CRTPA
CAPITAL REGION
TRANSPORTATION PLANNING AGENCY

TALLAHASSEE TO HAVANA TRAIL

Feasibility Study

Prepared by:

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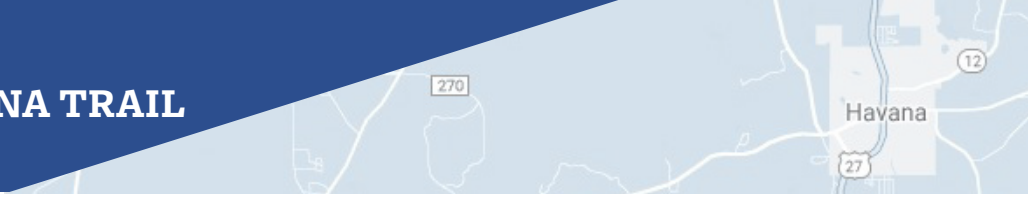


The Tallahassee to Havana Trail Feasibility Study evaluated the opportunity for constructing a 10 to 12-foot multi-use trail between the Orchard Pond Parkway in Leon County and Salem Road in Gadsden County through the Town of Havana. This connection would expand upon regional trail investments in neighboring Leon, Wakulla, and Jefferson Counties, and would allow for long distance multimodal connectivity between these jurisdictions. This route is proposed to be included in the Florida Department of Environmental (FDEP) Office of Greenways and Trails Land Trail Opportunities, and is identified as the Chipola-Apalachicola-Ochlockonee Corridor due to its ability to provide long-distance connectivity between several natural and recreational destinations along these regional rivers. Gadsden County is both a known thoroughfare and destination for cyclists in the region, and the investment of formal, separate facilities can make this connection more accessible to a wide variety of skill levels. The Tallahassee to Havana Trail would provide recreational, transportation, and economic benefits to the Town of Havana, Gadsden County, and the Capital Region overall.

This feasibility study examined the existing conditions along the project study area to determine potential routes for connecting the existing Orchard Pond Greenway in Leon County to Salem Road west of Havana. This phase of the feasibility study focused on a technical analysis of existing conditions and targeted stakeholder engagement. Expanded public engagement will be conducted in future phases of this project as funding becomes available for design and construction.

WHAT IS A FEASIBILITY STUDY?

A Feasibility Study is the first planning step when considering a project for eventual construction. It includes the following:

An existing conditions assessment and an inventory of features within and surrounding the project footprint

A list of identified potential impacts or enhancements at a very high level

Recommendations moving forward in the event this project proceeds to design phases, where impacts and enhancements will be further evaluated and addressed with specificity

PROJECT STUDY AREA AND CHARACTERISTICS

The Tallahassee to Havana Trail Feasibility Study focused primarily on corridors located in eastern Gadsden County to facilitate a connection between existing recreational facilities in Leon County and destinations in the Town of Havana. The main corridors that were primarily evaluated include the following:

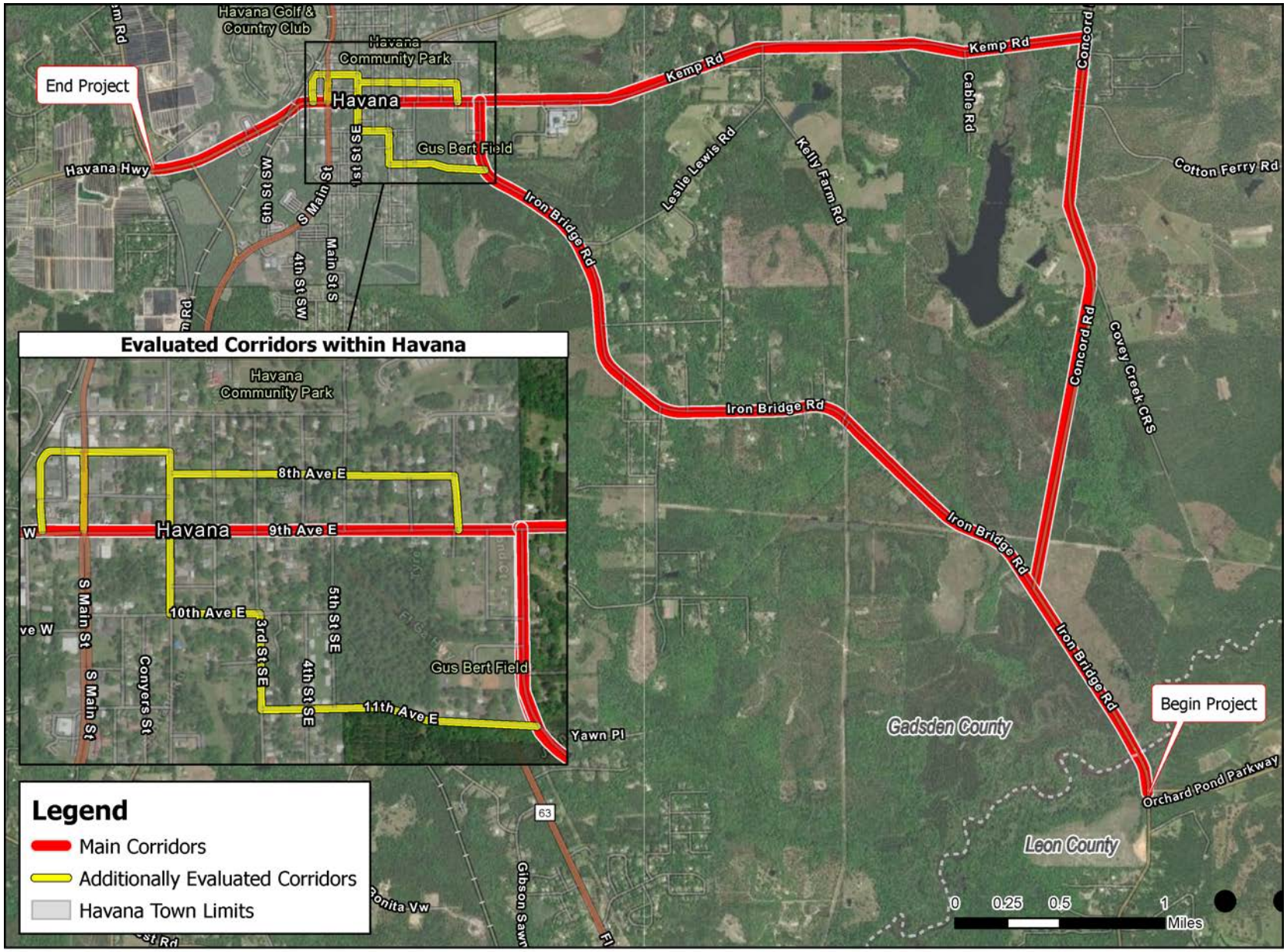
- Old Bainbridge Road / Iron Bridge Road
- Concord Road
- Kemp Road
- 9th Avenue / SR 12

In addition to these corridors, several local neighborhood streets within Havana town limits were also evaluated to facilitate safe and accessible connections. These neighborhood streets will be detailed where appropriate in the existing conditions analysis. **Figure 1** shows the main corridors that were evaluated and the overall project vicinity.

The areas surrounding the project study area along Old Bainbridge Road / Iron Bridge Road, Concord Road, Kemp Road, and 9th Avenue / SR 12 are generally characterized by residential, commercial, and agricultural land uses. The project's southern limit is located within Leon County for approximately .15 miles until it reaches the Ochlockonee River, and then enters Gadsden County for the remainder of the route. The Town of Havana has a population of 1,753 as

Downtown Havana at 7th Avenue and Main Street

FIGURE 1. PROJECT AREA AND EVALUATED CORRIDORS



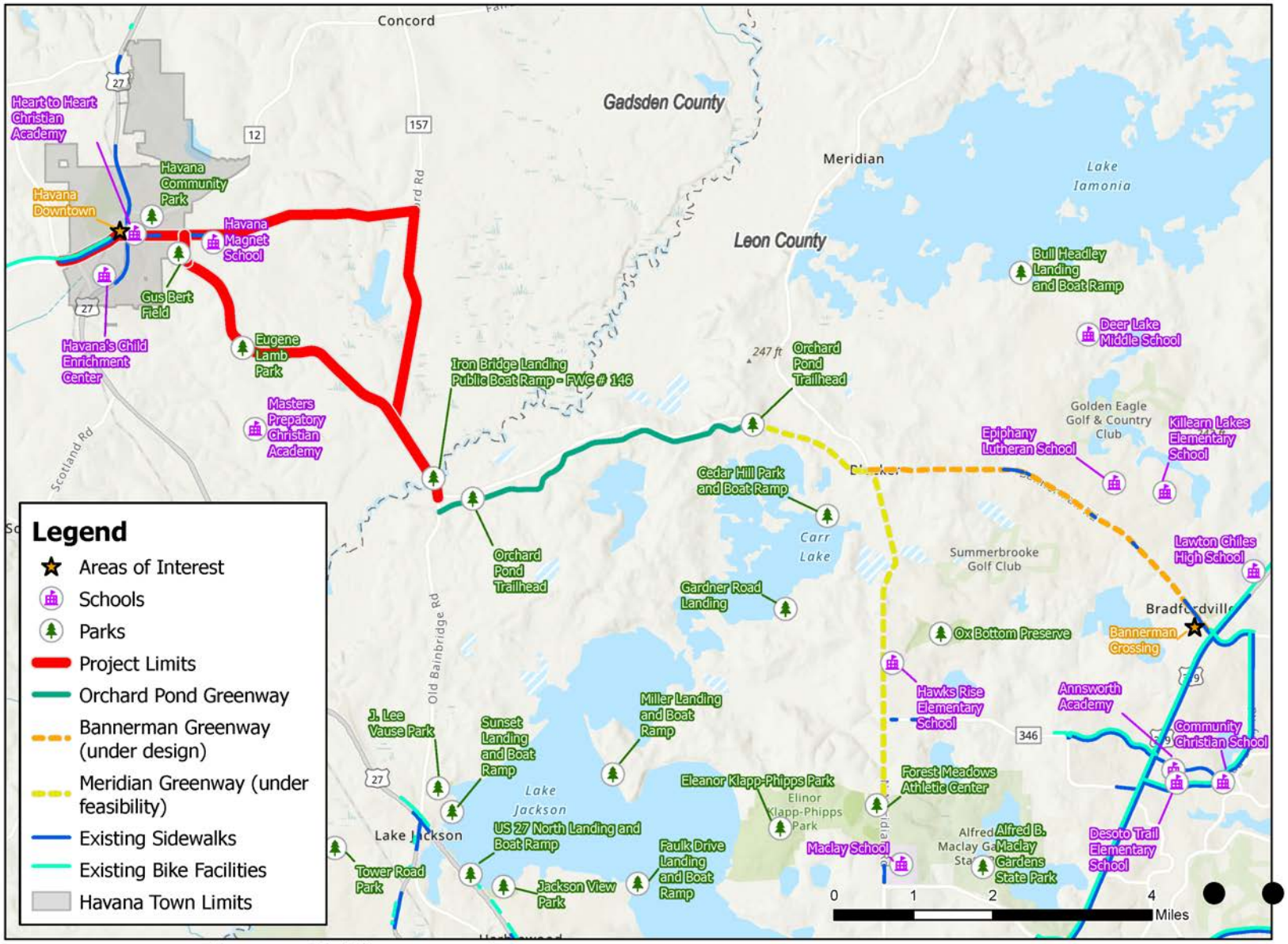
Havana Trail Feasibility Study *Evaluated Corridors*

of the 2020 US Census, and is home to businesses including antique shops, art galleries, and other specialty stores. The area has some limited bicycle and pedestrian facilities, most notably at the western limits of this project, where a wide shoulder on SR 12 provides multimodal connectivity between Havana and the City of Quincy.

Throughout the Capital Region area, significant investments have been made to expand the trail network and provide multimodal opportunities for transportation. These investments have been made at the municipal, county, and regional level, and the network is expected to be highly connected throughout Leon, Wakulla, Jefferson, and Gadsden Counties due to multi-use trail projects currently under development. The Tallahassee to Havana Trail will provide connectivity between Leon County and Gadsden County, which does not currently provide any formal bicycle or pedestrian facilities for making trips between them. Providing a specific route along Iron Bridge Road will connect existing trail facilities to the east on Orchard Pond Parkway, which will ultimately connect to planned and proposed facilities on Bannerman Road and North Meridian Road in Leon County. To the west, this route will connect to a wide shoulder on SR 12 that is currently regularly used by recreational cyclists. Some of these regional multimodal opportunities are shown in **Figure 2**.

Downtown Havana facing east on 7th Avenue

FIGURE 2. REGIONAL CONNECTIVITY



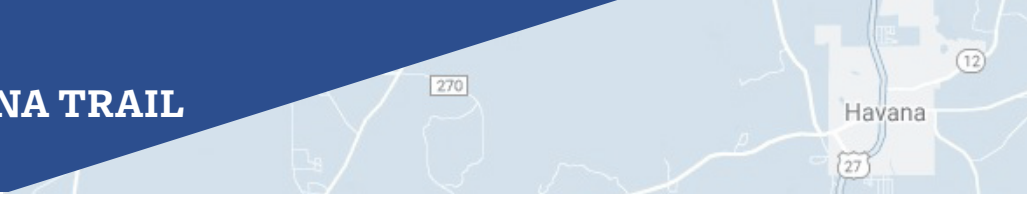
Havana Trail Feasibility Study *Regional Connectivity*

EXISTING CONDITIONS ANALYSIS

An existing conditions analysis was initiated in May 2022 and concluded in August 2022. This included a desktop analysis, preliminary mapping, and field verification through two (2) site visits conducted in May and July of 2022. Information was collected and analyzed to determine project feasibility. **Table 1** below includes desktop data reviewed for the purpose of this analysis.

TABLE 1. DATA AND SOURCES

Data	Source	Year
Average Annual Daily Traffic (AADT), Truck AADT, Number of Lanes, Speed Limit, Functional Classification, Existing Multimodal Facilities	Florida Department of Transportation (FDOT)	2021
Crash Analysis Reporting System (CARS)	Florida Department of Transportation (FDOT)	2017-2021
Signal Four Analytics	University of Florida GeoPlan	2021
Preliminary Right-of-Way	Florida Department of Transportation (FDOT), Gadsden County Property Appraiser, Google Maps	Various
Historic Structures, Resources, Bridges, Cemeteries	Florida Department of State via Florida Geographic Data Library (FGDL)	2019
Land Use	Florida Geographic Data Library (FGDL)	2021
FEMA Flood Zones	Federal Emergency Management Agency (FEMA) via FGDL	2021
Wetlands	National Wetlands Inventory (NWI)	2021
Species	Florida Fish and Wildlife Conservation Commission (FWC), United States Fish and Wildlife Service (USFWS)	Various
Bicyclists Patterns within Gadsden and Leon Counties	Strava	2021-2022



TRANSPORTATION AND ROADWAY CHARACTERISTICS

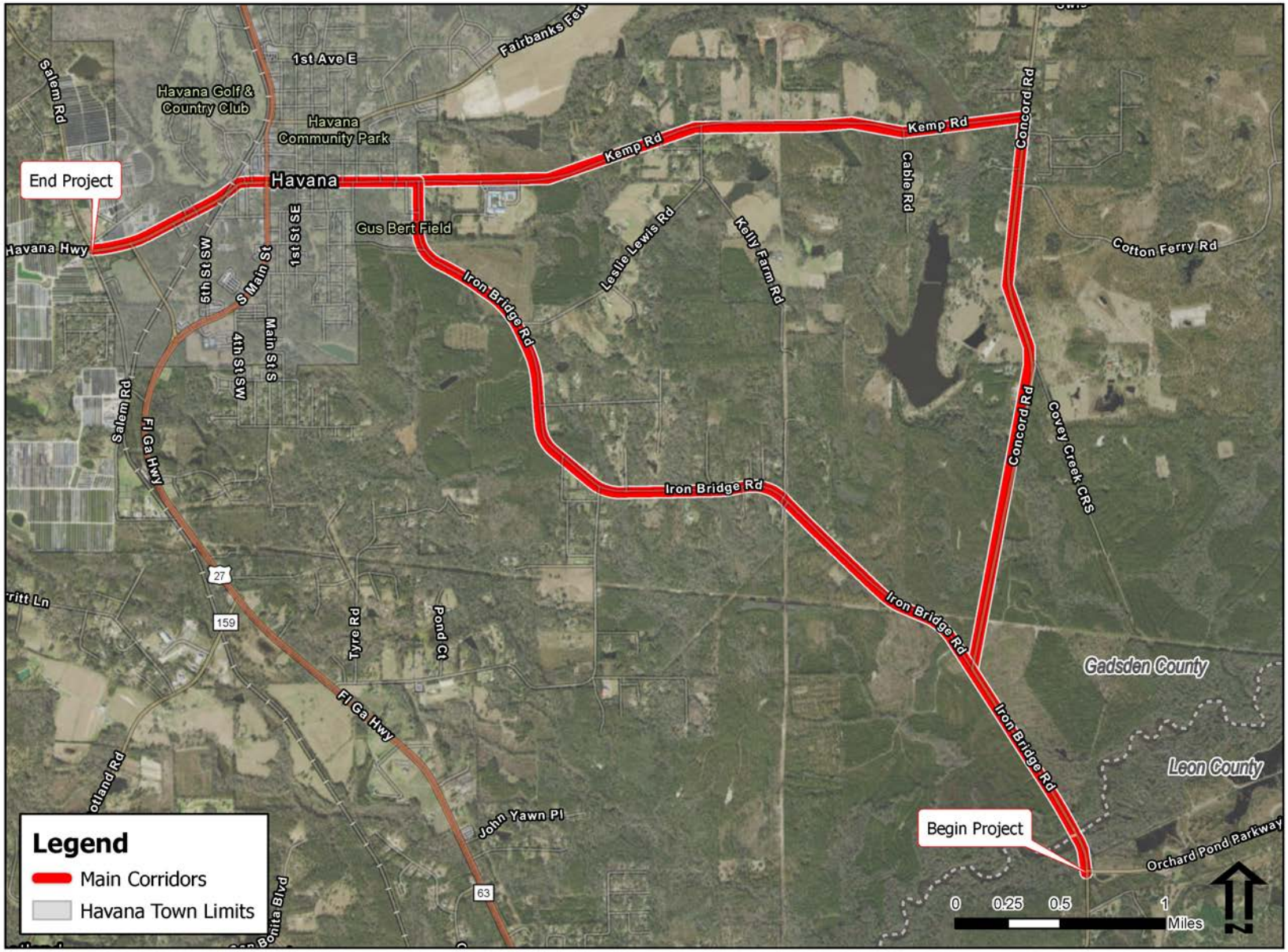
The majority of the project study area is located along rural, two-lane bi-directional highways with posted speed limits of 45 miles per hour or higher. At the Havana town limits, Iron Bridge Road dead ends into Kemp Road, which becomes 9th Avenue at this intersection. Ninth Avenue in Havana is a two-lane bi-directional urban road, with a speed limit of 25 miles per hour. Despite this low speed limit, heavy truck traffic is common along 9th Avenue and can create an unsafe atmosphere along this corridor for bicyclists and pedestrians. On the west side of Havana, 9th Avenue becomes SR 12 and the speed limit increases to 35 miles per hour.

Bicycle and pedestrian facilities are located sporadically throughout project study area but are most concentrated in the downtown Havana commercial areas along 6th, 7th, and 9th Avenues, 2nd Street, and Main Street, as well as on 9th Avenue/SR 12 on the west side of Havana. **Table 2** below describes transportation and roadway characteristics in more detail for all roads evaluated as part of this feasibility study. **Figure 3** below shows these corridors on a map. **Table 3** and **Figure 4** detail additional corridors within Havana that were evaluated as part of this analysis.

TABLE 2. MAIN CORRIDORS EVALUATED

Evaluated Corridors	Road Ownership	Speed Limit	Roadway Characteristics	Multimodal Facilities	Vehicular AADT	Truck AADT
Iron Bridge Road	Gadsden County	45	2-lane bi-directional	No	1100 - 5500	65- 325
Concord Road	Gadsden County		2-lane bi-directional	No	4700	277
Kemp Road	Town of Havana	25	2-lane bi-directional	No	1200	71
9th Avenue E	Town of Havana	25	2-lane bi-directional	No	1200	71
9th Avenue W	Town of Havana, FDOT	35	2-lane bi-directional	Sharrows, 6 ft paved shoulder, 5 ft sidewalk on south side	3700 -5200	359 -385
SR 12/ Havana Highway	Town of Havana, FDOT	35	2-lane bi-directional	Sharrows, 6 ft paved shoulder, 5 ft sidewalk on south side	3700 -5200	359 -385

FIGURE 3. MAIN CORRIDORS EVALUATED



Havana Trail Feasibility Study *Main Corridors Evaluated*

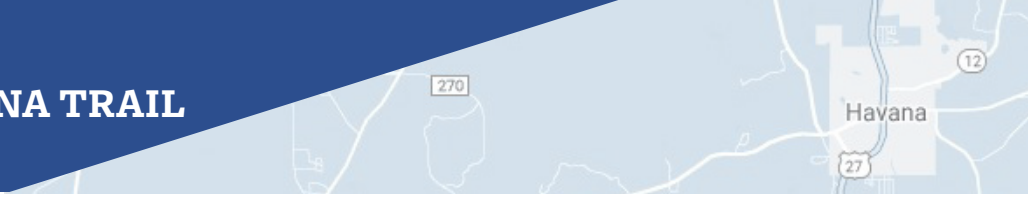
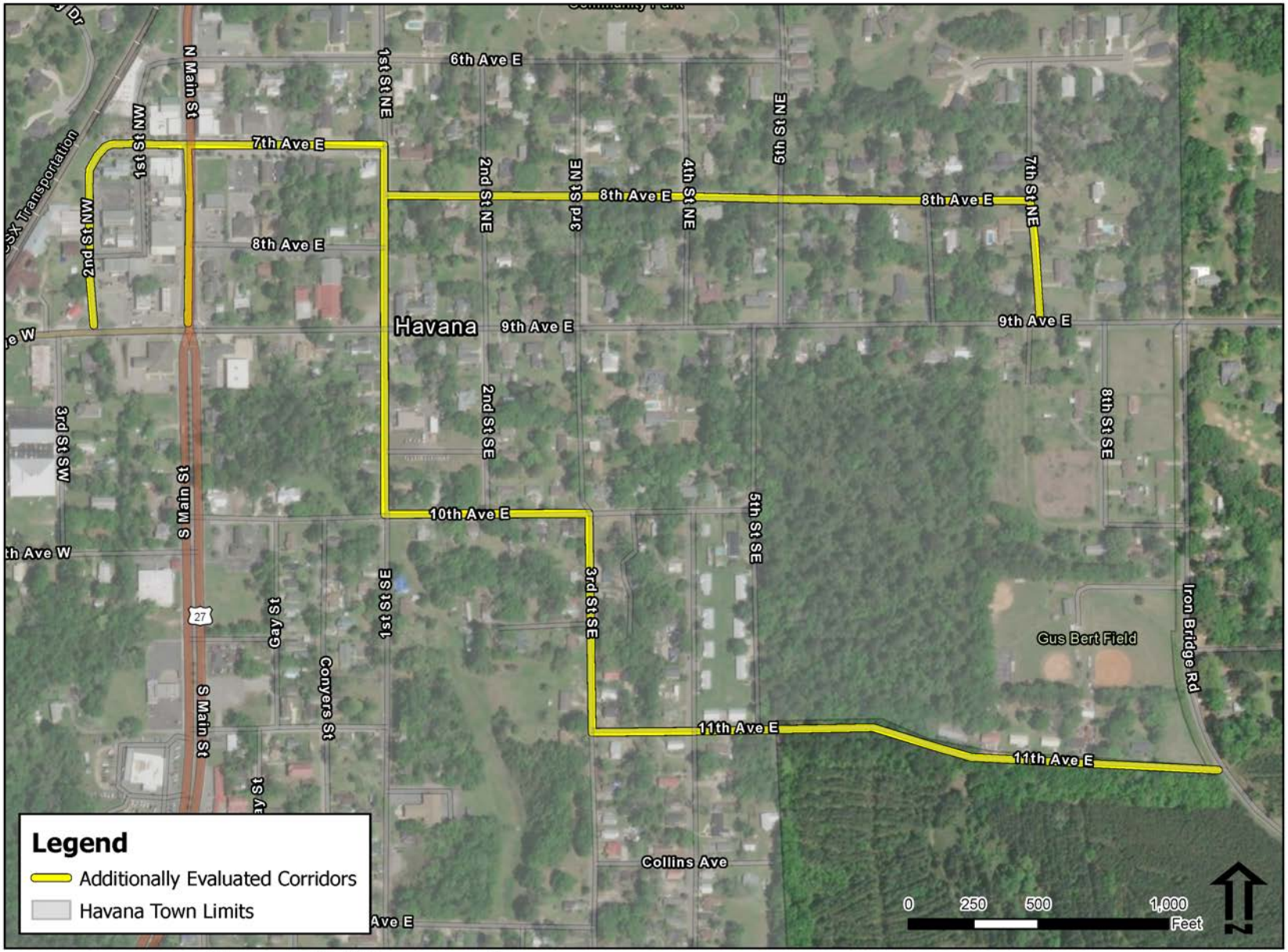


TABLE 3. EVALUATED CORRIDORS IN HAVANA

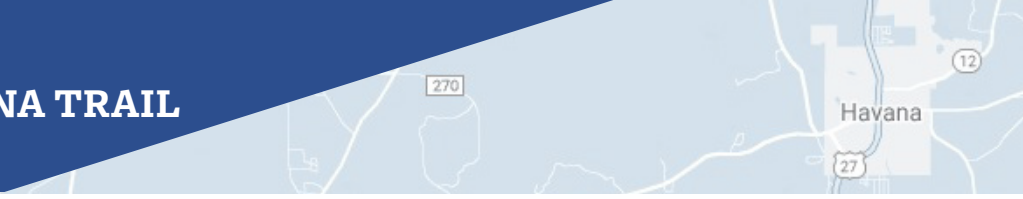
Evaluated Corridors	Road Ownership	Speed Limit	Roadway Characteristics	Multimodal Facilities	Vehicular AADT	Truck AADT
1st Street NE	Town of Havana	Low speed*	2-lane bi-directional, no striping	5-foot sidewalk on east side	Local road	Local road
1st Street SE	Town of Havana	Low speed*	2-lane bi-directional, striped	None	Local road	Local road
2nd Street NW	Town of Havana	Low speed*	2-lane bi-directional, striped	Intermittent 6-foot sidewalk on west side, brick paver crosswalks	Local road	Local road
7th Avenue W	Town of Havana	Low speed*	2-lane bi-directional, striped	4 to 5-foot sidewalks on both sides, brick paver crosswalks	Local road	Local road
7th Avenue E	Town of Havana	Low speed*	2-lane bi-directional, striped	4 to 5-foot sidewalks on both sides, brick paver crosswalks	Local road	Local road
7th Street SE	Town of Havana	Low speed*	2-lane bi-directional, no striping	None	Local road	Local road
8th Avenue E	Town of Havana	Low speed*	2-lane directional, no striping	None	Local road	Local road
Main Street	FDOT	35	4-lane bi-directional, paved, landscaped median, access management	5-foot sidewalks on both sides	11900	2356

**There were no posted speed limits along local and neighborhood roads.*

FIGURE 4. EVALUATED CORRIDORS WITHIN HAVANA



Havana Trail Feasibility Study *Additionally Evaluated Corridors within Havana*



RIGHT-OF-WAY

The right-of-way along the evaluated corridors varies significantly. Generally, right-of-way availability on corridors outside of the Havana town limits is sufficient to accommodate a 10 to 12-foot multi-use trail on both the east and west sides of the corridor. Within the Havana town limits, right-of-way along the main corridors (9th Avenue E and W, Main Street) is extremely constrained and limits opportunities for separated, off-road facilities. However, low speeds and low volumes on parallel neighborhood streets provide opportunities for a continuous route utilizing on-street facilities such as sharrows and signage. These opportunities are further discussed in the route opportunities section of this document.

Table 4 below details the right-of-way availability along each of the corridors reviewed for the Tallahassee to Havana Trail. These right-of-way measurements were obtained using Gadsden County Property Appraiser parcel information and are for general planning purposes. If this project moves forward to subsequent phases, such as project development and environment (PD&E) study or design, a formal survey will be conducted which will establish detailed right-of-way measurements. Right-of-way along low-speed, low-volume roads within Havana was not measured due to the assumption that sharrows would be sufficient for a neighborhood route.

TABLE 4. RIGHT-OF-WAY AVAILABILITY

Corridor	Limits	R/W Range (Feet)	R/W Determination
Iron Bridge Road	Orchard Pond Parkway to Kemp Road/9th Avenue E	65 - 163	Sufficient
Concord Road	Iron Bridge Road to Kemp Road	98 - 166	Sufficient
Kemp Road	Concord Road to Iron Bridge Road	90 - 103	Sufficient
9th Avenue E	Iron Bridge Road to Main Street	30 - 42	Constrained
9th Avenue W/SR 12	Main Street to Salem Road	28 - 66	Constrained

DRIVEWAYS

An analysis was conducted to determine the location and type of driveways present along Iron Bridge Road, Kemp Road, Concord Road, and 9th Avenue E and west SR 12. Driveway counts for local neighborhood roads within Havana were not taken because the trail would likely consist of sharrows and signage located on the roadway that would not cross driveways. Driveway counts are detailed in **Table 5**. The driveways were sorted into four categories: residential driveways, commercial driveways, unsignalized roads, and signalized roads. These categories are defined as follows:

- **Residential Driveway:** Driveway for private residence;
- **Commercial Driveway:** Driveway or road that leads directly to a business, church, park, or school;
- **Unsignalized Road:** Road that does not have a traffic light;
- **Signalized Road:** Road that has a traffic signal.

Additionally, railroad crossings were also identified. All driveway crossings on Iron Bridge Road and the 9th Avenue E and west SR 12 are listed in **Table 5** and detailed maps are included in the **Appendix**.

TABLE 5. DRIVEWAY COUNTS BY TYPE

Iron Bridge Road from Orchard Pond Parkway to 9th Avenue East

Side of Corridor	Signalized Road	Unsignalized Road	Commercial Driveway	Residential Driveway	Railroad Crossing	Total
West	0	1	3	16	0	20
East	0	8	4	14	0	26

9th Avenue East from Iron Bridge Road to Main Street

Side of Corridor	Signalized Road	Unsignalized Road	Commercial Driveway	Residential Driveway	Railroad Crossing	Total
South	1	2	1	14	0	18
North	1	5	3	12	0	21

9th Avenue West from Main Street to Salem Road

Side of Corridor	Signalized Road	Unsignalized Road	Commercial Driveway	Residential Driveway	Railroad Crossing	Total
South	1	0	5	0	1	7
North	1	1	12	0	1	15

Concord from Iron Bridge Road to Kemp Road

Side of Corridor	Signalized Road	Unsignalized Road	Commercial Driveway	Residential Driveway	Railroad Crossing	Total
South	0	2	0	15	0	17
North	0	3	0	8	0	11

Kemp Road from Concord Road to Iron Bridge Road

Side of Corridor	Signalized Road	Unsignalized Road	Commercial Driveway	Residential Driveway	Railroad Crossing	Total
South	0	5	2	16	0	23
North	0	2	0	30	0	32

Storefronts in downtown Havana

EVALUATED UTILITY EASEMENTS

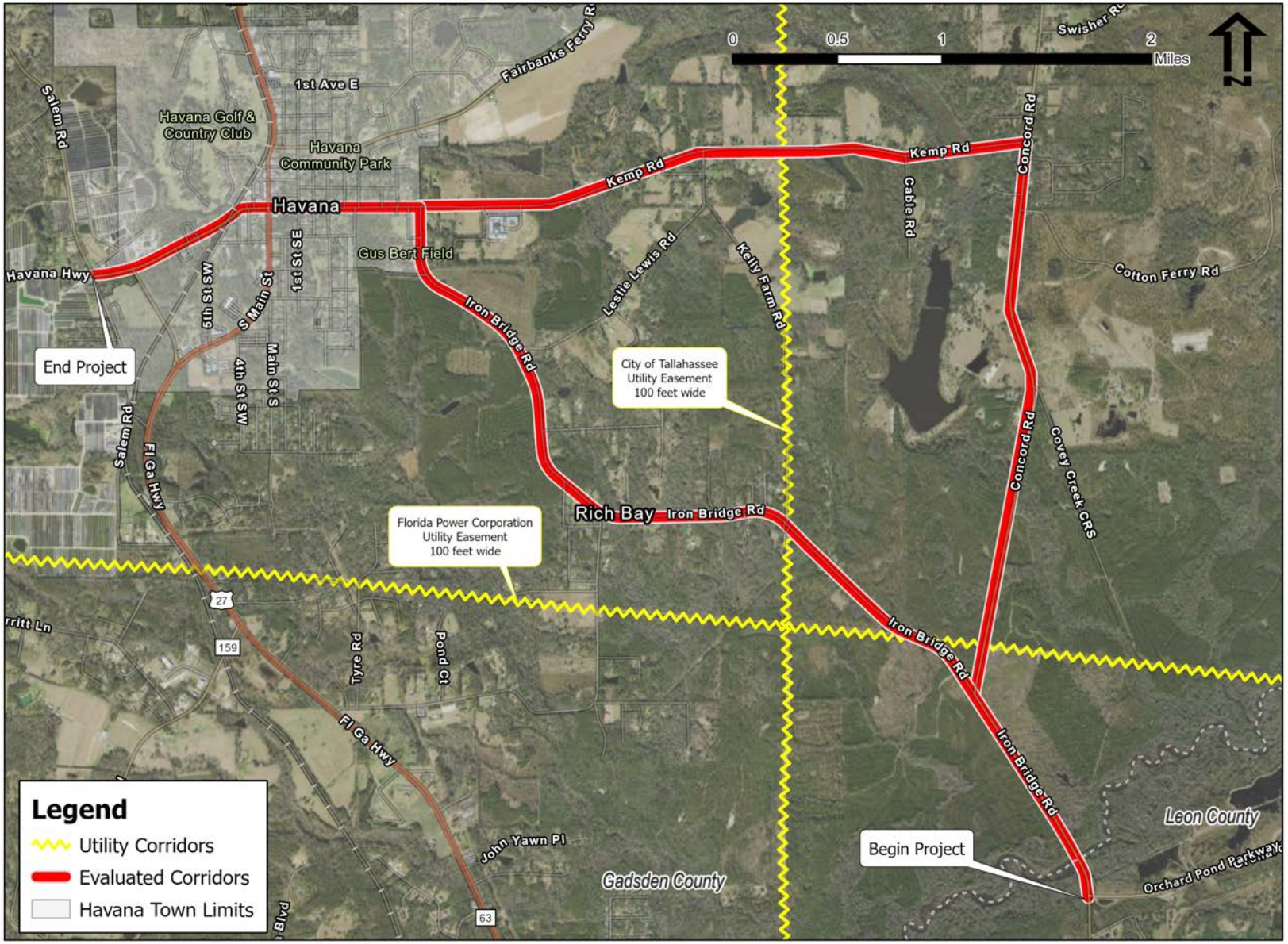
Utility easements in the general project vicinity were also identified. In other places throughout the state, utility easements have provided clear, safe areas to accommodate trails and outdoor recreation opportunities. **Table 6** lists the utility easements that were identified, and they are shown in **Figure 5** below. While other utility corridors exist in areas surrounding Havana and the project area, the easements listed below identify those that could potentially serve as alternate routes for a direct trail route.

TABLE 6. IDENTIFIED UTILITY EASEMENTS

Easement Type	Location	Owner	Width
Transmission Line	Kemp Road to Iron Bridge Road (North South)	City of Tallahassee	100 feet
Transmission Line	US 27 to Concord Road (East West)	Florida Power Corp.	100 feet

Mural in downtown Havana

FIGURE 5. UTILITY EASEMENTS EVALUATED



Havana Trail Feasibility Study *Evaluated Utility Easements*

CRASH DATA

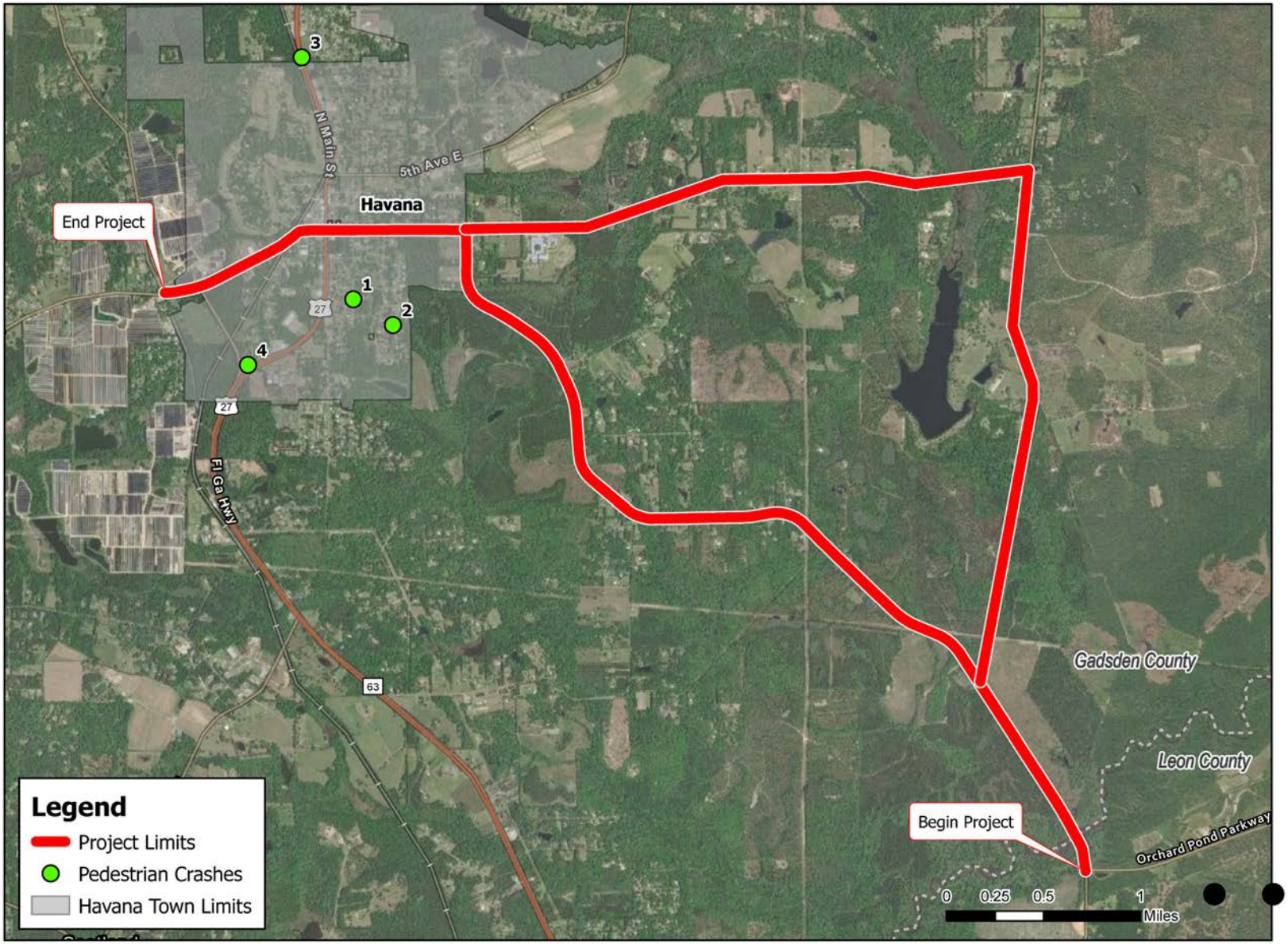
Downtown Havana is located at the convergence of two major highways (US 27 and SR 12) and experiences high volumes of through traffic. Reviewing crash data history allowed the project team to understand and identify potentially unsafe locations for bicyclists and pedestrians to avoid or address in future recommendations. Crash data was pulled from the Florida Department of Transportation's (FDOT) CAR database for the years 2017 to 2021 within Havana City. The CAR database does not currently have "certified" data for 2021, so Signal Four Analytics data was used to confirm the unverified data for 2021 provided by Signal four. Crash data was pulled to identify specific intersections or corridors that would not be suitable for a multi-use trail due to safety concerns and previous crashes. The data indicated four (4) crashes involving pedestrians occurred within Havana during the reviewed time period. However, none of these crashes involved injury or fatality, and were not located along any of the corridors being considered as a potential trail route. The crashes are detailed in **Table 7** below and shown in **Figure 6**.

TABLE 7. CRASH DATA

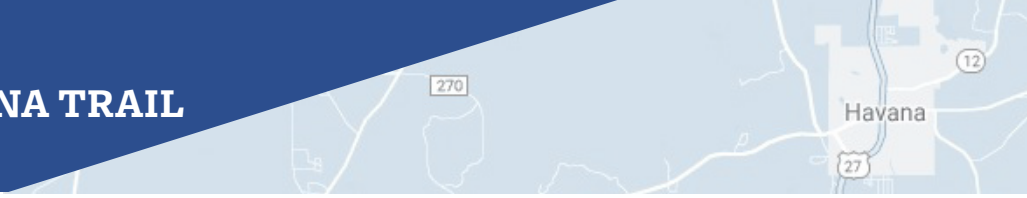
Map ID	Crash Type	Year	Crash Location	Injury?
1	Pedestrian	2021	1st Street SE between 11th Avenue E and 12th Avenue E	No
2	Pedestrian	2021	12th Avenue E between 3rd Street SE and 4th Street SE	No
3	Pedestrian	2021	FL GA Hwy at Washington Ave	No
4	Pedestrian	2021	FL GA Hwy at Short Cut Rd	No

Existing multimodal facilities along SR 12 just outside of Havana town limits

FIGURE 6. CRASH DATA



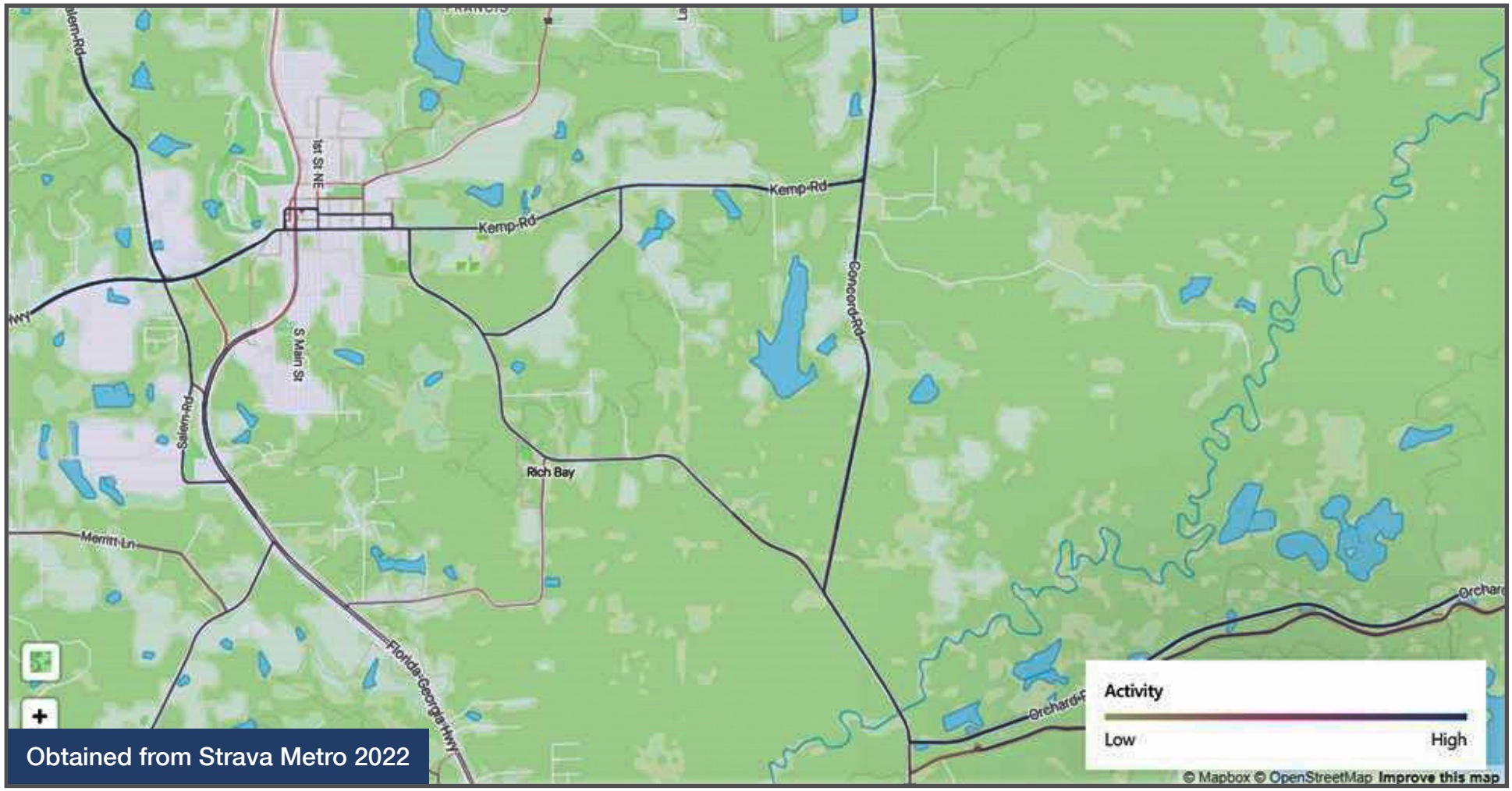
Havana Trail Feasibility Study *Bicycle & Pedestrian Crash Map (2017-2021)*



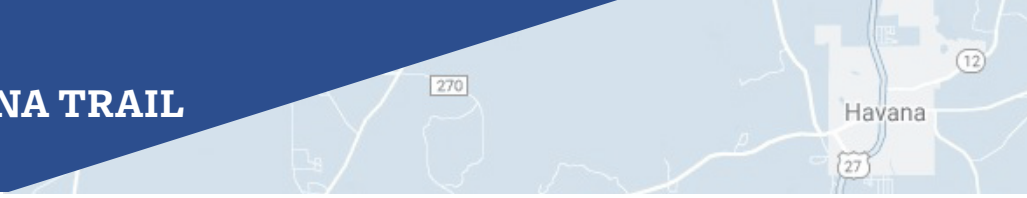
STRAVA

Strava data is an aggregated dataset that utilizes GPS data points to identify routes for a variety of activity types. It has traditionally been used by athletes for tracking workouts, but has recently become a tool for understanding mobility patterns to help identify opportunities for infrastructure improvements. Strava data was obtained as part of this existing conditions analysis to help identify where cyclists are currently traveling within the study area. It is well-known that cyclists are currently traveling between Leon and Gadsden Counties along this general route, but what specific corridors they are using can be difficult to identify without a formal public engagement process, which was not part of this analysis. Using Strava, the project team was able to identify which corridors could be assumed to be preferred by frequent cyclists by making note of their physical location through GPS tracking via a cell phone or fitness tracker. **Figure 7** shows routes between Orchard Pond Parkway and Salem Road via heatmap, showing routes with high activity in dark blue, and those with less activity in shades of red, pink, orange, and yellow. The data shown in **Figure 7** indicates that a majority of cycling activity in the project vicinity is occurring on main corridors including Iron Bridge Road, Concord Road, Kemp Road, 9th Avenue E, 9th Avenue W, and SR 12. Within Havana town limits, as shown in **Figure 7**, very little activity is occurring off the main corridors outside of one main cycling route along 7th Street NE, 8th Avenue W, 1st Avenue NE, 7th Avenue E, and 2nd Street NE. This data provides a clearer picture of potential opportunities within Havana that help omit high-speed high-volume roads with safety concerns from consideration.

FIGURE 7. STRAVA



Obtained from Strava Metro 2022



ENVIRONMENTAL CHARACTERISTICS

As part of this existing conditions analysis, environmental characteristics were reviewed to identify any major concerns that would limit the feasibility of constructing a 10 to 12-foot multi-use trail if this project moves forward to subsequent PD&E or design phases. The project area and surrounding vicinity is generally made up of rural agricultural lands and residential uses, with some urban land uses and commercial areas located in downtown Havana.

FLOOD ZONES AND WETLANDS

All evaluated corridors are located within Flood Zones A, AE, and X. The flood zones can be described as follows:

- Flood Zone A – 1% annual chance of flooding without base flood elevations established
- Flood Zone AE – 1% annual chance of flooding with base flood elevations established
- Flood Zone X – .2% annual chance of flooding

These flood zones are not expected to be adversely impacted by any of the routes outlined in this document. In instances where flood zones are associated with existing wetlands, design modifications or routes such as constructing a boardwalk for the trail would likely be proposed to minimize wetlands impacts from construction and future use. This would likely only occur in areas surrounding the Ochlockonee River, which is near the southeastern limits of the project. Flood zones are shown in **Figure 8**.

National Wetland Inventory (NWI) data maintained by the United States Fish and Wildlife Service was used to identify wetlands in the project area. Areas identified as wetlands are generally concentrated near the southeastern limits of the project surrounding the Ochlockonee River. Site reconnaissance conducted in May of 2022 indicated that wetlands identified by the NWI do not appear to extend into maintained right-of-way associated with the evaluated corridors, including Iron Bridge Road, Concord Road, and Kemp Road. There are no wetlands within the Havana town limits, nor along 9th Avenue west SR 12. While some wetland impacts may occur as a result of this project, large-scale impacts to flood zones or wetlands are not expected. However, subsequent design or PD&E phases that may be pursued in the future will determine the impacts at a more granular level. Wetlands are shown in **Figure 9**.

SPECIES

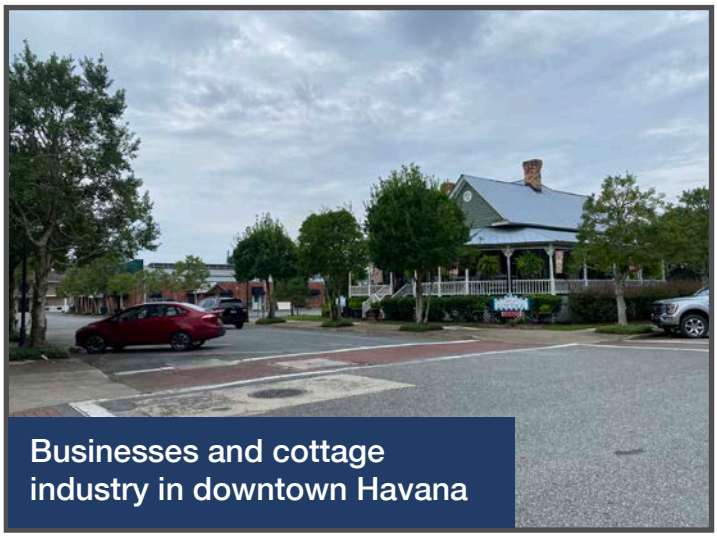
Along the evaluated corridors, GIS data maintained by the Florida Fish and Wildlife Conservation Commission (FWC) indicated that no species of interest have been documented within the vicinity surrounding the corridor. However, preliminary analysis indicated that the corridor is located within wood stork core foraging areas associated with an active colony located approximately 3 miles southwest of the southeastern project limits. Core foraging areas are not uncommon, with the majority of Leon and Gadsden Counties being located within one or within sensitive areas for active nesting colonies. This is shown in **Figure 10**.

Additionally, the Ochlockonee River was identified as threatened and endangered freshwater mussel habitat, which can limit construction associated with transportation projects within a certain distance of identified rivers and associated stream channels. Based on brief review of the FDOT's ***Freshwater Mussel Phase I Programmatic Approach for Transportation Work Activities***, work associated with bikeways and sidewalks are not likely to adversely affect these protected species. However, additional review will be required in subsequent project phases as more specific details become available. Mussel critical habitat is also shown in **Figure 10**.

This project is also located within the East Panhandle Bear Management Unit, in an area identified as having a frequent range of the Florida black bear. Like the wood stork, this designation is fairly common for Leon and Gadsden County and will not cause any major concerns for project feasibility.

HISTORIC AND CULTURAL RESOURCES

Available data from the State Historic Preservation Office (SHPO) was mapped to locate any known historic or culturally significant resources near the corridor. Several historic resource groups, structures, bridges, and cemeteries were identified along the evaluated corridors and in areas surrounding. For the purposes of this existing conditions assessment, only National Register of Historic Places (NRHP) -eligible or -listed resources and structures were mapped and identified. Based on this approach, 14 structures and four linear resources were identified along the evaluated corridors within the Havana town limits. Additionally, two cemeteries were identified along Kemp Road and Iron Bridge Road, but NRHP eligibility information was not available. These sites are listed in **Table 8** and shown in **Figure 11**. In the event this project moves forward, a Cultural Resource Assessment Survey (CRAS) will be completed during the environmental phase of this project to determine impacts to existing and potential SHPO resources and establish an Area of Potential Effects (APE). Cemeteries were also identified and shown in **Table 9**.



Businesses and cottage industry in downtown Havana

TABLE 8. SHPO EVALUATED NRHP-ELIGIBLE AND -LISTED RESOURCES IN THE PROJECT VICINITY

Site Number	Site Name	Type	County
GD00422	Planters Exchange Frame Warehouse	Structure	Gadsden
GD00423	Planters Exchange Truck Shed	Structure	Gadsden
GD00424A	Planters Exchange Store	Structure	Gadsden
GD00424B	Planters Exchange	Structure	Gadsden
GD00424C	Planters Exchange Warehouse Ii	Structure	Gadsden
GD00424D	Planters Exchange Warehouse Iii	Structure	Gadsden
GD00424E	Planters Exchange Warehouse Iv	Structure	Gadsden
GD00424F	Planters Exchange Warehouse V	Structure	Gadsden
GD00424G	Planters Exchange Warehouse Vi	Structure	Gadsden
GD00424H	Planters Exchange Warehouse Vii	Structure	Gadsden

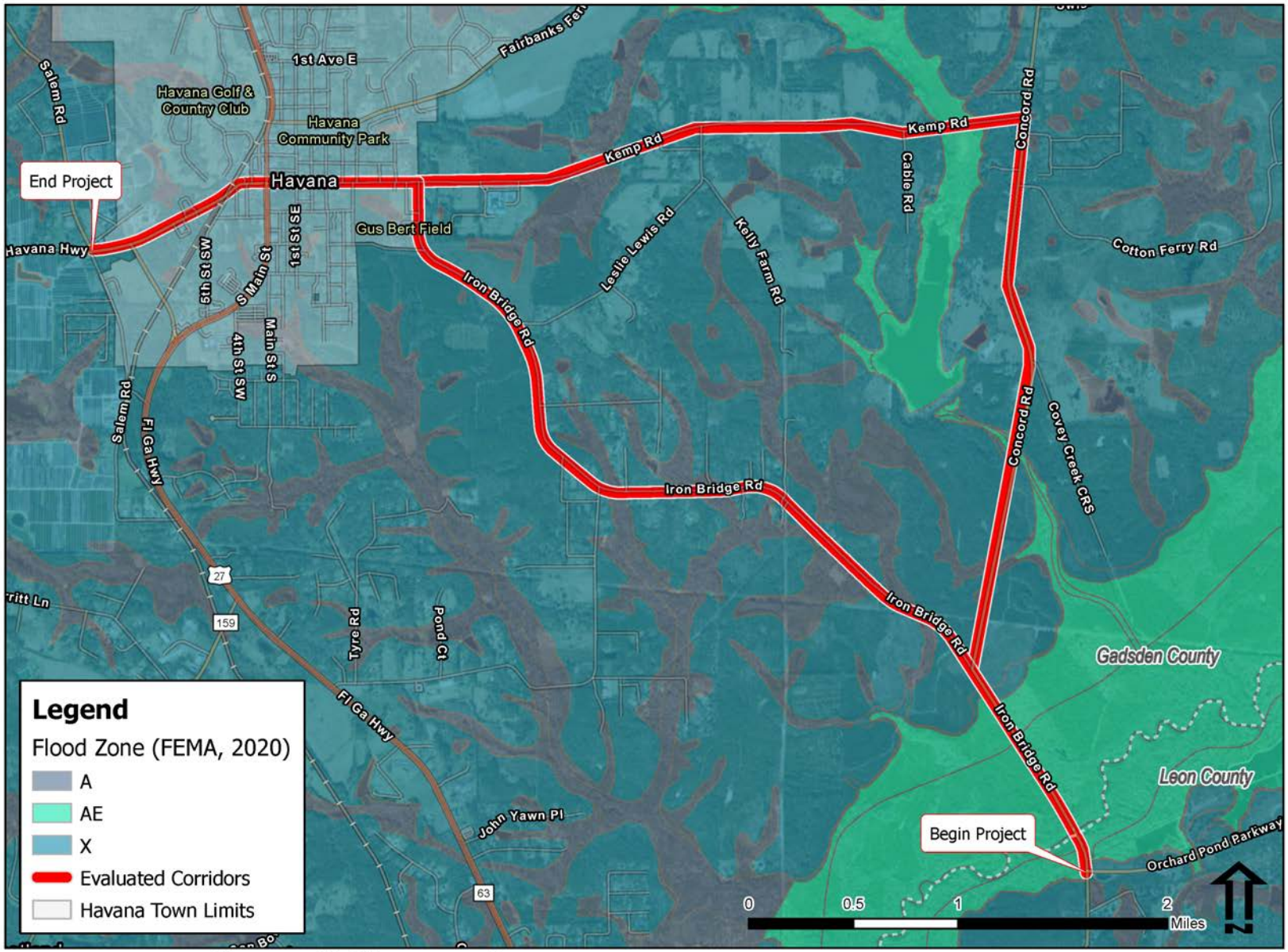
Site Number	Site Name	Type	County
GD00424I	Planters Exchange Fertilizer Elevator	Structure	Gadsden
GD00424J	Planters Exchange Fertilizer Mill	Structure	Gadsden
GD01060	301 9th Avenue West	Structure	Gadsden
GD01061	113 9th Avenue West	Structure	Gadsden
GD01064	Georgia, Florida, And Alabama Railroad	Linear	Gadsden
GD02044	Iron Bridge Road	Linear	Gadsden
LE06152	Old Bainbridge Road	Linear	Leon
LE05976	Orchard Pond Road	Linear	Leon

TABLE 9. ADDITIONAL HISTORIC RESOURCES - CEMETERIES

Site Name	County
Shelfer Cemetery	Gadsden
Piney Grove Primitive Baptist Church Cemetery	Gadsden

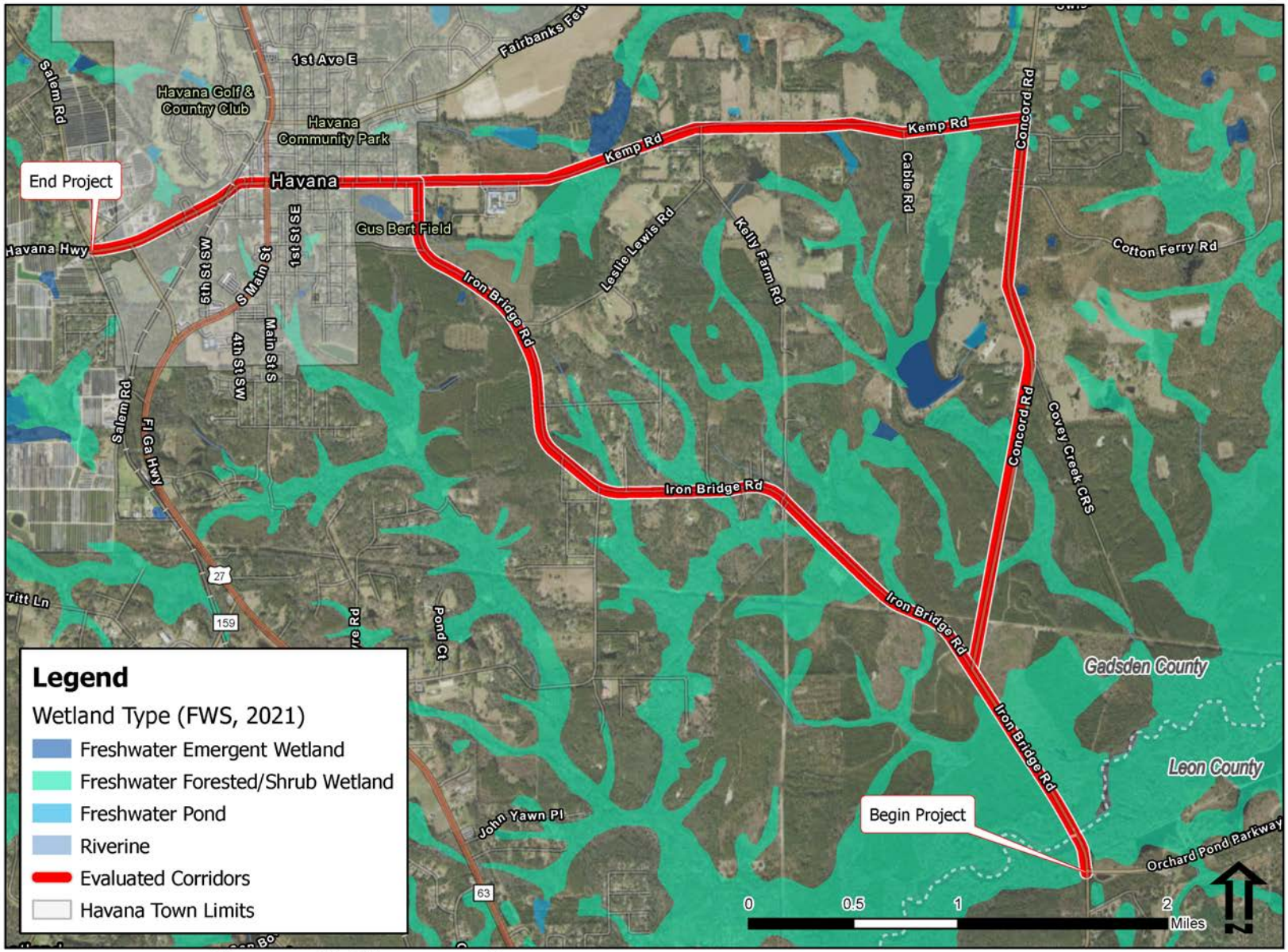
SR 12 outside of Havana city limits has sharrows and a wide shoulder on either side of the corridor

FIGURE 8. FLOOD ZONES



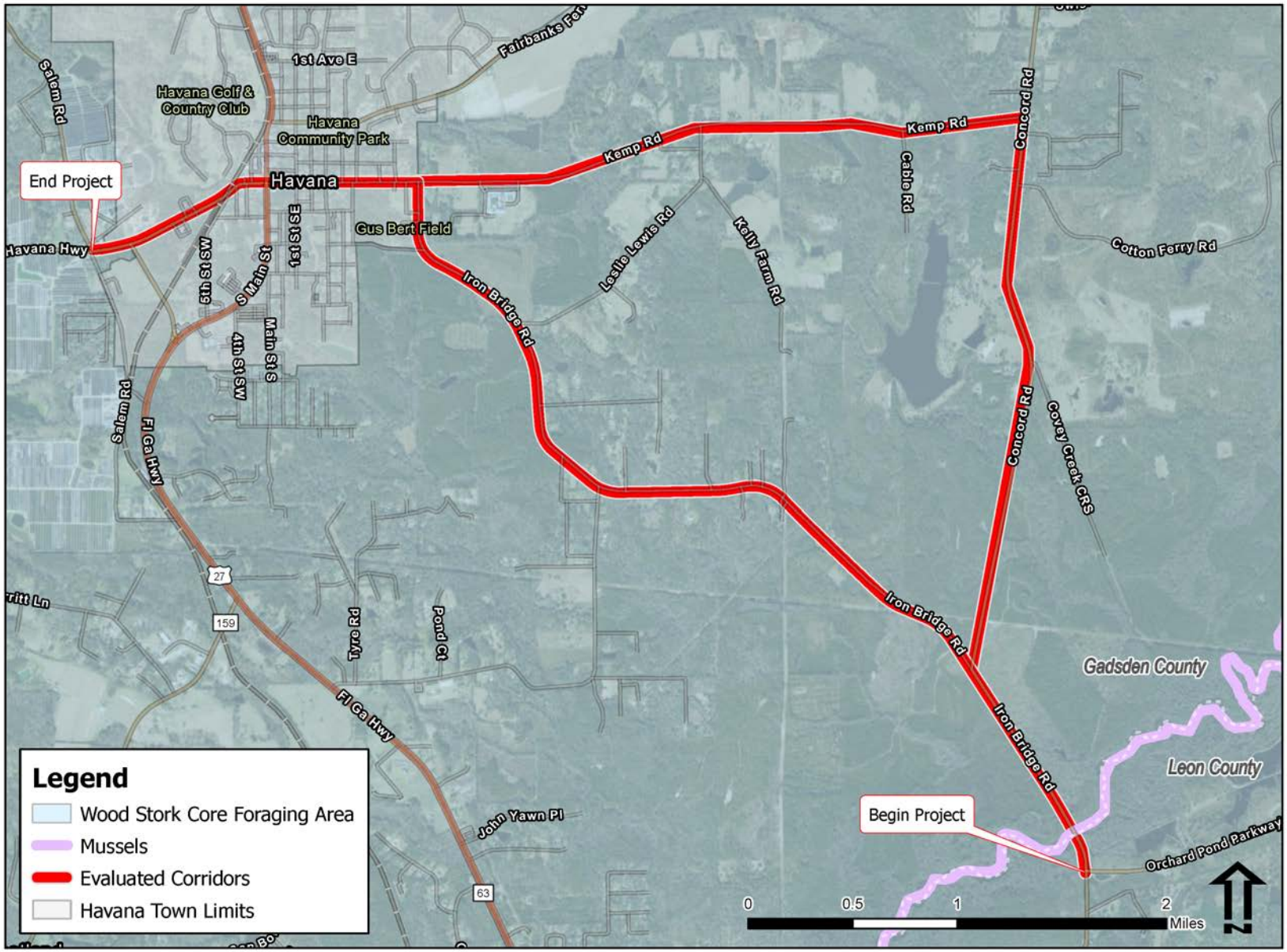
Havana Trail Feasibility Study *Flood Zones*

FIGURE 9. WETLANDS



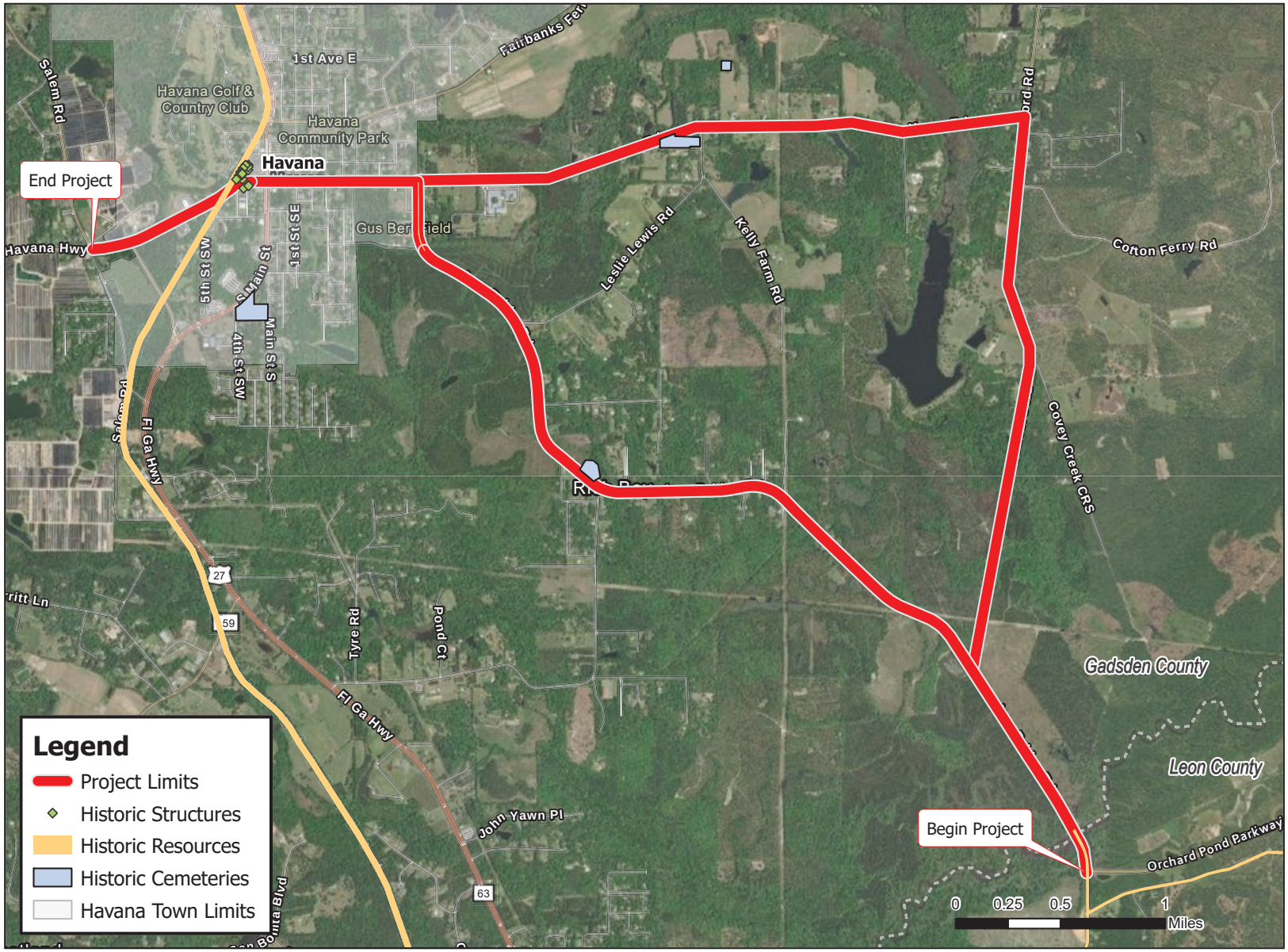
Havana Trail Feasibility Study *Wetlands*

FIGURE 10. SPECIES



Havana Trail Feasibility Study *Species*

FIGURE 11. CULTURAL AND HISTORIC RESOURCES



Havana Trail Feasibility Study *Historic and Cultural Resources*

STAKEHOLDER COORDINATION

As part of the existing conditions phase of this feasibility study, limited engagement was conducted with key stakeholders to introduce the project and solicit feedback. This initial engagement included meetings with the Gadsden County Public Works Department, Gadsden County Growth Management, and the Havana Town Manager. These stakeholders provided valuable feedback that allowed the project team to gain a better understanding of upcoming projects in the project vicinity and gain preliminary information about the perception of a trail project. These meetings were conducted in-person. The stakeholder meetings are summarized in **Table 10** below.

TABLE 10. STAKEHOLDER MEETINGS

Stakeholder	Meeting Date
Gadsden County Public Works *Gadsden County Growth Management*	7/12/2022
Havana Town Manager	7/12/2022

STAKEHOLDER MEETINGS – KEY TAKEAWAYS

Stakeholders were generally enthusiastic about the possibility of a trail

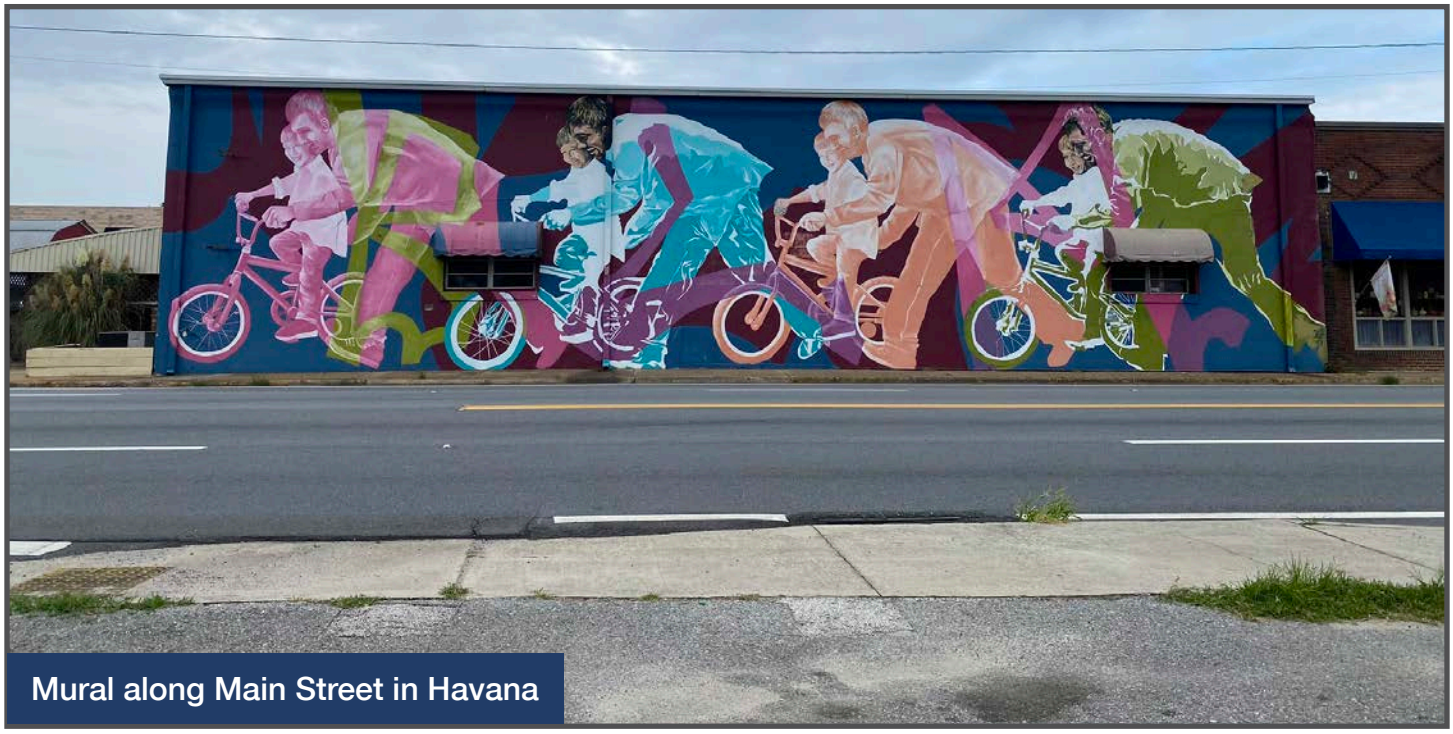
A trail in this location will contribute positively to multimodal connectivity within and beyond Gadsden County

There is significant bicyclist activity throughout the county, and formal facilities would provide safer opportunities for these users.

EVALUATED ALTERNATIVES

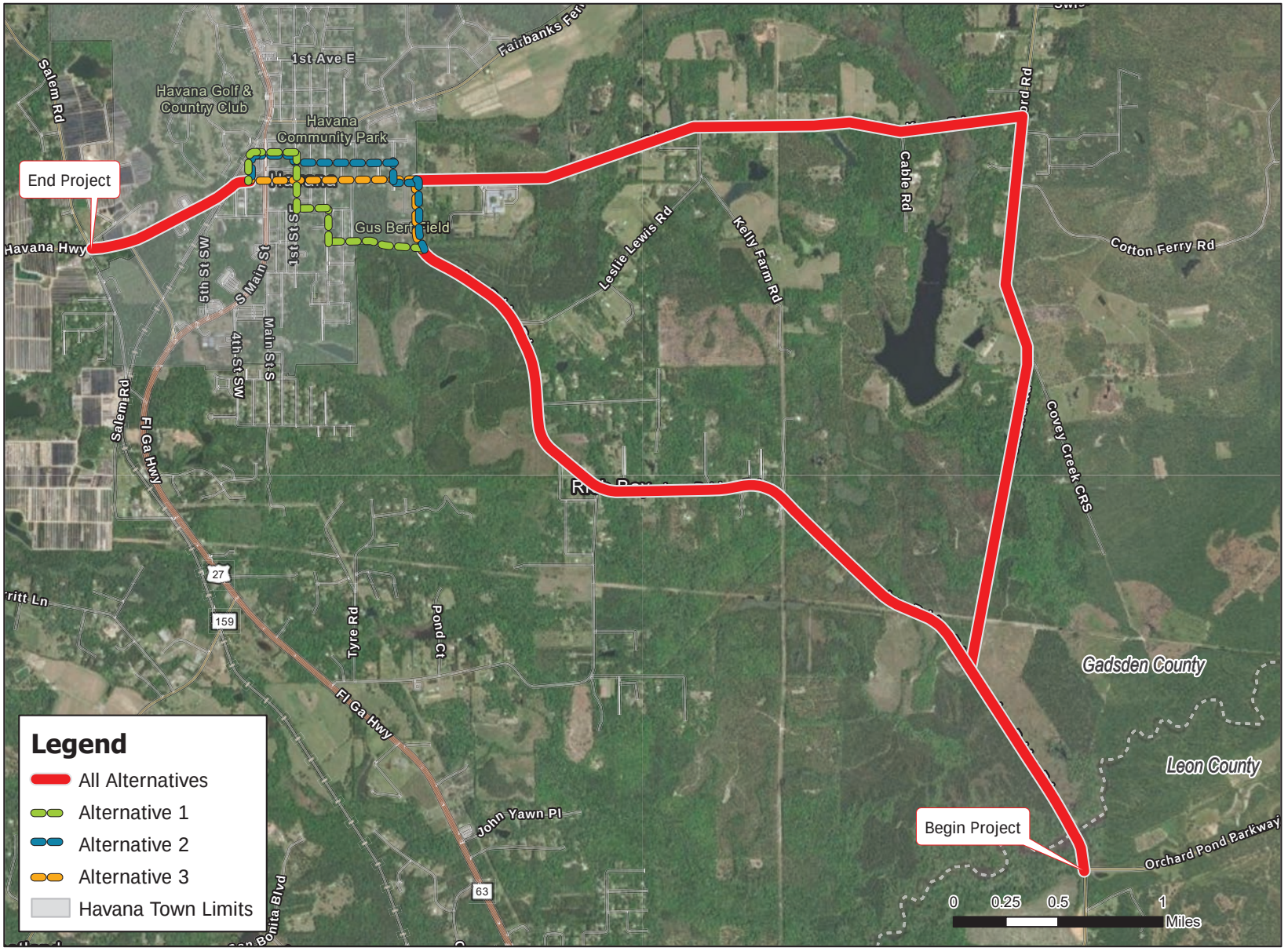
As noted previously, several corridors were evaluated to identify the best alternative for the Tallahassee to Havana Trail. These corridors included Iron Bridge Road, Concord Road, Kemp Road, utility corridors, and 9th Avenue through downtown Havana to Salem Road. Neighborhood streets were also reviewed to identify alternatives to re-route the trail along low-volume, low-speed roads via an on-street bicycle network utilizing sharrows and signage. Using the information obtained through the existing conditions analysis, three viable routes have been identified as alternatives moving forward. This project is not currently programmed to move forward to subsequent environmental or design phases, so a final preferred alternative has not been selected as part of this study.

Each of the identified route alternatives begins at the eastern terminus where Orchard Pond Parkway intersects with Old Bainbridge Road/Iron Bridge Road. All three routes then follow along Iron Bridge Road until the Havana town limits. The main variation between the routes occurs within Havana where ***Alternative 1*** utilizes neighborhood streets south of 9th Avenue E, ***Alternative 2*** utilizes those north of 9th Avenue E, and ***Alternative 3*** remains on 9th Avenue through the downtown to the west side of Havana. Each of the alternatives allows access to commercial areas along 2nd Street NW, and then follows 9th Avenue W/SR 12 to Salem Road, which is the western terminus of this project. All three alternatives are shown in **Figure 12**.



Mural along Main Street in Havana

FIGURE 12. EVALUATED ALTERNATIVES



Havana Trail Feasibility Study *Evaluated Alternatives*

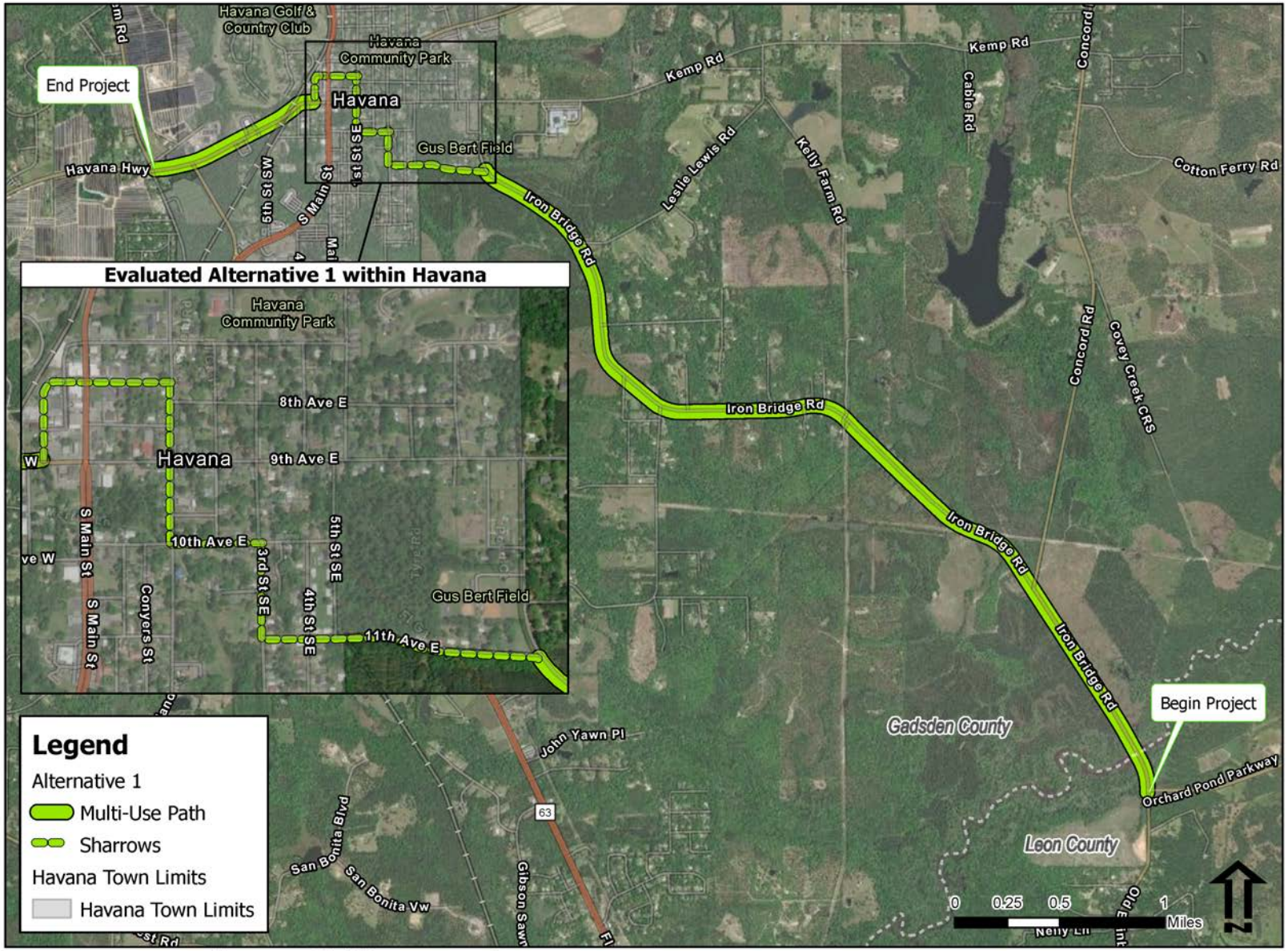
ALTERNATIVE 1

Alternative 1 utilizes Iron Bridge Road beginning at the Orchard Pond Parkway intersection in Leon County to 11th Avenue SE, just south of the 9th Avenue/Kemp Road intersection. Along Iron Bridge Road, right-of-way appears to be sufficient on both sides of the corridor, however, in this alternative, the trail would be optimal on the west side of the corridor to avoid a crossing at 11th Avenue SE. The trail then follows several neighborhood streets (11th Avenue to 3rd Street SE to 10th Avenue E to 1st Street SE to 7th Avenue E) to reach downtown Havana, where restaurants and shops are located on 2nd St NW. This route will then continue along 9th Avenue W/ SR 12 to Salem Road. Along this segment, there is severely constrained right-of-way between 2nd Street NW and the railroad crossing, and creative design features will need to be incorporated to accommodate any type of separated facility on the north side of the corridor. West of the railroad crossing, either side of the corridor appears to have sufficient right-of-way to accommodate a trail. An existing sidewalk on the south side of SR 12 could be widened, but two additional crossings would be needed to follow the trail to the south side of the corridor and then access Salem Road to continue the connection to the north. Alternative 1 is shown in **Figure 13**.

Downtown Havana facing west on 7th Avenue West

ALTERNATIVE 1	
Number of Crossings to be Installed as part of this Alternative (Including railroad crossing)	2 – 5
Right-of-Way Concerns	9th Avenue west SR 12 between 2nd Street SE and railroad
Connectivity Opportunities	Orchard Pond Greenway, Eugene Lamb Jr. Community Park, Shops and Restaurants in Downtown Havana, existing on-street bicycle facilities on SR 12

FIGURE 13. EVALUATED ALTERNATIVE 1



Havana Trail Feasibility Study *Evaluated Alternative 1*

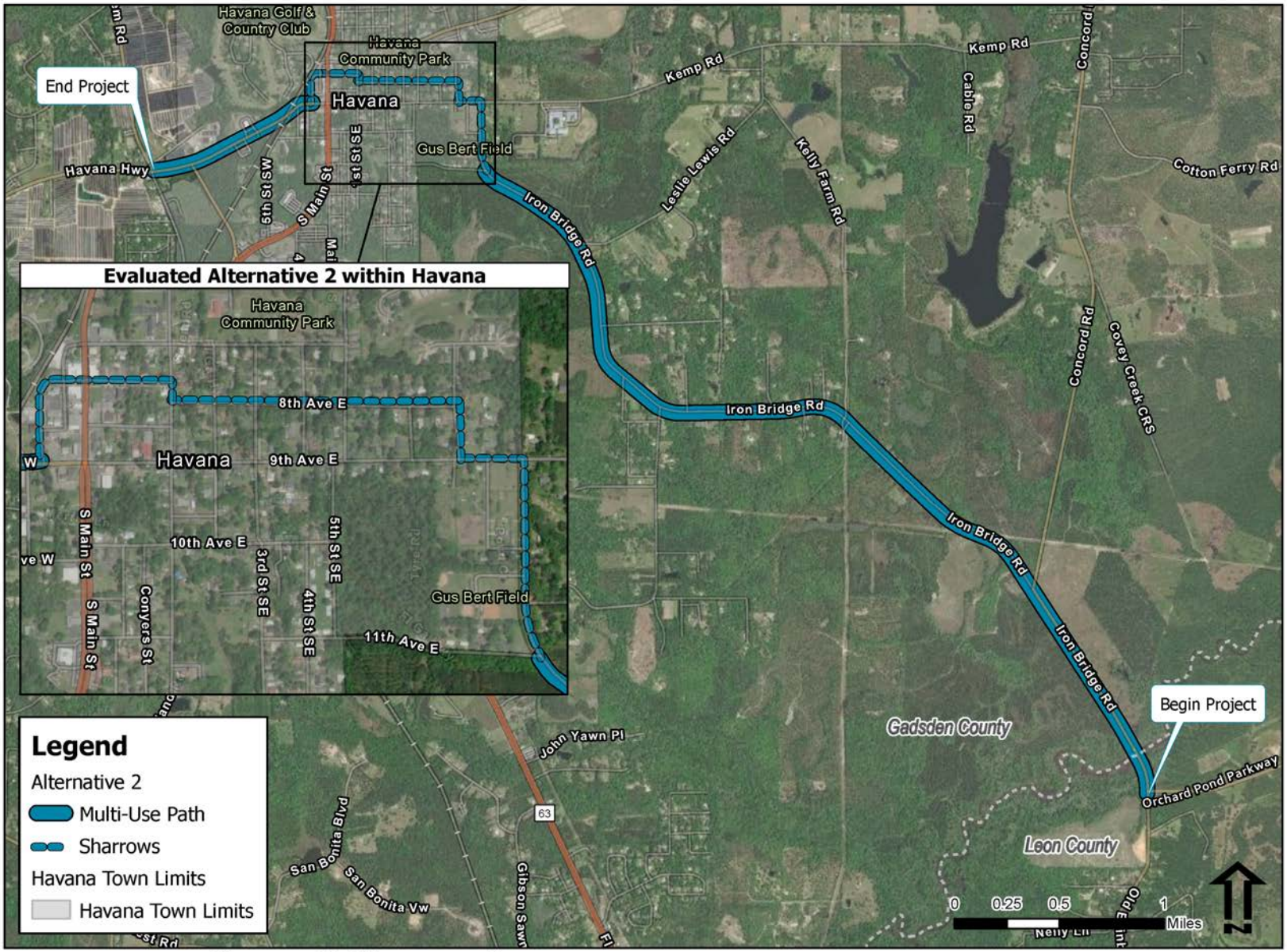
ALTERNATIVE 2

9th Avenue East in Havana town limits

Alternative 2 also utilizes Iron Bridge Road beginning at the Orchard Pond Parkway intersection in Leon County, but the trail remains on this corridor until its terminus at 9th Avenue E/Kemp Road. Along Iron Bridge Road, the trail could be located on either side of the corridor, but the western side of the corridor is preferred due to fewer grade issues. The trail will turn onto 9th Avenue E, and convert to on-street signage and sharrows due to constrained right-of-way along the corridor. The speed limit along this portion of 9th Avenue E is 25 miles per hour, and the route is expected to be located on this main corridor for less than .25 miles. The route will then continue north on 7th Street SE to utilize several neighborhood streets (8th Avenue E to 1st Street NE to 7th Avenue E) to reach downtown Havana, where restaurants and shops are located on 2nd Street NW. This route will then continue along 9th Avenue west SR 12 to Salem Road. Along this segment, there is severely constrained right-of-way between 2nd Street NW and the railroad crossing, and creative design features will need to be incorporated to accommodate any type of separated facility. West of the railroad crossing, either side of the corridor appears to have sufficient right-of-way to accommodate a trail. An existing sidewalk on the south side of SR 12 could be widened, but 2 additional crossings will be needed at the intersection of 2nd Street NW and 9th Avenue W, and Salem Road and SR 12. Locating the trail on the northern side of the corridor limits the need for these additional crossings. Alternative 2 is shown in **Figure 14**.

ALTERNATIVE 2	
Number of Crossings to be Installed as part of this Alternative (Including railroad crossing)	2 – 5
Right-of-Way Concerns	Ninth Avenue west SR 12 between 2nd Street SE and railroad
Connectivity Opportunities	Orchard Pond Greenway, Eugene Lamb Jr. Community Park, Shops and Restaurants in Downtown Havana, existing on-street bicycle facilities on SR 12

FIGURE 14. EVALUATED ALTERNATIVE 2



Havana Trail Feasibility Study *Evaluated Alternative 2*

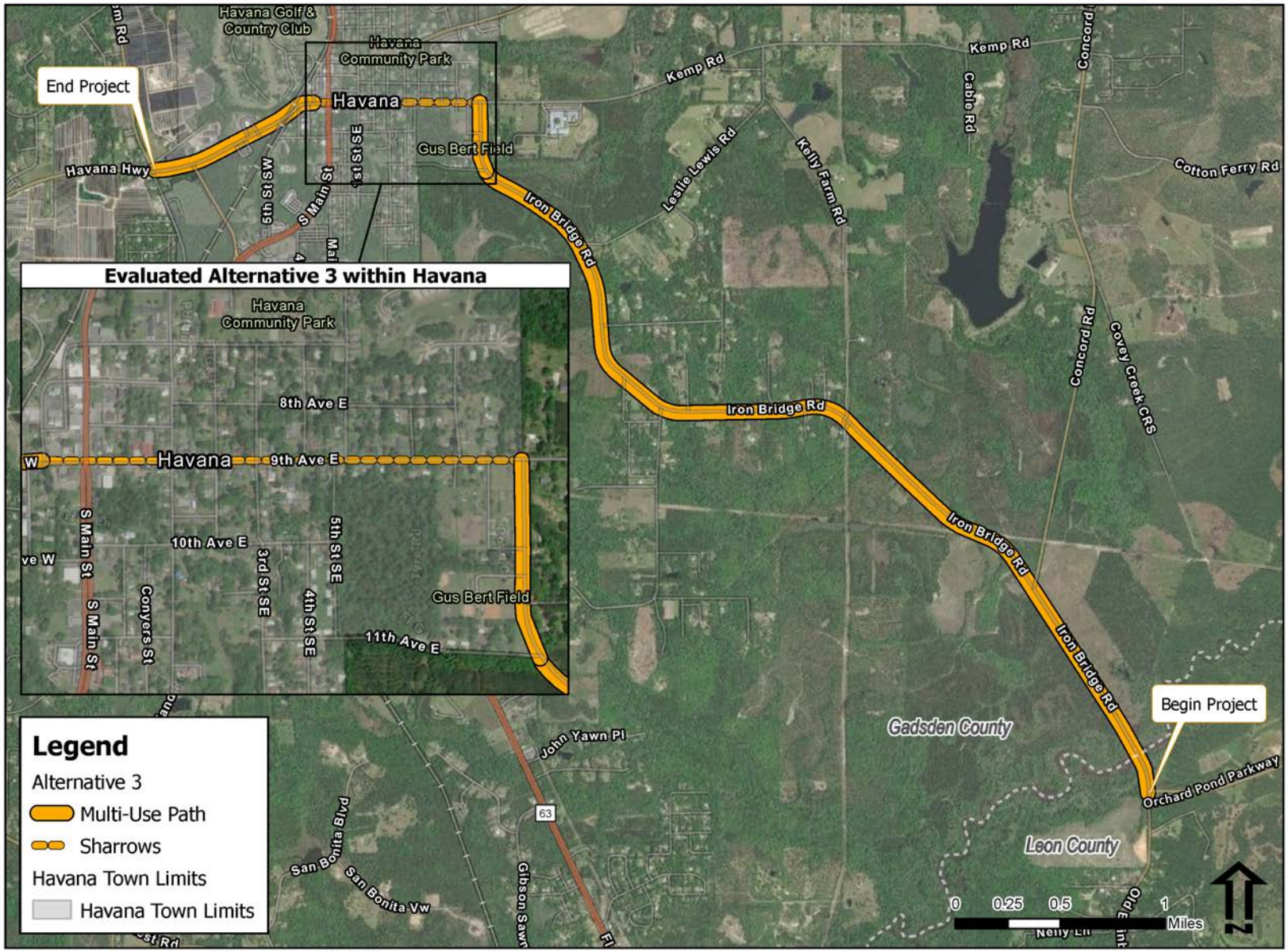
ALTERNATIVE 3

Intersection of 9th Avenue and Main Street in downtown Havana

Like the previously describe routes, Alternative 3 follows Iron Bridge Road to 9th Avenue E/Kemp Road. Along Iron Bridge Road, the trail could be located on either side of the corridor, but the western side of the corridor is preferred due to fewer grade issues. The trail will turn onto 9th Avenue E, and convert to on-street signage and sharrows due to constrained right-of-way along the corridor. The speed limit along this portion of 9th Avenue E is 25 miles per hour. The route continues along 9th Avenue E/W/SR 12 through downtown Havana to the terminus at Salem Road. As with the previously described alternatives, Alternative 3 could transition to a separated 10 to 12-foot trail on either side of the corridor west of 2nd Street NW and the railroad crossing, but the number of crossings would fluctuate depending on which side is selected, potentially increasing safety risks associated with crossing a high-speed corridor several times in a short distance. While speeds and volume appear generally low along 9th Avenue, there are concerns with this route associated with semitruck thru traffic that utilizes 9th Avenue to travel through Havana to destinations to the north and south. Alternative 3 is shown in **Figure 15**.

ALTERNATIVE 3	
Number of Crossings to be Installed as part of this Alternative (Including railroad crossing)	1 - 3
Right-of-Way Concerns	9th Avenue west SR 12 between 2nd Street SE and railroad
Connectivity Opportunities	Orchard Pond Greenway, Eugene Lamb Jr. Community Park, Shops and Restaurants in Downtown Havana, existing on-street bicycle facilities on SR 12

FIGURE 15. EVALUATED ALTERNATIVE 3



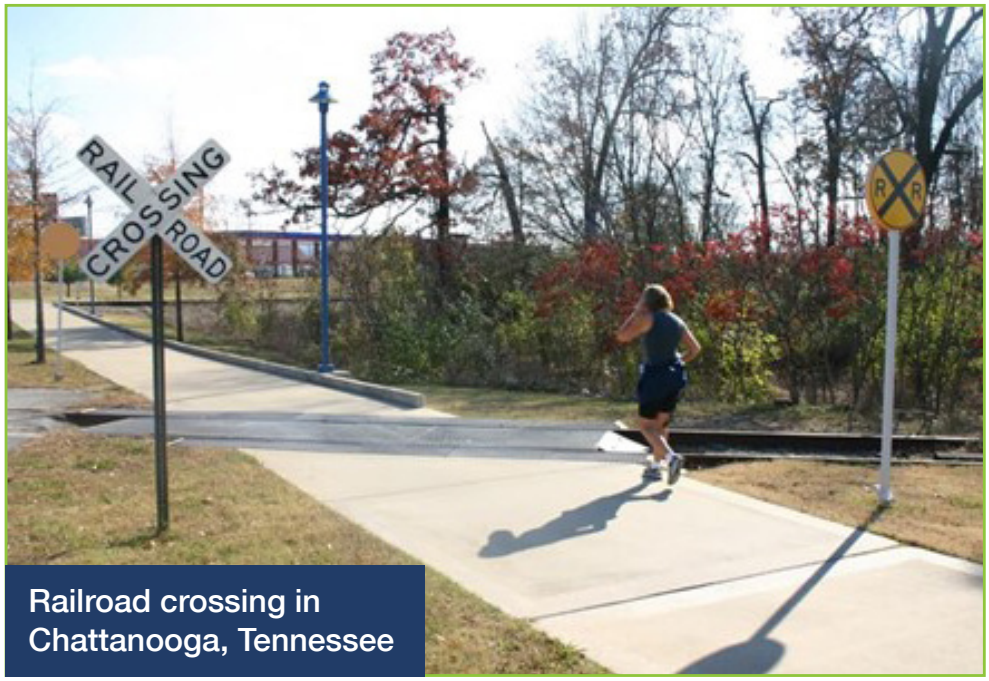
Havana Trail Feasibility Study *Evaluated Alternative 3*

OTHER CONSIDERATIONS

As noted previously, all three of the identified alternatives will cross the railroad along 9th Avenue W/SR 12 on the west Town of Havana town limits. Railroad crossings are understandably a major safety concern for all user types, as trains travel at high speeds with limited ability to stop at short notice if a car or trail user were to appear along the tracks. Despite these safety concerns, many trails throughout the country with railroad crossings have had success in implementing creative design features, signage, rail-accommodating trail surfaces, warning signals, and crossing gates to address these concerns.

Railroad crossing on Willamette River Trail in Portland, Oregon

Currently, the angle of 9th Avenue and its intersection with the railroad tracks may cause sight distance issues if the trail is located on the north side. As this project move into subsequent phases, the railroad crossing should be further evaluated to ensure that safety features are incorporated into design and construction. Examples of trail and railroad crossings are shown throughout this section.



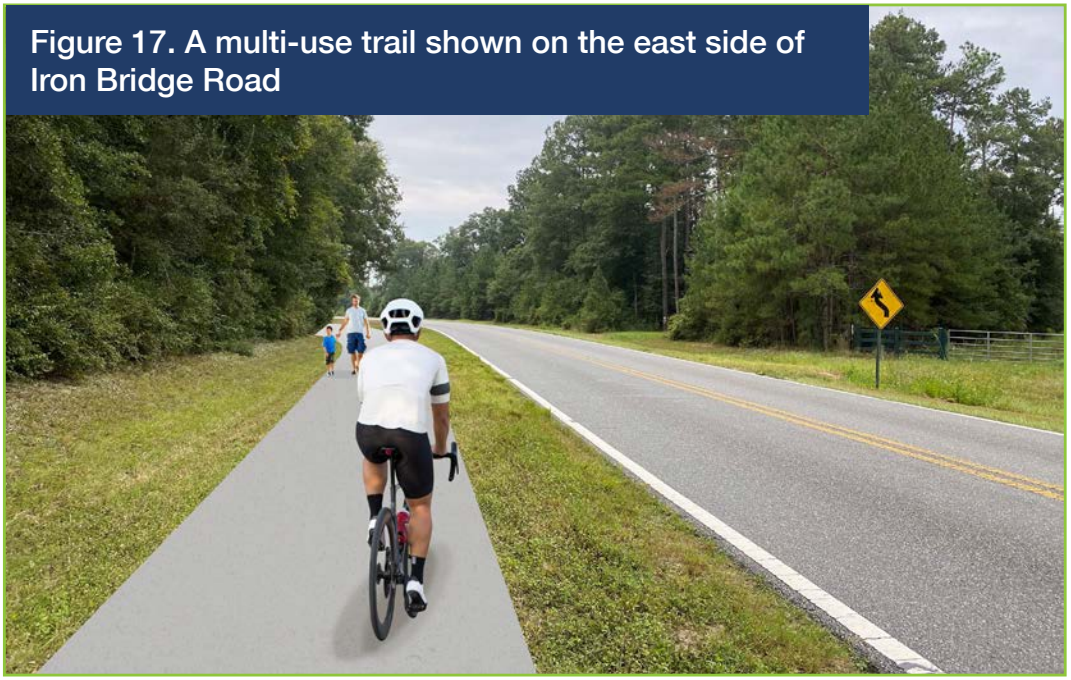
Railroad crossing in Chattanooga, Tennessee

PRELIMINARY RENDERINGS

For the purposes of this study, some preliminary renderings were created to show how the trail might look at common locations between the different alternatives. While not to scale, these conceptual renderings show the features envisioned for a multi-use trail along Iron Bridge Road, and where sharrows within Havana town limits will likely be located and how they may appear. If this project moves forward to subsequent phases, more accurate depictions of trail location, width, and other specifications will be developed. **Figures 16 and 17** show these preliminary renderings.

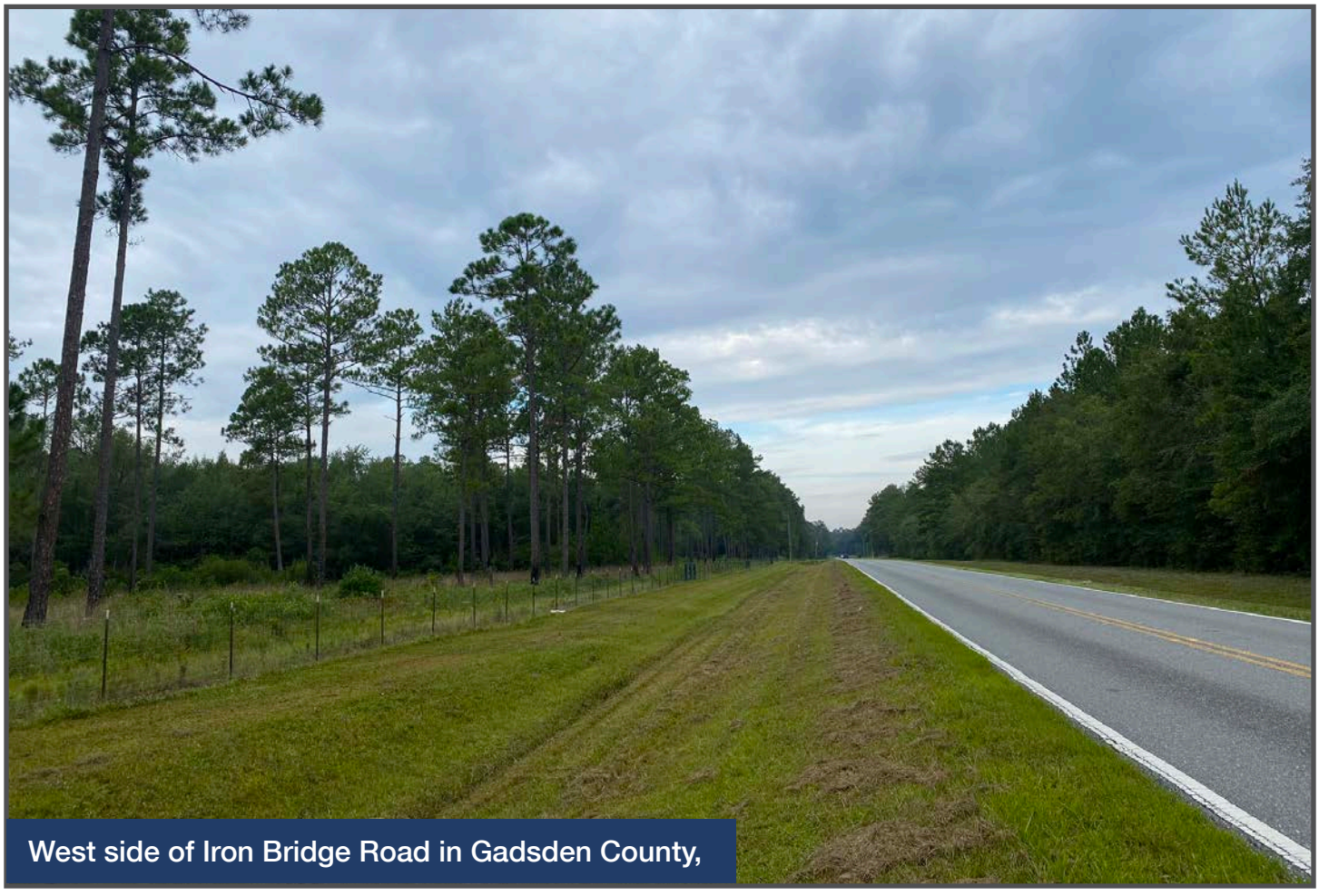
Figure 16. Sharrows along 9th Avenue E

Figure 17. A multi-use trail shown on the east side of Iron Bridge Road



CONCLUSION

The Tallahassee to Havana Trail Feasibility Study was conducted to complete an existing conditions assessment, coordinate with local stakeholders, and identify potential route alternatives to connect Leon County and Gadsden County If this project moves forward to subsequent phases, public engagement will be conducted to allow citizens the opportunity to comment on the routes and provide feedback. Following any engagement phase, this project could potentially move into environmental or design phases. At this time, there is no additional funding or next steps associated with this project. However, due to the ability of the Tallahassee to Havana Trail to contribute positively to both local and regional multimodal connectivity, and its high support from the limited stakeholders contacted as part of this study, it is anticipated that this project will be further explored in the future as interest grows and funds become available. The Tallahassee to Havana Trail can provide numerous opportunities to both local communities and regional trail users for safe connections.



West side of Iron Bridge Road in Gadsden County,