Georgia State Bicycle Route 15 Analysis

June 2012

Southern Georgia Regional Commission

Table of Contents

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Introduction

Beginning in July 2010 the Southern Georgia Regional Commission (SGRC) in partnership with the Georgia Department of Transportation began the process of evaluating Georgia State Bicycle Route 15 for designation as US Bicycle Route 15.

The process to review requirements of a new route designation took nearly one year to iron out and determine what information would be useful to transportation planners and design engineers. In the end the SGRC determined that 35 different variables would be collected for each road segment along the corridor in the four counties (Lowndes, Cook, Tift, and Turner) in the SGRC region and one county (Colquitt) in the Southwest Georgia Regional Commission area.

The SGRC staff drove the entire corridor over a period of several days stopping to measure road widths and lane widths whenever the design characteristics of the road changed. In the end there were more than 140 different road segments in the region that were mapped and recorded by staff. To better help record the information collected in the field, staff used a Capturx Pen to record the spatial location of notes made on paper. These notes were later retrieved by the Capturx software and placed in GIS format for maps like you see below. Staff was also able to record the handwritten notes that were translated by the software into data in a spreadsheet file.

The data collected for this report and for use by GDOT and local transportation planners and engineers is included in the following chart. Note that some of the data is collected through existing data sources, while others were collected through field observations.

Name	Description	Method
ID	Segment ID	Assigned
Street Name	Name of Street	Field
GDOT Route	State Road	Field
Beginning Measure	Crossroad where segment begins	Field
Speed Limit	Posted Speed Limit	Field
AADT	Average Annual Daily Traffic	Existing
Percent Heavy Vehicles	Percent of Traffic Heavy Vehicles	Existing
85th %	85th Percentile of Speed of Vehicles	Existing
Survey Direction	Survey Direction	Field
Number of Lanes	Number of Lanes	Field
Configuration	Roadway Configuration	Field
Width of Pavement (Wt)	Centerline to Edge Stripe	Field
Width of Paving (W1)	Width of Pavement from Edge Stripe to Edge of Pavement	Field
Wide of Pavement (Wps)	Width of Pavement for On Street Parking	Field
Total Pavement Width	Total Width of Pavement of Roadway	Field
Edge Type	Shoulder or Curb Type	Field
On Street Parking % Occupied	% of parking occupied	Field
Parking Time Limit	Time Limit on Parking	Field
PC_t	Pavement Condition of Travel Lane	Field
PC_1	Pavement Condition of Shoulder	Field
Res_Dev	Primarily Residential Development	Field
High_RTV	High Right Turn Volume	Field
DBL	Designated Bicycle Lane	Field
DBR	Designated Bicycle Route	Field
Share Rd Sgn	Share the Road Sign Present	Field
Rumble Strip	Rumble Strips Present	Field/Existing
Steep Grade	Steep Grade Present	Field
Num LT Bays	Number of Left Turn Bays	Field
Pct S SW	Percent with Sidewalks	Field
Buffer Width	Width of Tree Buffer	Field
Tree Space	Space between trees in buffer	Field
Sidewalk Width	Sidewalk Width	Field
Roadside PC	Roadside Condition	Field
Impedance	Notes on Any Impedances	Field
Comments	Notes	Field

Table 1: Data Collected for Bicycle Route Analysis

US Bicycle Route System[1]

The US Bicycle Route System is a proposed national network of bicycle routes, each connected two or more states or other US Bicycle Routes. "US Bicycle Routes are intended to link urban, suburban and rural areas using a variety of appropriate facilities."[2]

Proposed routes are nominated by state departments of transportation and are designated by the American Association of State Highway and Transportation Officials (AASHTO), Special Committee on U.S. Route Numbering.

With gas prices at an all time high and climate change on the minds of many Americans, bicycling provides a sustainable transportation solution. The goal of the U.S. Bicycle Route System is to provide the opportunity for more people to travel by bicycle, especially for medium and long-distance travel. Besides the environmental benefits, cycling is a healthy and affordable, and spending by travelling bicyclists can provide a powerful economic impact for the many towns and cities they encounter on their journeys.

Two routes were designated in 1982 connecting Virginia, Kentucky and Illinois (U.S. Bicycle Route 76) and Virginia and North Carolina (U.S. Bicycle Route 1). In 2003 an effort was undertaken to reinvigorate the national network and a National Corridor Plan was developed. In Georgia several of the state designated bicycle routes were elevated to national corridors or alternate routes (see National Corridor Plan Map). One of the key corridors is Georgia State Bicycle Route 15, it has been proposed as the U.S. Bicycle Route 15 as well.

In 2009, criteria for corridors and routes were developed by AASHTO to provide guidance to states and consistence for a uniform approach to a national bicycle route system.

The Primary Considerations for Corridors are included below. As a part of the analysis of Georgia Bicycle Route 15, these considerations are weighed against the current route alignment.

- Where applicable meet planning, design and operational criteria developed by AASHTO.
- Access destinations with high tourism potential, including scenic, historic, cultural and recreational values.
- Link metropolitan areas to connect attractions and transportation nodes.
- Reasonably connect cities and attractions.
- Make natural connections between states when possible.
- Distribute routes evenly (north/south & east/west) taking into consideration population density and route suitability.
- Include major existing bicycle routes, both on- and off-road, shared use paths and suitable roads.
- Offer services and amenities such as restaurants, accommodations, camping,

[1] Much of the information about the U.S Bicycle Route System is taken from blog.adventurecycling.org unless otherwise noted.
[2] blog.adventurecycling.org

bicycle shops, and grocery stores at appropriate intervals.

When considering the specific roads and trails the following Considerations should be considered. As a part of the analysis of Georgia Bicycle Route 15, these considerations are weighed against the current route alignment.

- Where applicable meet planning, design and operational criteria developed by AASHTO.
- Offer services and amenities such as restaurants, accommodations, camping, bicycle shops, and grocery stores at appropriate intervals.
- Go into the centers of metropolitan areas, using low-traffic, or off-road bikeways when possible.
- Include spurs to target destinations and attractions and transportation nodes such as airports, rail, bus, and transit stations.
- Follow natural corridors and provide terrain suitable for cycling.
- Consider appropriate combinations of low daily traffic, low truck traffic, paved shoulders, lane striping, traffic speed, etc. for cyclist and motorist safety.
- In urban areas, consider routes that can be used as evacuation routes in emergency situations.
- Include major existing bicycle routes, both on- and off-road, shared use paths and suitable roads.
- May include short stretches of high-quality unpaved roads, to connect highly desirable paved road sections.

In order for a state bicycle route to be designated a national bicycle route the state department of transportation must apply to the AASHTO Standing Committee on Highways. The state DOT must also certify that the route meets the minimum requirements for design standards as found in the most current *Guide for the Development of Bicycle Facilities*. The state DOT must also affirm that the bicycle route complies with the current *Purpose and Policy in Establishing and Extending United States Bicycle Routes*.

Once a state DOT complies with these requirements and application procedures and approval is given by AASHTO signs designating this US Bicycle Route can be installed along the corridor. The data collected by the SGRC staff will be used by GDOT to improve the current infrastructure to eventually designate Georgia Bicycle Route 15 as US Bicycle Route 15.

Corridor Plan

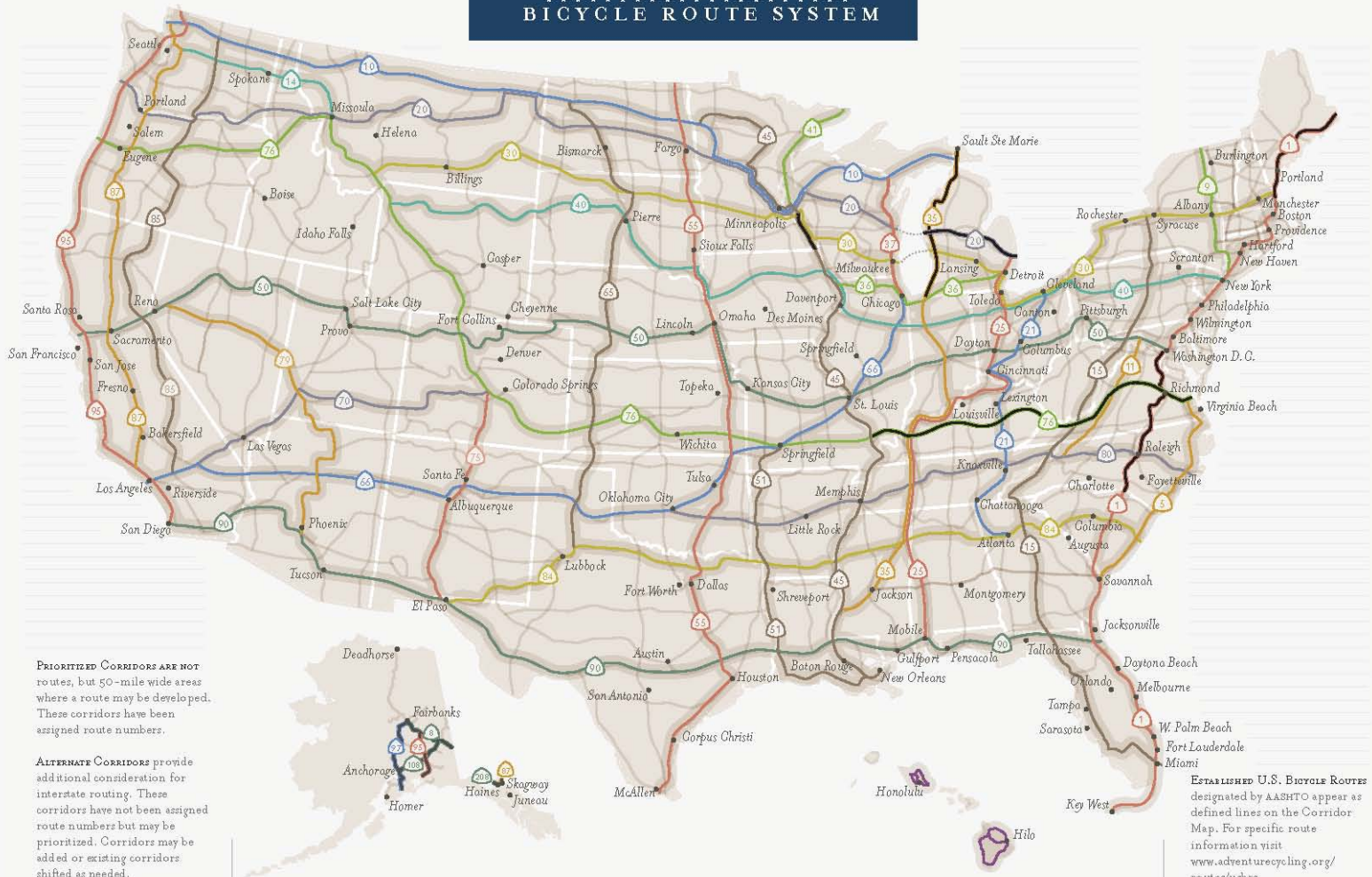
June 2012

The goal of The United States Bicycle Route System is to connect America through a network of numbered interstate bicycle routes.

THE UNITED STATES BICYCLE ROUTE SYSTEM

Adventure Cycling Association
America's bicycle travel experts

American Association of State Highway and Transportation Officials
AASHTO
The Voice of Transportation



Prioritized Corridors are not routes, but 50-mile wide areas where a route may be developed. These corridors have been assigned route numbers.

Alternate Corridors provide additional consideration for interstate routing. These corridors have not been assigned route numbers but may be prioritized. Corridors may be added or existing corridors shifted as needed.

Established U.S. Bicycle Routes designated by AASHTO appear as defined lines on the Corridor Map. For specific route information visit www.adventurecycling.org/routes/usbrs.

Connecting People, Communities, and the Nation

[PRIORITIZED CORRIDOR] [ALTERNATE CORRIDOR] [PRIVATE OR PUBLIC FERRY] [UNITED STATES BICYCLE ROUTE]

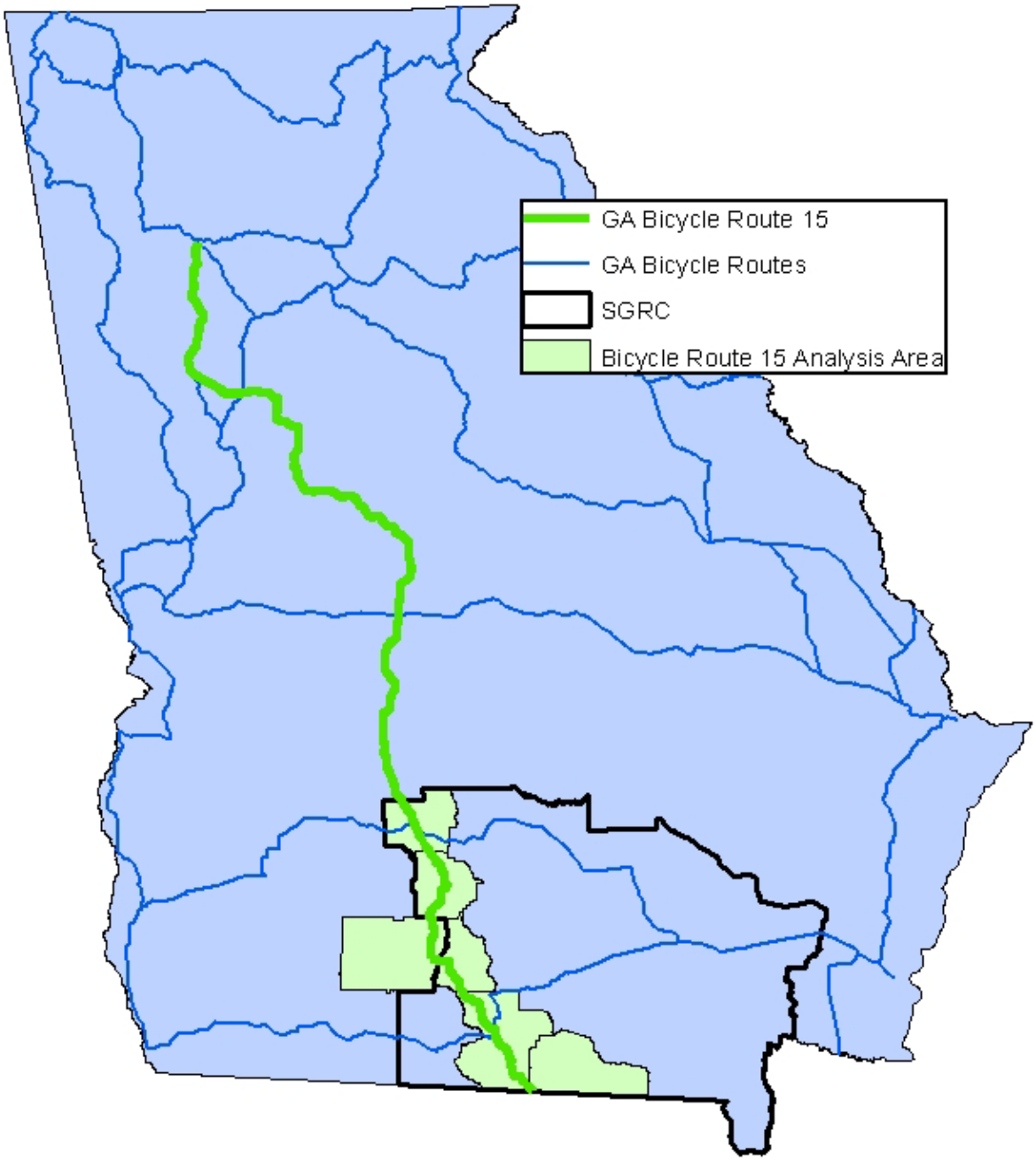


Figure 1 Georgia Bicycle Route System and Route 15 Analysis Area

Route 15 Assessment

The field assessment of Georgia State Bicycle Route 15 was started in December 2011 and completed in April 2012 over a period of several days.

In order to provide as objective as possible assessment of the conditions on the existing bicycle route, SGRC staff used the Bicycle Level of Service Model[3]. The SGRC staff traveled the entire length of the Route inside the Southern Georgia region and included a portion of Colquitt County to make the connection between Cook and Tift Counties. The field work included the measuring of the pavement, lane and shoulder widths. The field work also included measuring the sidewalk and tree buffer widths and distances. Other characteristics of the route were measured as well including pavement condition and the condition of the shoulder. These latter two characteristics were more subjective in nature, but did use guidance similar to the following to remove subjectivity from the assessment.

- Fair Rating (3 out of 5) – Riding qualities are noticeably inferior to those of higher ratings; may be barely tolerable for high-speed traffic. Defects may include rutting, map cracking, and extensive patching.[4]

Generally Georgia Bicycle Route 15 follows US Highway 41 or its former routes through this region of the state. The assessment was generally conducted from south-to-north through the region over a period of several days.

South Georgia is generally a flat terrain with few small hills and most rural in nature with the exception of the City of Valdosta (2010 pop.: 54,518). Several other smaller towns are traversed along the route as well.

The following sections breakdown the assessment for each county; however most of the characteristics in each county are similar throughout the entire region.

Lowndes County

The assessment began at the Florida State Line on US 41 just south of Lake Park, Georgia in Echols County. About 1.5 miles of the bike route

Figure 2 Bike Route 15 at Florida State Line

is in Echols County. Between the State Line and the Lake Park city limits this rural section of road way is a two lane section with generally light traffic and good pavement conditions. These types of roadway conditions continue north of the City of Lake Park, however the roadway turns into a four-lane divided highway with higher travel speeds through the City of Dasher, where there is a walking trail, community center and small park. Traffic continues to be relatively light in this area.

In Lake Park the road is lined with sidewalks through most of the city. The roadway is also marked for parking on both sides that does not

[3] Developed by Bruce Landis, et.al., TRB, 1997, obtained from City of Rockville, MD Comprehensive Master Plan

[4] US DOT, HPMS, 1987

Figure 3 Bike Route 15 in Lake Park

appear to be used often. The pavement condition in the community is new and has recently been replaced along the corridor all the way to Valdosta. Beginning in Lake Park the road becomes a divided highway however the speed is lower at 45 mph.

North of Valdosta the bicycle route continues along North Valdosta Road, turning left onto a short segment of Old Hwy 41 North before crossing back over North Valdosta Road to

Figure 4 Bike Route 15 on Old Hwy 41 North near Valdosta

continue onto Old Hwy 41 North to Hahira. This crossover can be hazardous and confusing to riders as it is currently not well marked and cyclists need to navigate a four-lane divided highway with heavy traffic.

The route continues north to Hahira along the two-lane Old Hwy 41 North passing Valwood School, several residential developments and scenic agricultural areas.

Roadway conditions in Hahira are similar to that in Lake Park, with wide sidewalks, parking and wide travel lanes. While traffic can be significant at times, low speed limits and wide pavement widths make this roadway segment more comfortable for bicycle riders. Leaving Hahira, the route continues west on a rural section of Highway 122, over I-75 and onto Webb Road before heading into Cook County.

City of Valdosta

Entering Valdosta from the south along Patterson Street, cyclists will travel first through a growing industrial and aging commercial area, before arriving in Downtown Valdosta. Just before arriving in Downtown the Bicycle Route

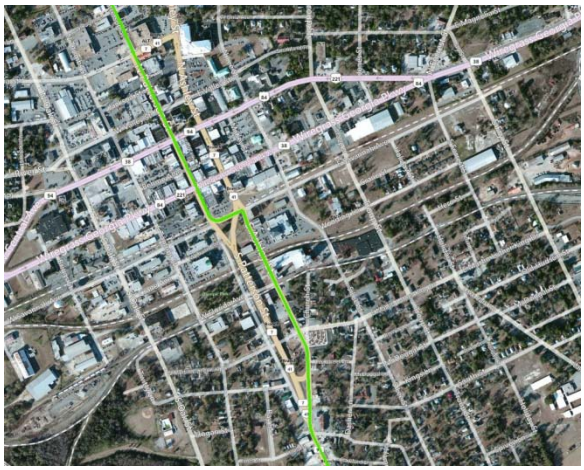


Figure 5 Bike Route 15 in Downtown Valdosta

takes a confusing turn to avoid a railroad overpass. The turn involves riders crossing multiple lanes of traffic on a very busy street, and going the wrong direction on a one-way street. While it is not believed that this was originally intended (roadway changes have occurred in the past that turned this street into

a one-way street) it is a confusing area along the route, especially for someone who is unfamiliar with the area.

As cyclists enter downtown Valdosta, the traffic remains heavy and congested at times. The travels lanes are wide, with parallel parking on both sides of the street. Again in downtown Valdosta along Patterson Street the bike route travels against the flow of traffic on this one-way street.

North of downtown Valdosta, Patterson Street returns to two-way traffic through historic residential neighborhoods, by the Front Law of Valdosta State University, by South Georgia Medical Center, before arriving at the Five Points area.

The very busy Five Points intersection can be confusing for motorists, let alone bicyclists that do not have any signage to guide them on their route. The City of Valdosta is currently working on improvements to this intersection and surrounding areas that will improve the flow of traffic and ease the confusion in this area, which will be home to a new municipal auditorium and regional library.

Past the Five Points intersection Bicycle Route 15 continues on North Valdosta Road, before turning onto Old Highway 41 as described earlier.

Cook County

Not just in Cook County, but throughout the entire region, the signage for this route is considerable lacking and in some cases wrong. Leaving Hahira on Webb Road this route is signed as Bike Route 10.

Webb Road turns into Old Valdosta Road in Cook County, where the bicycle route travels along this rural roadway with gentle curves and hills. The roadway is in a fair condition with

Figure 6 Bike Route 15, incorrectly signed as Bike Route 10 on Webb Road in Lowndes County. This is the only location outside of Valdosta where a 'Share the Road' sign is present along the route.

some areas of roughness. There roadway is generally narrow and traffic tends to travel at speeds near 50 mph. The roadway has no shoulders to speak of and would require significant investment to widen the areas for wider shoulders in many areas due to the roadside drainage ditch on both sides of the roadway.

Figure 7 Typical roadway conditions in Cook County along Bike Route 15

Colquitt County

Leaving Cook County on Highway 37, a well maintained two-lane state highway, with high travel speeds, and narrow shoulders the bicycle route travels into the City of Ellenton via the Ellenton-Omega Road. In Ellenton the roadway conditions are similar to that on the rural roads

in Cook County. In Ellenton however, wider shoulders provide areas where cyclists can be safely separated from motorists.

Figure 8 Bicycle Route 15 in Ellenton, GA, notice the wide shoulders

Tift County

Continuing along Ellenton-Omega Road, Bicycle Route 15 crosses into Tift County near the City of Omega. Omega has recently completed several Transportation Enhancement program projects through their downtown along US 319 that provide safe aesthetic sidewalks.

Figure 9 Bicycle Route 15 along Hwy 319, notice the rumble strips on the shoulder

Just east of Omega, Highway 319 turns into an undivided highway with a speed limit of 55 mph. The shoulders area narrow and have rumble strips.

City of Tifton

Bicycle Route 15 enters the City of Tifton on the southwest side of town where for a segment Hwy 319 is a five-lane roadway with a center turn lane. At the intersection with US 82, the route turns east towards downtown Tifton. Along these segments the travels are wide and in some places there is a narrow shoulder for bicycles to safely travel.

Downtown Tifton has wide sidewalks and angled parking along both sides of the street that can make it more hazardous for bicyclists. Downtown Tifton is home to several shops, restaurants, and businesses that keep this neighborhood quite active during the day. Bike lanes are present on other downtown Tifton streets, but not on the streets designated Bicycle Route 15.

Leaving downtown Tifton, the route travels north to 12th Street, where it takes a left through an historic residential neighborhood. 12th street is a tree lined street with wide travel lanes and is suitable for bicycling.

Figure 10 Wide Sidewalks in dowtown Tifton along Bicycle Route 15

Leaving Tifton, Bicycle Route 15 cross I-75 once again on Hwy 41, near Tift Regional Medical Center, and the University of Georgia and Abraham Baldwin Agricultural College campuses.

Turner County

Through northern Tift County and Turner County, Hwy 41 is the primary route of Bicycle Route 15. Much of the route is along this two-lane road with narrow shoulders, fair pavement conditions, slight curves and some small rolling hills.

Figure 11 Bicycle Route 15 in Sycamore with rumble strips in paved shoulder

Entering the Cities of Sycamore and Ashburn the roadway become slightly wider, with narrow sidewalks present in some locations. The shoulder of the roadway becomes wider in these cities, but it is not always a smooth paved shoulder and in several cases rumble strips are present.

Figure 13 Bike Route 15 entering Turner County from the North

Ashburn has recently completed several Transportation Enhancement projects that have increased the walk ability and aesthetics of its downtown. Along US Hwy 41 are wide

Figure 12 Scenic Canopy Road in Turner County along Bicycle Route 15

sidewalks and wide travel lanes where bicyclists may safely travel through the community. Traffic along this roadway can be moderate to heave at times.

North from Ashburn Hwy 41 and the Bicycle Route continue into Crisp County. The roadway north of Ashburn is very scenic, and is in a poor-to-fair condition, with some areas needing maintenance work for cyclists to feel comfortable and safe when traveling this area.

On the following pages are maps of the exiting route in each county in the region, where appropriate changes have been proposed to certain segments as described later.

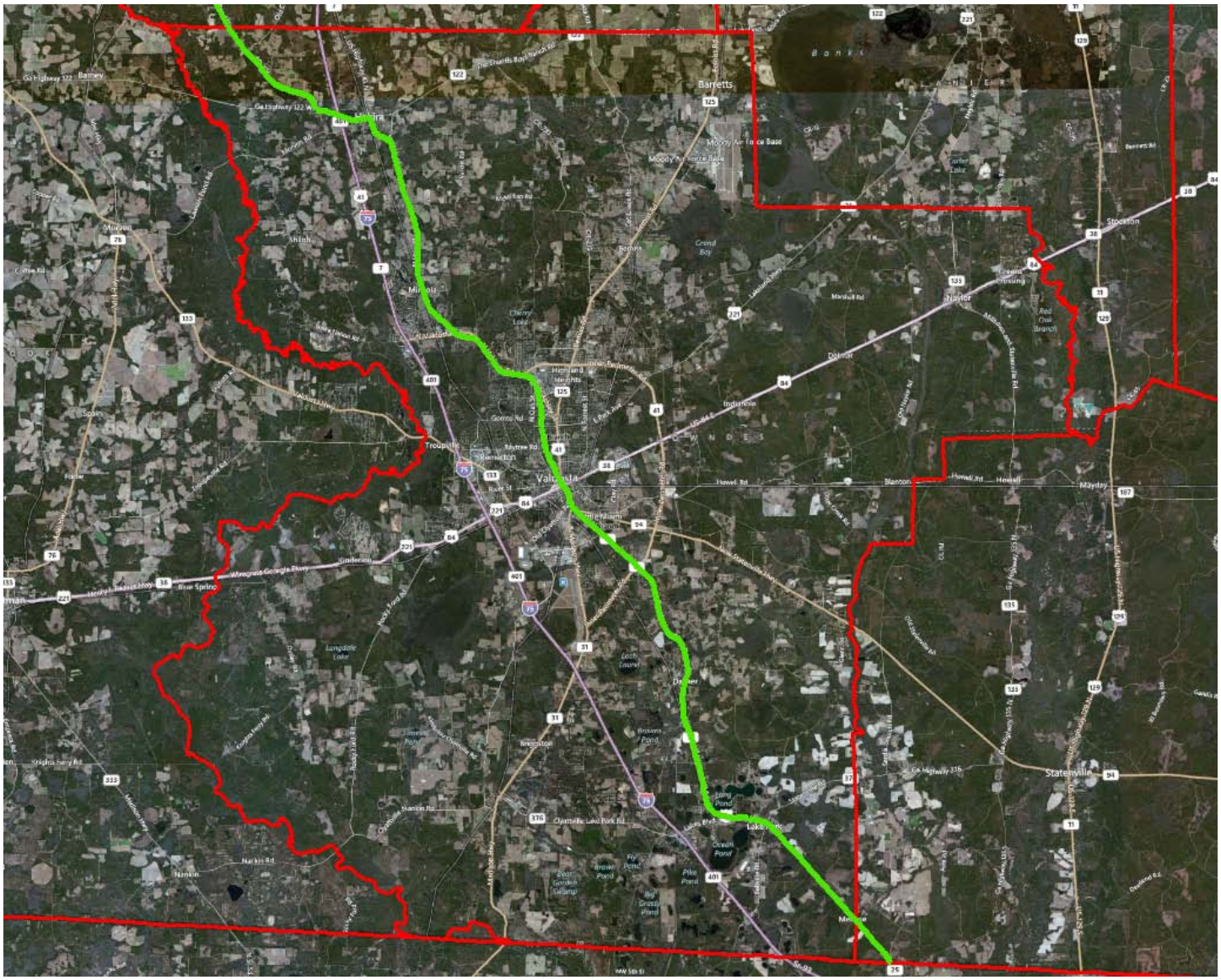


Figure 14 Bicycle Route 15 in Echols and Lowndes Counties

Figure 15 Bicycle Route 15 in downtown Valdosta, with proposed changes in red, notice one-way direction of streets

Figure 16 Bicycle Route 15 north of Valdosta with proposed changes in red, all bicycle traffic would stay on North Valdosta Road

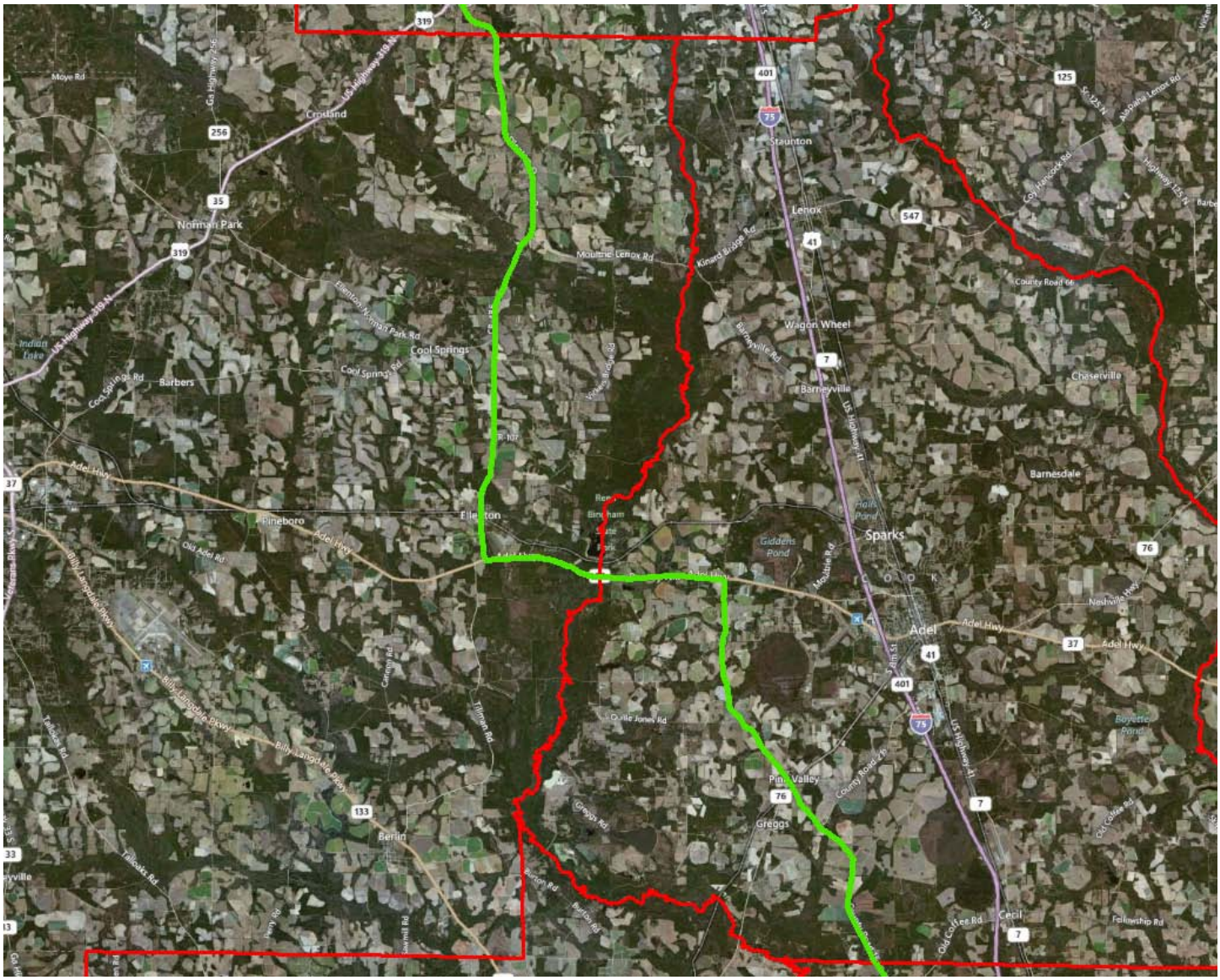


Figure 17 Bicycle Route 15 in Cook and Colquitt Counties

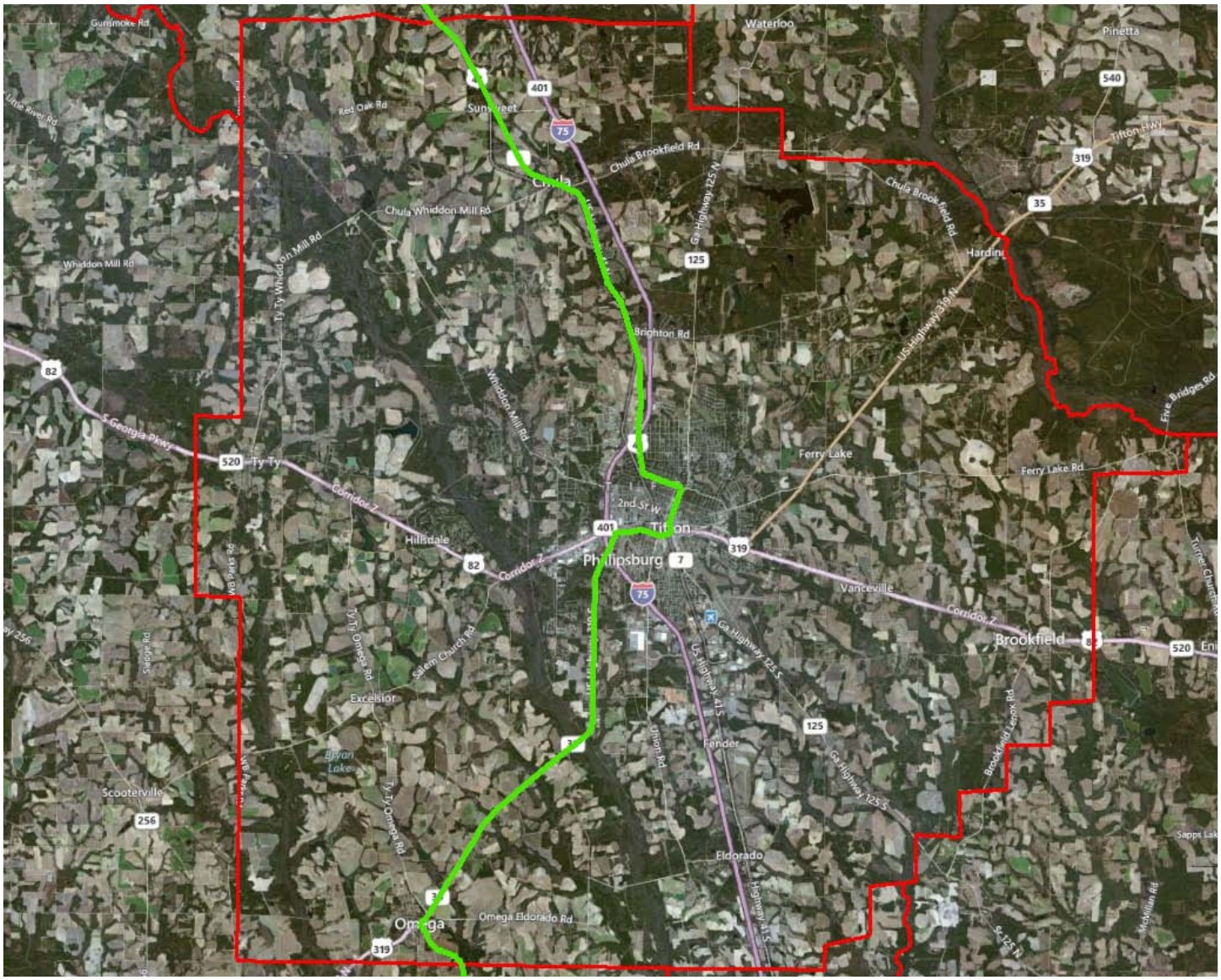


Figure 18 Bicycle Route 15 in Tift County

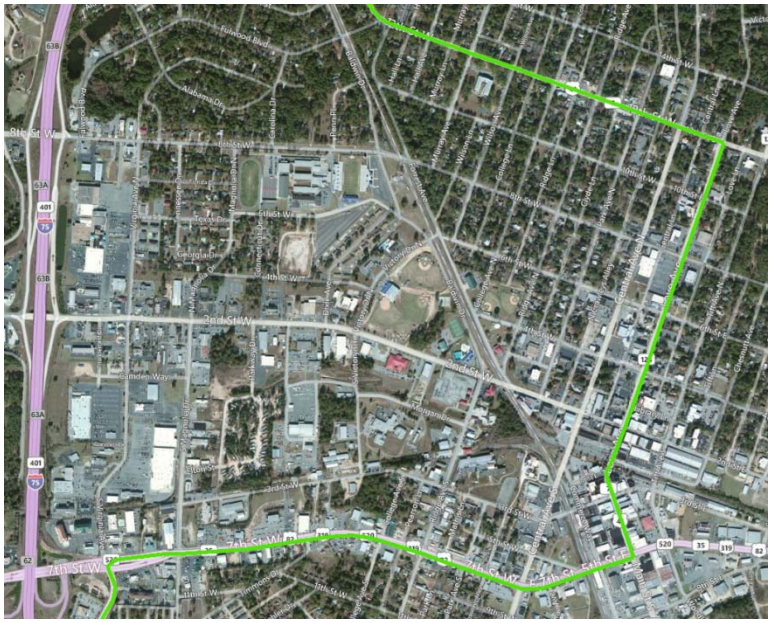


Figure 19 Bicycle Route 15 in the City of Tifton

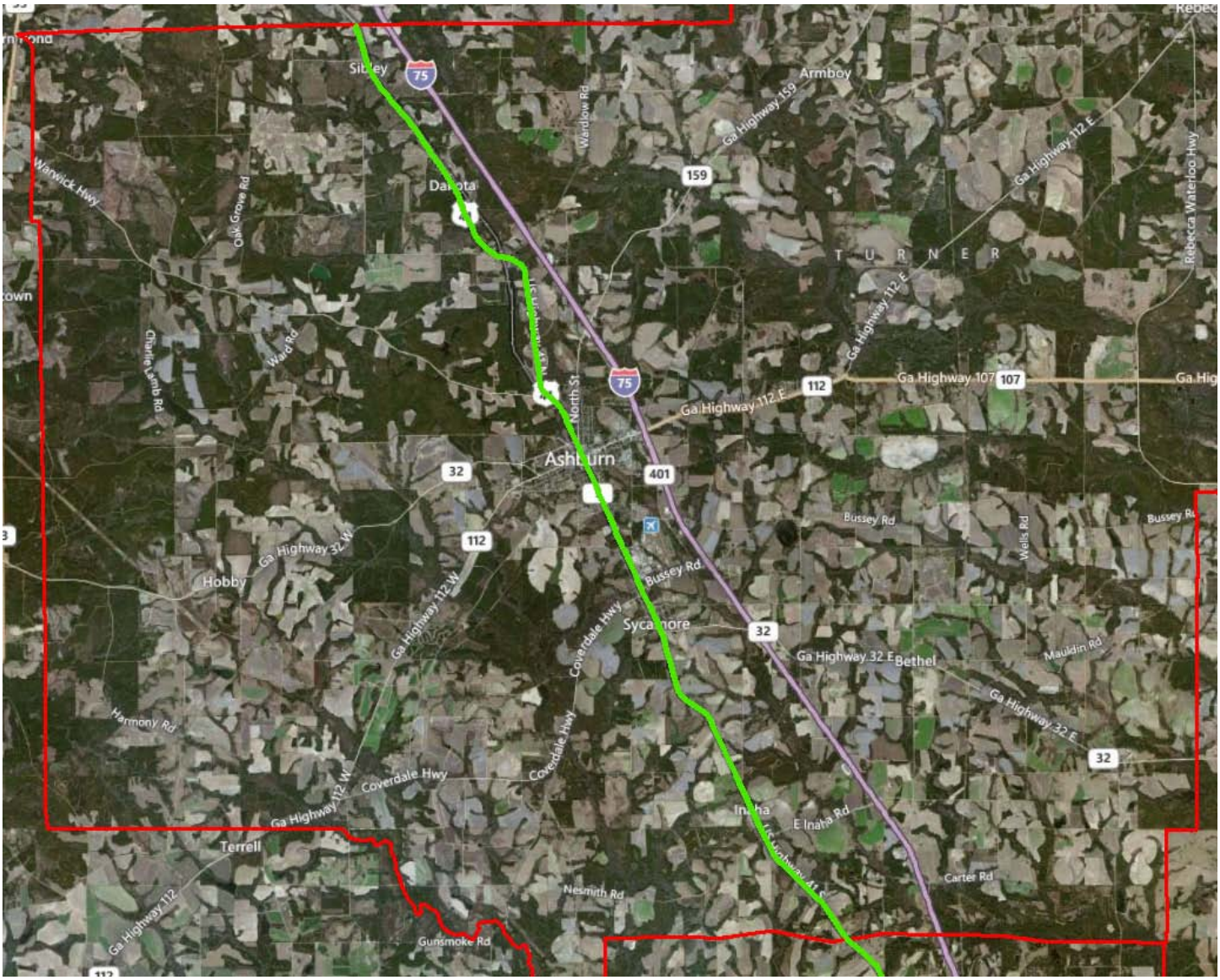


Figure 20 Bicycle Route 15 in Turner County

Recommendations

After a field assessment and review of data collected the SGRC makes the following recommendations for improving the Bicycle Route 15 Corridor in Southern Georgia.

Much of these recommendations are not meant to be immediate improvements that the state or local governments should proceed with immediately to complete, rather to complete as appropriate when the particular road segment is undergoing regularly scheduled maintenance or upgrades.

Of first concern is the need to ensure that signage for Bicycle Route 15 is placed along the route. GDOT needs to ensure that this route is properly signed so cyclists can be assured they are on the correct road. Second to signage at appropriate intervals and locations "Share the Road" signs, pavement markings and other safety and awareness measures should be put in place so motorists and cyclists are aware of the route.

Figure 22 Example of 'Share the Road' signs

It is recommended that where appropriate in at least the communities of Lake Park, Valdosta, Hahira, Ellenton, Tifton, Sycamore and Ashburn that the roadways be restriped to include bicycle lanes where appropriate for safer bicycle route travel. Using the Southern Georgia Bicycle and Pedestrian Plan and the Valdosta-Lowndes MPO Bicycle and Pedestrian Master Plan as guides further bicycle lanes and facilities should be developed along this corridor to improve the safety of the cyclist and to improve the mobility and quality of life throughout the region and communities.

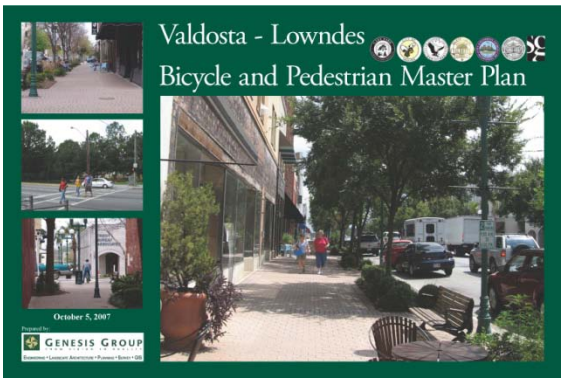


Figure 21 VLMPO Bicycle and Pedestrian Master Plan

The Valdosta-Lowndes MPO through the SGRC should work with local governments and the general public to promote Bicycle Route 15 and other routes and facilities in our region. Outreach should also include tourism and safety related awareness for motorists and cyclists or all ages. The SGRC should work to make this information available in both paper and electronic formats to reach the broadest spectrum of motorists and cyclists alike.

As can be seen above in Figures 15 and 16, based on this assessment it is recommended that Bicycle Route 15 be slightly altered in the City of Valdosta to require cyclists to obey all traffic laws (to avoid directing them to go down a one-way street the wrong way) and make other accommodations for safer interactions with motorists. The changes to the Route in downtown Valdosta can be confusing due to the one-way streets in the area. Further consideration should be made of converting these one-way streets to two-way operations or to avoid confusion for cyclists, moving the route to Lee Street with appropriate directional signage for downtown businesses and attractions.

Throughout the Route the shoulders should be widened in the rural areas to promote safe cycling without the use of added bicycle lanes or separated paths. Rumble strips in these cases

should be narrow and not take up the entire shoulder to further promote usage of the shoulders as a safe alternative for cyclists in the rural sections of the Route.

As part of the analysis GDOT has been provided with the digital GIS files used and developed during the field assessment. This information can be used by GDOT and local planners and engineers to develop future improvements to the Route 15 corridor without additional field work.

In conclusion, Bicycle Route 15 through Southern Georgia stand to be an excellent candidate for nomination to the US Bicycle Route System with minor improvements that can be made over time at a minimal cost to the state and local jurisdictions. This Route would provide a boost in tourism and quality of life for South Georgia. The recommended improvements will also provide safer infrastructure for all bicyclists.

Turn-by-turn, Existing Route 15			Turn-by-turn, Proposed Route 15	
1	At Florida State Line travel north on US Hwy 41		1	At Florida State Line travel north on US Hwy 41
2	Continue on Marion Avenue		2	Continue on Marion Avenue
3	Continue north on US Hwy 41		3	Continue north on US Hwy 41
4	Continue north on Patterson Street		4	Continue north on Patterson Street
5	Veer right onto Ashley Street		5	Veer right onto Ashley Street
6	~~Turn left onto Savannah Avenue~~		6NB	Turn right on Martin Luther King Jr. Drive
			7NB	Turn left on Lee Street
			8NB	Turn left on Savannah Avenue
			9NB	Turn right on Ashley Street
			10NB	Turn left on Magnolia Street
			11NB	Turn right on Patterson Street
			11SB	Continue on Patterson Street
			10SB	Turn left under Overpass
			9SB	Turn right on Ashley Street
			8SB	Turn left on Florida Avenue
			7SB	Turn left on Patterson Street
			6SB	Continue/Turn right on Patterson Street
12	Turn right onto Patterson Street		12	Turn right onto Patterson Street
13	Turn right onto Smithbriar Drive		13	Turn right onto Smithbriar Drive
14	Turn left onto Ashley Street		14	Turn left onto Ashley Street
15	Continue on North Valdosta Road		15	Continue on North Valdosta Road
	~~Turn left on Old Hwy 41~~			
	~~Turn left on North Valdosta Road~~			
16	Turn right on Old Hwy 41 North		16	Turn right on Old Hwy 41 North
17	Continue on Church Street		17	Continue on Church Street
18	Turn left on Main Street		18	Turn left on Main Street
19	Continue on Hwy 122		19	Continue on Hwy 122
20	Turn right on Webb Road		20	Turn right on Webb Road
21	Continue on MJ Taylor Road		21	Continue on MJ Taylor Road
22	Turn left on Old Union Road		22	Turn left on Old Union Road
23	Turn left on Hwy 37		23	Turn left on Hwy 37
24	Turn right on Ellenton-Omega Road		24	Turn right on Ellenton-Omega Road
25	Turn right on US Hwy 319		25	Turn right on US Hwy 319
26	Turn right on US Hwy 82		26	Turn right on US Hwy 82
27	Turn left on Main Street		27	Turn left on Main Street
28	Continue on Love Avenue		28	Continue on Love Avenue
29	Turn left on 12th Street		29	Turn left on 12th Street
30	Continue on US Hwy 41		30	Continue on US Hwy 41
31	Continue on Railroad Avenue		31	Continue on Railroad Avenue
32	Continue on Jefferson Davis Memorial Hwy		32	Continue on Jefferson Davis Memorial Hwy
33	Continue on Main Street		33	Continue on Main Street
34	Continue on US Hwy 41 north into Crisp County		34	Continue on US Hwy 41 north into Crisp County

Figure 23 Turn-by-Turn directions of Existing and Proposed Bicycle Route 15 in Southern Georgia