. 19 (FDOT Bridges 540008 & 540048) just north of Jefferson County Middle/High School was one such constraint; the limited right of way on the bridge presents an obstacle for continuing a multi-use path along the corridor to the school. While a multi-use path is more appealing to trail users, replacement of the bridge to accommodate a trail is not financially feasible.

Private ownership was also a limiting factor in alternative development. The abandoned railbed that goes through Simpson Nurseries offered the opportunity for a scenic trail that would keep the trail off high-volume corridors, such as U.S. 19. As stated previously in this report, stakeholder outreach determined this was not a feasible option due to concerns mentioned by the property owner.

Additionally, Old Drifton Road and Horne Road both have poor pavement condition and are in need of resurfacing. Both roads are part of the alternatives proposed in this report and will require resurfacing and the addition of shared lane markings to connect to the current trail corridor. To install shared lane markings, the roads will need to be milled and resurfaced, an additional, previously unforeseen cost associated with this extension due to the lack of right of way on the bridge on U.S. 19. While lack of right of way on the bridge and private ownership discrepancies will not be considered at this time, the milling and resurfacing is a consideration that is detailed in the cost estimate section of this report. These constraints are identified on a map in **Figure 6**.

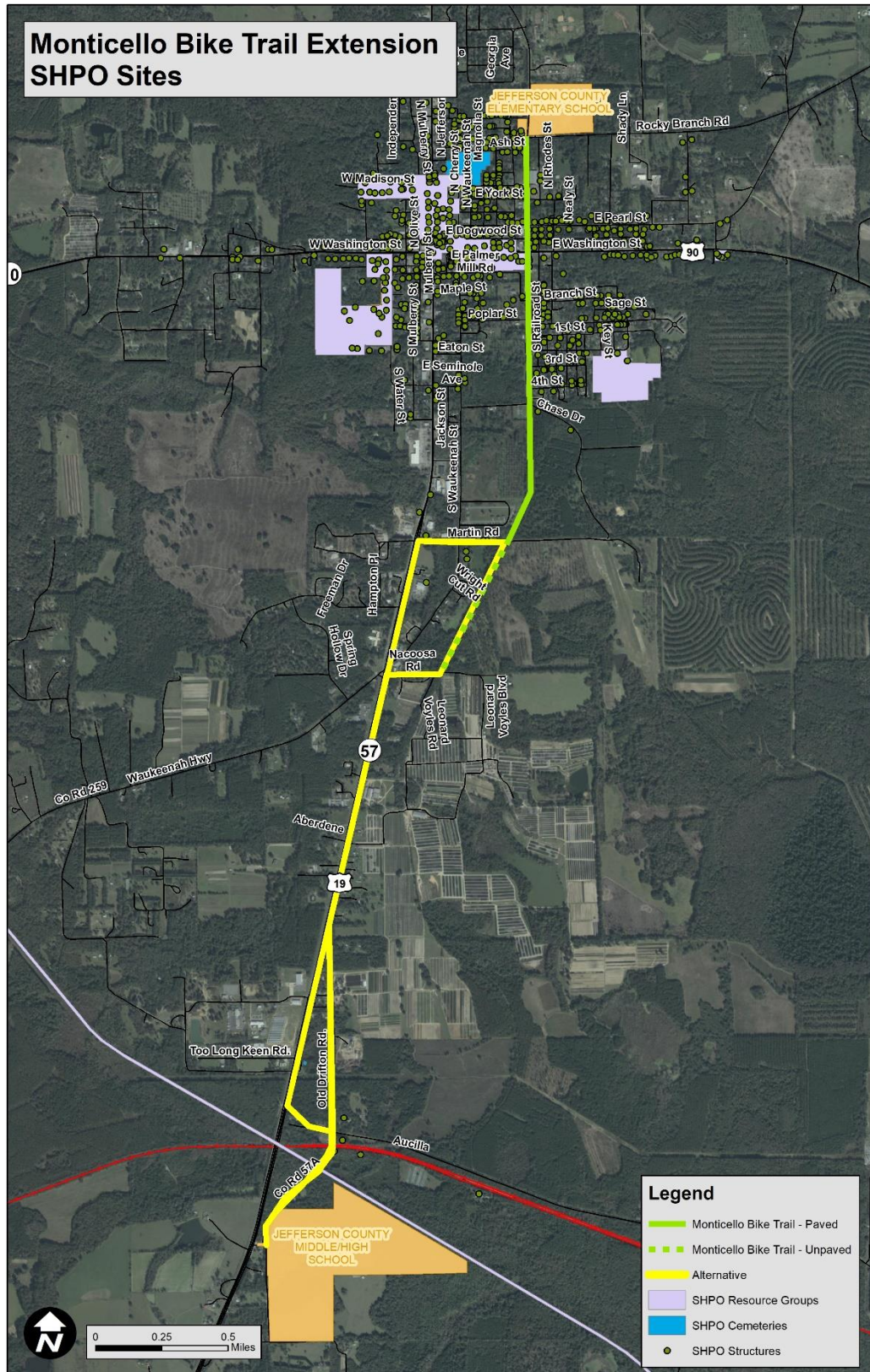


Figure 5: Historic and Cultural Features (SHPO, 2019)

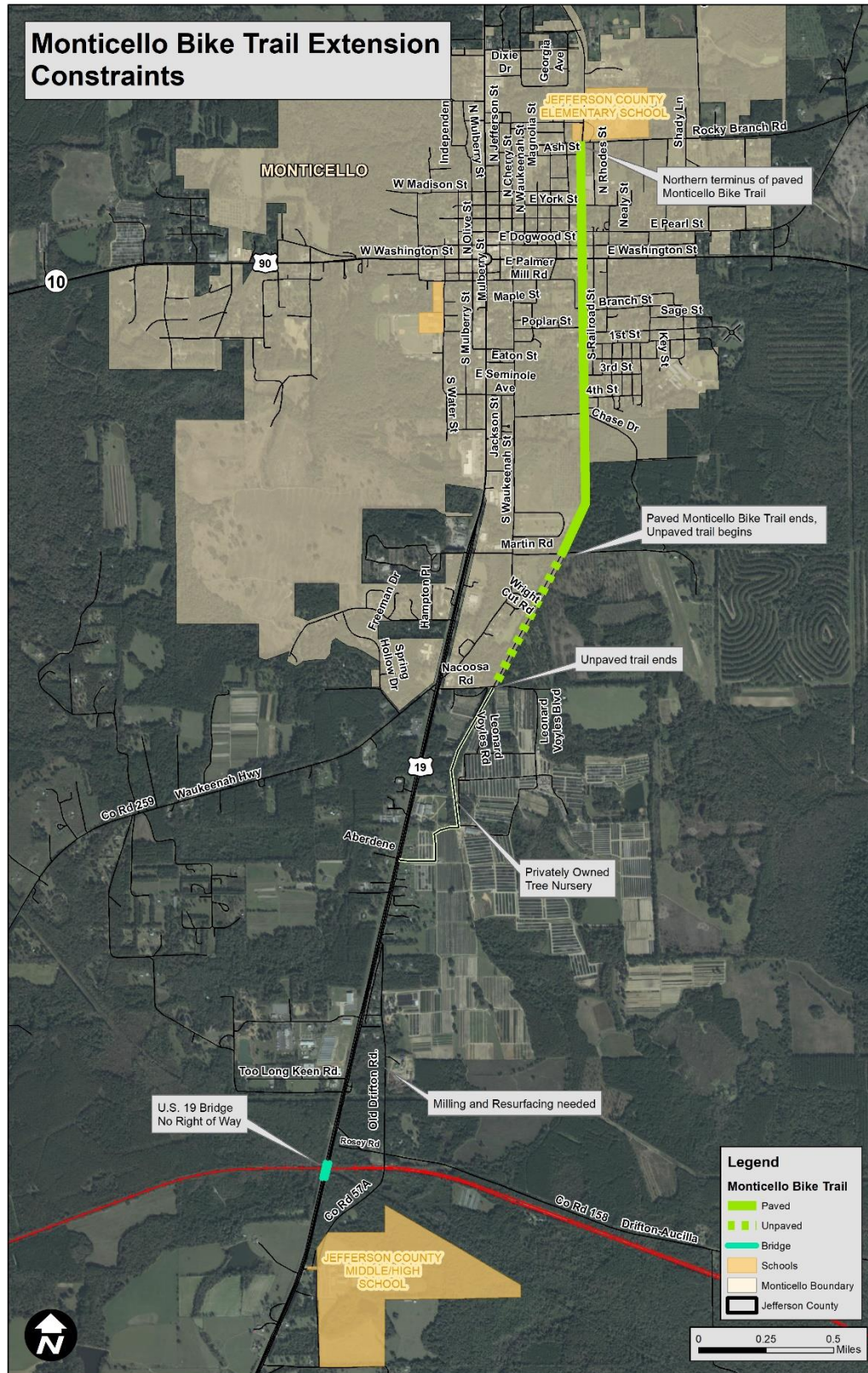


Figure 6: Monticello Bike Trail Extension Constraints

Trail Alternative Descriptions

Trail Alternative 1

Alternative 1 takes advantage of the existing .55-mile unpaved section of the Monticello Bike Trail from Martin Road to Nacoosa Road. Shared lane markings and signage will be installed on Nacoosa Road to U.S. 19, where a multi-use path within the existing right of way on the east side of the corridor will begin. The multi-use path will continue south to Aucilla Highway. From there, it will continue as shared lane markings along Aucilla Highway east, to Horne Road, and continues until the entrance of Jefferson County Middle/High School. Shared lane markings will be placed along the entrance road to the school. Because of a lack of right of way passing over the bridge on U.S. 19 heading south to the school, Horne Road is a more direct alternative with low vehicular traffic and slower speeds. In total, alternative 1 is an addition of approximately 2.65 miles in length to the existing paved and unpaved sections of the Monticello Bike Trail. The entire trail with alternative 1 as the extension will be approximately 4.75 miles in length.



Photo 7: Unpaved section of Monticello Bike Trail, South of Martin Road

This alternative will allow for effective travel between the neighborhoods and Jefferson County Middle/High School, while also increasing access to the City of Monticello. Additionally, this route takes advantage of the existing, unpaved section of the Monticello Bike Trail. **Table 1** identifies known benefits and challenges with this route.

Table 1: Alternative 1 – Benefits and Challenges

Alternative 1	
Benefits	Challenges
Within existing road right of way/public property	Horne Road will require resurfacing
Increased connectivity between city, neighborhoods, and Jefferson County Middle/High School and potentially, regional trail network	Existing mail delivery route in the right of way, which would not be permitted on the multi-use path. This will require some level of additional public outreach and the possible relocation of mailboxes that are currently in the right of way.
More of the trail is located off a major road corridor	

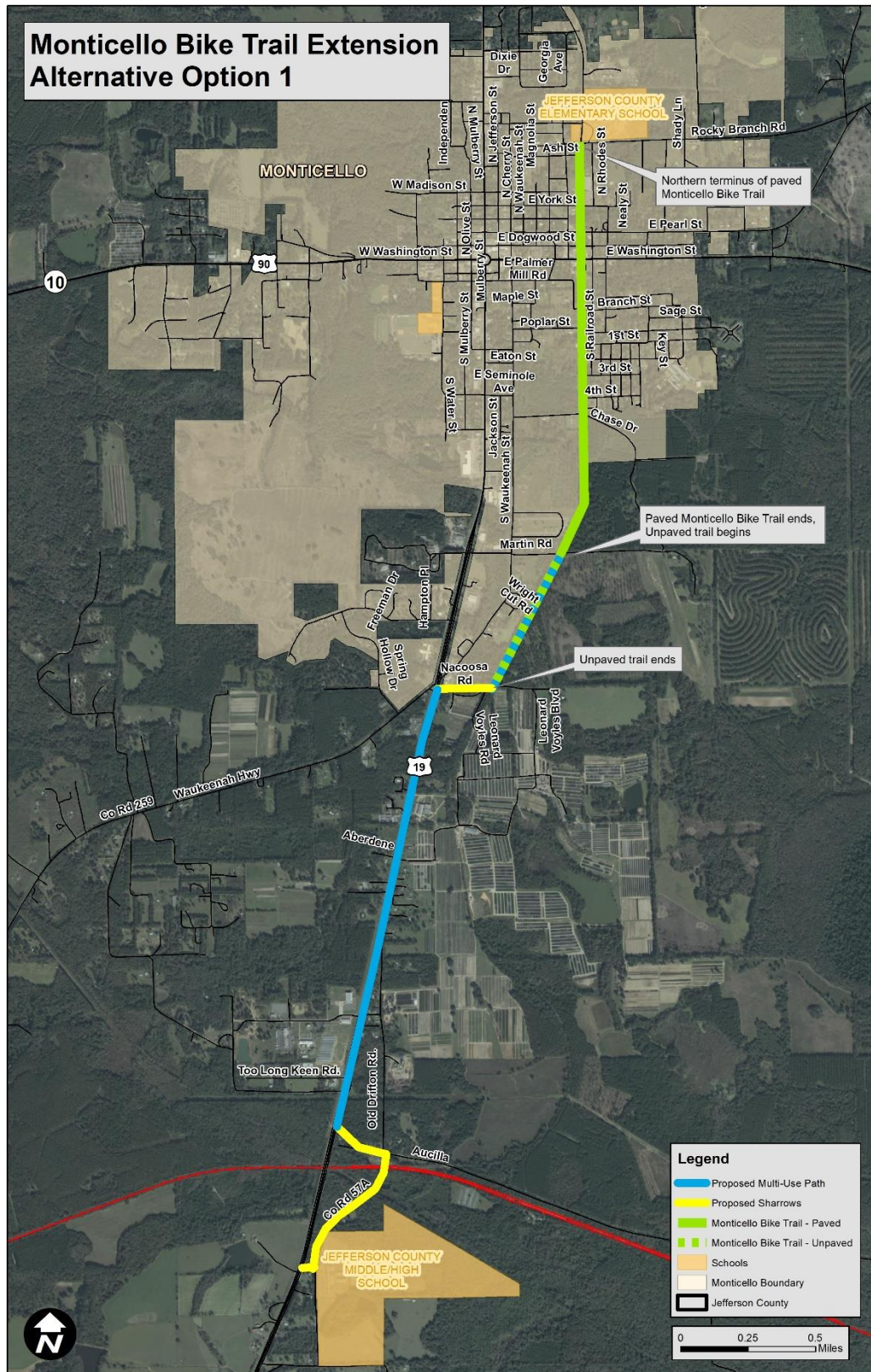


Figure 7: Alternative 1 Route

Trail Alternative 2

Alternative 2 begins on Martin Road, where the paved section of the Monticello Bike trail ends. Instead of heading south on the unpaved section, the trail will follow Martin Road west with shared lane markings to U.S. 19. This is the difference between Alternative 1 and Alternative 2. Alternative 2 will follow along U.S. 19 for a slightly longer distance than Alternative 1 since it does not utilize the unpaved section of the existing trail. The trail will be on the east side of the U.S. 19 corridor as a multi-use path. The multi-use path will continue south to Aucilla Highway. The route will head east on Aucilla Highway, and then to Horne Road, and continue until the entrance to Jefferson County Middle/High School, which will be marked by shared lane markings due to low volume. Shared lane markings will be placed along the entrance to the school as an added safety precaution, similar to Alternative 1. **Figure 8** depicts

Alternative 2's route. This route is approximately 3.3 miles in length and will bring the total length of the Monticello Bike Trail to approximately 4.8 miles in total.

This trail alternative will increase access between Monticello, the neighborhoods, and Jefferson County Middle/High School. Like Alternative 1, the increased access to the school by alternate transportation options may limit traffic in the area. This route will provide additional transportation options to students located in Monticello or along U.S. 19. **Table 2** identifies known benefits and challenges with this route.



Photo 8: Intersection of Old Drifton Road and Aucilla Highway, facing North

Table 2: Alternative 2 - Benefits and Challenges

Alternative 2	
Benefits	Challenges
Within existing road right of way/public property	Horne Road will require resurfacing
Increased connectivity between city, neighborhoods, and Jefferson County Middle/High School and potentially, regional trail network	Existing mail delivery route in the right of way, which would not be permitted on the multi-use path. This will require some level of additional public outreach and the possible relocation of mailboxes that are currently in the right of way.

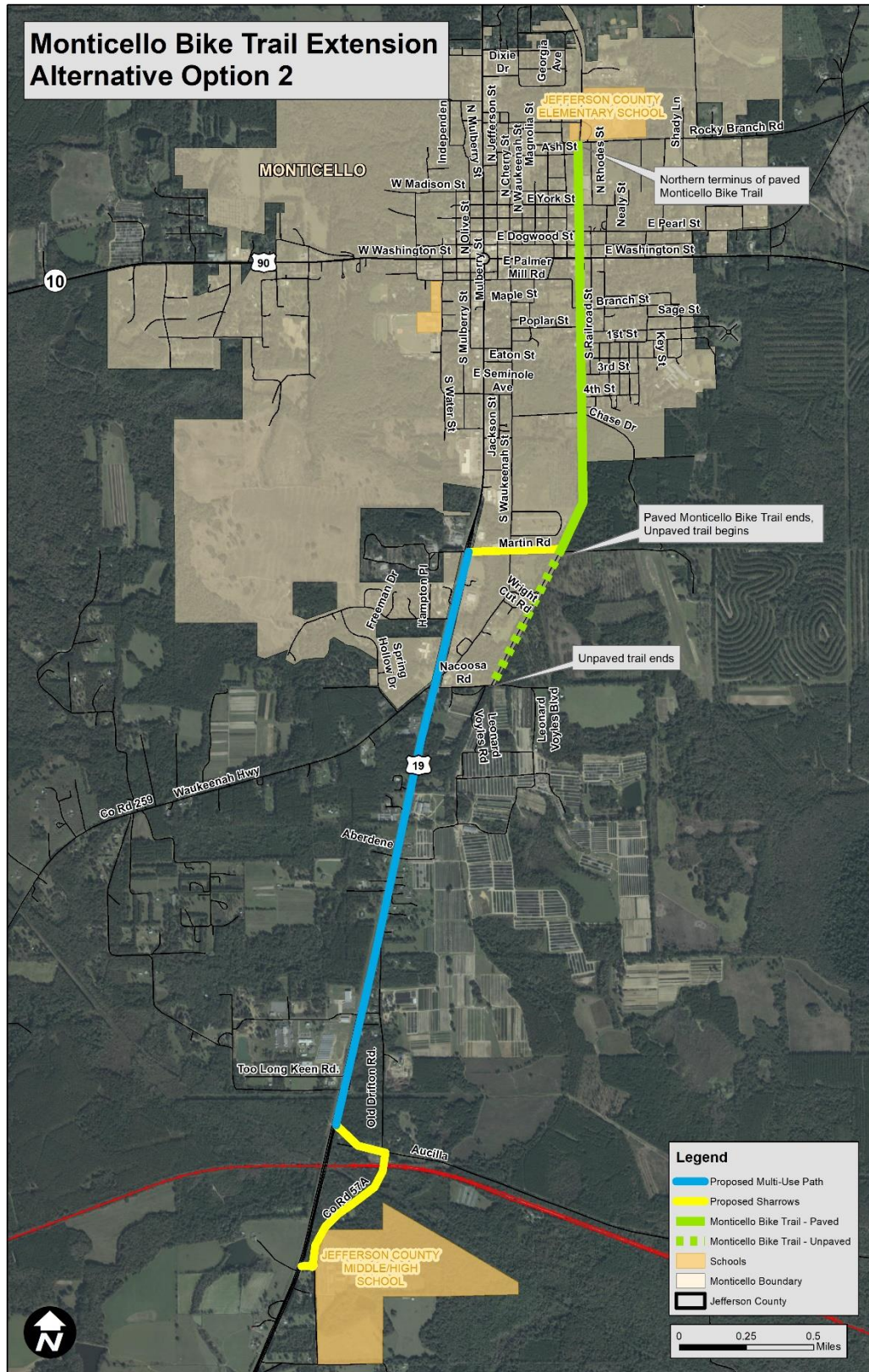


Figure 8: Alternative 2 Route

Trail Alternative 3

This trail alternative is different than alternatives 1 and 2 in that it utilizes less of U.S. 19 and heads south along Old Drifton Road where the two roads intersect. The route could potentially begin at Martin Road, heading west to U.S. 19, or continue south on the existing unpaved section of the trail to Nacoosa Road where shared lane markings will lead users to the multi-use path on U.S. 19. This alternative includes a multi-use path on the east side of U.S. 19, but instead of continuing to Aucilla Highway, the trail will take



Photo 9: Old Drifton Road

Old Drifton Road about 0.5 miles before the turn-off onto Aucilla Highway. This alternative, while similar to Alternatives 1 and 2, offers a low volume road as an option for a longer portion of the trail. The trail continues along Horne Road to end at the school in the same way as Alternatives 1 and 2. Alternative 3, when using Nacoosa Road starting from the end of the existing, unpaved trail, is approximately 2.5 miles in length and will bring the length of the Monticello Bike Trail to approximately 4.6 miles. Using Martin Road, this alternative would be about 3.1 miles in length and bring the Monticello Bike Trail closer to 4.7 miles in total.

This trail alternative will increase access between Monticello, the neighborhoods, and Jefferson County Middle/High School. Like Alternatives 1 and 2, the increased access to the school by alternate transportation options may limit traffic in the area. This route will provide additional transportation options to students located in Monticello or along U.S. 19. **Table 3** identifies known benefits and challenges with this route.

Though Alternative C may be the most difficult in terms of coordination with private land and business owners along Old Drifton Road, the potential for a more scenic route off a major corridor represents a value to the community. This alternative also shortens the total length of a multi-use path facility which is a limiting factor in attracting trail users. Known benefits and challenges of the alternative being depicted can be seen in **Table 3**.

Table 3: Alternative 3 - Benefits and Challenges

Alternative 3	
Benefits	Challenges
Within existing road right of way/public property	A longer portion of Old Drifton Road and Horne Road will need to be milled and resurfaced
Increased connectivity between city, neighborhoods, and Jefferson County Middle/High School	Shorter length of multi-use path for the extension
	Coordination with private land and business owners along Old Drifton Road

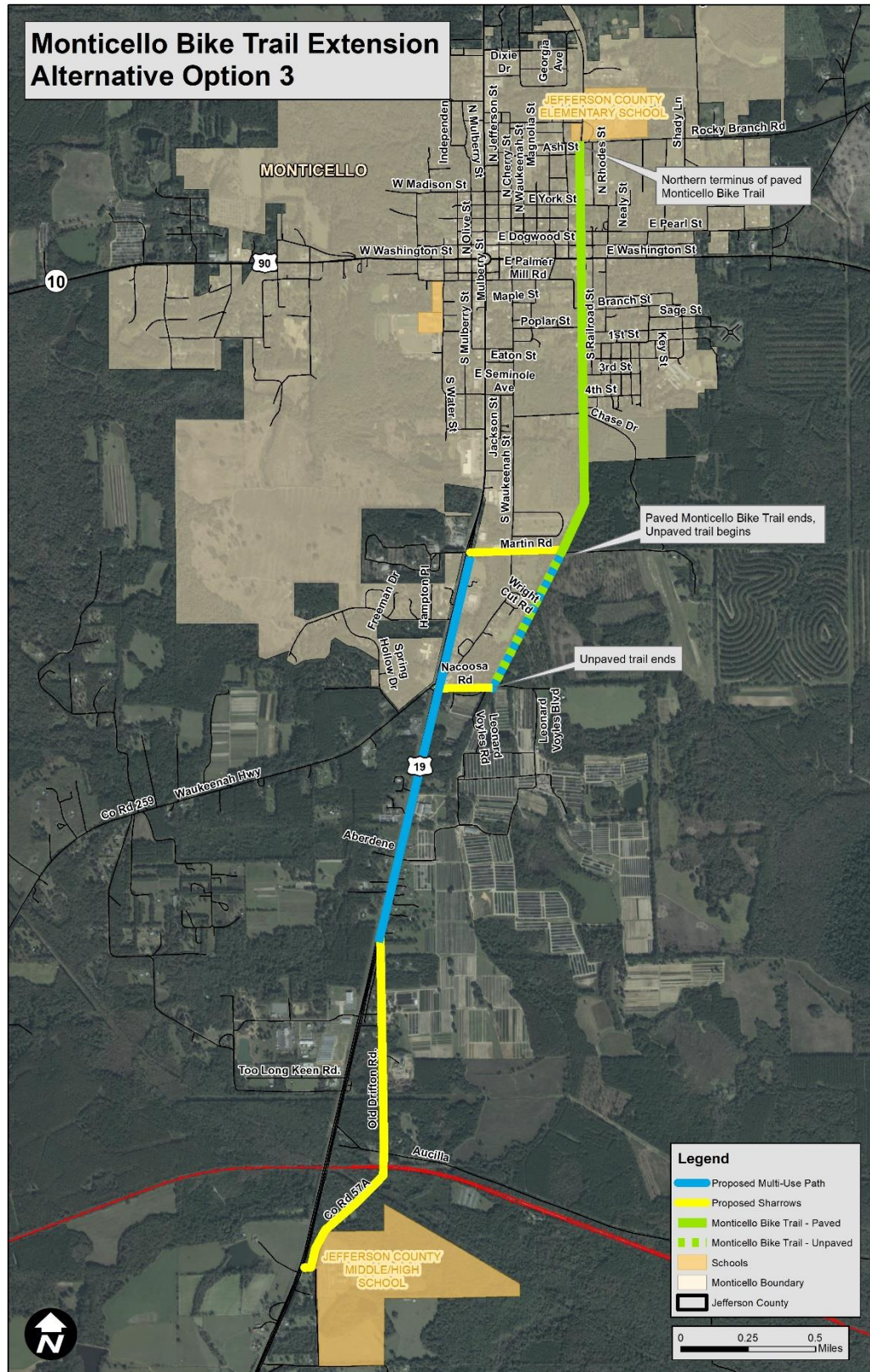


Figure 9: Alternative 3 Route

Potential Costs

Using the proposed routes above, approximate costs have been developed detailing the trail distances and types. For these alternatives, three trail cost types have been considered. These types have been outlined in **Table 4**.

Table 4: Trail Type Costs Per Mile

Trail Type	Approximate Construction Cost (Per Mile)	Approximate Costs with 15% Increase***
Multi-Use Path*	\$285,000.00	\$328,000.00
Shared Lane Markings	\$ 30,000.00	\$30,000.00 (no permitting required)
Mill and Resurface**	\$238,000.00	\$274,000.00

* Source is FDOT LRE 2 Directional 12' shared use path

**Source is FDOT LRE Mill and Resurface (1 additional lane, rural arterial)

*** Accounts for design, permitting, and other additional costs prior to construction

The distances that the proposed alignments will vary between multi-use paths and shared lane markings in each of the alternatives have been outlined in **Table 5**, with their estimated costs based on the "Approximate Costs with 15% Increase" costs in **Table 4**.

Table 5: Trail Type Distances and Costs

Alternative	Trail Type	Approximate Distance (Miles)	Approximate Cost	Approximate Total Cost	Approximate Total Cost without Road Paving
Trail Alternative 1	Multi-use Path	2.22	\$728,160.00	\$908,260	\$757,560
	Shared Lane Marking	0.98	\$29,400.00		
	Road Paving*	0.55	\$150,700.00		
Trail Alternative 2	Multi-use Path	2.20	\$721,600.00	\$905,300	\$754,600
	Shared Lane Marking	1.10	\$33,000.00		
	Road Paving*	0.55	\$150,700.00		
Trail Alternative 3 (Martin Road)	Multi-use Path	1.45	\$475,600.00	\$895,900	\$526,000
	Shared Lane Marking	1.68	\$50,400.00		
	Road Paving*	1.35	\$369,900.00		
Trail Alternative 3 (Nacoosa Road)	Multi-use Path	1.50	\$492,000.00	\$908,700	\$538,800
	Shared Lane Marking	1.56	\$46,800.00		
	Road Paving*	1.35	\$369,900.00		

*Road Paving costs will be funded by the County where needed.

Based on the costs in **Table 5**, costs for each alternative are comparable at slightly above and below \$900,000. However, it should be noted that a part of each alternative includes a road milling and resurfacing project that may be completed using funds outside of the anticipated trail funding. The improvement of Old Drifton Road and Horne Road is an added expense of this trail extension but will serve multiple uses and give the community access to upgraded facilities.

The cost estimates found in this feasibility report are based on planning level cost estimates including costs for design, permitting, and construction. The range of total costs for the viable alternatives found in this study are between \$895,000 to \$909,000 approximately when including road paving. Without road

paving involved, the costs range from \$526,000 to \$757,560. As stated previously, the costs can fluctuate depending on responsibility of funding for the road improvements on Old Drifton Road and Horne Road, as well as the length of the road needing to be milled and resurfaced. As a rural county with a low population, Jefferson County is eligible for programs such as Small County Outreach Program (SCOP) and Small County Road Assistance Program (SCRAP). Both programs offer funds for resurfacing and reconstructing county roads, among other improvements for counties with populations below 170,000 (SCOP) and below 75,000 (SCRAP) respectively. The final trail alignment and responsibility for funding will be determined through near term coordination with private property owners, the City of Monticello, Jefferson County, and the Jefferson County School Board.

Facility Renderings

Renderings have been created to depict the facilities that are included in the feasibility study alternatives. The facility types that are included in each alternative are shared lane markings and multi-use path.

Figure 10 depicts Aucilla Highway with shared lane markings, which could potentially be placed on Nacoosa Road (Alternative 1 or 3), Martin Road (Alternative 2 or 3), Old Drifton Road, and Horne Road.

Figure 11 depicts a paved 12-ft wide, asphalt multi-use path on U.S. 19, a facility that appears in each of the alternatives for varying distances.



Figure 10: Rendering of shared lane markings on Aucilla Highway



Figure 11: Rendering of multi-use path on east side of U.S. 19

Preferred Alternative

Based on the analysis of this feasibility study, each of the alternatives is considered viable. **Alternative 1 is the preferred alternative** because of the existing, unpaved section of the bike trail between Martin Road and Nacoosa Road that offers the opportunity for a longer multi-use facility off of a major corridor. Alternative 1 offers trail users a safe, protected option through a separate multi-use path facility that is over 2 miles in combined length. Using the existing, unpaved section of the trail, the proposed alignment keeps the trail easily navigable and off a major road for a significant period which is ideal for trail users and may attract more users. This alternative will require public involvement to determine how to address mailbox relocation on U.S. 19.

Alternatives 1 and 2 will require minimal milling and resurfacing on Horne Road, while Alternative 3, regardless of whether the trail begins on Nacoosa or Martin Road, will require more extensive milling and resurfacing on Old Drifton Road and Horne Road to incorporate shared lane markings. Apart from road improvements, none of the alternatives will require further easements, or the purchase of private property.



Photo 10: Monticello City Limits

Next Steps

After consideration of the preferred alternative from this study, the next step will be environmental documentation; the required documentation for that study will be based on the funding of the project. Since new right of way is not anticipated to be needed, this will likely be a minor environmental action. Jefferson County should also continue to prioritize and coordinate linkages from the Monticello Bike Trail to other desired destinations within the County and to future planned trails in the region, such as the Duke



Photo 11: Existing paved trail near elementary school

Energy Corridor that runs through Jefferson County and the U.S. 90 project that will connect Monticello to Tallahassee. Once the environmental documentation is complete, design, permitting, and construction can occur.

Conclusion

It is the opinion of this study that a feasible option exists for proceeding with implementing this trail project, and that Alternative 1 is the most beneficial and efficient option based on the findings detailed in this report.