April 16, 2019

AGENDA ITEM 6 B

SOUTHWEST AREA TRANSPORTATION PLAN
DRAFT ORANGE AVENUE CORRIDOR PLAN

TYPE OF ITEM: Discussion

STATEMENT OF ISSUE

The purpose of this item is to present the Draft Southwest Area Transportation Plan (SATP) Orange Avenue Report to the CRTPA Board.

HISTORY AND ANALYSIS

The Southwest Area Transportation Plan (SATP) is a joint project between the Capital Region Transportation Planning Agency (CRTPA) and the Blueprint Intergovernmental Agency (IA) that will address transportation issues in southwest Tallahassee and Leon County. Concurrently, the IA and the Florida Department of Transportation (FDOT) initiated efforts along Orange Avenue or portions of Orange Avenue.

The IA commenced work to amend the Airport Gateway project language to address the integration of the Florida State University (FSU) Southwest Campus as well as further refinement of planning efforts for North and South Lake Bradford Road and Springhill Road. The FDOT began the Orange Avenue (Monroe Street to Capital Circle, Southwest) Project Development and Environment (PD&E) Study that will provide the ultimate solution for long-term capacity issues along the corridor.

The initiation of the PD&E study expedited the Orange Avenue portion of the SATP to meet the demands of the PD&E Study and to allow for local input into the development of the corridor. The SATP Orange Avenue Corridor Plan, shown as ***Attachment 1***, effort included the collection of data such as:

- Future Land Use
- Structures
- Utilities
- Lighting
- Existing Transportation Facilities
- Traffic Trends – Traffic Counts and Bluetooth Data Collection
- Capacity Analysis
- Intersection Analysis
- Crash Analysis
- Environmental Inventory

- Community Cohesion and Demographics
- Historic Sites
- Recreational Areas
- Wetlands and Floodplains
- Future Project Consideration – Capital Circle, SW Widening, Innovation Park Expansion, Airport Gateway, New FSU Corridor, Orange Avenue/Meridian Placemaking, and Orange Avenue PD&E

Additional information was collected from outreach to the Southwest community including Technical Team meetings, 14 Stakeholder meetings, 5 Neighborhood meetings, and two Orange Avenue District Forums.

All of the data that was collected and public outreach efforts are outlined in the Plan and can be found on pages 10 – 65.

The purpose for collecting this information from citizens and various organizations was to develop a picture of the potential that Orange Avenue has based on what is currently in the corridor. This "Picture" is what will be the foundation of the community's vision to pass on to FDOT in the PD&E Study. The following pages contain what the Project Team gathered and heard from the public meetings.

Pedestrian – Existing Conditions

Orange Avenue has sporadically placed sidewalks along the length of the corridor, which appear to be based on existing right-of-way availability. The intermittent sidewalks switching between the north and south sides of the corridor creates a lack of connectivity for pedestrians and has been identified as a major issue along Orange Avenue. From Capital Circle, Southwest, a 4 to 5-foot sidewalk is present along the north side of the corridor continuously to North Lake Bradford Road. From North Lake Bradford Road to Springhill Road, there are no sidewalks present. A pedestrian-desired path can be seen on the south side of the corridor over to Springhill Road, indicating a strong need for pedestrian facilities in this area. The feedback from the public echoed this sentiment, with North Lake Bradford Road to Springhill Road being one of the most highly mentioned locations for pedestrian facilities. Starting at Springhill Road, a sidewalk is present directly adjacent to the road on the south side of the corridor for the remainder of the study area. A sidewalk begins on the north side of the corridor slightly west of Holton Street and continues until Monroe Street and beyond.

Pedestrian Opportunities

<u>Capital Circle, Southwest to South Lake Bradford Road</u>

- 6-foot sidewalk on south side of corridor.
- Replace existing 4 to 5-foot sidewalk on the north side of the corridor and expand to 6 feet.

<u>South Lake Bradford Road to North Lake Bradford Road</u>

- 6-foot sidewalk on south side of corridor.
- Replace existing 4 to 5-foot sidewalk on the north side of the corridor and expand to 6 feet.

North Lake Bradford Road to Springhill Road

- 6-foot sidewalk on south side of corridor.
- Temporary sidewalk on south side of the corridor until road widening occurs.

Springhill Road to Wahnish Way

- 6-foot sidewalk on south side of corridor.
- Extend existing sidewalk on north side of the corridor further west to Springhill Road.

Wahnish Way to Monroe Street

- If sidewalk is replaced on either the north or south side, add 6-foot sidewalk.

Note: 5-foot sidewalk is a minimum width in areas with a utility buffer, but 6-foot sidewalk is desired. In cases where there is an existing sidewalk, the sidewalk should be replaced to be 6-foot if being impacted by the road widening project. FDOT's PD&E will determine impacts to existing sidewalks along Orange Avenue.

"Set back the sidewalk from the back of curb to improve pedestrian safety and comfort"
~ Public Comment from District Forum 1

Multi-Use Path – Existing Conditions

Multi-use paths have become a popular transportation facility over the years, allowing enough space for dual uses. Currently, along Orange Avenue, there are no adjacent multiuse paths. The Tallahassee-St. Marks Historic Railroad State Trail crosses underneath Orange Avenue west of Holton Street with no access to or from Orange Avenue. Many public involvement participants for this plan have expressed the desire for a connection to the Tallahassee-St. Marks Historic Railroad State Trail from Orange Avenue via multi-use path or sidewalk. During the public involvement efforts, the most commonly mentioned facility needed and desired by participants was a multi-use path. Many participants noted that they would not feel safe having only on-street bicycle lanes as an option to ride along Orange Avenue. Several multi-use paths are planned in proximity to Orange Avenue and Capital Circle, Southwest.

Multi-Use Path – Opportunities

Capital Circle, Southwest to South Lake Bradford Road

- Construct a 12-foot multi-use path along the south side of the corridor.
- Remove existing sidewalk and construct a 12-foot multi-use path along the north side of the corridor.

South Lake Bradford Road to North Lake Bradford Road

- Construct a 12-foot multi-use path along the south side of the corridor.
- Remove existing sidewalk and construct a 12-foot multi-use path along the north side of the corridor.

North Lake Bradford Road to Springhill Road

- Construct a 12-foot multi-use path along the south side of the corridor.
- Construct a 12-foot multi-use path along the north side of the corridor.

Springhill Road to Wahnish Way

- Remove existing sidewalk and construct a 12-foot multi-use path along the south side of the corridor.
- Remove existing sidewalk and construct a 12-foot multi-use path along the north side of the corridor.

Wahnish Way to Monroe Street

- Remove existing sidewalk and construct a 12-foot multi-use path along the south side of the corridor.
- Remove existing sidewalk and construct a 12-foot multi-use path along the north side of the corridor.

"For bicycle and pedestrian amenities – prefer multi-use path as it is safer for all, in my opinion"
~ Public Comment from District Forum 2

Crosswalks – Existing Conditions
Along Orange Avenue, the following signalized intersections have existing crosswalks:

- Springhill Road
- Pasco Street
- Wahnish Way
- Adams Street
- Monroe Street

Because of the intermittent and inconsistent sidewalks and lack of crosswalks, pedestrians have unsafe connectivity options along the entire corridor. There is also a lack of crossings near R. Frank Nims Middle School, with the only pedestrian crossing located at Pasco Street east of the school. Many participants during the public outreach efforts expressed the need for an additional signalized crossing on the west side of the school as many kids are crossing there already. Another crossing location mentioned multiple times was near the Liberty Park neighborhood just east of North Lake Bradford Road. A heavily used transit stop is located on the northern side of Orange Avenue near this location. Many residents in and near Liberty Park cross Orange Avenue without any facility to access this transit stop. Another location mentioned needing a pedestrian crossing is the Florida A&M University community garden on the south side of Orange Avenue, just east of Wahnish Way. Students from the Florida A&M University Development Research School use the community garden and have no safe way to cross the four-lane section of Orange Avenue. All new crossings added along Orange Avenue should be signalized pedestrian crossings.

Crosswalks – Opportunities

Capital Circle, Southwest to South Lake Bradford Road

- Capital Circle, Southwest and Orange Avenue intersection.
- Crossing from South Lake Bradford Road to north side of Orange Avenue to access Paul Dirac Road.

South Lake Bradford Road to North Lake Bradford Road

- Reliant upon location of new FSU Road Location.

North Lake Bradford Road to Springhill Road

- Crossing from Liberty Park Neighborhood (Lake Henrietta Street) to north side of Orange Avenue.

Springhill Road to Wahnish Way

- Crossing from R. Frank Nims Middle School (Holton Street) to north side of Orange Avenue.
- Possibility for a pedestrian bridge instead of a crossing here.

Wahnish Way to Monroe Street

- Crossing from FAMU Community Garden to FAMU DRS school.

"Additional features needed are audible crosswalks, as well as delayed timed crosswalks to accommodate safe travel for the disabled and the elderly."
~ Public Comment from District Forum 1

Pedestrian Refuge Islands – Existing Conditions

From Capital Circle, Southwest to Wahnish Way, Orange Avenue is a two-lane undivided corridor. After Wahnish Way, Orange Avenue has an additional two turn-lanes and then becomes a four-lane undivided corridor with left-hand turn lanes. With such high volumes of both pedestrians and motor vehicles, it is important for pedestrians to feel safe and have refuge when crossing Orange Avenue. Pedestrian refuge islands or raised medians should be located where there is not a signalized intersection or crossing. If possible, during the road widening of Orange Avenue, a median should be placed throughout to serve as refuges for pedestrians and cyclists along the corridor.

Pedestrian Refuge Island - Opportunities

Capital Circle, Southwest to South Lake Bradford Road

- South Lake Bradford Road and Paul Dirac Road.

South Lake Bradford Road to North Lake Bradford Road

- Proposed FSU Road if no signalized intersection is constructed.

North Lake Bradford Road to Springhill Road

- In conjunction with any improved crossing from Liberty Park to north side of Orange Avenue.

Springhill Road to Wahnish Way

- Signalized crosswalk at Nims Middle School with pedestrian refuge for safe student crossings.

Wahnish Way to Monroe Street

- South Adams Street – Add pedestrian refuges to medians that run along Orange Avenue.

"Include raised, planted medians to facilitate crossings by pedestrians and improve the appearance of the corridor."
~ Public Comment from District Forum 1

Bicycle Lanes – Existing Conditions

East of Monroe Street, during the widening of Orange Avenue, 4-foot bicycle lanes were added to the corridor along with a 5-foot sidewalk and 3-foot grass buffer between the sidewalk and curb on both the north and south side of the street. Once you reach Monroe, the bicycle lanes cease to exist. There is a 6-foot sidewalk on both sides of the corridor. These continue until Wahnish Way as 5-foot sidewalks with a 3-foot buffer and a 1-foot shoulder. The sidewalk returns to 6 feet with no buffer on the north side of the corridor between Adams and Wahnish Way. The 1-foot shoulder also becomes a 2-foot shoulder west of Wahnish Way, and the sidewalks return to a 5-foot width with a 3-foot buffer. The sidewalk continues in front of Nims Middle School, becoming a 4-foot sidewalk with utility blockage and access management issues.

West of the Leon County Health Department on the north side of the corridor, the paved shoulder on both sides becomes a 4-foot bike lane that varies in size due to the limited right-of-way. The bike lane abruptly ends about .3 mile west of the Health Department. A 6-foot bike lane begins on both sides west of Springhill Road, reduces to a 5-foot lane near Cypress Lake Road and ends at Pottsdamer Street, continuing as a wide paved shoulder, leaving nearly 2.5 miles without a bike lane before reaching Capital Circle, Southwest. A 5-foot sidewalk set back from the roadway about 5 feet reappears along this route on the north side of the corridor just west of the start of North Bradford Lake Road and continues to Capital Circle, Southwest.

Bicycle Lanes – Opportunities

Capital Circle, Southwest to South Lake Bradford Road

- Construct a multi-use path.
- Add a 7-foot buffered bike lane.

South Lake Bradford Road to North Lake Bradford Road

- Construct a multi-use path.
- Add a 7-foot buffered bike lane.

North Lake Bradford Road to Springhill Road

- Construct a multi-use path.
- Add a 7-foot buffered bike lane.

Springhill Road to Wahnish Way

- Construct a multi-use path.
- Add a 7-foot buffered bike lane.

Wahnish Way to Monroe Street

- Construct a multi-use path.
- Add a 7-foot buffered bike lane.

Note: If right-of-way restrictions don't allow for a 7-foot buffered bike lane, 6 feet or 5 feet would be acceptable.

"Orange Avenue east of Monroe is great for confident cyclists, but not for casual cyclists, and it's unpleasant for walkers."
~ Public Comment from District Forum 1

Connections to St. Marks Trail – Existing Conditions
The Tallahassee-St. Marks Historic Railroad State Trail extension runs along the former CSX rail corridor and passes underneath Orange Avenue between Wahnish Way and Springhill Road. There is currently no connection between the trail and Orange Avenue, limiting access between the two facilities, nearby residents and businesses, and schools. Many participants during the outreach efforts expressed a need to make a safe connection between the trail and Orange Avenue.

Connections to St. Marks Trail – Opportunities

- Construct a new four-lane bridge and access facilities on either side of Orange Avenue for bicyclists and pedestrians.
- Construct Orange Avenue at grade and construct the trail as a bridge over the corridor.
- Construct Orange Avenue and the trail both at grade and have a signalized crossing for trail users.

"Pedestrian and bike connectivity to St. Marks Trail at Orange Avenue from the west is needed. There are lots of paths through the trees, and pedestrians need something better."
~ Public Comment from District Forum 1

Transit – Existing Conditions
Along Orange Avenue, the following types of StarMetro Transit stops exist:

- No seating – pole only
- Two seats with bus stop pole
- Bench with bus stop pole
- Shelter

From Monroe Street to Wahnish Way, one shelter type stop exists, providing coverage and seating for people waiting for the bus. They are located on only one side of the corridor, however— one on the north side and the other further west on the south side, leaving people on the opposite side without shelter or much seating. Between Wahnish Way and Springhill Road, there are three two-seat with bus stop pole stops, and two with no seating. There is one shelter near the intersection of Orange Avenue and Wahnish Way. From Springhill Road to Capital Circle Southwest, there are five bus stops, none of which provide seating. The bus route runs consistently along the corridor but ends at Eisenhower Street, about one mile from Capital Circle Southwest. Existing census data regarding vehicle ownership in the area indicates the need for better transit availability and infrastructure in this area. The following opportunities and recommendations regarding transit facilities along Orange Avenue will be provided to StarMetro for consideration.

Transit – Opportunities

Low Limited seating, structure
Medium Seating, structure/shelter, trash cans, lighting
High Ample seating, structure/shelter, trash cans, lighting, wayfinding, bicycle racks

<u>Capital Circle Southwest to South Lake Bradford Road</u>

- Low Transit Amenities.

<u>South Lake Bradford Road to North Lake Bradford Road</u>

- Low to Medium Transit Amenities.

<u>North Lake Bradford Road to Springhill Road</u>

- Low to Medium Transit Amenities.

<u>Springhill Road to Wahnish Way</u>

- Medium to High Transit Amenities.
- Relocate the bus stop in front of Nims Middle School to opposite side of Orange Avenue.

<u>Wahnish Way to Monroe Street</u>

- Medium to High Transit Amenities.

"Put covered areas at each bus stop along Orange Avenue."
~ Public Comment from District Forum 1

Roadway – Existing Conditions

The existing and future conditions analysis indicated that a portion of Orange Avenue is experiencing congestion and capacity issue today, and this is expected to continue, the entire corridor is expected to operate over capacity.

In addition, the crash data indicated that 52% of crashes were rear-end crashes. Rear-end crashes are indicative of congestion. Many of the segment's yearly crash rates are over the statewide average and indicate that there is a safety issue along the corridor. Public involvement comments identified congestion at the signalized intersections to be a concern.
Future development in the area has the potential to impact the corridor with traffic pattern changes, additional intersections, and the need for additional improvements to the bicycle, pedestrian, and transit infrastructure.

Right-of-way along the corridor varies and will be considered as part the future PD&E phase through FDOT.

Roadway - Opportunities

Signalized Intersection improvements

- All intersection reconstruction, new construction and safety improvements shall evaluate roundabouts as a potential solution per the current FDOT policy on roundabouts.
- Intersection retiming and coordination improvements may decrease the delay experienced the signalized intersections during peak periods.

Capacity Improvements

- The corridor four-lane typical section should tie into the eastern section of Orange Avenue east of South Monroe Street that was improved in 2013 to accommodate an increase in traffic volume along with improved pedestrian and bicycle facilities.
- Majority of crashes over the last five years on Orange Avenue were rear-end collisions, indicating congestion. Alleviating that congestion with increased capacity along the corridor will impact the crash rate and improve the corridor safety.

Capital Circle, Southwest

- FDOT's Capital Circle Southwest road widening project is anticipated to provide additional capacity at the intersection of Capital Circle Southwest and Orange Avenue alleviating some of the congestion experiences in existing conditions.

Access Management

- Access management should be considered when providing any improvements along the corridor. Good access management improves safety at driveways, safety for pedestrians and bicyclists, and helps direct traffic advantageously for businesses and operations along the corridor.

Future Volumes

- Future traffic volumes indicate that the roadway segment from South Lake Bradford Road to South Monroe Street is expected to operate over capacity by the year 2040 and the entire corridor is expected to be over capacity by the year 2045. The coupling of the existing crash rates and types and the projected future capacity constraint supports the opportunity for widening the corridor to four lanes. A more detailed traffic analysis will be conducted during FDOT's PD&E study and will determine the ultimate capacity needs along the corridor.

"For future growth, the corridor should include at minimum a 4-lane roadway."
~ Public Comment from District Forum 1

Summary of Opportunities

Capital Circle, Southwest to South Lake Bradford Road

This segment of the Orange Avenue Corridor from Capital Circle Southwest to South Lake Bradford Road is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis). An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. The preferred opportunity would be to four-lane the corridor, add a 12-foot multi-use path on one side of the corridor, and add a 6-foot sidewalk on the other side of the corridor. Whichever side of the corridor that the multi-use path should be constructed on will be determined during the PD&E study to reduce right-of-way and environmental impacts. Low to medium transit amenities should be included in this section for increase comfort of transit users. A moderately landscaped median should also be included in the typical section for the corridor to serve as a pedestrian refuge. This segment of the corridor should also include potential intersection realignment and improvements near South Lake Bradford Road, Orange Avenue, and Paul Dirac Road.

South Lake Bradford Road to North Lake Bradford Road

This segment of the Orange Avenue Corridor from South Lake Bradford Road to North Lake Bradford Road is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis). An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. The preferred typical section includes four-laning the existing two-lane section, adding a 12-foot multi-use path to one side of the corridor, and adding a 6-foot sidewalk to the other side of the corridor. Whichever side of the corridor that the multi-use path should be constructed on will be determined during the PD&E study to reduce right-of-way and environmental impacts. Low to medium transit amenities should be included in this section. With the proposed new north-south road through Florida State University property North of Orange Avenue in this segment.

North Lake Bradford Road to Springhill Road

This section of the Orange Avenue Corridor has many residents and some businesses located directly adjacent to the corridor and is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis) An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this

section. This segment also has high pedestrian traffic so the preferred opportunity for pedestrian facilities would be to add a 12-foot multi-use path on one side of the corridor and add a 6-foot sidewalk on the other side of the corridor. Whichever side of the corridor that the multi-use path should be constructed on will be determined during the PD&E study to reduce right-of-way and environmental impacts. A median in this segment would be preferred as a pedestrian refuge since there is so much pedestrian traffic. This segment will also require a signalized pedestrian crossing at the Liberty Park neighborhood. Low to medium transit amenities should be included especially near transit stop located near Lake Mary Street. Intersection improvements are needed at Orange Avenue and North Lake Bradford Road as well as at Springhill Road.

Springhill Road to Wahnish Way

This existing two-lane section of the Orange Avenue Corridor is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis). An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. The preferred opportunity would be to four-lane the corridor, add a 12-foot multi-use path to one side of the corridor, and add a 6-foot sidewalk on the other side of the corridor. This section is currently operating over capacity warranting corridor expansion. Also, in this segment, it is recommended that a connection between Orange Avenue and the Tallahassee-St. Marks Historic Railroad State Trail via multi-use path or sidewalk is constructed during the road widening project. A signalized pedestrian crossing was heavily supported connecting R. Franks Nims Middle School to the north side of the corridor. Currently, the only crossing from the school to the opposite side of the corridor is at Pasco Street; this deters students who are traveling to the west of the school from using the crossing. Medium to high transit amenities should be included in this section due to the number of business located here, and the number of neighborhoods connected to the north and south of Orange Avenue. The bus stop in front of R. Frank Nims Middle School should be considered for relocation as well. This segment of the corridor should also include intersection improvements at Pasco Street.

Wahnish Way to Monroe Street

This segment is the only existing four-lane portion of the Orange Avenue corridor in the Southwest area plan. This area should have improved multi-modal facilities including a 12-foot multi-use path on either the north or south side of the corridor. The existing sidewalk should remain on the side of the corridor that does not have the multi-use path. A pedestrian crossing should be constructed between the FAMU garden and the FAMU Development and Research School. Medium to high transit amenities should be included in this section to the high proximity to Florida A&M University and businesses.

Typical Sections

Figure 1 and ***Figure 2*** show two typical sections. The community preferred typical is consistent to what is displayed ***Figure 1*** which contains a sidewalk and multiuse path. The other typical section, ***Figure 2***, was also presented to the public and was not preferred due to the increased right-of-way impact and the lack of a shared use path.

Figure 1

Figure 2

Corridor Summary

Through extensive public outreach and stakeholder input, a variety of possible multi-modal improvements for Orange Avenue have been proposed. The improvements include the need for safe and more connected pedestrian facilities such as continuous sidewalks, multi-use path along the entirety of the corridor, and pedestrian crossings near high traffic areas. Public and stakeholder

input also indicated the desire for better bicycle facilities and transit amenities to accommodate the variety of user types often seen along Orange Avenue. Future traffic volumes indicate that the roadway segment from South Lake Bradford Road to South Monroe Street is expected to operate over capacity by the year 2040 and the entire corridor is expected to be over capacity by the year 2045. The crash rates over the last five years show rates that are above the statewide average for similar facilities and majority of crash types are rear-end crashes which are indicative of congestion. The coupling of the existing crash rates and types and the projected future capacity constraint supports the opportunity for widening the corridor to four lanes.

The opportunity improvements identified in this corridor plan are based on both data analyses along with public and stakeholder input. It is recommended Florida Department of Transportation Project Development and Environment (PD&E) Study for Orange Avenue consider the opportunity improvements. Coordination with the Capital Region Transportation Planning Agency, Blueprint Intergovernmental Agency, Leon County and the City of Tallahassee should continue as the PD&E better identifies which of the opportunities seem most feasible for implementation.

NEXT STEPS

- Any comments the Board has will be incorporated into the Orange Avenue Corridor Plan.
- The Project Team will move forward to meet with the FDOT PD&E Project Team to discuss the Orange Avenue corridor and the Plan results.
- The Project Team will move forward with completing the Lake Bradford (North and South) and Springhill Road corridor document.
- A final "Area Wide" public meeting will be held in May to present the Orange Avenue Report and the Lake Bradford (North and South) and Springhill Road Corridor Reports. CRTPA staff will provide the Board information for the public meeting when the date is established.
- Prepare the final Southwest Area Transportation Plan document.

Southwest Area TRANSPORTATION PLAN

Orange Avenue

Corridor Plan

APRIL 4, 2019

CRTPA CAPITAL REGION

BLUEPRINT INTERGOVERNMENTAL AGENCY

Kimley»Horn

Table of Contents

Appendix

Introduction and Project Background

Orange Avenue, along with Springhill Road, North Lake Bradford Road, and South Lake Bradford Road, make up the transportation corridors for the Southwest Area Transportation Plan. The purpose of the Plan is to identify transportation improvements for the Southwest Area Transportation corridors. The improvement opportunities identified include operational and multimodal improvements and future transportation enhancements.

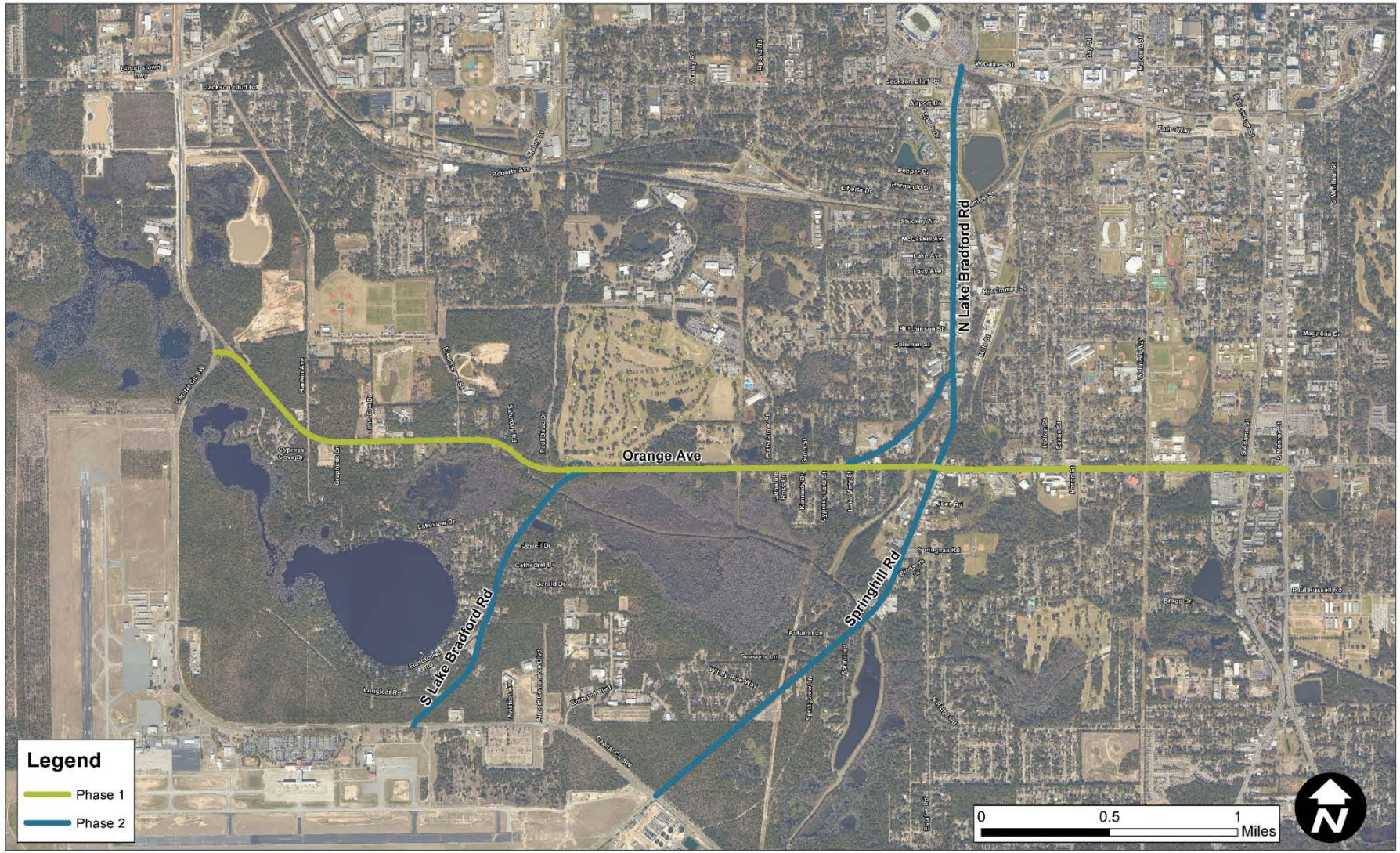
Figure 1. Orange Avenue Corridor

The Florida Department of Transportation (FDOT) previously identified Orange Avenue (SR 371; SR 373) for a road widening project, with a Project Development and Environment (PD&E) study beginning in late 2018. Due to this FDOT project, the Southwest Area Transportation Plan has been divided into two-phases, focusing first on Orange Avenue, ahead of the PD&E study. Phase 2 Corridor Plan will focus on North Lake Bradford Road, South Lake Bradford Road, and Springhill Road, and both phases will be incorporated into a final Southwest Area Transportation Plan.

The information gathered and evaluated regarding the first phase of the Southwest Area Transportation Plan is summarized in this corridor plan, which outlines the transportation improvement opportunities for Orange Avenue (SR 371; SR 373) from Monroe Street (SR 61) to Capital Circle Southwest (SR 263) **Figure 1**. This Plan encourages FDOT to consider the information outlined herein during the evaluation of the feasibility of recommended facilities along Orange Avenue in relation to environmental, cultural, historical, right-of-way, and contamination issues. The recommended facilities along Orange Avenue will be determined through the finalized PD&E study. **Figure 2** shows the Southwest Area Transportation Plan corridors and the phased approach to public outreach conducted for the Plan.

Existing conditions along Orange Avenue are outlined in this document for public consumption and technical guidance along with the data collection and analyses that took place. Public outreach efforts and recurring topics heard from participants during the multiple outreach efforts are also incorporated. The opportunities to address the multiple user types along Orange Avenue, future transportation needs, and recommended typical sections are provided for consideration for the PD&E study.

Figure 2. Southwest Area Transportation Plan Corridors and Phases



Overall Project Goal

The objective for the Southwest Area Transportation Plan is to create a vision for the area that is consistent with the 2040 Regional Mobility Plan, FDOT plans, Blueprint 2020 sales tax extension projects, and the Tallahassee-Leon County Comprehensive Plan. The Corridor Plan also reflects input from local land owners, residents, business owners, and public officials regarding the guiding elements for future development of the transportation network in the area. Transportation is a fundamental part of daily life. It affects everyone in many ways and plays a critical role in shaping a region's physical and social infrastructure. Reliable access to efficient and safe modes of transportation is critical in the development of livable communities and goes a long way toward improving the region's economic equity, environmental footprint, and overall quality of life. Below is an outline of the Goals and Objectives of this plan. All ten planning factors as described in §450.306(b) are addressed in the Goals and Objectives of this plan.

Goals and Objectives

1. Balanced Transportation System and Safety.
   - 1.1 Incorporate ITS and technology throughout the study area to improve safety for all user types.
   - 1.2 Allow for a balanced transportation system that includes all appropriate modes for the corridors within the study area.
   - 1.3 Provide project recommendations that support emergency response and disaster preparedness.

2. Compatibility with Local Planning Efforts.
   - 2.1 Develop corridor recommendations that consider existing and future land use maps.
   - 2.2 Promote consistency with the Comprehensive Plan, 2040 Regional Mobility Plan, neighborhood/sector plans, and Blueprint projects.
   - 2.3 Created corridor recommendations that coincide with, or improve upon, ongoing and future transportation projects in the area.
   - 2.4 Recommend projects consistent with the Congestion Management Plan.

3. Increased Multi-modal Connectivity to Support Current and Future Development.
   - 3.1 Identify potential improvements to transit service and related amenities.
   - 3.2 Improve the pedestrian and bicycle network through the addition of new facilities and improvements to existing facilities.
   - 3.3 Improve roadway design to improve safety and mobility for all modal users along study corridors.
   - 3.4 Identify potential Complete Streets applications that focus on all transportation types.

4. Improved Community Cohesion and Connectivity.
   - 4.1 Engage the community in the planning process through public and stakeholder involvement efforts.
   - 4.2 Improve access to and between existing community assets such as churches, schools, parks, community centers, neighborhoods, and Tallahassee International Airport.
   - 4.3 Increase the effectiveness and safety of all modal connections between community assets and neighborhoods.
   - 4.4 Implement appropriate bicycle and pedestrian signage and crossings in areas with schools and other high pedestrian areas.

5. Improved Economic Opportunities.
   - 5.1 Apply access management techniques to the corridor to maximize safe travel to and from local businesses.
   - 5.2 Develop corridor enhancements that improve multi-modal access to community assets.
   - 5.3 Develop corridor recommendations that encourage context-sensitive development in the Southwest Area.
   - 5.4 Continue to allow for efficient freight movement on existing freight corridors.

Project Considerations

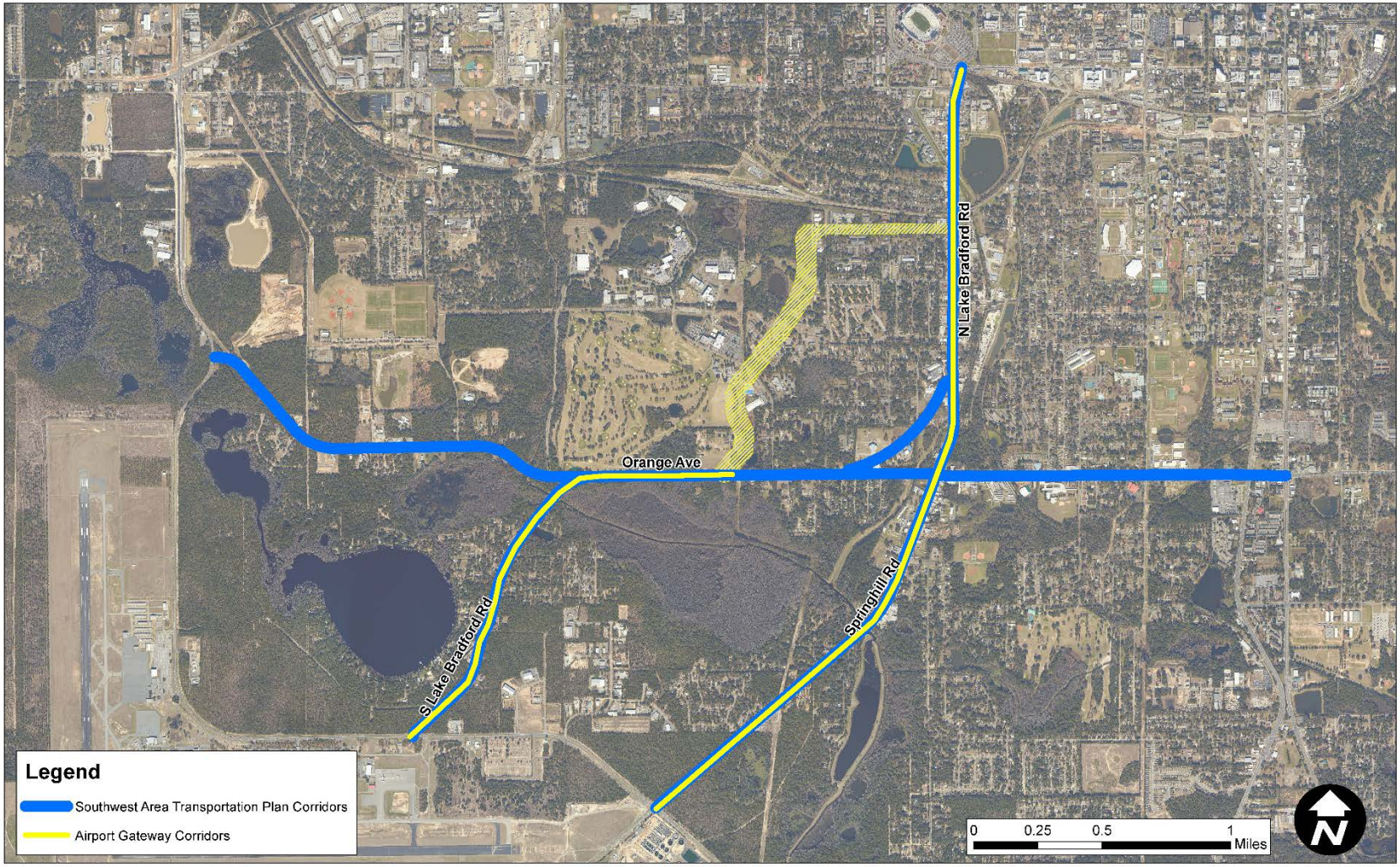
The Blueprint Intergovernmental Agency approved an Airport Gateway Project amendment in March 2018 to allocate funding to the following corridors for improvements related to transportation, sense of place, and safety:

- South Lake Bradford Road
  - Capital Circle Southwest to Orange Avenue
- North Lake Bradford Road
  - Orange Avenue to Gaines Street
- Orange Avenue[1]
  - South Lake Bradford Road to new gateway road alignment
- Springhill Road
  - Capital Circle Southwest to Orange Avenue
- New corridor connecting Orange Avenue to North Lake Bradford Road (*not a part of the Southwest Area Transportation Plan*)
  - Orange Avenue to North Lake Bradford Road; accessing North Lake Bradford via Stucky Avenue

[1] For the Orange Avenue Corridor Plan, the section between South Lake Bradford Road and the proposed new north/south corridor should consider opportunities related to a possible new intersection and upgraded multi-modal facilities through the Airport Gateway project.

Figure 3 illustrates the location of the corridors that are included in the Airport Gateway. After the Southwest Area Transportation Plan is completed, Blueprint will take the recommendations and move forward to additional environmental, planning, and design phases.

Figure 3. Airport Gateway Corridors



Existing Land Use

Transportation and Land Use History

The area south of Tallahassee's downtown/urban core has been the focal point of several improvement efforts over the last decades. Growth in Tallahassee has primarily occurred away from the southern area. **Figure 4** shows that the southern area that used Orange Avenue as the main east-west transportation artery was rural, with little to no development in 1938.

In 1949 growth was slowly moving south, as shown in **Figure 5**; however, much of the area remained rural.

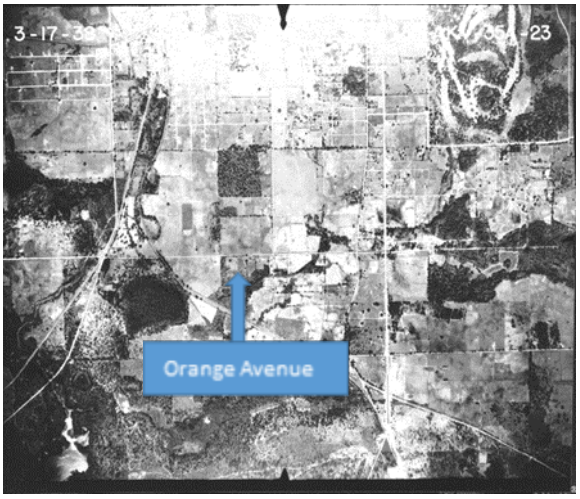


Figure 4. 1938 Aerial Photo

Figure 5. 1949 Aerial Photo

As the southside area continued to slowly develop, by 1960, there were several housing developments/neighborhoods built along Orange Avenue, as well as scattered small businesses as shown in **Figure 6**.

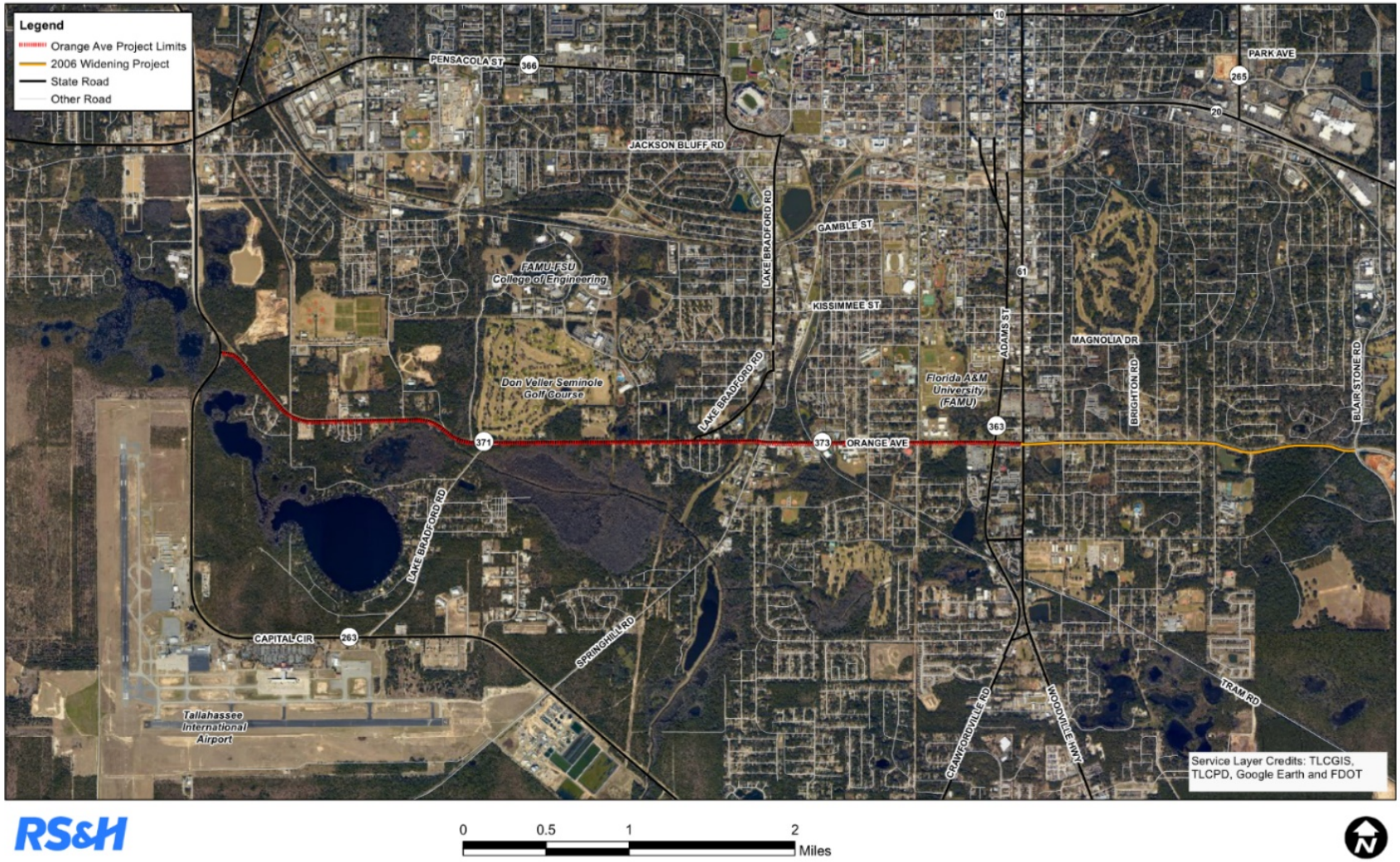
Figure 6. 1960 Aerial Photo

By 1963, there were several small businesses at the intersection of Orange Avenue and Springhill Road, as shown in **Figure 7.**

Figure 7. Intersection of Orange Avenue and Springhill Road in 1963

Today, the southern area has developed along Orange Avenue primarily with residential and small businesses. Orange Avenue continues to serve as the main east-west corridor in the southern area, providing the connection from Capital Circle Southwest to Capital Circle Southeast. Present day Orange Avenue is shown in **Figure 8**.

Figure 8. Present Day Orange Avenue

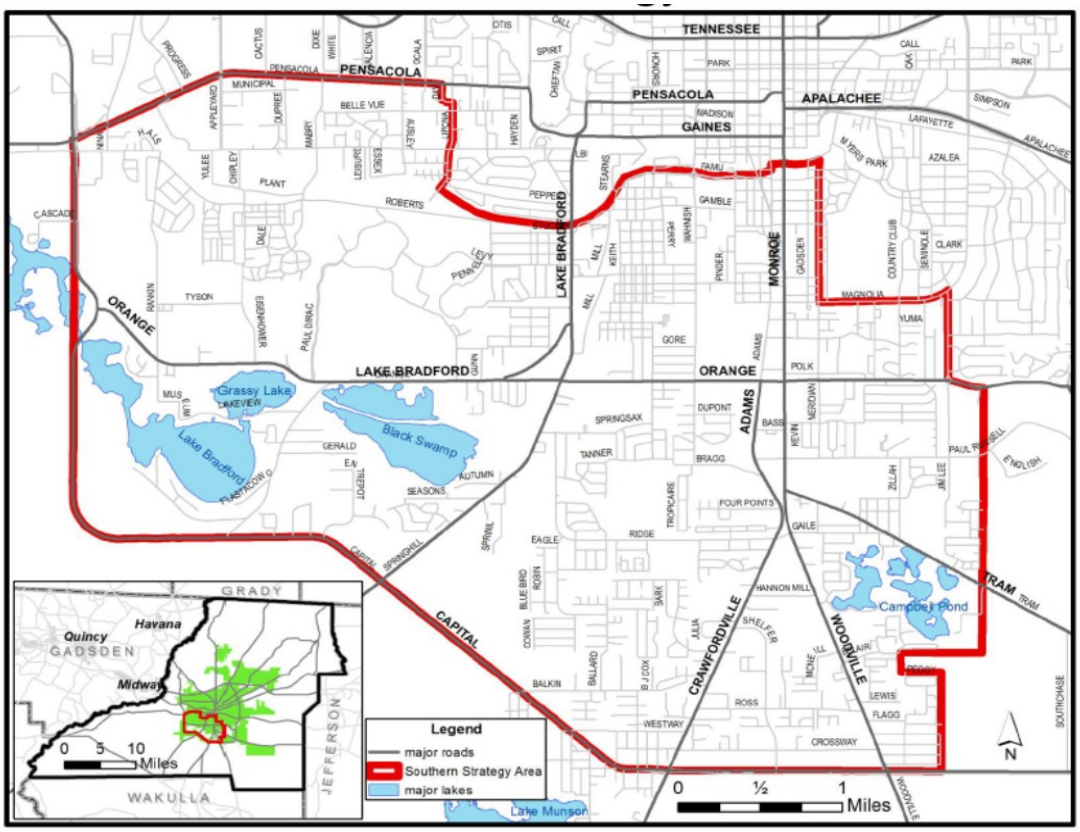


In 2006, the eastern end of Orange Avenue (a Leon County road) underwent reconstruction from Monroe Street to Blair Stone Road. This project widened the facility to four lanes and included sidewalks, bike lanes, stormwater improvements and landscaping. From Wahnish Way west, Orange Avenue transitions from a four-lane facility with a center turn lane to a two-lane facility.

According to the American Community Survey of the US Census (2017), the four census tracts that touch Orange Avenue show that the demographics of the four census tracts display an average population of 81% African American. The median age of the population of the four tracts is approximately 26 years of age with a comparatively lower household income than the remainder of Leon County.

In recognition of the relative lack of economic development, growth and opportunities within the area, the City of Tallahassee and Leon County Comprehensive Plan incorporated a targeted effort known as the Southern Strategy in 1998. This Southern Strategy Area (SSA) included the area in **Figure 9.**

Figure 9. Tallahassee-Leon County Planning Department Southern Strategy Area



The primary goals for the SSA included the promotion of quality land development with an increase in population, the incentivization and retention of businesses and employment opportunities, and the promotion of mixed-income housing within the area to encourage population growth. There have been several additional efforts subsequent to the designation of the SSA focused on growth and development through land use and transportation strategies. The efforts that impact Orange Avenue have included:

- Five-Year Economic and Development Strategy (2004, Angelou Economics)
- Lake Bradford Sector Study (2005, Tallahassee-Leon County Planning Department)
- Retaining and Expanding Businesses of Tallahassee's Southside (2006, Florida State University)
- Multimodal Transportation District (2009, Tallahassee-Leon County Planning Department)
- South City Report (2015, Urban Land Institute)
- Southern Strategy Area Comprehensive Report (2016, Tallahassee-Leon County Planning Department)

Each of these efforts have identified or encapsulated a variety of strategies to promote sustainable economic development and quality growth through the coordination of transportation and land use.

Existing Land Use

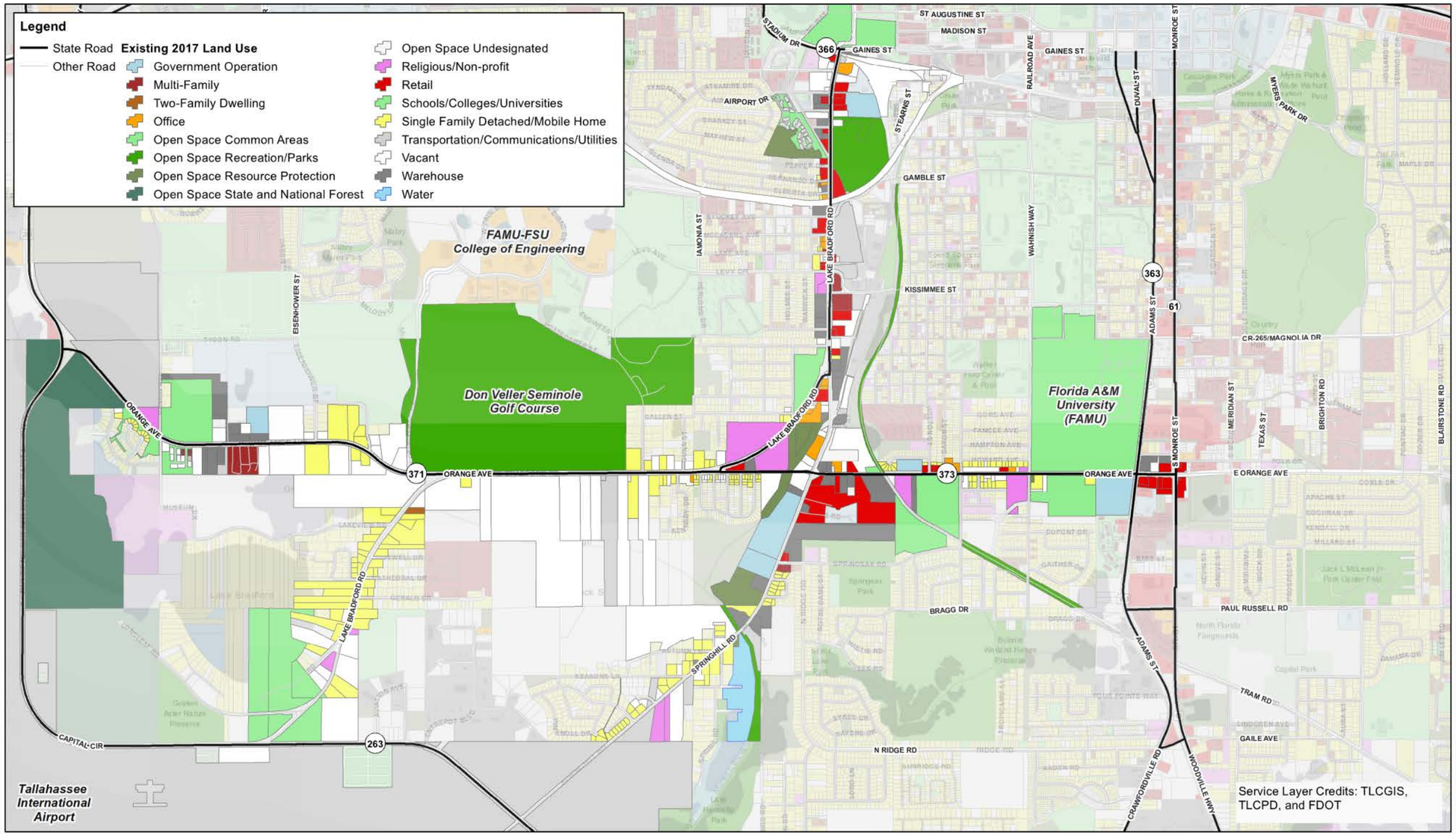
To understand the existing land use within the study area, a review of the parcels adjacent to each of the major facilities was conducted, with a focus on Orange Avenue for this effort. The parcels are shown in **Figure 10.** The majority of land use along Orange Avenue is Single Family Detached/Mobile Home with slightly over 40% of the parcels in this category. The next highest category of use along Orange Avenue is Vacant properties with over 25%. Approximately 15% of the parcels are in Retail and Warehouse. Multi-family housing is almost 5% with the remainder of the property categories make up 15% of the land use along Orange Avenue.

Table 1 provides a summary of existing land uses throughout the Southwest Area Transportation Plan.

Table 1. Existing Land Use Summary

Land Use	Number of Parcels		Size of Parcels	
	Total	Land Use Type	Acreage	Percent of Acreage
Government Operation	3	1.32%	19.92	1.57%
Multi-Family	11	4.85%	8.2	0.64%
Office	4	1.76%	2.93	0.23%
Open Space Common Areas	3	1.32%	10.07	0.79%
Open Space Recreation/Parks	2	0.88%	354.39	27.87%
Open Space Resource Protection	2	0.88%	10.13	0.80%
Open Space State and National Forest	1	0.44%	169.8	13.35%
Open Space Undesignated	2	0.88%	0.69	0.05%
Religious/Non-profit	5	2.20%	20.01	1.57%
Retail	19	8.37%	33.5	2.63%
Schools/Colleges/Universities	4	1.76%	224.15	17.63%
Single-Family Detached/Mobile Home	91	40.09%	49.91	3.92%
Transportation/Communications/Utilities	5	2.20%	129.42	10.18%
Two-Family Dwelling	0	0.00%	0.00	0.00%
Vacant	58	25.55%	205.79	16.18%
Warehouse	17	7.49%	32.76	2.58%
Water	0	0.00%	0.00	0.00%

Figure 10. Existing Land Use



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Future Land Use

Future land use must conform to the goals and vision of the Tallahassee-Leon County Comprehensive Plan, which is articulated below:

> "The Comprehensive Plan shall protect and enhance the quality of life in this community by providing economically sound educational, employment, cultural, recreational, commercial, industrial and professional opportunities to its citizens while channeling inevitable growth into locations and activities that protect the natural and aesthetic environments and residential neighborhoods."

The Land Use Element of the Comprehensive Plan provides the framework for growth and development within Tallahassee and Leon County. This element provides the connection between the community's overall vision and priorities with land use and development patterns. The current Land Use Element, which was adopted in 1991 and only incrementally revised since then, is being updated. The draft goals identified are applicable to the study area as part of the larger community, however, no specific goals have been identified that are applicable to only the study area and Orange Avenue. In addition, the proposed 2019 amendments to the Comprehensive Plan are not within the study area.

The 2030 future land use categories found along Orange Avenue are shown in **Figure 11** and listed and defined below per the Land Use Element of the Comprehensive Plan:

- **Central Urban**

  This category is characterized by older developed portions of the community that are primarily located adjacent to or near the urban core and major universities. The land use is intended to provide a variety of residential types (up to 45 dwelling units per acre), employment (including light manufacturing), office, and commercial activities. Infill and potential redevelopment and/or rehabilitation activity should be encouraged.

- **Government Operational**

  The primary function of this future land use category is to provide for the operation and provision of services on property owned or operated by local, state, and federal governments. Allowed uses include community services, heavy infrastructure, and post-secondary uses, which include police and fire stations, electric generating facilities, postal facilities, and government offices.

- **Residential Preservation**

  The primary function of this future land use category is to protect existing stable and viable residential areas from incompatible land use intensities and density intrusions. This future land use category allows for single family, townhouse, and cluster housing developments within a range of up to six dwelling units per acre. Consistency with surrounding residential types and density shall be a major determinant in granting development approval. New and infill development shall be consistent with the existing residential type and density. Commercial, including office as well as any industrial land uses, are prohibited.

- **Suburban**

  This land use category is intended to create an environment for economic investment or reinvestment through the mutually advantageous placement of employment and shopping opportunities with convenient access to low- to medium-density residential land uses. This category predominantly consists of single-use projects that are interconnected whenever feasible. Mixed-use

projects and the principles of traditional neighborhood developments are encouraged, though not required. A mix of residential types are permitted. The density range is up to a maximum of 20 dwelling units per acre. Other permitted uses include commercial, office, community services, passive and active recreation, light industrial, and light infrastructure. Business activities are not intended to be limited to serve area residents, and as a result, may attract shoppers from larger portions of the community.

- **Educational**

This land use category is limited to educational uses and facilities for all public schools and for private schools with three hundred or more students and ancillary community services to serve the student population or the community in general.

- **Recreation/Open Space**

This land use category contains all government owned lands which have active or passive recreational facilities, historic sites, forests, cemeteries, or wildlife management areas and all privately owned lands which have golf courses, cemeteries, or wildlife management areas.

- **Urban Residential 2**

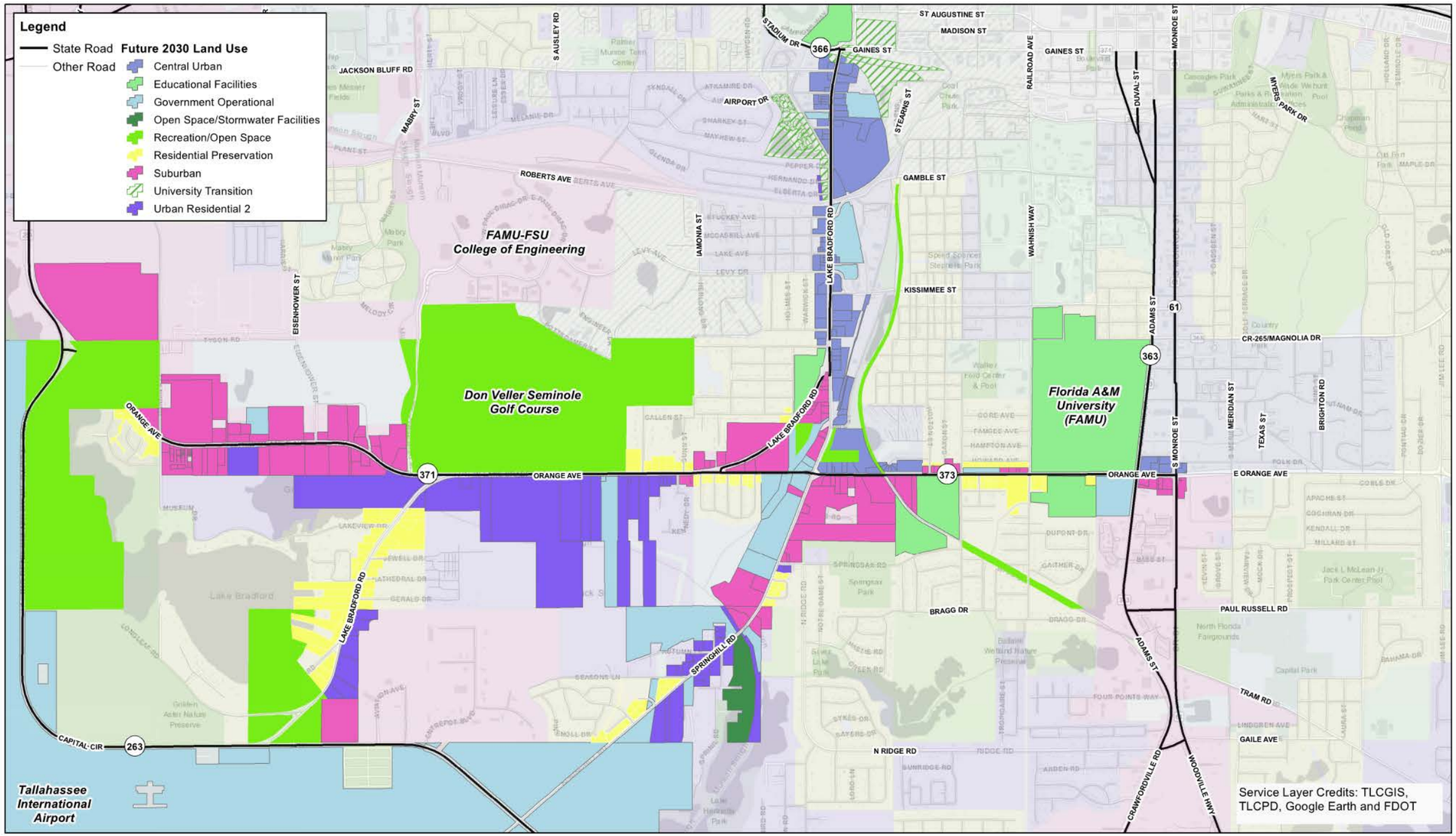
The primary function of the Urban Residential land use category is to promote a range of residential densities (4-20 dwelling units per acre), thereby promoting infill development, reducing urban sprawl, and maximizing the efficiency of infrastructure. This category allows townhouses, single-family detached homes, two-family homes, and apartments, as well as open space/recreation and community facilities related to residential use. This category is not intended to be applied within the interior of an existing neighborhood.

As previously discussed approximately 25% of the existing parcels along Orange Avenue are Vacant. The largest categories for the future land uses of the vacant parcels along Orange Avenue are Residential Preservation and Suburban. **Table 2** displays the 58 total vacant parcels and how they are identified on the future land use map shown in **Figure 11**.

Table 2. Vacant Parcels and Future Land Use Map Identification

Orange Avenue	Vacant Parcels
Central Urban	5
Government Operational	3
Residential Preservation	22
Suburban	19
Urban Residential 2	9
Total	**58**

Figure 11. 2030 Future Land Use



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The existing zoning and development codes, when combined with the future land use designations, are critical in understanding the development/redevelopment efforts. **Table 3** below depicts the primary existing land uses along Orange Avenue and the future land use designations found within each roadway section. The existing land use information is found in the 2017 update and the future land use has the horizon year of 2030. As noted previously, the Comprehensive Plan is currently being updated with an anticipated completion date in 2019.

Table 3. Primary Existing Land Uses Along Orange Avenue

Orange Avenue Existing and Future Land Use		
Roadway Section	**Existing Land Use**	**Future Land Use**
Capital Circle Southwest to South Lake Bradford Road	Open Space/Common Areas	Recreation/Open Space Suburban Urban Residential 2 Residential Preservation
	Open Space State/National Forest	
	Single Family	
	Vacant	
	Warehousing	
South Lake Bradford Road to Springhill Road	Vacant	Suburban Urban Residential 2 Residential Preservation Government Operational Recreation/Open Space
	Open Space (Golf Course)	
	Single Family	
	Religious	
Springhill Road to South Adams Street	Retail	Suburban Residential Preservation Educational Government Operational Central Urban
	Schools/Colleges/Universities	
	Religious	
	Single Family	
	Government	

With the existing and future land use designations on the parcels along Orange Avenue, the zoning and allowable development in the future are in place to encourage new development and redevelopment that promote sustainable economic growth for the area.

Developability

With the existing and future land use designations on the parcels along Orange Avenue, the zoning and allowable development in the future are in place to encourage new development and redevelopment that promote sustainable economic growth for the area.

Along Orange Ave, between Lake Bradford Rd and Springhill Rd, a sizeable collection of vacant parcels (≈ 300-acres) zoned Single Family Detached Residential and Office Residential lie to the south. Roughly ¾ of this area consists of wetlands surrounding the dry lakebeds 'Grassy Lake' and 'Black Swamp' and will not be suitable for development. Just west of Eisenhower St, along the north face of Orange Ave, 23.7-acres of considerable Office Residential and Office Residential District zoned land is currently vacant.

To the North of Orange Ave, between Springhill Rd and the St. Marks Trail, sits a 9.1-acre vacant parcel of land zoned Central Urban District. Section 10-251. of the City of Tallahassee, Florida - Land

Development Code defines this zone as suitable for medium to high density residential development (4-45 units/acre). The intent of this designation is to promote infill, which is the process of developing vacant and underused parcels within existing urban areas which are already largely developed. An additional collection of vacant Light Industrial parcels totaling 9.0-acres can be found along the west face of Springhill Rd just north of its intersection with Orange Ave. Both spaces can be considered strong candidates for future development.

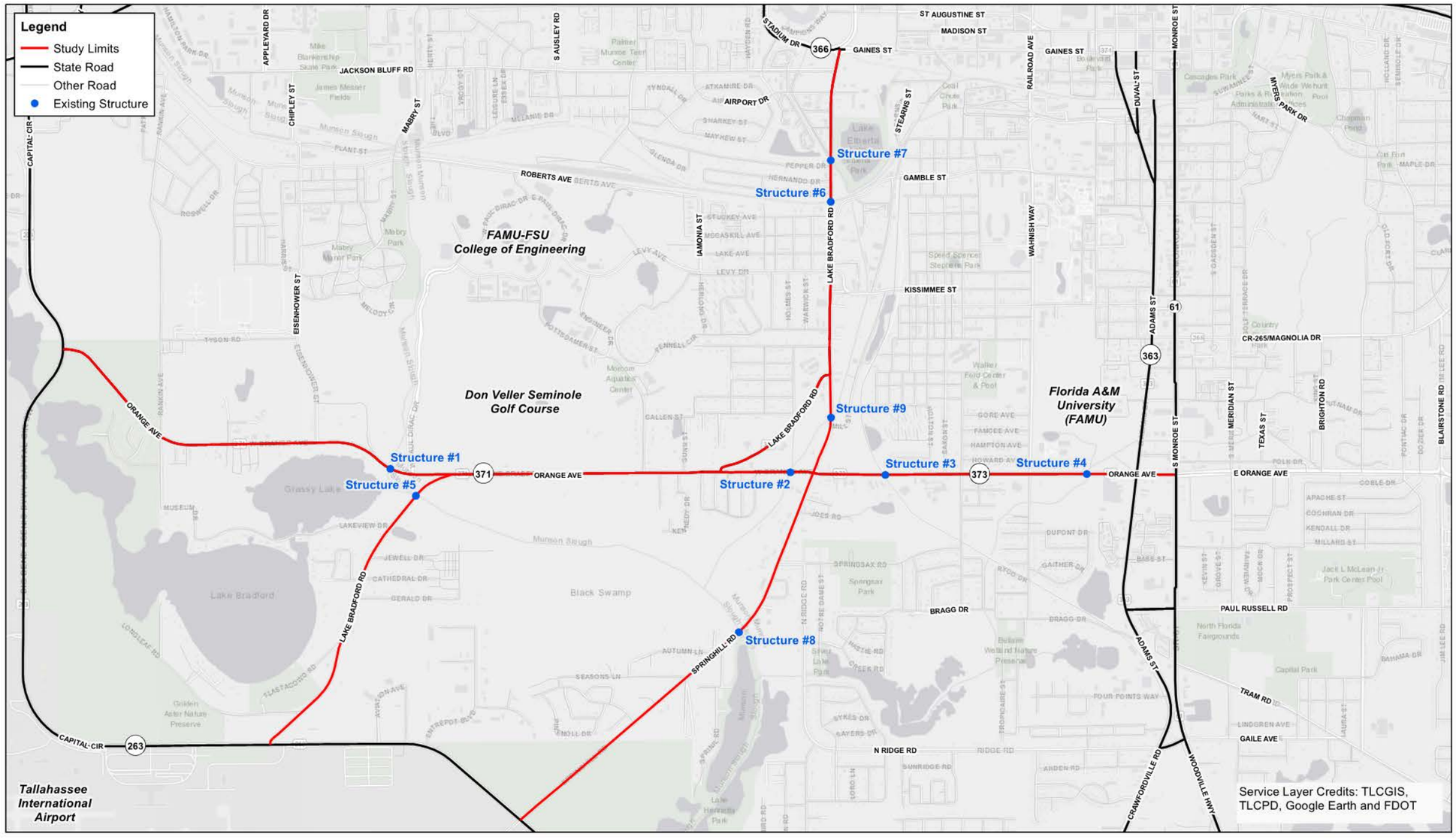
Corridor Inventory

Structures Inventory

Bridges are regularly inspected by FDOT to determine their structural and operational integrity. If a bridge is deemed structurally deficient, the bridge should be repaired or replaced within the next six years. A bridge that is functionally obsolete indicates that the configuration of the bridge does not meet current roadway design conditions. The sufficiency rating considers a variety of factors and is part of the formula used by the Federal Highway Adminnistration to determine funding allocations for bridges. Sufficiency ratings are based on a scale from one to 100, with 100 considered to be a fully sufficient bridge (usually new). The sufficiency ratings shown for the bridges along Orange Avenue were found in the December, 2018 FDOT bridge report.

Figure 12 provides an overview of individual structures within the project area. **Figure 13** through **Figure 16** reflect a structures inventory performed within the project limits. Projections in plan, elevation, and section view are accompanied by pictures taken during various site visits. Structures 1 through 4 are located along Orange Avenue. None of the four bridges are rated as functionally obsolete or structurally deficient.

Figure 12. Structure Locations



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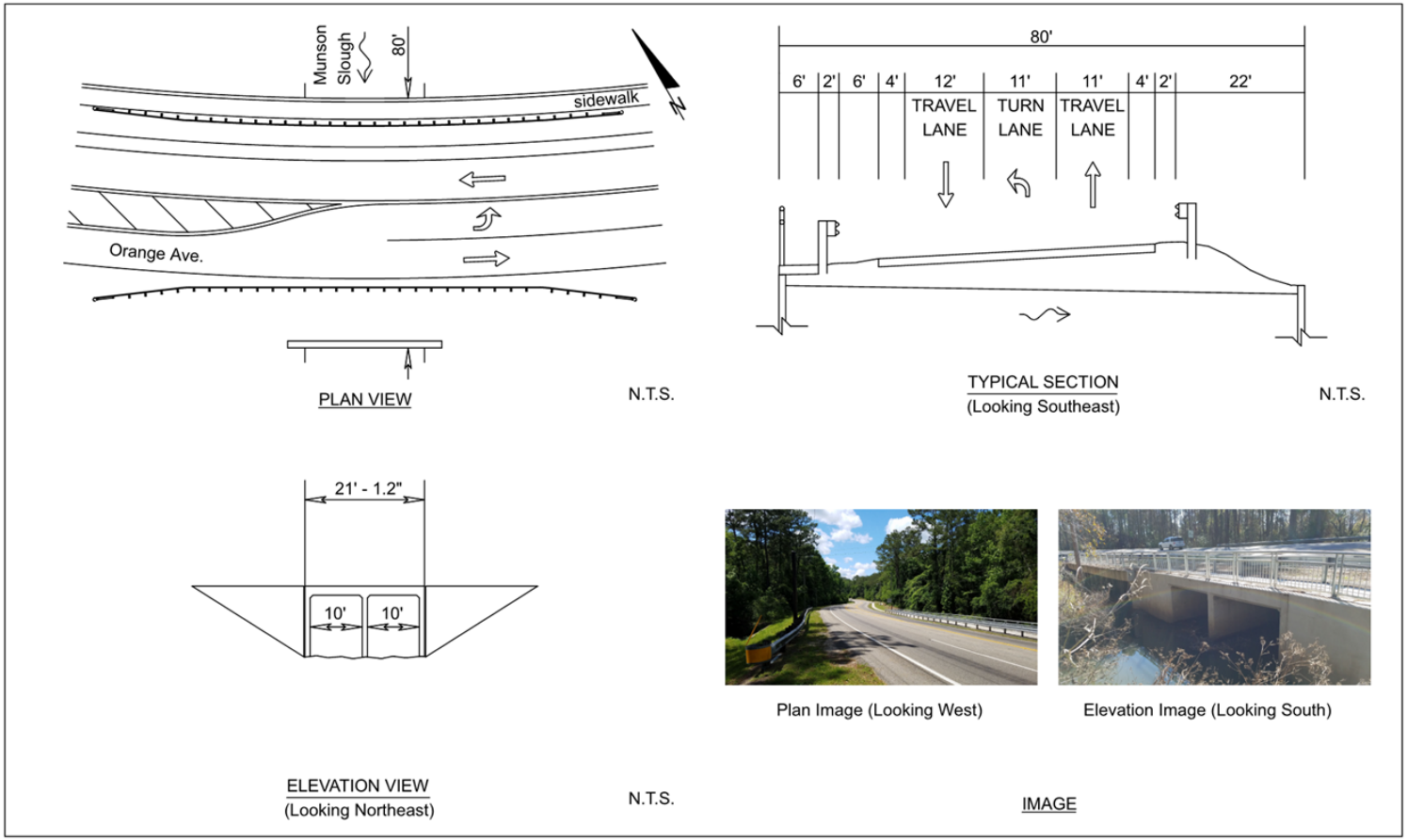
Structure 1 is located on West Orange Avenue, approximately 370 feet west of Paul Dirac Road and approximately 800 feet west of the intersection with South Lake Bradford Road. Built in 1963, the bridge spans Munson Slough and has a suffiiciency rating of 78.2.

Figure 13. Structures Inventory – Structure #1

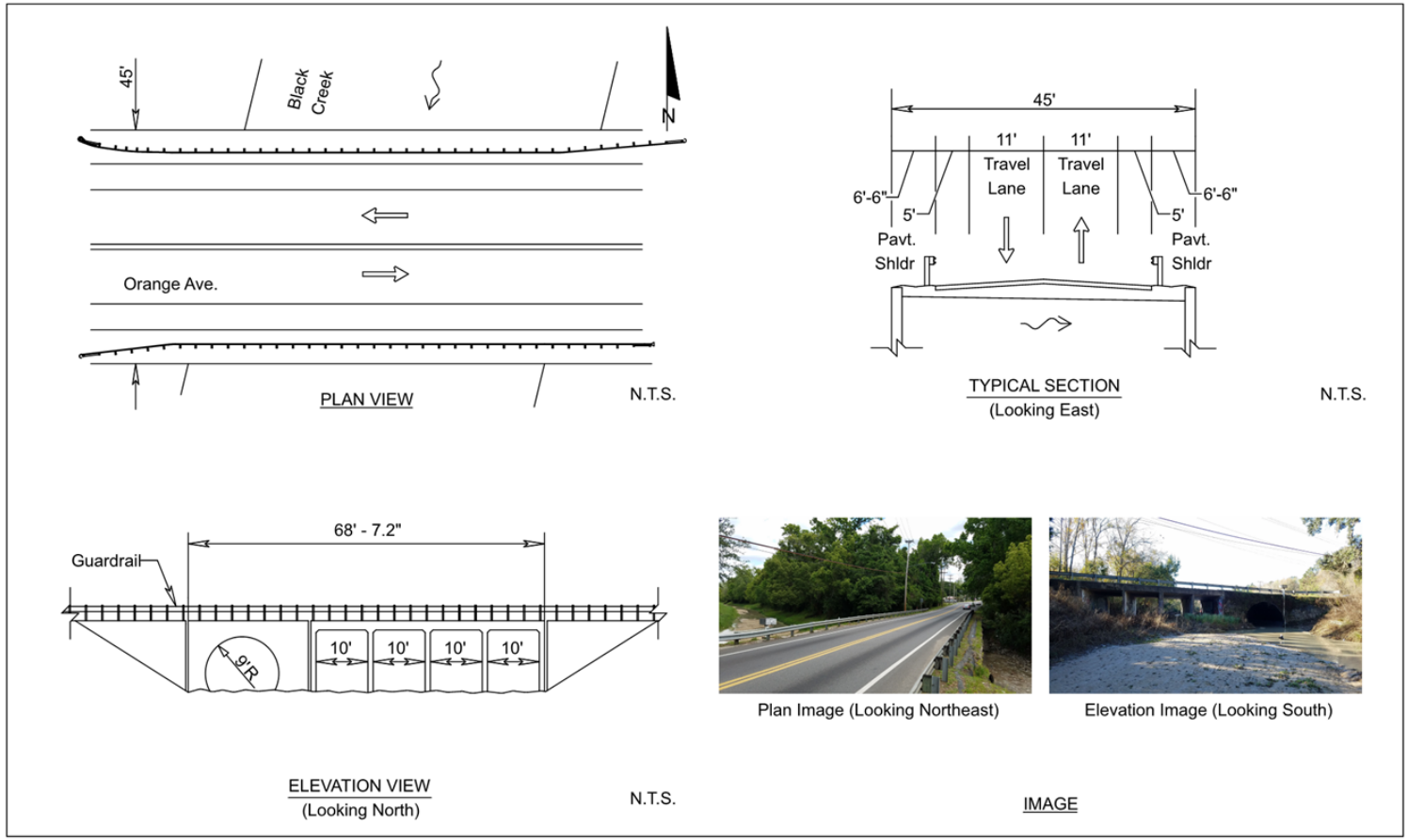


RS&H **Structures Inventory - Structure # 1**
Box Culvert #550081, Orange Ave. over Munson Slough

Sources: FDOT SLD, 2018 4th Quarter Bridge Inspections
Created: 2/13/2019

Structure 2 spans Black Creek and is located between Lake Bradford Road and Springhill Road. The bridge was built in 1957 and has a sufficiency rating of 99.0.

Figure 14. Structures Inventory – Structure #2

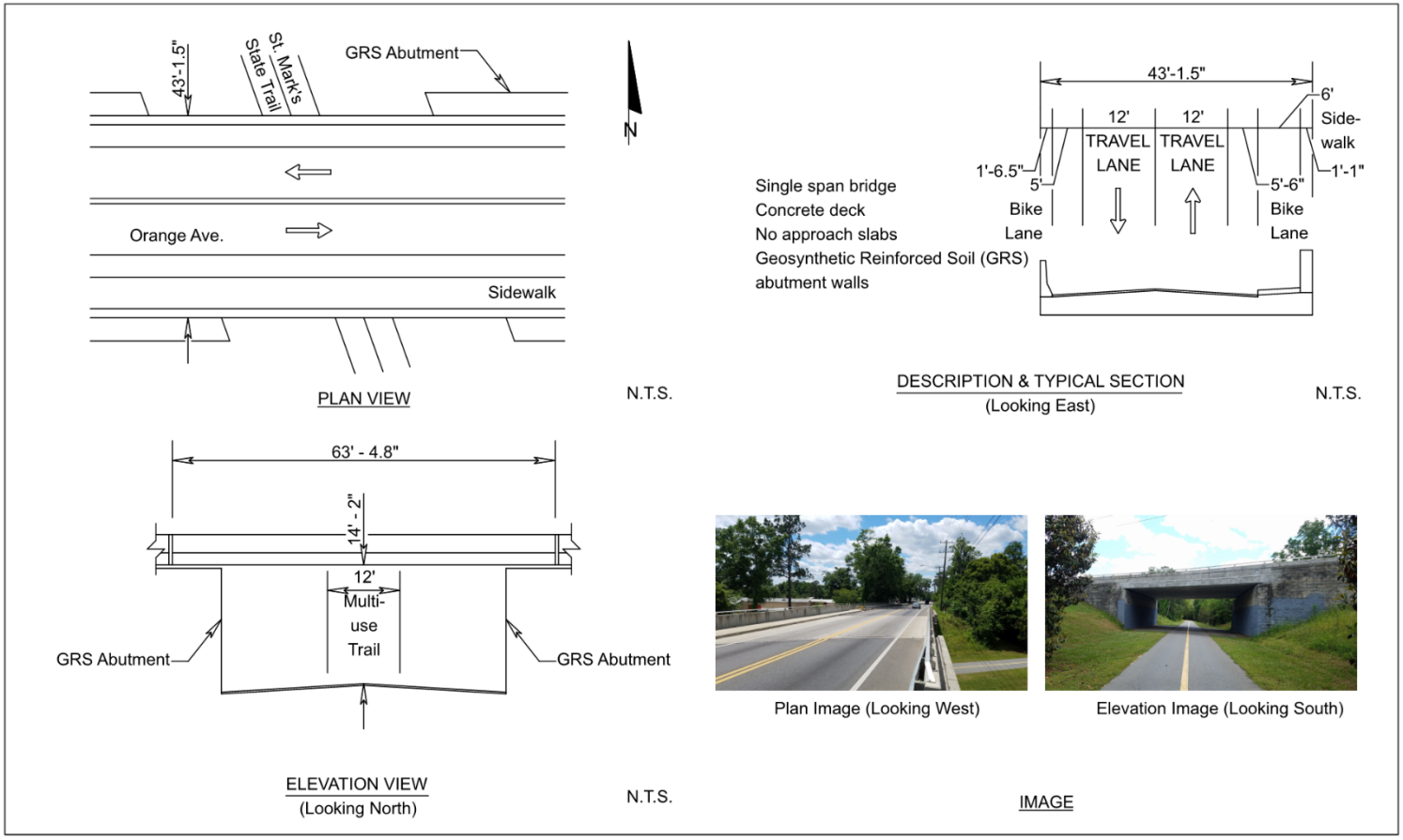


RS&H **Structures Inventory - Structure # 2**
Bridge #550037, Orange Ave. over Black Creek

Sources: FDOT SLD, 2018 4th Quarter Bridge Inspections
Created: 2/13/2019

Structure 3 is located approximately one-quarter mile east of Springhill Road. Built in 2014, the bridge spans the St. Marks Historic Railroad State Trail and has a sufficiency rating of 93.5.

Figure 15. Structures Inventory – Structure #3

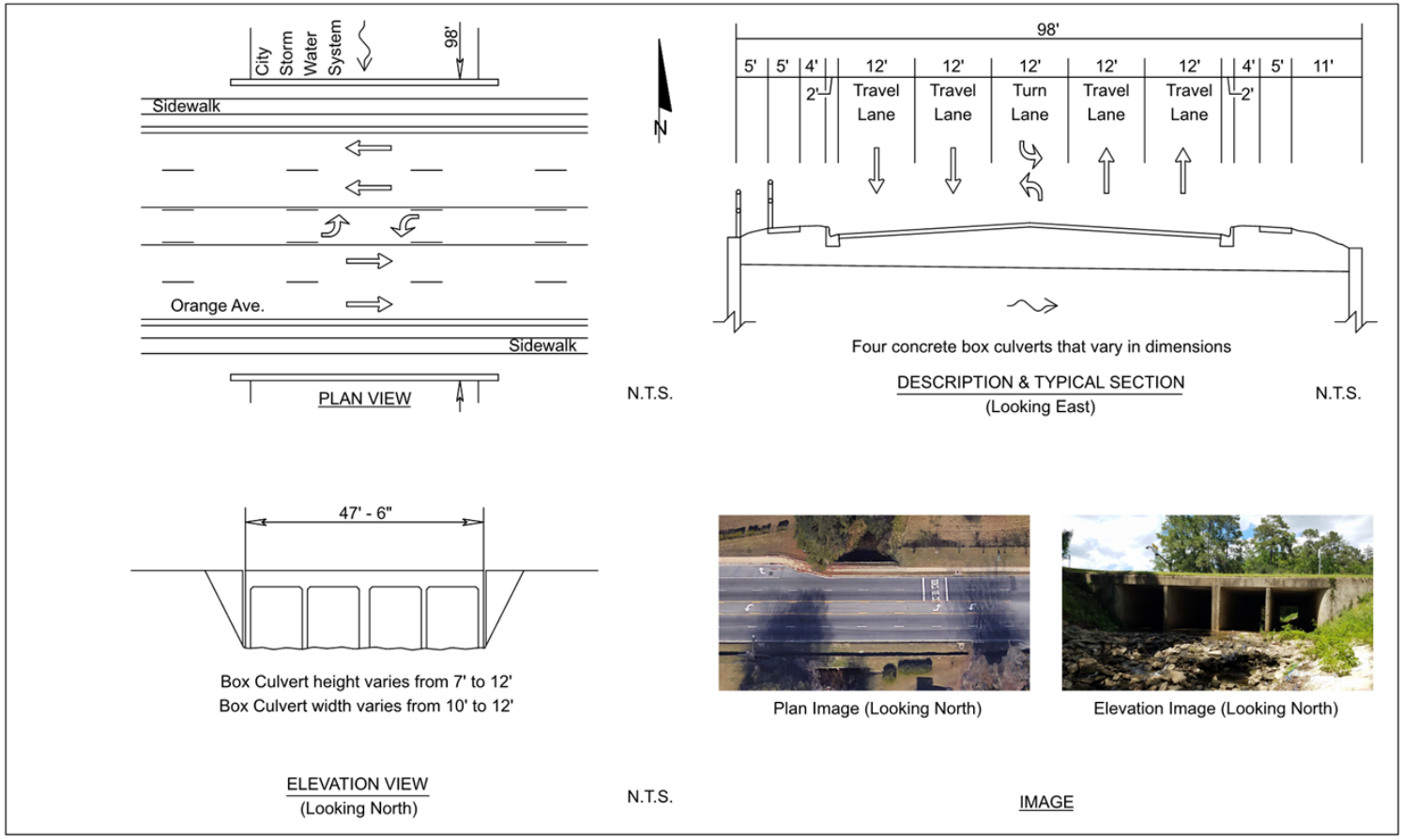


RS&H **Structures Inventory - Structure # 3**
Bridge #550171, Orange Ave. over St. Marks Trail

Sources: FDOT SLD, 2018 4th Quarter Bridge Inspections
Created: 2/13/2019

Structure 4 is located approximately 1,100 feet east of Wahnish Way and 900 feet west of South Adams Street. The bridge spans the City of Tallahassee Stormwater System facility and was built in 1975. The bridge has a sufficiency rating of 77.7.

Figure 16. Structures Inventory - Structure #4



RS&H **Structures Inventory - Structure # 4**
Box Culvert #550103, Orange Ave. over City Storm Water System

Sources: FDOT SLD, 2018 4th Quarter Bridge Inspections
Created: 2/13/2019

Utilities

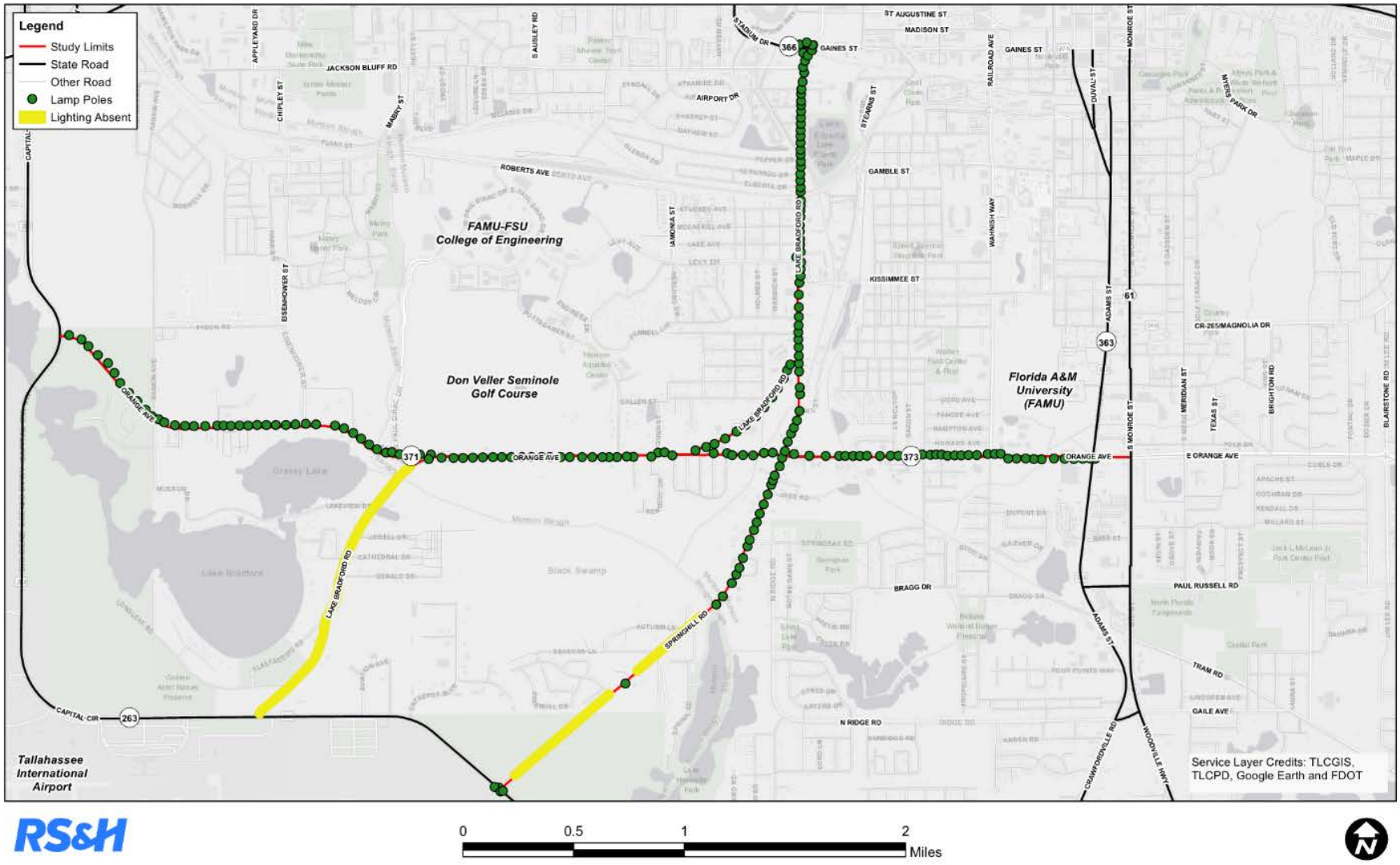
The following companies were identified as having utilities present within the right-of-way of Orange Avenue.

- CenturyLink
- Dial Communications
- Crown Castle Fiber
- Level 3 Communications
- Comcast Cablevision
- MCI
- Unite Fiber LLC
- City of Tallahassee

Lighting

Figure 17 illustrates the results of a lighting inventory conducted within the project limits. A total of 204 existing lamp poles were located on all facilities, with 5 lamps observed to be out of service during site visits. No lighting is currently provided along the entirety of South Lake Bradford Road or the segments of Springhill Road that have been highlighted in yellow.

Figure 17. Lighting Inventory



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Pedestrian visibility is of high importance when developing or assessing roadway lighting schemes. This assessment includes the time spent by a pedestrian in the intersection, as well as the time waiting for a 'walk' cycle at a sidewalk or island refuge. **Figure 18** through **Figure 20** illustrate the adequacy of lighting at several key intersections along the project. The illuminated buffers represent typical luminair coverage and Orientation to the roadway and mounting height were condidered, though no distinction is drawn between light types. The darker color indicates the areas of high visibility, with visibility decreasing as the distance from the lamp increases.

Figure 18. Lighting Assessment – Intersection of Orange Avenue and Wahnish Way

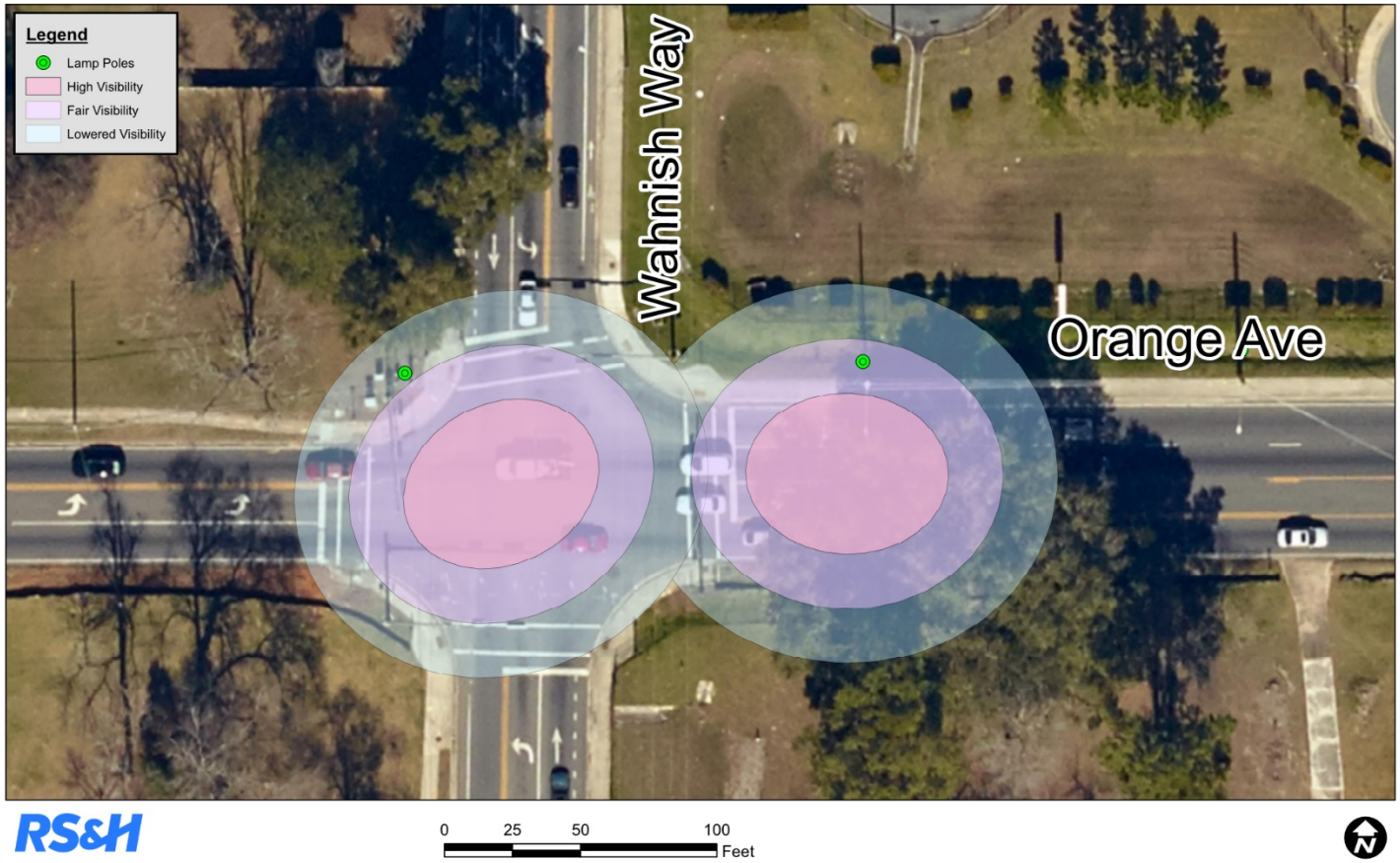


Figure 19. Lighting Assessment – Intersection of Orange Avenue and Pasco Street

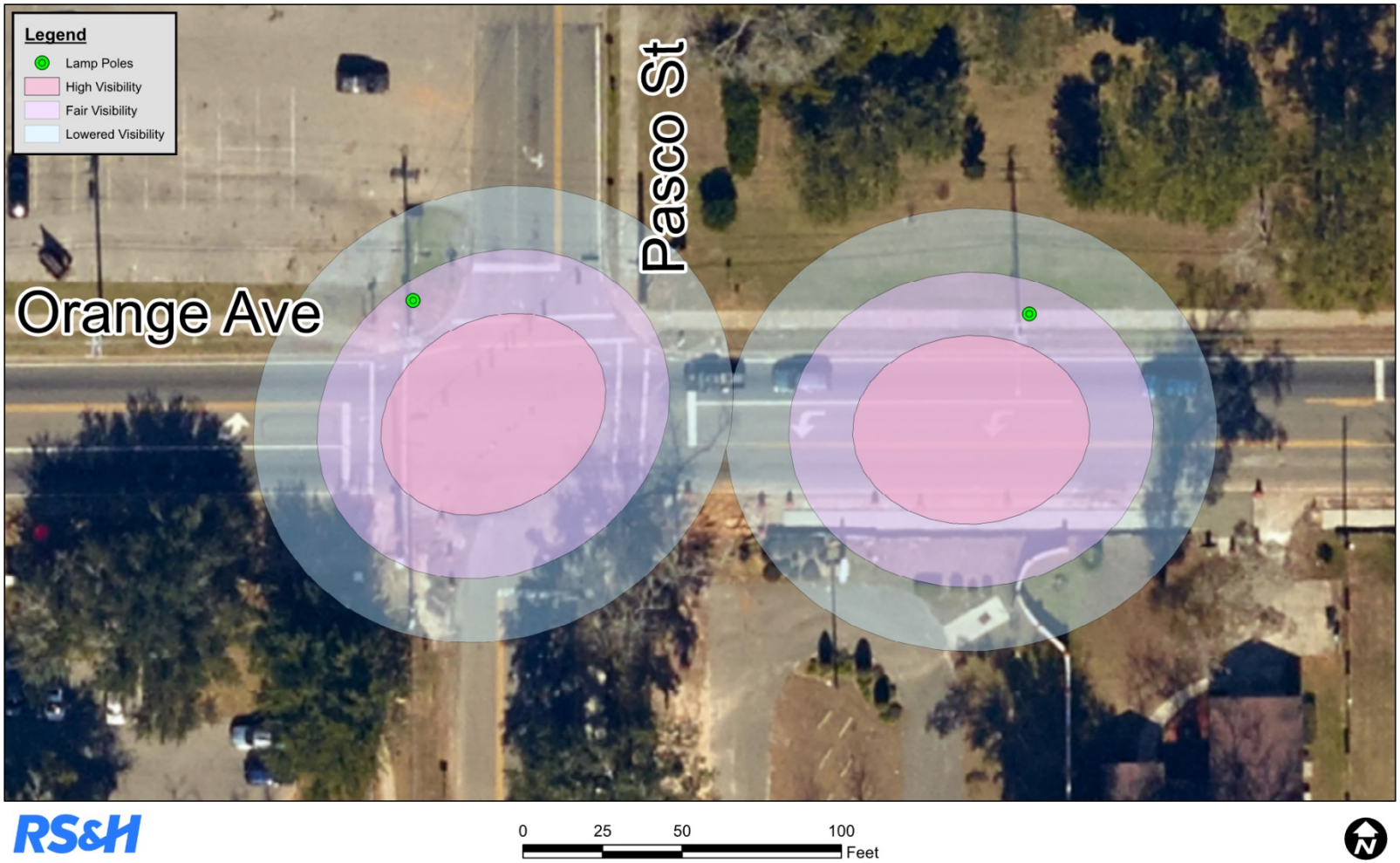
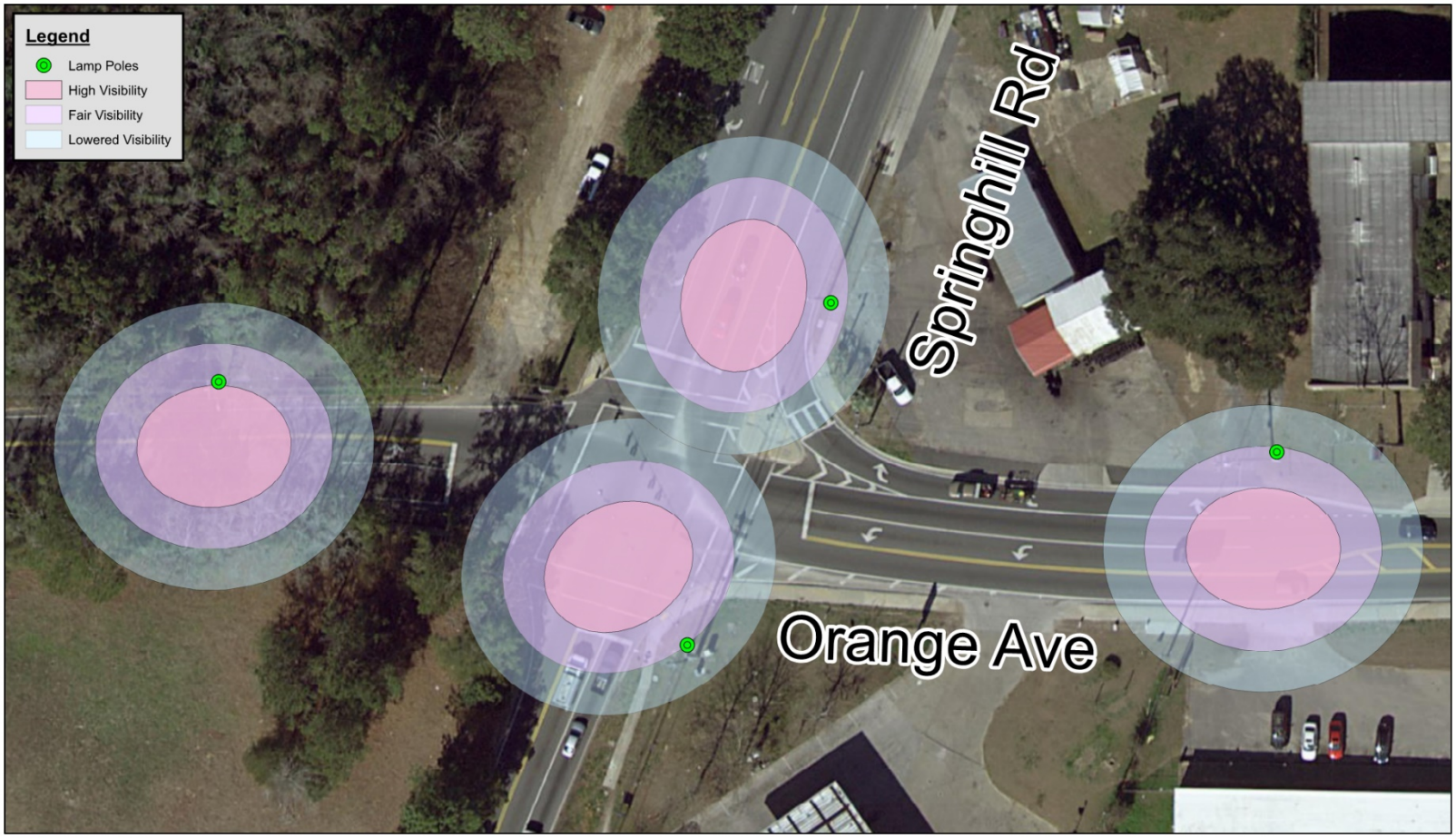


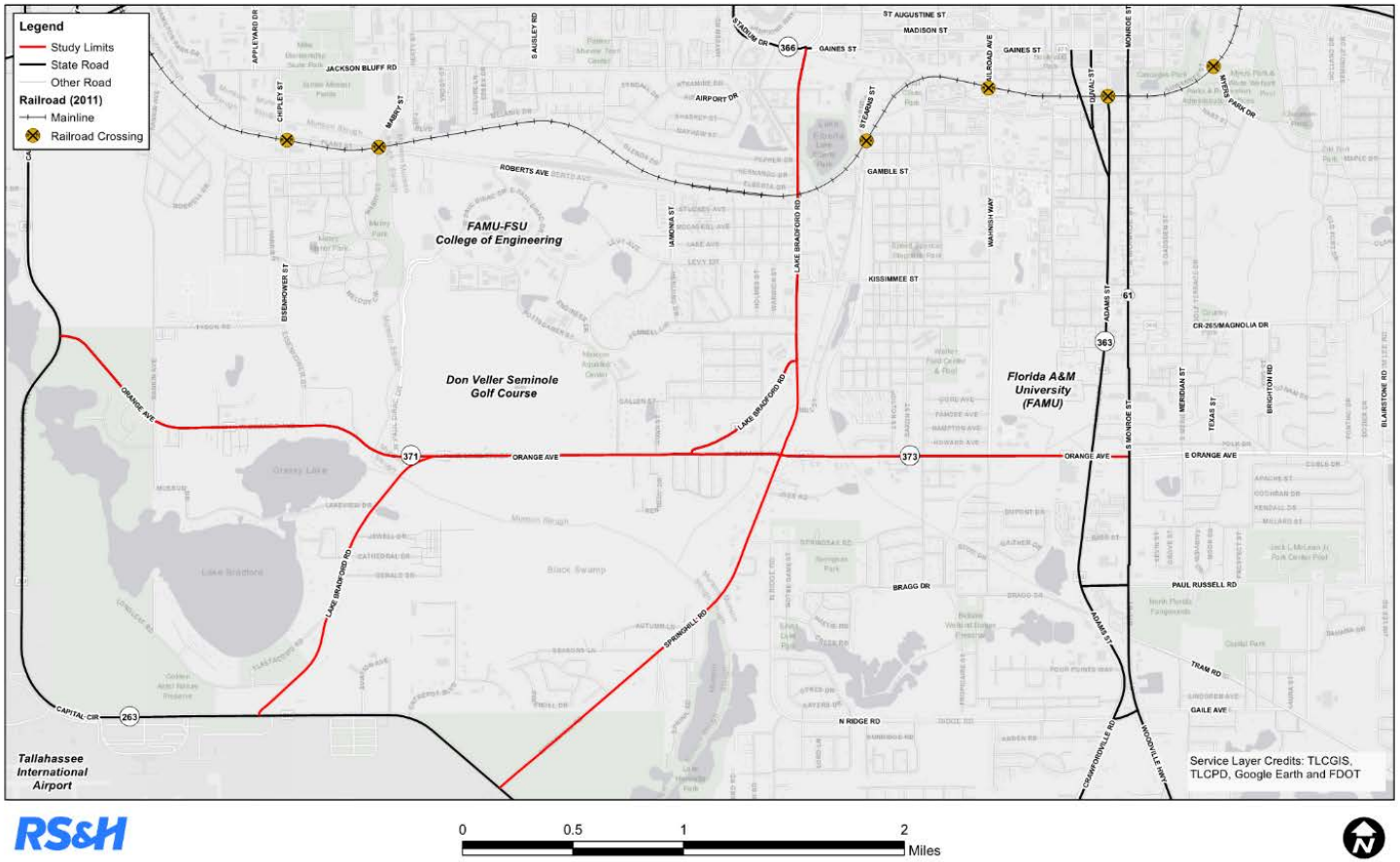
Figure 20. Lighting Assessment – Intersection of Orange Avenue and Springhill Road



Rail

As shown in **Figure 21**, there is one existing rail line within the study area. The CSX line runs basically parallel to Orange Avenue to the north and crosses North Lake Bradford Road approximately one-quarter of a mile south of Stadium Drive. There are no rail crossings on Orange Avenue.

Figure 21. Railroad Information



Existing Transportation Facilities

Roadway Network

The Orange Avenue section of the Southwest Transportation Plan study area consists of SR 371, which spans from Capital Circle Southwest to North Lake Bradford Road, and SR 373, from North Lake Bradford Road to South Monroe Street. Orange Avenue is classified as a minor arterial with a posted speed limit of 45 mph on SR 371 and a posted speed limit of 35 mph on SR 373. The roadway features of each segment are summarized below:

- Capital Circle Southwest to South Lake Bradford Road —
  - Two-lane undivided roadway.
  - Right-of-way along this section varies from 100 to 105 feet.
- South Lake Bradford Road to North Lake Bradford Road —
  - Two-lane undivided roadway.
  - Right-of-way along this section varies from 95 to 210 feet.
- North Lake Bradford Road to Springhill Road —
  - Two-lane undivided roadway.
  - Right-of-way along this section varies from 50 to 75 feet.
- Springhill Road to Wahnish Way —
  - Two-lane undivided roadway.
  - Right-of-way along this section varies from 65 to 90 feet.
- Wahnish Way to South Adams Street —
  - Four-lane roadway.
  - Right-of-way along this section varies from 65 to 100 feet.
- South Adams to South Monroe Street —
  - Four-lane roadway.
  - Right-of-way along this section varies from 65 to 100 feet.

Complete Streets

The Florida Department of Transportation developed a complete streets policy in 2014 which promotes context sensitive transportation projects. Complete streets focus on planning, designing, constructing, and reconstructing streets to take into consideration the surrounding local land uses and user types. Context classifications are the broad characteristics often found in our built environment which directs the types of transportation facilities that should be present. FDOT's classifications are shown in **Figure 22** .

Figure 22. FDOT Context Classifications from FDOT Design Manual

C1-Natural
Lands preserved in a natural or wilderness condition, including lands unsuitable for settlement due to natural conditions.

C2-Rural
Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands.

C2T-Rural Town
Small concentrations of developed areas immediately surrounded by rural and natural areas; includes many historic towns.

C3R-Suburban Residential
Mostly residential uses within large blocks and a disconnected or sparse roadway network.

C3C-Suburban Commercial
Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.

C4-Urban General
Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.

C5-Urban Center
Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city.

C6-Urban Core
Areas with the highest densities and building heights, and within FDOT classified Large Urbanized Areas (population >1,000,000). Many are regional centers and destinations. Buildings have mixed uses, are built up to the roadway, and are within a well-connected roadway network.

The FDOT Districts have been tasked with mapping the local context classifications for state roads within each of their respective districts. Orange Avenue is a state facility which has the following context classifications as designated by FDOT:

- C2-Rural - SR 263/Capital Circle to Rankin Avenue
- C3C-Suburban Commercial - Rankin Avenue to Eisenhower Street
- C3R-Suburban Residential - Eisenhower Street to Lake Bradford Road (north)
- C3C-Suburban Commercial - Lake Bradford Road (north) to S. Monroe Street

The opportunities highlighted in this Corridor Plan align with the Departments commitment to provide safe facilities for all user types, foster quality places, and stimulate economic development. As FDOT continues their PD&E study, the respective context classifications found along Orange Avenue should be considered, and the appropriate transportation characteristics should be implemented.

Driveways and Access Points

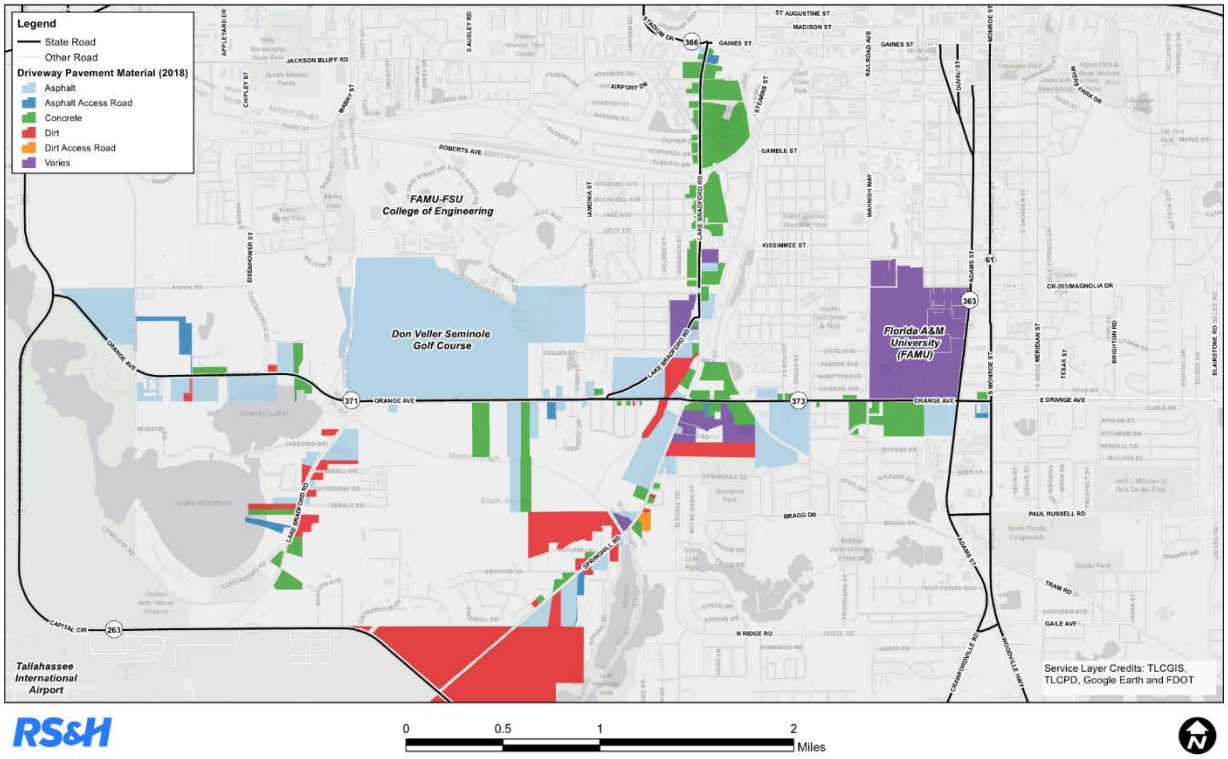
The number of access points onto a facility is a key element of both safety and operational efficiency, as well as a major component of the coordination between transportation and land use. Of the 361 parcels directly adjacent to the corridors within the study area, 210 have driveway access to the corridor, some of which have multiple access points adding up to 299 driveway access points. Driveway materials vary throughout the project and have been inventoried and noted in **Table 4**. Orange Avenue has a total of 108 driveway access points.

Table 4. Driveway Access Points and Driveway Material

	Concrete	Asphalt	Dirt	Total
Orange Avenue	**47**	**57**	**4**	**108**
Springhill Road	19	24	20	63
Lake Bradford Road	79	34	15	128
Total	145	115	39	299

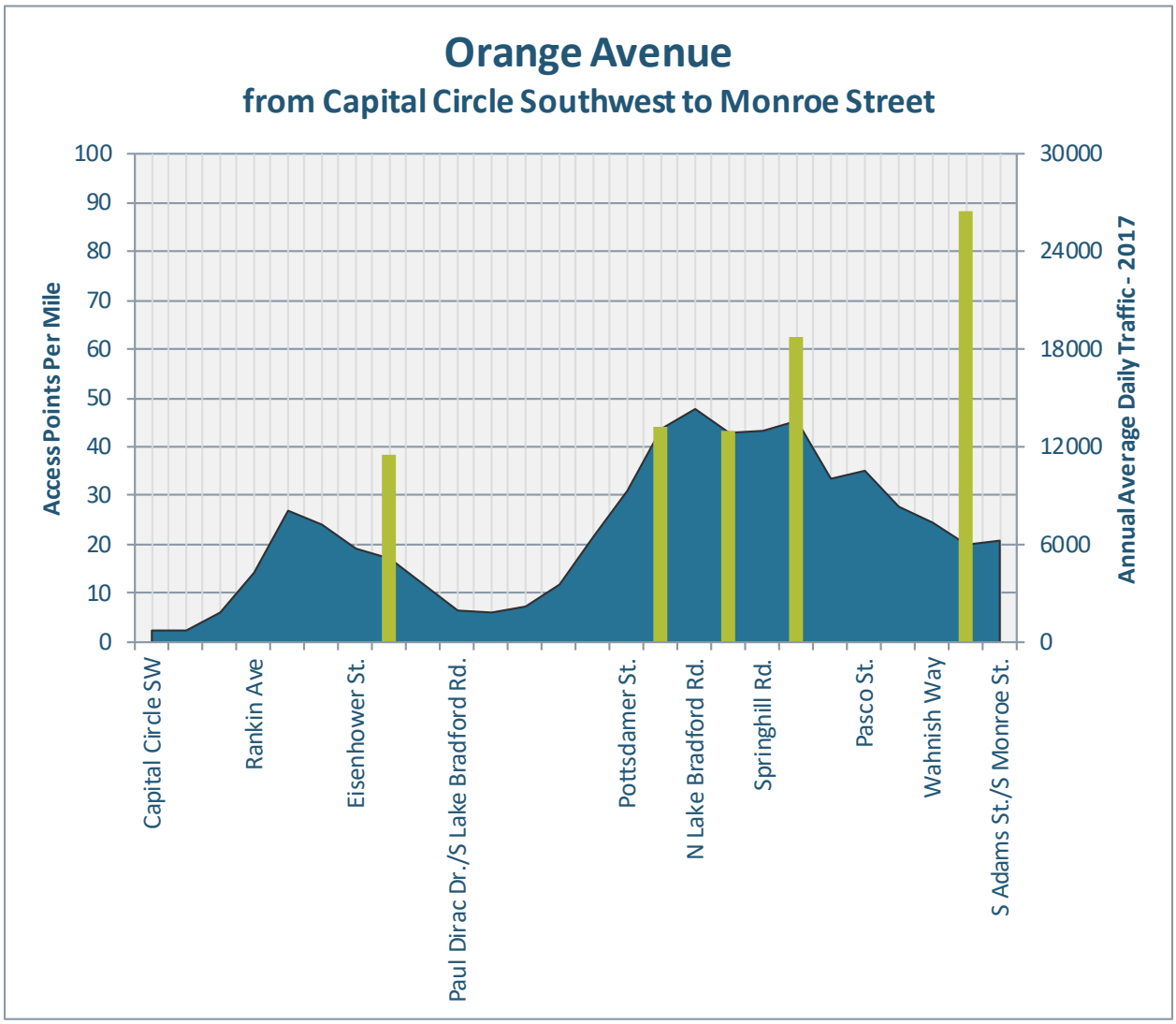
Figure 23 is a graphical representation of the data described in ***Table 4*** and the spatial distribution of parcels with driveway access; there are parcels that have multiple access points.

Figure 23. Driveway Access Points



Driveway and access point density varies from corridor to corridor and for this reason the access points per mile were calculated. The analysis for Orange Avenue is summarized by dividing the corridor into sections with the number of driveways between each section obtained via Google Earth and site visits. **Figure 24** shows the calculation of a weighted moving average in terms of access points per mile plotted in blue and numerically labeled on the left axis. The green bars are numerically labeled on the right axis and represent the Annual Average Daily Traffic for 2017. The scales used to represent the magnitudes of the AADT histogram and access management plot are independent and set to best display the data.

Figure 24. Access Points Per Mile



Access point density along the corridor peaks at Orange Avenue's intersection with North Lake Bradford Road and is due to the number of businesses and residential communities that are located near the intersection of these two roadways. East of this intersection, the access point density begins to decline and the AADT begins to increase. West of the Orange Avenue and Springhill Road intersection, the corridor transitions from high density neighborhoods with 0.1-acre parcels to multi-acre parcels resulting in fewer driveways per mile and a lower AADT.

Traffic Analysis

Traffic data was collected and analyzed throughout the Southwest Area Transportation Plan study area. The following sections describe the existing traffic trends along with the existing and future traffic operational and segment analyses focusing on the Orange Avenue corridor.

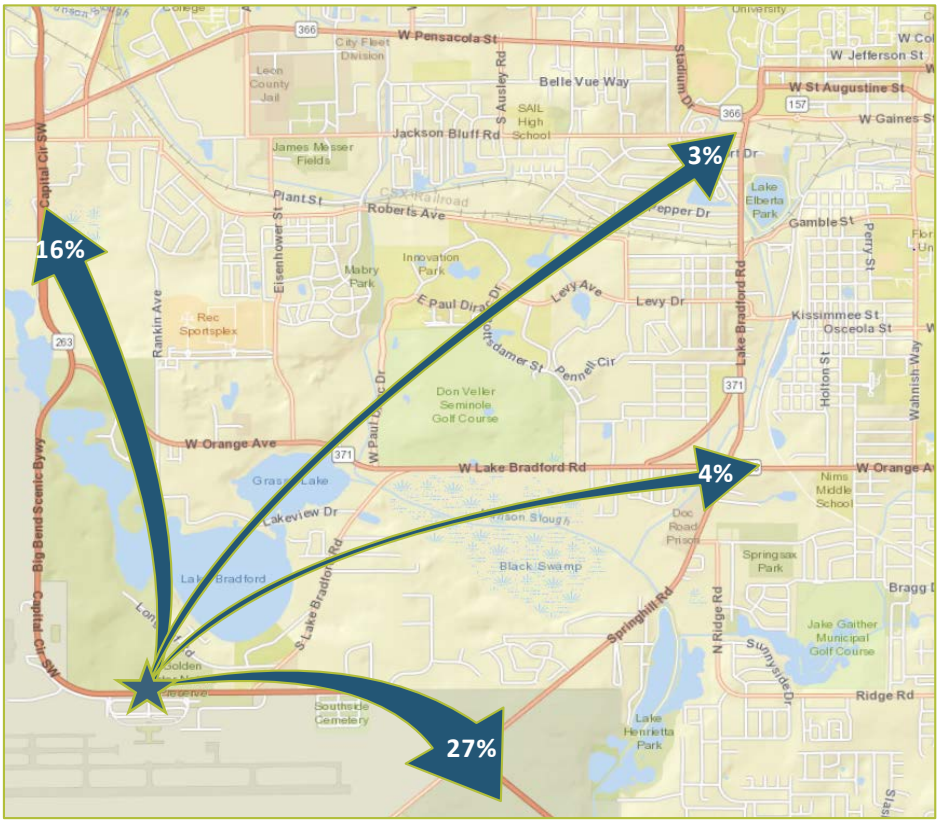
Existing Traffic Trends Analysis

Origin-destination (O-D) data was collected from 11/2/2017 to 11/14/2017. The technology used to collect the O-D data is Bluetooth. The Bluetooth data was collected anonymously by device media access control (MAC) addresses as they passed into or through the signal range of Bluetooth collection units placed strategically in and around the southwest area of Tallahassee. Records are not otherwise associated with the owner of the vehicle or device detected by the collection units. Data was collected specifically for analyses of travel patterns in the area.

The collected Bluetooth data is used to determine trends rather than a quantifiable volume of trips. Bluetooth's capabilities are limited and only capture a small percentage of vehicles traveling along the roadway; however, it provides insight into travel patterns and routes. The overall traffic patterns of trips originating south end of the study area at the airport are shown in **Figure 25**.

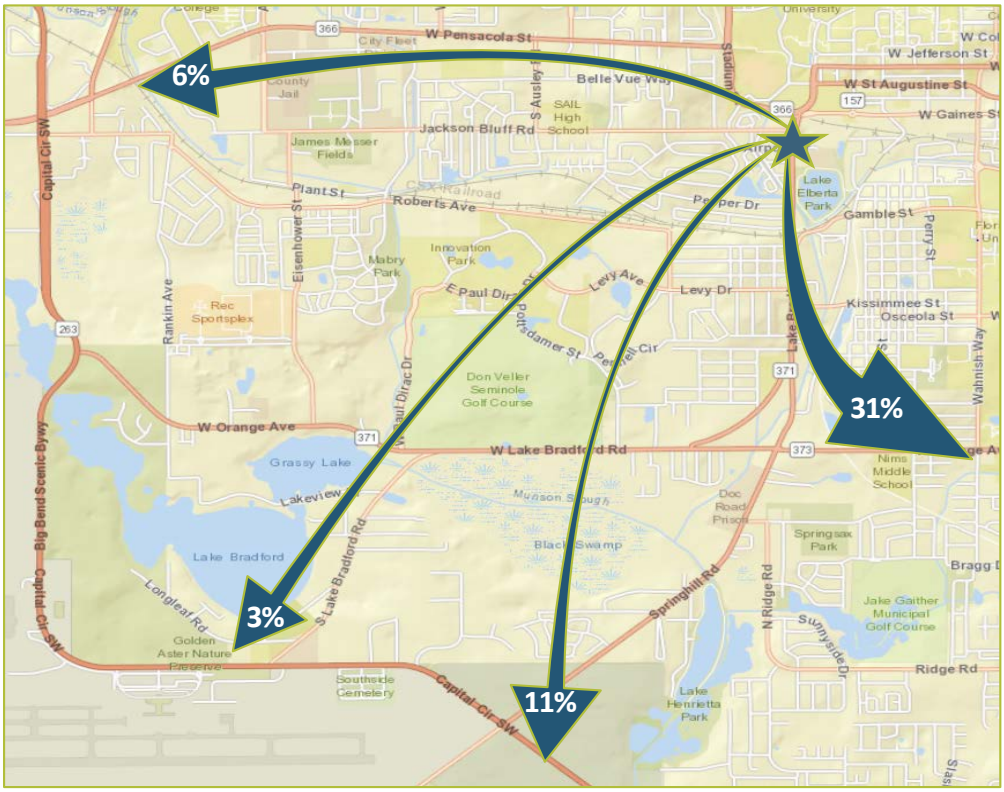
The data shows that of the traffic that originates on Capital Circle SW by the airport, 16% reach Capital Circle north of Orange Avenue, 27% reach Capital Circle east of Springhill Road SW, 4% reach Orange Avenue east of Springhill Road and 3% reach the northern portion of North Lake Bradford Road. Other destinations, including trips that stop before they reach the identified destinations, make up the remaining trips. The traffic that reaches the northern portion of North Lake Bradford (shown as 3% on the trend map) generally utilizes two primary separate routes. Data collected indicates that 25% of the trips that reach the northern point of North Lake Bradford Road use South Lake Bradford Road and 75% use Springhill Road.

Figure 25. Traffic Patterns Originating from South of Corridor



The percentage of traffic that originates at the northern portion of North Lake Bradford Road primarily utilizes two separate routes to reach the airport (shown as 3% on the **Figure 26**). Fifty percent of the trips travel south on Springhill Road to Capital Circle Southwest and 50% use South Lake Bradford Road. The data also shows that 6% reach West Pensacola Street east of Capital Circle SW, 3% reach Capital Circle SW from adjacent to the airport, 11% reach Capital Circle SW east of Springhill Road, and 31% reach Orange Avenue east of Springhill Road.

Figure 26. Traffic Patterns Originating from North of Corridor



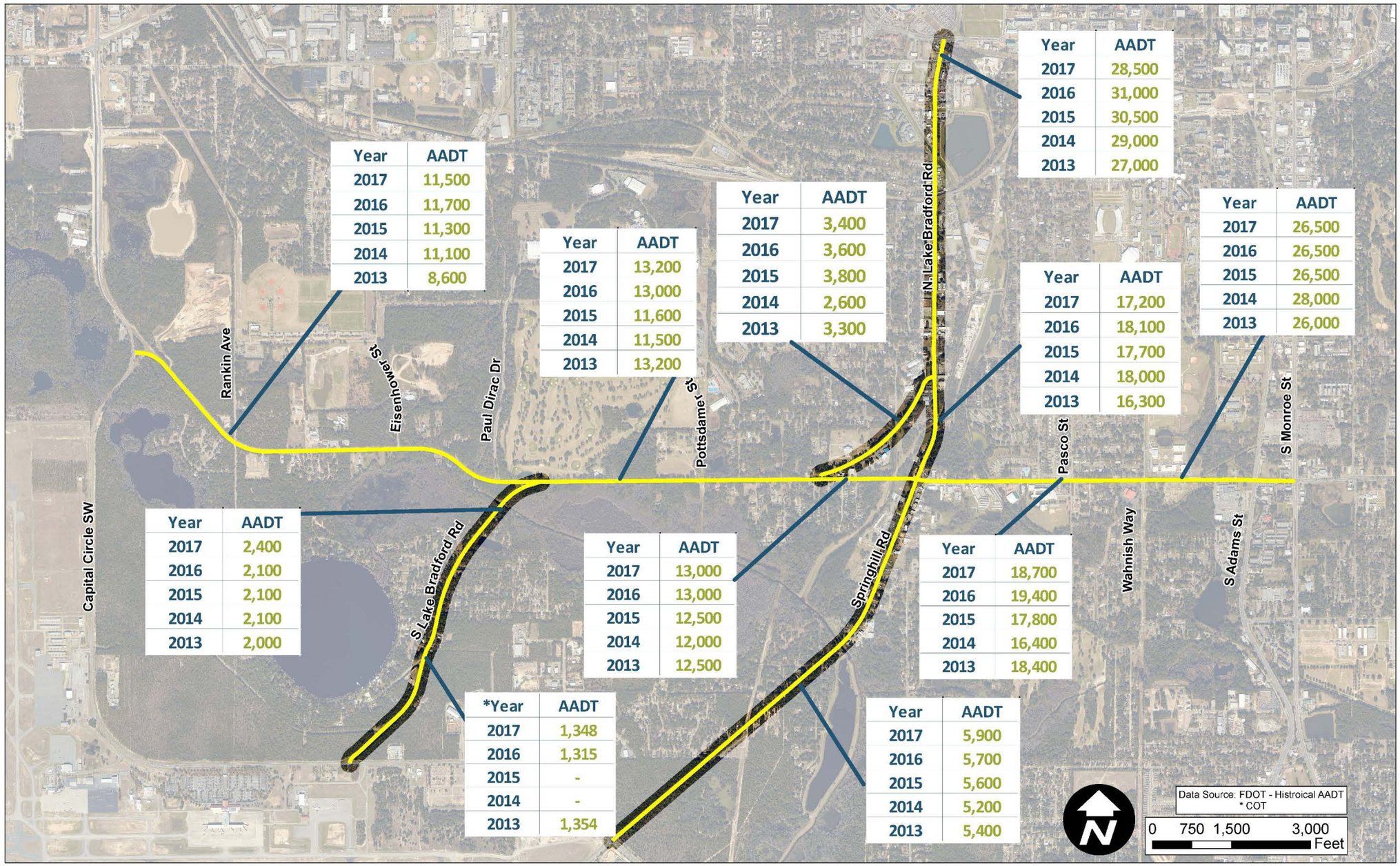
Capacity Analysis

Signalized intersection data was obtained from the City of Tallahassee. The Synchro files were reviewed with the provided counts and adjusted to correct for inconsistencies in the model files and the City's collected turning movement counts. Additional traffic volume data, were collected during the analysis period.

Historical Traffic Volumes and Trends

Annual Average Daily Traffic (AADT) volumes along Orange Avenue were obtained from FDOT's online traffic website. The last five years of data were used to determine the annual growth of the traffic. Annual growth rates were calculated for six count stations along Orange Avenue, which varied from 0.5% to 6.7%. An annual growth rate of 2% was chosen to provide a conservative approach and applied to the 2017 volumes to project to the 2045 horizon year. **Figure 27** shows the historical traffic volumes throughout the Southwest Area Transportation Plan study area.

Figure 27. Historical AADT Traffic Data



Segment Analysis

The 2017 AADTs along the corridor were compared to FDOT's Generalized Maximum Service Volume Tables (12/18/12). Orange Avenue is categorized as a state signalized arterial. It was determined that the segment from Springhill Road to Wahnish Way is operating today over capacity. This is a result of high traffic volumes (AADT 18,700) compared to a maximum service volume (capacity) of 15,600. All other Orange Avenue segments are currently well under capacity. ***Figure* 28** shows the existing (2017) capacity conditions along the corridor.

The 2017 traffic volumes were forecasted to the year 2040 and 2045 by applying the 2% annual growth rate to the volumes and it was determined that by 2040, the segment from South Lake Bradford Road to South Monroe Street will be over capacity. Five years later (2045), the entire corridor from Capital Circle Southwest to South Monroe Street is anticipated to be over capacity. **Figure 29** shows the 2040 and 2045 capacity conditions along the corridor.

The traffic growth is being applied over a 28-year period, which provides insight into future demand along the corridor. Future planned projects near the corridor, including expansion plans for FSU's Southwest campus and Innovation Park, along with standard growth will contribute to this impending capacity issue. Consideration should be given to providing additional capacity along the corridor to accommodate future development and growth in the area.

Figure 28. 2017 AADT Capacity Analysis

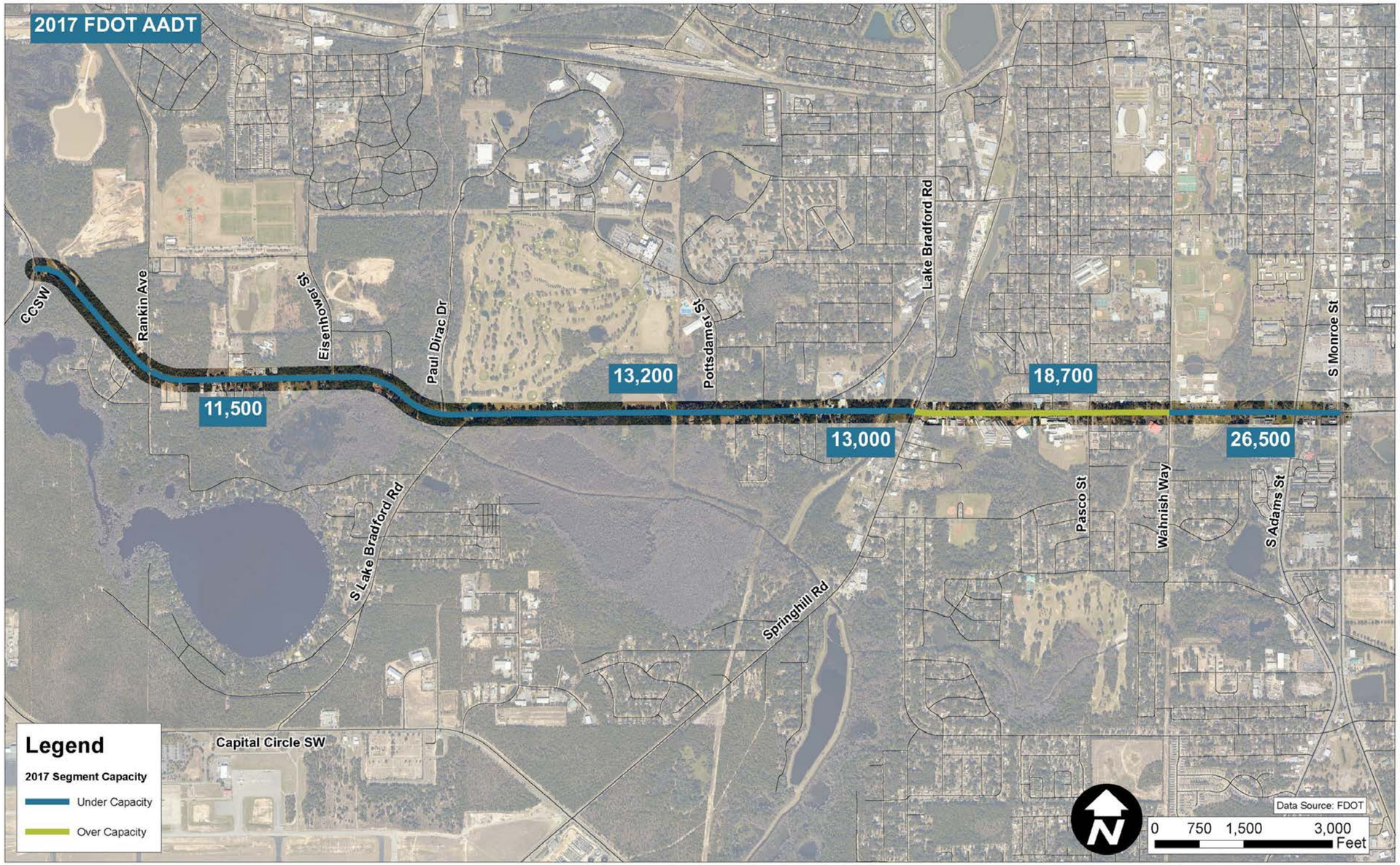
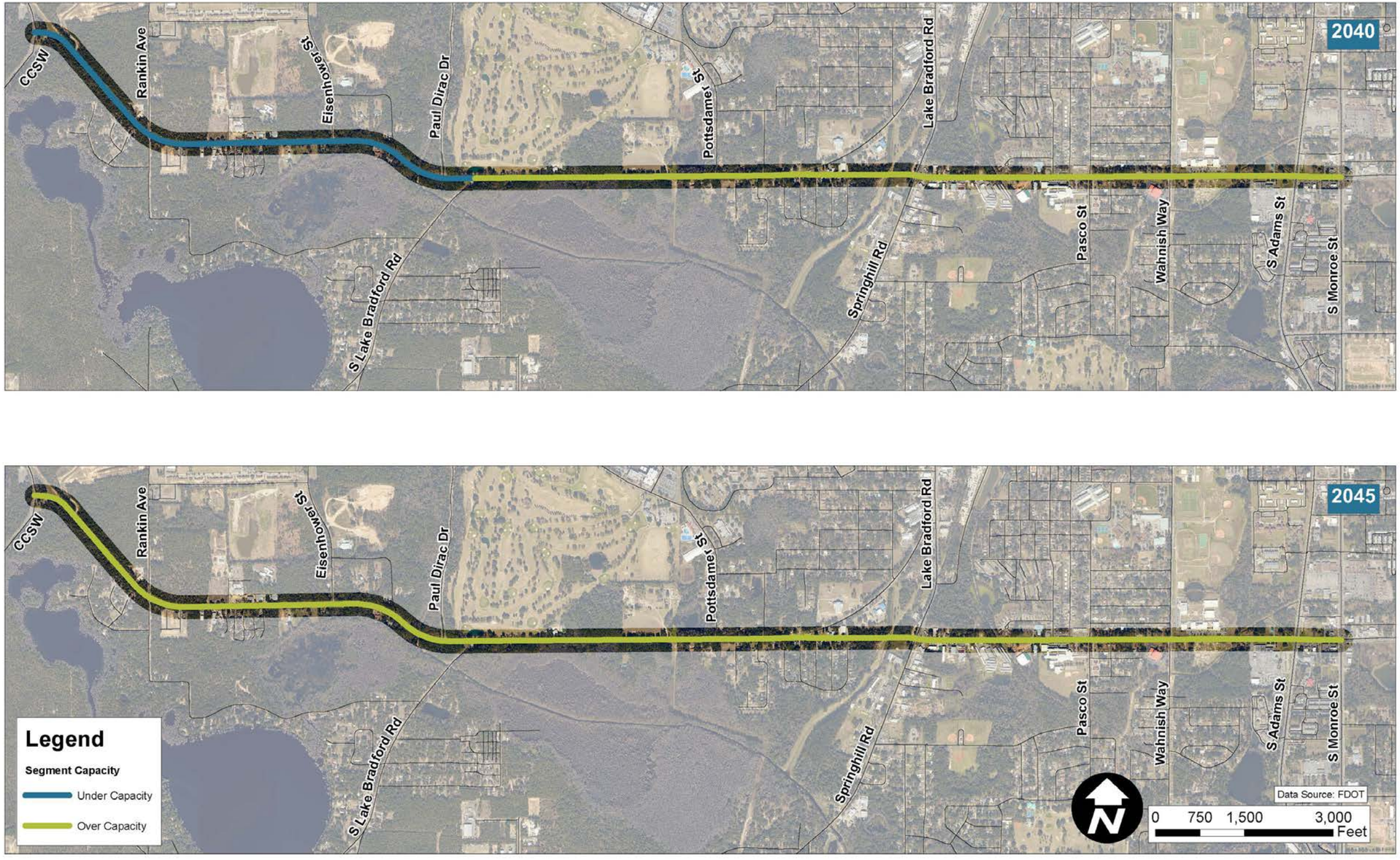


Figure 29. Future Capacity Analysis



Existing Intersection Analysis

There are six signalized intersections along Orange Avenue. **Table 5** shows the existing Level of Service (LOS) and the AM/PM peak period intersection delays. The intersections at Capital Circle Southwest, Springhill Road, Adam Street, and Monroe Street are all experiencing significant delay and congestion under current conditions. **Appendix A** contains the associated Synchro summaries.

Table 5. Existing LOS and Delays at Signalized Intersections

Intersection with Orange Avenue	AM		PM	
	LOS	Delay (sec)	LOS	Delay(sec)
Capital Circle Southwest	F	85.8	F	80.4
Springhill Road	E	59.9	E	72.4
Pasco Street	B	14.6	C	29.3
Wahnish Way	C	44.0	D	40.9
Adams Street	E	56.0	E	65.8
Monroe Street	E	66.5	F	85.7

The existing signalized intersections from Capital Circle Southwest to Springhill are actuated uncoordinated, while the intersections from Pasco Street to South Monroe Street are actuated coordinated. Retiming the intersections will result in improvements to the corridor. In addition, the future planned widening of Capital Circle Southwest is expected to alleviate congestion at the intersection with Orange Avenue.

Crash Analysis Overview

The FDOT Crash Analysis Reporting (CAR) System was utilized to obtain verified crash location data, which was then supplemented by crash details and reports from the Signal Four Analytics software. Crash data for years 2012 to 2016 (the most recent years for CAR) were obtained for Orange Avenue in Leon County, Florida. The data below reflects crashes recorded along the project corridor.

Overall Crashes (498)

A total of 498 crashes within the study area—including 241 injury crashes and no fatal crashes—were reported over the five-year period between January 1, 2012 to December 31, 2016 (most current and available data at the time of the study). The annual crash frequency varied during the analysis years, with a maximum of 134 crashes in 2015 and a minimum of 75 crashes in 2016.

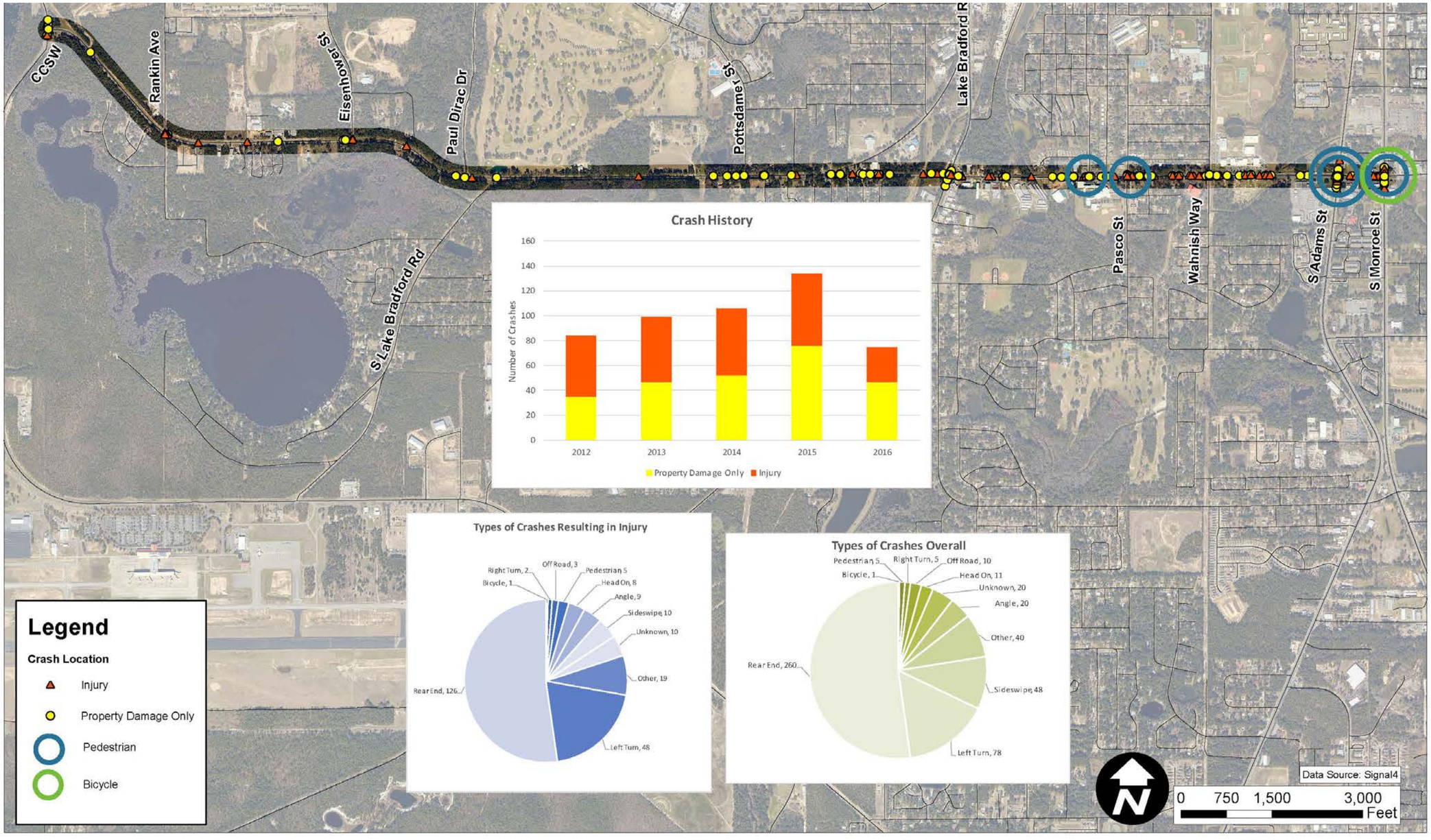
Crash data were analyzed to estimate the severity of crashes and contributing factors. Injury crashes accounted for 48% of all crashes. Crashes that occurred under dark conditions accounted for 25% of all crashes and crashes that occurred on wet surface conditions accounted for 19%. **Table 6** summarizes the crashes that occurred in the study area during the five-year analysis period.

Table 6. Crashes in Five-Year Period along Orange Avenue

Year	Total Crashes	Injury Crashes	Fatal Crashes	Dark Crashes	Wet Crashes	Alcohol Related Crashes
2012	84	49	0	19	19	2
2013	99	52	0	32	27	5
2014	106	54	0	31	22	4
2015	134	58	0	34	21	4
2016	75	28	0	10	8	3
TOTAL	**498**	**241**	**0**	**126**	**97**	**18**
Average Per Year	**100**	**48**	**0**	**25**	**19**	**4**
Percent of Total Crashes		**48%**	**0%**	**25%**	**19%**	**4%**

The locations of the 498 crashes recorded along the corridor are shown in **Figure 30**.

Figure 30. Five Year Crash Data (2012-2016)



Crash characteristics were assessed to determine temporal trends in the 498 crashes during the five-year study period, such as monthly, weekday vs. weekend, and hourly variations in crash frequency. August and October were the most common months for crashes, with 52 (10%) compared to the monthly median of 42 crashes. The day of the week during which the most crashes occurred was Friday, with 92 crashes (18%) compared to the median of 71 crashes. The two-hour period during which the most crashes occurred was between 5:00 P.M. and 6:00 P.M., with 60 crashes (12%) compared to the one-hour median of 21 crashes. **Figure 31** through **Figure 33** depict the monthly, weekly, and hourly patterns observed in the five years of crash data from 2012 to 2016 along the corridor.

Figure 31. Monthly Crash Trends along Orange Avenue

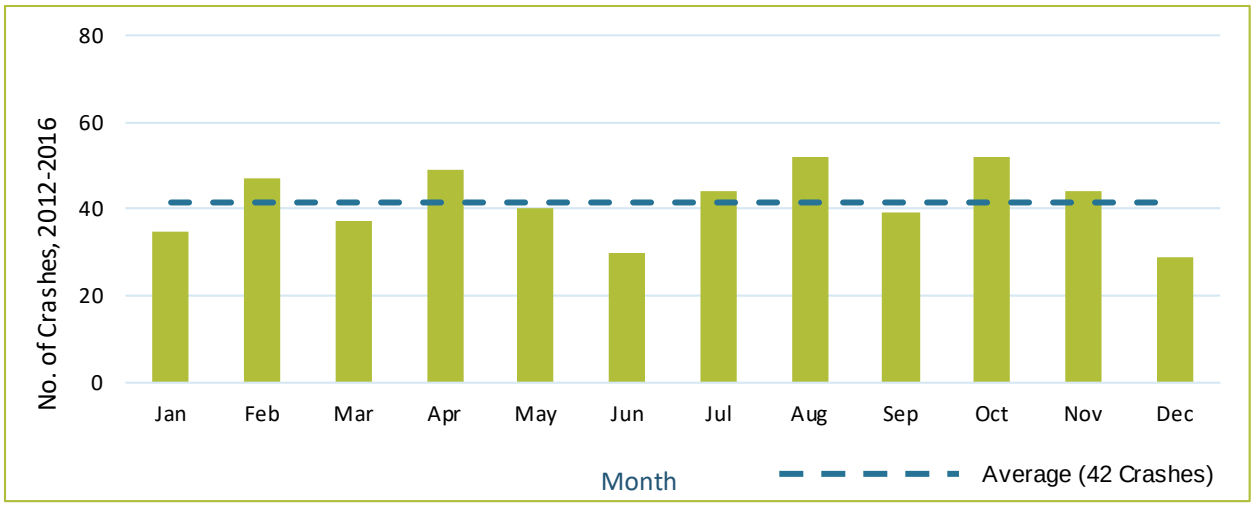


Figure 32. Weekday Crash Trends along Orange Avenue

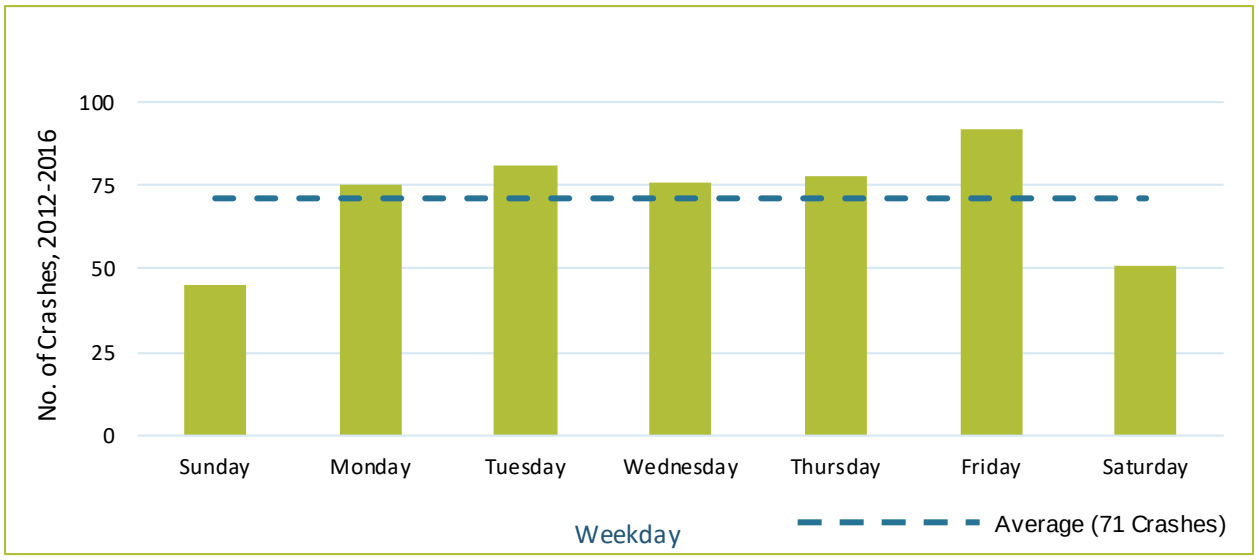
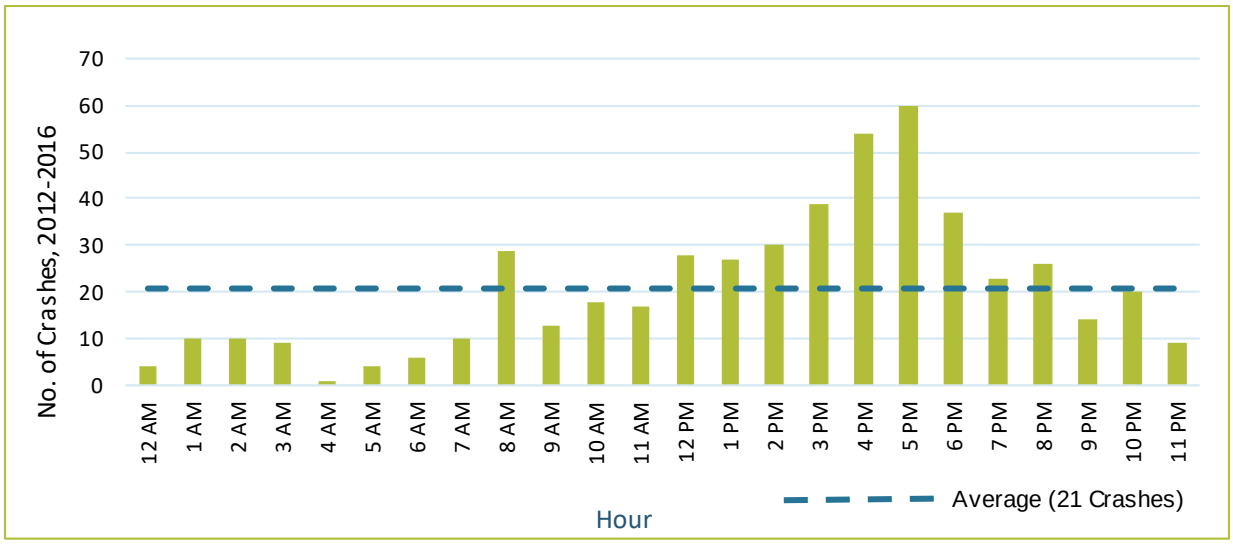
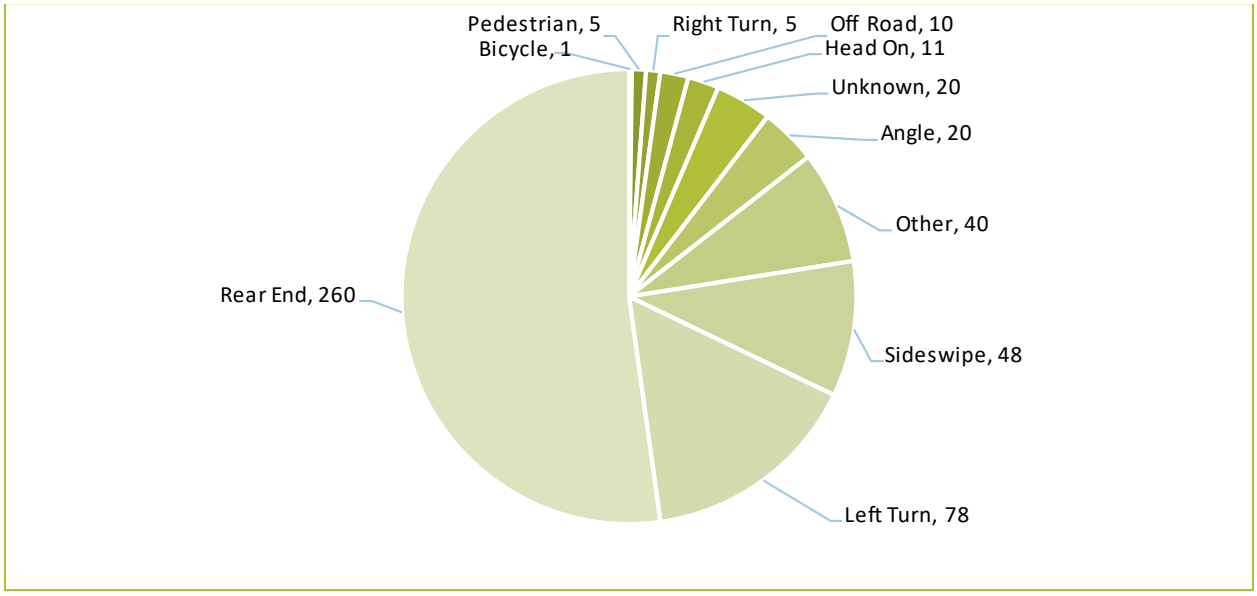


Figure 33. Hourly Crash Trends along Orange Avenue



Several parameters were used to determine trends in the crash types that occurred along the corridor from 2012 to 2016. The highest percentage of any crash type within the study area was attributed to rear end crashes, which accounted for 260 of the 498 crashes (52%). Left-turns were the second most common crash type, with 78 crashes (16%). Of the crashes that involved injuries, 52% were rear-end crashes. **Figure 34** below summarizes the five years of crash data by crash type.

Figure 34. Type of Crash, 2012-2016 along Orange Avenue



Crash Rate Analysis-Segments

Crash rates per million vehicle miles traveled (MVMT) on the corridor were calculated for each year from 2012 to 2016. Roadway classifications varied based on the area type (all study segments are urban in this case), number of travel lanes, and the presence of a median. Orange Avenue from Capital Circle Southwest to Wahnish Way is classified as an urban, two-lane, undivided roadway. And Orange Avenue from Wahnish Way to Monroe Street is classified as urban, four-lane, divided paved. These classifications were utilized to compare the study segments to the statewide average crash rate for similar facilities in each year.

Crashes along each segment, the associated crash rate (crashes per million vehicle miles traveled), and the statewide average for similar facilities are summarized in **Table 7**. Crashes on Orange Avenue from North Lake Bradford Road to Springhill Road were over the state average for all years (2012-2016). The segment from Springhill Road to Wahnish Way and from Wahnish Way to Monroe Street are above the state average for 2012-2015.

Table 7. Orange Avenue Crash Summary by Segment, Rate, and Statewide Average

	Limits	Segment Length (miles)		2012	2013	2014	2015	2016
Segment 1	Capital Circle Southwest to South Lake Bradford Road	1.576	Total Crashes	9	13	11	7	13
			Crash Rate	1.43	2.63	1.72	1.08	1.93
			Statewide Average	2.68	3.19	3.46	3.45	-
Segment 2	South Lake Bradford Road to North Lake Bradford Road	1.067	Total Crashes	3	0	6	3	3
			Crash Rate	0.64	0.00	1.34	0.66	0.59
			Statewide Average	2.68	3.19	3.46	3.45	-
Segment 3	North Lake Bradford Road to Springhill Road	0.347	Total Crashes	14	9	17	25	25
			Crash Rate	8.85	5.69	11.19	15.80	15.20
			Statewide Average	2.68	3.19	3.46	3.45	-
Segment 4	Springhill Road to Wahnish Way	0.813	Total Crashes	26	30	26	37	3
			Crash Rate	4.66	5.49	5.34	7.00	0.52
			Statewide Average	2.68	3.19	3.46	3.45	-
Segment 5	Wahnish Way to Monroe Street	0.547	Total Crashes	37	47	46	62	26
			Crash Rate	7.00	9.06	8.24	11.73	4.92
			Statewide Average	4.67	5.15	5.80	6.16	-

Crash Analysis Findings

In summary, over the five-year analysis period from 2012 to 2016, the study area exhibited a relatively high percentage (52%) of crashes resulting from rear end collisons, due at least in part to the existing congestion along the corridor. Three roadway segments exhibited sustained crash rates exceeding the statewide average for similar facilities. Above average crashes occured during the PM peak period which, coupled with the congestion exhibited at the signalized intersections in the PM peak hour, means that congestion and capacity constraints result in a higher than average crash rate.

Environmental Inventory

The following sections summarize the results of the socio-economic, cultural, and natural environmental data collection and analysis conducted as part of this corridor study. This analysis was conducted at a desktop level utilizing available U.S. Census tract data along with Federal Emergency Management Agency (FEMA) data.

Social

Community

Community cohesion is the degree to which residents have a sense of belonging to their community. This may also include the degree to which neighbors interact and cooperate with one another; the level of attachment felt between residents and institutions in the community; and/or a sense of common belonging, cultural similarity or "togetherness" experienced by the population. There are multiple established neighborhoods throughout the study area. When selecting a recommended opportunity, consideration should be given to how the recommendation will impact connectivity among the neighborhoods.

Demographics

An analysis of minority and low-income populations (Environmental Justice or Potential EJ populations) was conducted through a review of census data and field reconnaissance. In addition, the level of vehicle ownership was reviewed as part of the socioeconomic assessment. The surrounding community has a high minority population. Along the corridor there are areas where over 50% of the households are living below the poverty line. There also are areas where 15% of the homes do not own a vehicle. This supports the need for transit, pedestrian, and bicycle facilities along the corridor. **Figure 35** and **Figure 36** show the poverty and vehicle ownership maps.

Figure 35. US Census Poverty Data

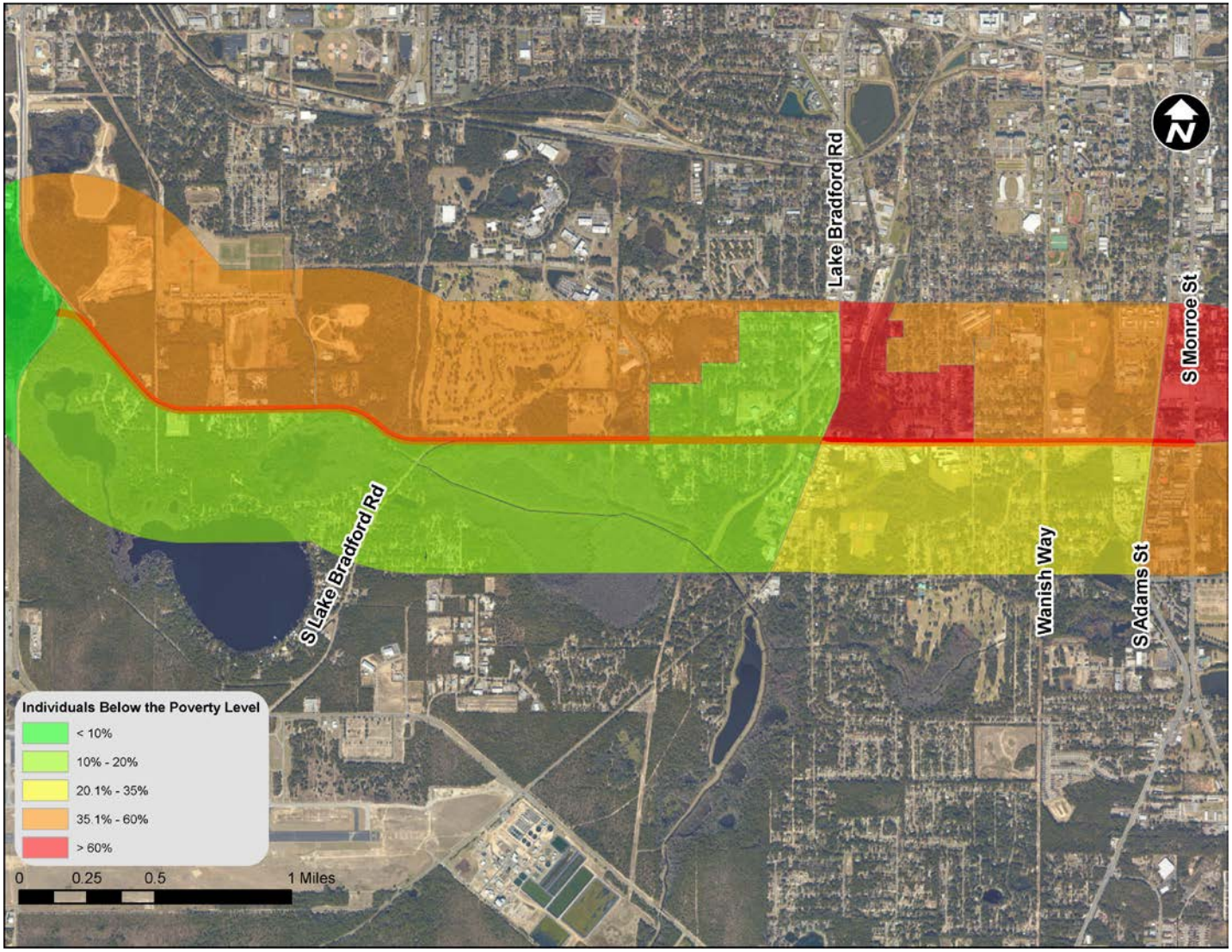
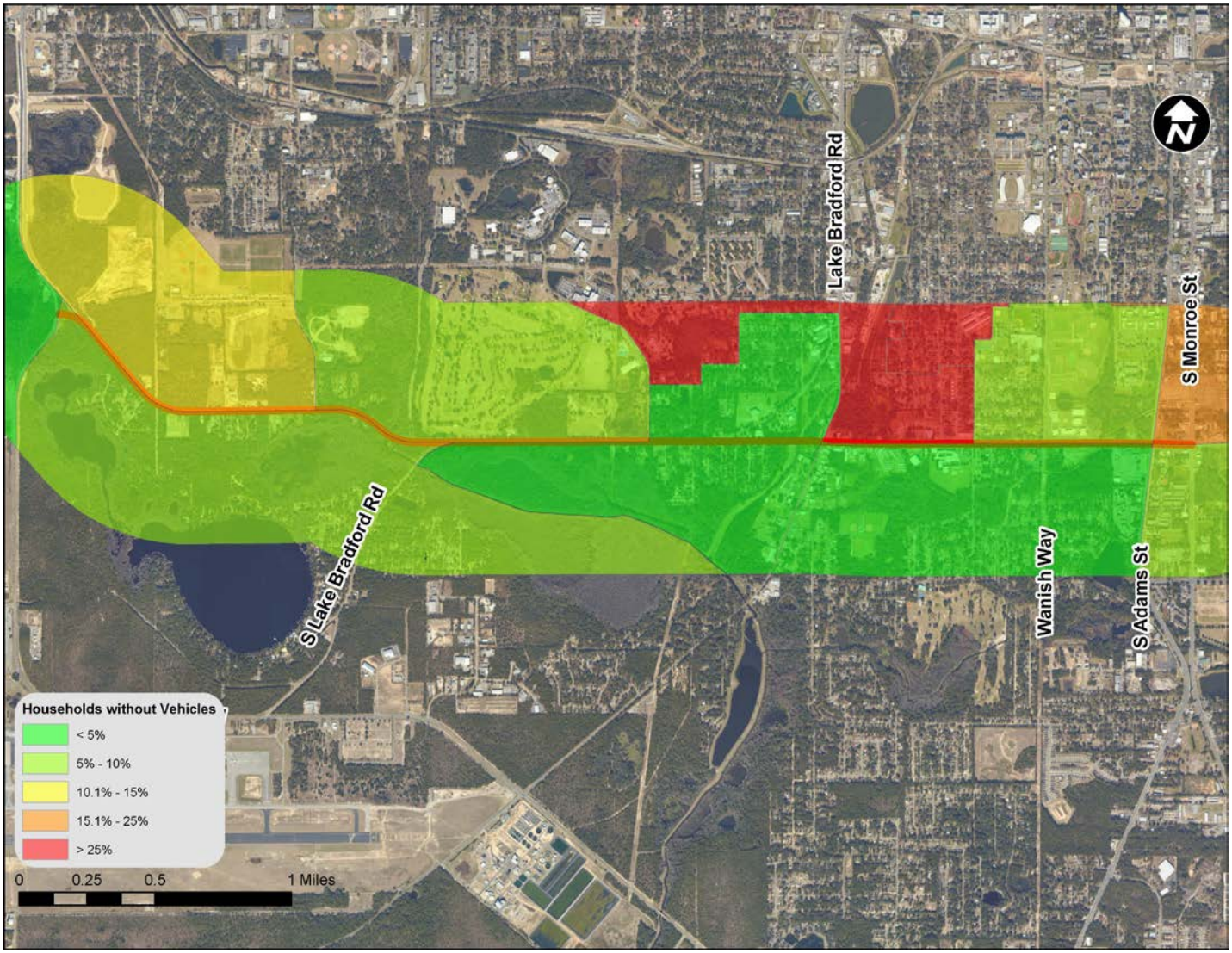


Figure 36. US Census Vehicle Ownership Data



Cultural

Historic Sites/Districts

There are multiple State Historic Preservation Office (SHPO) structures and one SHPO bridge in the project area. Eligibility for listing in the National Register of Historic Places (NRHP) for their significance to transportation and commerce will be determined as part of the PD&E study for Orange Avenue.

Recreational Areas

Recreational facilities and other community facilities near the corridor are shown in **Figure 37.** There are two schools directly along corridor (Nims Middle School and FAMU Research School) and multiple schools in the surrounding area. Consideration should be given to the impacts of any opportunity to the connectivity of residential, community centers, recreational, and educational facilities.

Natural

Wetlands and Floodplains

Figure 38 shows the presence of the wetlands and food zones near the project corridor. The avoidance and minimization of impacts to wetlands and natural surface waters are critical criteria during the evaluations of opportunities. FEMA Flood Insurance Rate Map GIS data for Leon County indicates the project is located within FEMA flood zones AE and A. Flood zone AE represents the 100-year flood with base flood elevations determined. Flood zone A represents the 100-year flood with no base flood elevations determined.

Stormwater treatment should be designed to maintain the natural predevelopment hydroperiod and water quality, as well as to protect the natural functions of adjacent wetlands. Wetland impacts and stormwater treatment will be addressed as part of the FDOT PD&E Study.

Figure 37. Recreational and Community Facilities

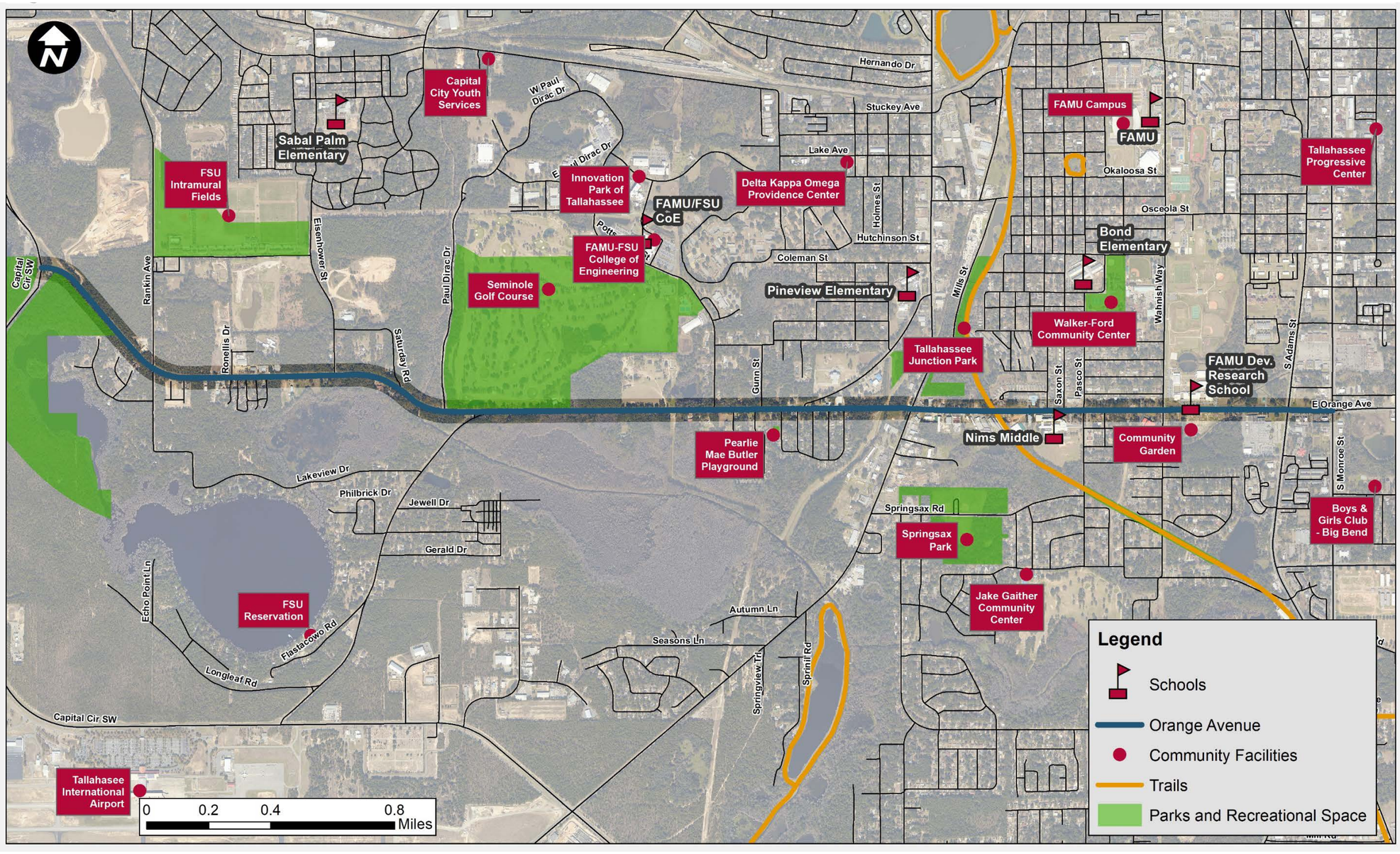
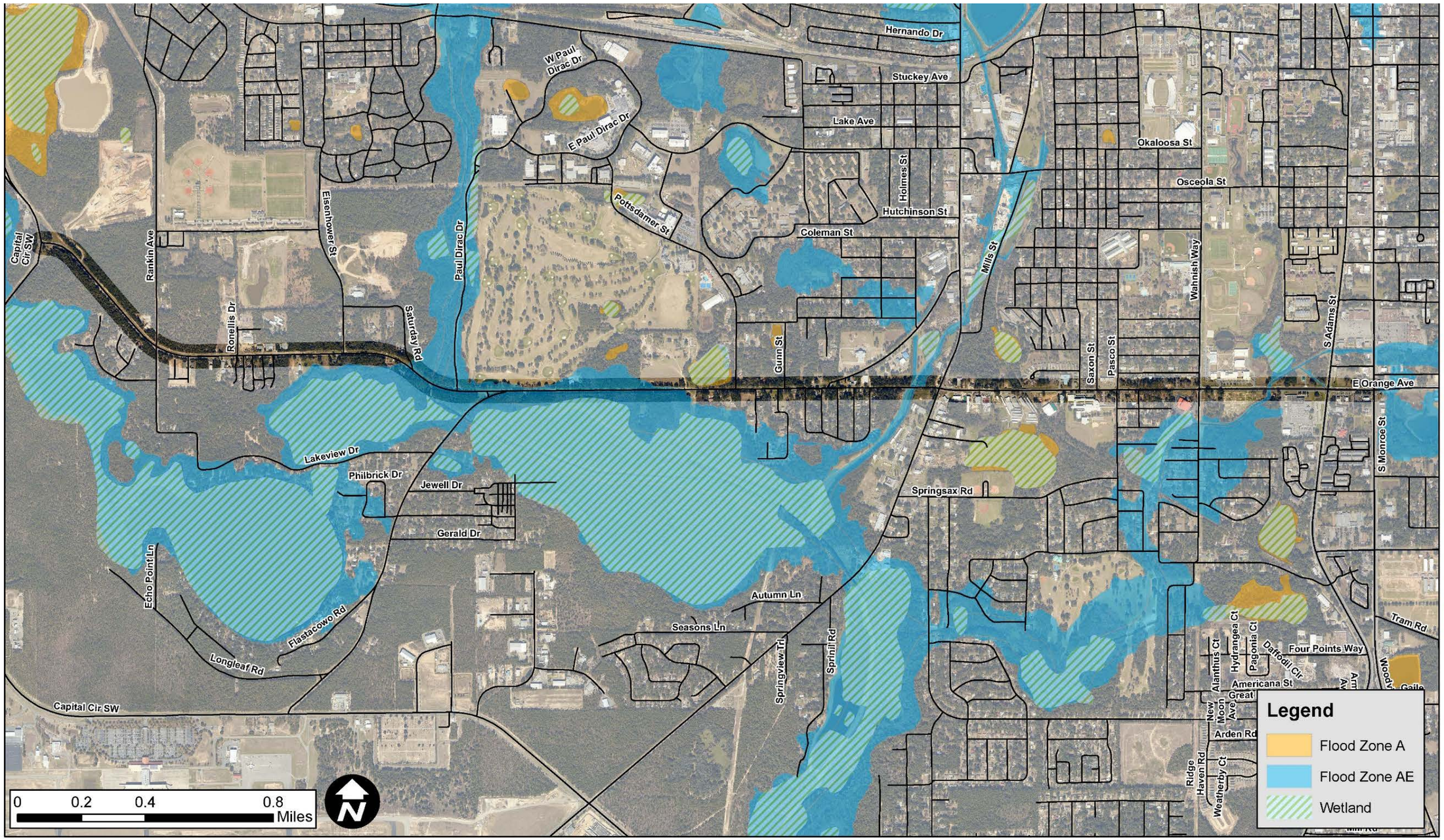


Figure 38. Flood and Wetland Map



Future Projects

There are multiple planned projects in the surrounding area that will impact Orange Avenue. These projects should be considered throughout the next phases of Orange Avenue redevelopment to ensure consistency and continuity in design and recommendations.

Capital Circle Southwest Widening (FDOT Project 219749-2)

The limits for the Capital Circle Southwest (SR 263) capacity project are from Crawfordville Road to Springhill Road and from Springhill Road to Orange Avenue. The project is a roadway widening project that is currently in the right-of-way acquisition stage. The project is intended to widen the existing roadway facility from two lanes to six lanes with the addition of lighting, stormwater management facilities, and intersection improvements. In addition, the typical section will include a 10-foot multi-use path on the east side of the roadway and a 5-foot sidewalk will be included on the west/south side of the roadway. The segment from Crawfordville Road to Springhill Road is funded for right-of-way acquisition and construction. The schedule indicates that bids for construction will be received in fall 2021. The segment from Springhill Road to Orange Avenue is also funded for right-of-way acquisition and construction. The schedule indicates that bids for construction will be received in 2021. This project will directly impact the intersection of Capital Circle Southwest and Orange Avenue. This project also has the potential to impact travel patterns in the area as capacity increases along the corridor it will become more advantageous for commuters with the potential of reducing cut through traffic in the surrounding community.

Innovation Park of Tallahassee

Innovation Park is located north of Orange Avenue with access to the Orange Avenue corridor via both Paul Dirac Drive and Pottsdamer Street. This is a research and development business park that is managed by the Leon County Research and Development Authority. The park is affiliated with Florida State University, Florida A&M University, and Tallahassee Community College along with supporting businesses.

The Park is continuing to grow and expand with the renovation of existing facilities and construction of new facilities. Currently, there are plans for a 40,000-square foot state-of-art incubator/accelerator. This will offer space for education, mentoring, and other support for startup and second stage businesses looking to commercialize new technologies in Tallahassee. In addition, Danfoss Turbocor is expanding their footprint with the construction of 44,000 additional square feet which will add 120 new jobs. The Florida State University will be constructing a new interdisciplinary research and commercialization 125,000 square foot building to accommodate researchers in the disciplines of bio-medical engineering, chemistry, chemical engineering, condensed matter physics, and device prototyping. The Park is also constructing a trail along the central pond that will have three different entry points to support Park employees along with providing an amenity to the surrounding community. The expansion of the Park will increase the traffic demand in the area which will need to be considered as part of the future redevelopment of the surrounding corridors. In addition, as the park continues to expand and add job

opportunities, attention should be paid to multimodal connectivity to the surrounding community to provide access to the new amenities along with job opportunities.

Airport Gateway: Springhill Road, and North and South Lake Bradford Road (Gateway District)

This project is identified as a gateway project with the intention of creating an urban gateway into Tallahassee from the Tallahassee International Airport. This is a Blueprint Intergovernmental Agency project known as the Airport Gateway which includes Springhill Road and North and South Lake Bradford Road and Orange Avenue from South Lake Bradford Road to a new North-South roadway. Additional planning and design of the Airport Gateway corridors will occur upon completion of this Southwest Area Transportation Plan.

Proposed New Corridor

As identified previously, Innovation Park of Tallahassee is a park that houses Florida State University and Florida A&M University facilities. The planned expansions will continue to grow this partnership and the need for connectivity to the main campus. The new north-south roadway will connect Orange Avenue to Stuckey Avenue which connects into North Lake Bradford Road and FAMU Way Expansion. The proposed intersection of the new roadway and Orange Avenue will be located west of the existing intersection of Orange Avenue and Pottsdamer Road. This potential intersection location along with the proposed roadway improvements along with the surrounding corridors should be considered as part of FDOT's Orange Avenue PD&E, described in the subsequent section.

Orange Avenue/Meridian Road Placemaking

The Orange Avenue and Meridian Road Placement project is located just east of the project corridor limits for this Study. The placemaking project is intended to revitalize the commercial area from Orange Avenue north of the Town South shopping center. A StarMetro Transit Center will be constructed with covered seating and bus bays at the intersection of Orange Avenue and Meridian Road. In addition, stormwater facilities will be enhanced with the intention of improving pedestrian access between Town South shopping center and the new development. This will be done in a park-like design similar to Lake Ella in the Midtown District. Connectivity to this proposed facility will positively impact the communities along the Orange Avenue study corridor.

Orange Avenue PD&E

Florida Department of Transportation is currently initiating and will be completing a PD&E study along the corridor from Capital Circle Southwest to South Monroe Street. This study will result in the completion of the required NEPA documents along with a preferred Orange Avenue roadway alternative. This project is in the early stages and will analyze the existing facility traffic and multimodal needs along with extensive public involvement and environmental considerations to shape the preferred alternative that will move forward to design. It is understood that the PD&E will consider the results of the Southwest Area Transportation Plan.

Outreach Efforts

Orange Avenue District Forum Participants

The Southwest Area Transportation Plan team completed extensive public outreach efforts to collect information from residents, business owners, and other stakeholders in the project area. Because the PD&E study for Orange Avenue began during the development of the plan, it was imperative that the public had multiple opportunities to provide information and ideas regarding Orange Avenue. All public outreach efforts were advertised through multiple avenues including agency websites, newsletters, and emails. All public involvement efforts complied with Title VI. The general approach taken to collect public input is summarized below. The full summary of input is provided in **Appendix B**.

Technical Team Meetings

The technical team for the plan was made up of a staff from the City of Tallahassee, Leon County, and FDOT. The team met several times throughout the development of this plan to provide insight into ongoing local projects, existing project delivery, and additional guidance for developing recommendations. This team will continue to identify and help implement some of the short-term recommendations and additional enhancements such as transit upgrades and landscaping in coordination with the Orange Avenue corridor widening project.

Stakeholder Meetings

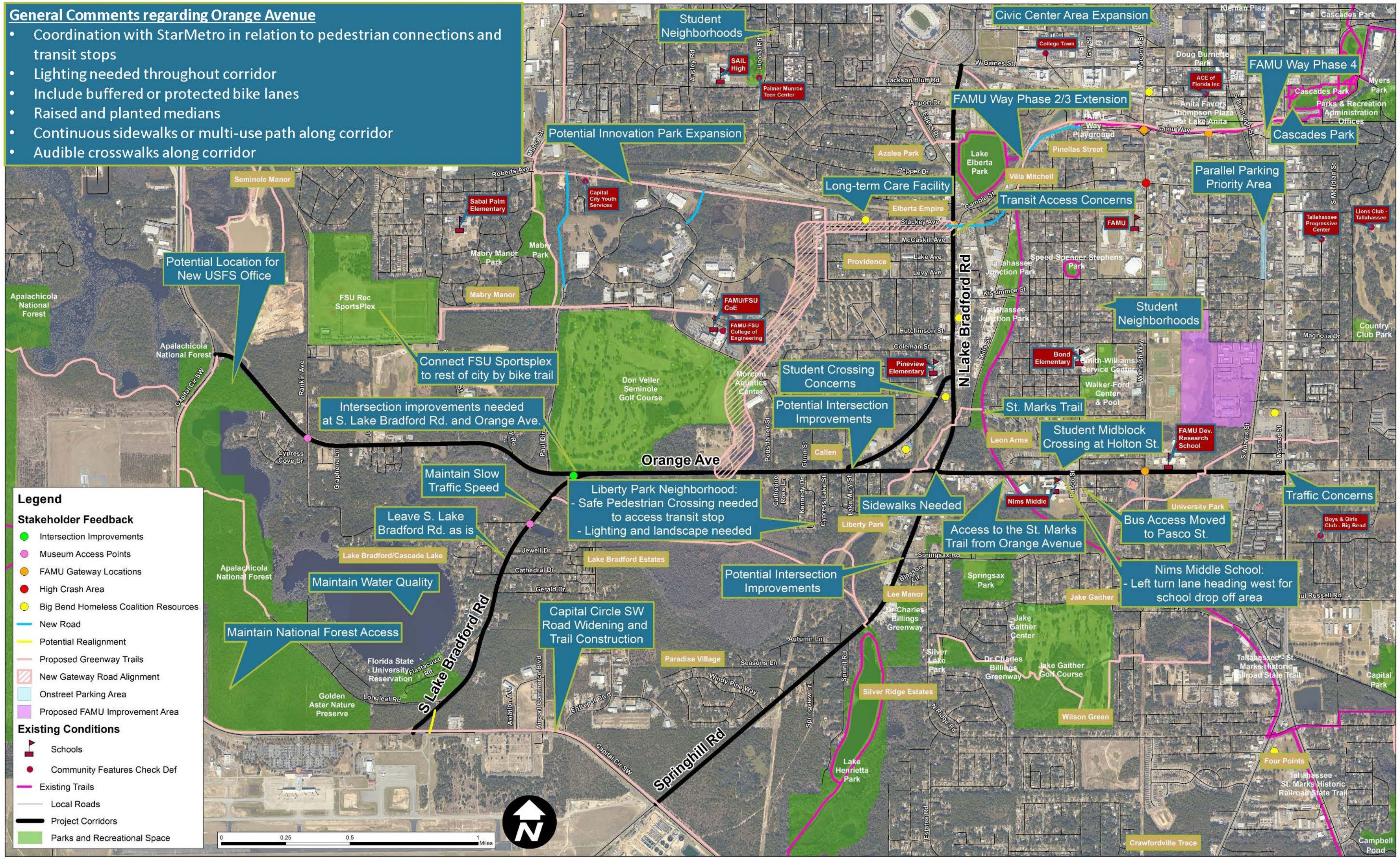
A series of 14 stakeholder meetings were held with the following persons/agencies for their input related to each of the Southwest Area Transportation Plan corridors:

- Leon County School Board (1/10/2018)
- Florida State University (1/17/2018)
- Innovation Park (1/17/2018)
- Greater Tallahassee Chamber of Commerce (1/18/2018)
- Tallahassee Museum (1/23/2018)
- Big Bend Homeless Coalition (1/22/2018)
- U.S. Forest Service (1/23/2018)
- Southside CRA Advisory Board (1/24/2018)
- Big Bend Minority Chamber of Commerce (1/25/2018)
- Pineview Elementary School (1/30/2018)
- Florida A&M University (1/31/2018)
- Capital City Chamber of Commerce (2/1/2018)

- Joint City County Bike Work Group (2/1/2018)
- R. Frank Nims Middle School (3/22/2018)

Through these stakeholder meetings, an abundance of information regarding planned development, new or changing roadways, and known transportation improvements needed were gathered. **Figure 39** shows a summary of the input received from the stakeholder meetings.

Figure 39. Stakeholder Input



Neighborhood Association Meetings

Localized meetings were held during previously scheduled neighborhood association meetings along Orange Avenue. This beneficial effort meeting with residents involved in their neighborhoods meant they could express not only their concerns and desires, but others' concerns and desires due to their strong relationships and knowledge of those living in the area. Five neighborhood association meetings were held with the following neighborhoods:

- Liberty Park Neighborhood (7/19/2018)
- Providence Neighborhood (8/20/2018)
- College Terrace Neighborhood (8/30/2018)
- Jake Gaither Neighborhood (11/15/2018)
- Callen Neighborhood (1/10/2019)

These meetings also allowed the project team to advertise through their neighborhood association emails and gave residents additional opportunities to provide input in a more formalized setting. Localized neighborhood association meetings will continue to be held along the remaining corridors included in the Southwest Area Transportation Plan.

Callen Neighborhood Entrance off Orange Avenue

Orange Avenue District Forums

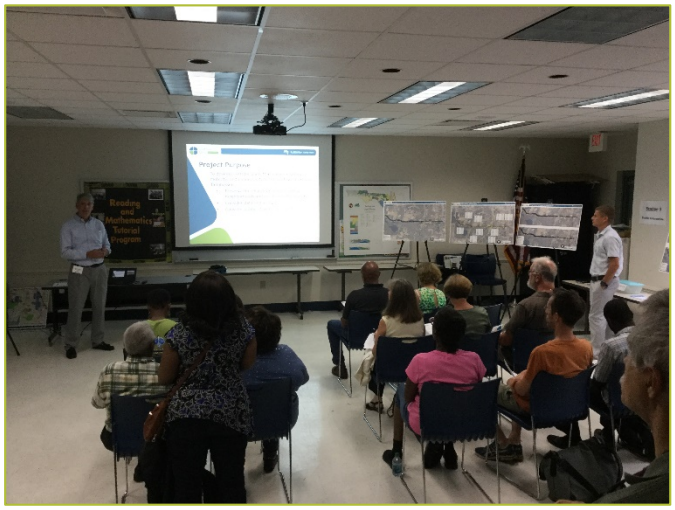
Two District Forums focusing on gaining information related to Orange Avenue were held in June 28, 2018 and October 4, 2018. Theses district forums provided participants with multiple opportunities to ask questions, understand existing and future conditions in the area, and provide their input for what transportation upgrades or improvements they felt were most needed along Orange Avenue.

District Forum 1

The first District Forum focusing on Orange Avenue included formal presentation on the Southwest Area Transportation Plan, the project's goals, and intended outcome of the plan. This District Forum presented a series of maps showing existing transportation facilities, traffic and safety figures, summaries of input previously received from stakeholders, and multiple opportunities to provide input. The participants at this workshop provided an assortment of recommendations including the following:

Orange Avenue District Forum Participants

- Need for continuous bike lanes and sidewalks along the entire Orange Avenue corridor
- Need for a connection between Orange Avenue and the Tallahassee-St. Marks Historic Railroad State Trail
- Upgrades to make Orange Avenue more aesthetically pleasing and enjoyable for people to walk along
- Pedestrian safety measures including pedestrian crossings at the schools along Orange Avenue and access to transit stops



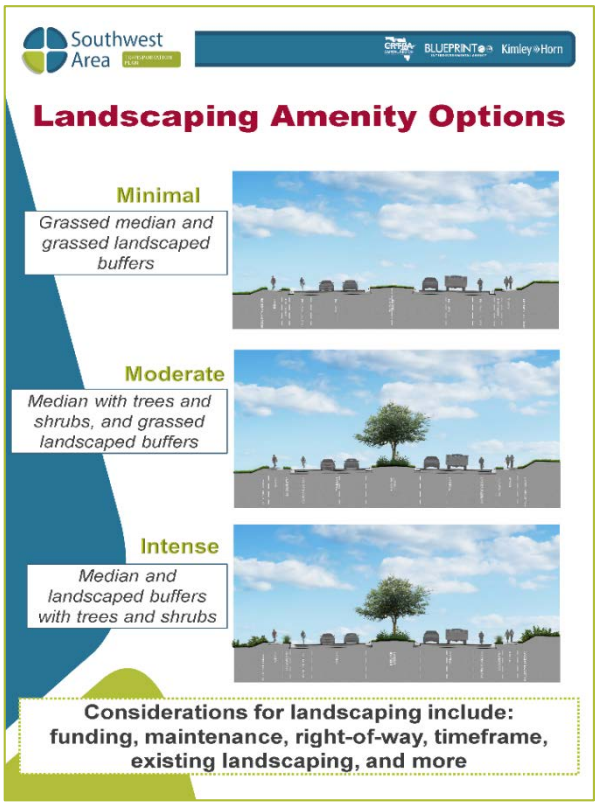
Formal Project Presentation

Participants Providing Comments

Orange Avenue District Forum 2

The second District Forum presented improvement opportunities along Orange Avenue. Opportunities regarding the following topics were addressed and participants were encouraged to identify which they preferred for the corridor:

- Connection between the Tallahassee-St. Marks Historical Railroad State Trail and Orange Avenue
- Typical sections along Orange Avenue broken down into the following segments:
  - Capital Circle Southwest to South Lake Bradford Road
  - South Lake Bradford Road to North Lake Bradford Road
  - North Lake Bradford Road to Springhill Road
  - Springhill Road to Wahnish Way
  - Wahnish Way to Monroe Street
- Preferred landscaping
- Preferred bicycle and pedestrian facilities
- Transportation amenities such as lighting, transit facilities, and placemaking



Landscaping Options Presented at District Forum #2

Most of the District Forum participants expressed a preference toward the four-lane typical section opportunity with a multi-use path on one side of the corridor and a sidewalk on the other. Participants also expressed that they preferred bicycle facilities off the road for safety reasons and stated that this would encourage more people to use bicycling as a form of transportation in the area. They also expressed the desire for moderate landscaping and lighting along the corridor.

Overall Feedback

Through the extensive outreach conducted focusing on gathering input for Orange Avenue, the overall sentiment from participants was a need for better multi-modal facilities along the entire corridor. Participants expressed concerns that if bicycle lanes were constructed instead of an off-road bicycle facility such as a multi-use path, the corridor wouldn't be as safe for most bicyclists in the area. They also expressed the need for continuous sidewalks along the corridor as many residents in the area enjoy walking and use it for transportation purposes to connect to other neighborhoods, schools, and commercial establishments. Beautifying the corridor and keeping the sense of place for the Southwest Area was another response often heard during outreach efforts. Making it a place people want to travel along while making safety the top priority was echoed by many residents in the project area.

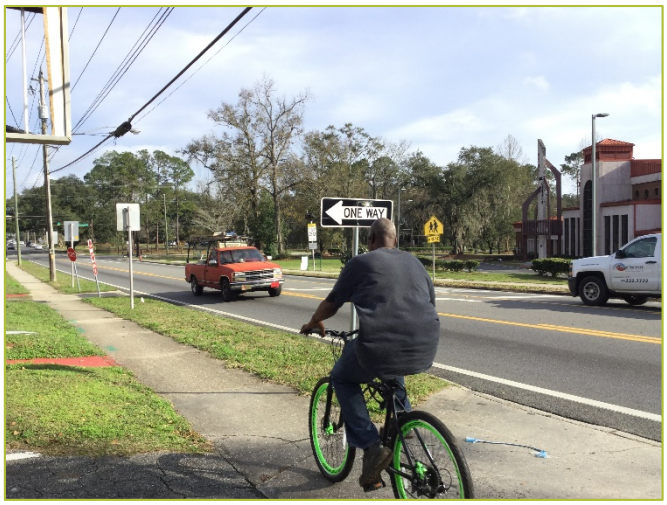
Transportation Opportunities Along Orange Avenue

The following pages discuss the existing transportation facilities by user types and the different opportunities for addressing these transportation facilities along Orange Avenue. The transportation facilities have been broken down by the following user types:

Access Along Orange Avenue

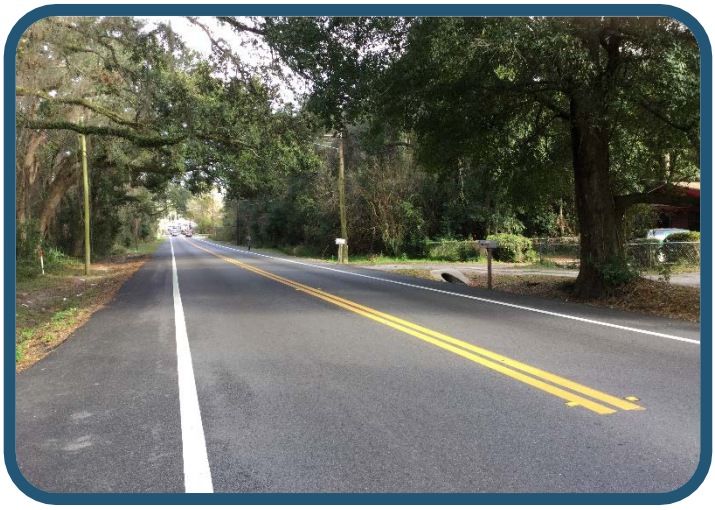
- **Pedestrians**
  - Sidewalks
  - Multi-use path
  - Pedestrian crossings
  - Pedestrian island refuges
- **Bicyclists**
  - Bicycle lanes
  - Multi-use path
  - Trail connections
- **Transit Facilities**
  - This information will be provided to StarMetro for consideration
- **Motorists**
  - Corridor expansion
  - Access management
  - Intersection improvements

This information should be considered to help provide an understanding of the existing inconsistent multi-modal facilities along the corridor, the need for improved transportation facilities to manage expanding traffic demands, and options to provide safe facilities for other user types.



Bicyclist Utilizing the Sidewalk along Orange Avenue

PEDESTRIANS



Sidewalks

Existing Sidewalk Conditions

Orange Avenue has sporadically placed sidewalks along the length of the corridor, which appear to be based on existing right-of-way availability. The intermittent sidewalks switching between the north and south sides of the corridor creates a lack of connectivity for pedestrians and has been identified as a major issue along Orange Avenue. From Capital Circle Southwest, a 4 to 5-foot sidewalk is present along the north side of the corridor continuously to North Lake Bradford Road. From North Lake Bradford Road to Springhill Road, there are no sidewalks present. A pedestrian-desired path can be seen on the north side of the corridor over to Springhill Road, indicating a strong need for pedestrian facilities in this area. The feedback from the public echoed this sentiment, with North Lake Bradford Road to Springhill Road being one of the most highly mentioned locations for pedestrian facilities. Starting at Springhill Road, a sidewalk is present directly adjacent to the road on the south side of the corridor for the remainder of the study area. A sidewalk begins on the north side of the corridor slightly west of Holton Street and continues until Monroe Street and beyond.

Existing Sidewalk Along Orange Avenue Near Business Access

Pedestrian Footpath Along Orange Avenue Indicating the Location of the Pedestrian-Desired path on the North Side of the Corridor.

Existing Sidewalk on North Side Of Orange Avenue

Sidewalk Opportunities

- Capital Circle Southwest to South Lake Bradford Road:
  - 6-foot sidewalk on south side of corridor.
  - Replace existing 4 to 5-foot sidewalk on the north side of the corridor and expand to 6 feet.
- South Lake Bradford Road to North Lake Bradford Road:
  - 6-foot sidewalk on south side of corridor.
  - Replace existing 4 to 5-foot sidewalk on the north side of the corridor and expand to 6 feet.
- North Lake Bradford Road to Springhill Road:
  - Construct 6-foot sidewalk on both sides of the corridor.
  - Temporary sidewalk on south side of the corridor until road widening occurs.
- Springhill Road to Wahnish Way:
  - 6-foot sidewalk on south side of corridor.
  - Extend existing sidewalk on north side of the corridor further west to Springhill Road.
- Wahnish Way to Monroe Street:
  - If sidewalk is replaced on either the north or south side, add 6-foot sidewalk.

Note: 5-foot sidewalk is a minimum width in areas with a utility buffer, but 6-foot sidewalk is desired. In cases where there is an existing sidewalk, the sidewalk should be replaced to be 6-foot if being impacted by the road widening project. FDOT's PD&E will determine impacts to existing sidewalks along Orange Avenue.

"Set back the sidewalks from the back of curb to improve pedestrian safety and comfort"
~ Public Comment from District Forum 1

Multi-Use Path

Existing Conditions

Multi-use paths have become a popular transportation facility over the years, allowing enough space for dual uses. Currently, along Orange Avenue, there are no adjacent multi-use paths. The Tallahassee-St. Marks Historic Railroad State Trail crosses underneath Orange Avenue west of Holton Street with no access to or from Orange Avenue. Many public involvement participants for this plan have expressed the desire for a connection to the Tallahassee-St. Marks Historic Railroad State Trail from Orange Avenue via multi-use path or sidewalk. In addition to existing trails, there are proposed trails such as the FAMU Greenway which is planned cross Orange Avenue in the future. During the public involvement efforts, the most commonly mentioned facility needed and desired by participants was a multi-use path. Many participants noted that they would not feel safe having only on-street bicycle lanes as an option to ride along Orange Avenue. Several multi-use paths are planned in close proximity to Orange Avenue and Capital Circle Southwest.

Tallahassee- St. Marks Historic Railroad State Trail along Woodville Highway

Capital Cascades Trail Shared- Use Path along FAMU Way

View from Tallahassee- St. Marks Historic Railroad State Trail to Orange Avenue

Multi-Use Path Opportunities

- Capital Circle Southwest to South Lake Bradford Road:
  - Construct a 12-foot multi-use path along one side of the corridor.
- South Lake Bradford Road to North Lake Bradford Road:
  - Construct a 12-foot multi-use path along one side of the corridor.
- North Lake Bradford Road to Springhill Road:
  - Construct a 12-foot multi-use path along one side of the corridor.
- Springhill Road to Wahnish Way:
  - Remove existing sidewalk on one side of the roadway and construct a 12-foot multi-use path.
- Wahnish Way to Monroe Street:
  - Remove existing sidewalk on one side of the roadway and construct a 12-foot multi-use path.

"For bicycle and pedestrian amenities – prefer multi-use path as it is safer for all, in my opinion."
~ Public Comment from District Forum 2

Crosswalks

Existing Conditions

Along Orange Avenue, the following signalized intersections have existing crosswalks:

- Springhill Road
- Pasco Street
- Wahnish Way
- Adams Street
- Monroe Street

Potential Location for Pedestrian Crossing at Nims Middle School

Because of the intermittent and inconsistent sidewalks and lack of crosswalks, pedestrians have unsafe connectivity options along the entire corridor. There is also a lack of crossings near R. Frank Nims Middle School, with the only pedestrian crossing located at Pasco Street east of the school. Many participants during the public outreach efforts expressed the need for an additional signalized crossing on the west side of the school as many kids are crossing there already. Another crossing location mentioned multiple times was near the Liberty Park neighborhood just east of North Lake Bradford Road. A heavily used transit stop is located on the northern side of Orange Avenue near this location. Many residents in and near Liberty Park cross Orange Avenue without any facility to access this transit stop. Another location mentioned needing a pedestrian crossing is the Florida A&M University community garden on the south side of Orange Avenue, just east of Wahnish Way. Students from the Florida A&M University Development Research School use the community garden and have no safe way to cross the four-lane section of Orange Avenue. All new crossings added along Orange Avenue should be signalized pedestrian crossings.

Existing Signalized Pedestrian Crossing on South Adams Street

Crosswalk Opportunities

- Capital Circle Southwest to South Lake Bradford Road:
  - Capital Circle Southwest and Orange Avenue intersection.
  - Crossing from South Lake Bradford Road to north side of Orange Avenue to access Paul Dirac Road.
- North Lake Bradford Road to Springhill Road:
  - Crossing from Liberty Park Neighborhood (Lake Henrietta Street) to north side of Orange Avenue.
- Springhill Road to Wahnish Way:
  - Crossing from R. Frank Nims Middle School (Holton Street) to north side of Orange Avenue.
    - Possibility for a pedestrian bridge instead of at-grade crossing.
- Wahnish Way to Monroe Street:
  - Crossing from FAMU Community Garden to FAMU DRS school.

"Additional features needed are audible crosswalks, as well as delayed timed crosswalks to accommodate safe travel for the disabled and the elderly."
~ Public Comment from District Forum 1

Pedestrian Refuge Islands

Existing Conditions

From Capital Circle Southwest to Wahnish Way, Orange Avenue is a two-lane undivided corridor. After Wahnish Way, Orange Avenue has an additional two turn-lanes and then becomes a four-lane undivided corridor with left-hand turn lanes. With such high volumes of both pedestrians and motor vehicles, it is important for pedestrians to feel safe and have refuge when crossing Orange Avenue. Pedestrian refuge islands or raised medians should be located where there is not a signalized intersection or crossing. If possible, during the road widening of Orange Avenue, a median should be placed throughout to serve as refuges for pedestrians and cyclists along the corridor.

Pedestrian Refuge Island Located on Monroe Street and Lake Ella

Pedestrian Refuge Island at Roundabout On FAMU Way

Pedestrian Refuge Island Opportunities

- Capital Circle Southwest to South Lake Bradford Road:
  - South Lake Bradford Road and Paul Dirac Road.
- Springhill Road to Wahnish Way:
  - Signalized crosswalk at Nims Middle School with pedestrian refuge for safe student crossings.
- Wahnish Way to Monroe Street:
  - South Adams Street – Add pedestrian refuges to medians that run along Orange Avenue.

"Include raised, planted medians to facilitate crossings by pedestrians and improve the appearance of the corridor."
~ Public Comment from District Forum 1

BICYCLISTS

Bicycle Lanes

Existing Conditions

During the widening of the Leon County section of Orange Avenue (east of Monroe Street), 4-foot bicycle lanes were added to the corridor along with a 5-foot sidewalk and 3-foot grass buffer between the sidewalk and curb on both the north and south side of the street. Once you reach Monroe, the bicycle lanes cease to exist. There is a 6-foot sidewalk on both sides of the corridor. These continue until Wahnish Way as 5-foot sidewalks with a 3-foot buffer and a 1-foot shoulder. The sidewalk returns to 6 feet with no buffer on the north side of the corridor between South Adams Street and Wahnish Way. The 1-foot shoulder also becomes a 2-foot shoulder west of Wahnish Way, and the sidewalks return to a 5-foot width with a 3-foot buffer. The sidewalk continues in front of Nims Middle School, becoming a 4-foot sidewalk with utility blockage and access management issues.

Designated Bike Lane on East Orange Avenue

West of the Leon County Health Department on the north side of the corridor, the paved shoulder on both sides becomes a 4-foot bike lane that varies in size due to the limited right-of-way. The bike lane abruptly ends about .3 mile west of the Health Department. A 6-foot bike lane begins on both sides west of Springhill Road, reduces to a 5-foot lane near Cypress Lake Road and ends at Pottsdamer Street, continuing as a wide paved shoulder, leaving nearly 2.5 miles without a bike lane before reaching Capital Circle Southwest. A 5-foot sidewalk set back from the roadway about 5 feet reappears along this route on the north side of the corridor just west of the start of North Bradford Lake Road and continues to Capital Circle Southwest.

Abrupt Termination of Existing Bike Lane Along Orange Avenue

Cyclists Along Orange Avenue Using the Sidewalk

Bicycle Opportunities

- Capital Circle Southwest to South Lake Bradford Road:
  - Construct a multi-use path.
  - Add a 7-foot buffered bike lane.
- South Lake Bradford Road to North Lake Bradford Road:
  - Construct a multi-use path.
  - Add a 7-foot buffered bike lane.
- North Lake Bradford Road to Springhill Road:
  - Construct a multi-use path.
  - Add a 7-foot buffered bike lane.
- Springhill Road to Wahnish Way:
  - Construct a multi-use path.
  - Add a 7-foot buffered bike lane.
- Wahnish Way to Monroe Street:
  - Construct a multi-use path.
  - Add a 7-foot buffered bike lane.

Note: If right-of-way restrictions don't allow for a 7-foot buffered bike lane, 6 feet or 5 feet would be acceptable.

"Orange Avenue east of Monroe is great for confident cyclists, but not for casual cyclists, and it's unpleasant for walkers. You do need continuous bike lanes and sidewalks the whole way, obviously."

~ Public Comment from District Forum 1

Connection to Tallahassee-St. Marks Historic Railroad State Trail

Existing Conditions

The Tallahassee-St. Marks Historic Railroad State Trail extension runs along the former CSX rail corridor and passes underneath Orange Avenue between Wahnish Way and Springhill Road. There is currently no connection between the trail and Orange Avenue, limiting access between the two facilities, nearby residents and businesses, and schools. Many participants during the outreach efforts expressed a need to make a safe connection between the trail and Orange Avenue.

Lack of Connection to St. Marks Trail on Orange Avenue

St. Marks Trail where it Passes Under Orange Avenue

Connection to Tallahassee-St. Marks Historic Railroad State Trail Opportunities

- Construct a new four-lane bridge and access facilities on either side of Orange Avenue for bicyclists and pedestrians.
- Construct Orange Avenue at grade and construct the trail as a bridge over the corridor.
- Construct Orange Avenue and the trail both at grade and have a signalized crossing for trail users.

"Pedestrian and bike connectivity to St. Marks Trail at Orange Avenue from the west is needed. There are lots of paths through the trees, and pedestrians need something better."

"Connection to the St. Marks Bike Trail MUST be included in any improvements to Orange Avenue."

~ Public Comments from District Forum 1

TRANSIT RIDERS

Transit

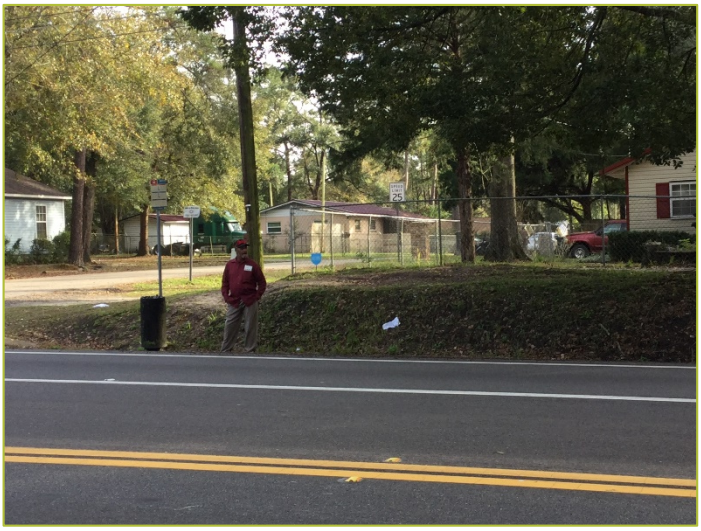
Existing Conditions

Along Orange Avenue, the following types of StarMetro Transit stops exist:

- No seating – pole only
- Two seats with bus stop pole
- Bench with bus stop pole
- Shelter

From Monroe Street to Wahnish Way, one shelter type stop exists, providing coverage and seating for people waiting for the bus. They are located on only one side of the corridor, however— one on the north side and the other further west on the south side, leaving people on the opposite side without shelter or much seating. Between Wahnish Way and Springhill Road, there are three two- seat with bus stop pole stops, and two with no seating. There is one shelter near the intersection of Orange Avenue and Wahnish Way. From Springhill Road to Capital Circle Southwest, there are five bus stops, none of which provide seating. The bus route runs consistently along the corridor but ends at Eisenhower Street, about one mile from Capital Circle Southwest. Existing census data regarding vehicle ownership in the area indicates the need for better transit availability and infrastructure in this area. The following opportunities and recommendations regarding transit facilities along Orange Avenue will be provided to StarMetro for consideration.

Bench with Bus Stop Pole On Orange Avenue



No Seating – Pole-Only Stop on Orange Avenue

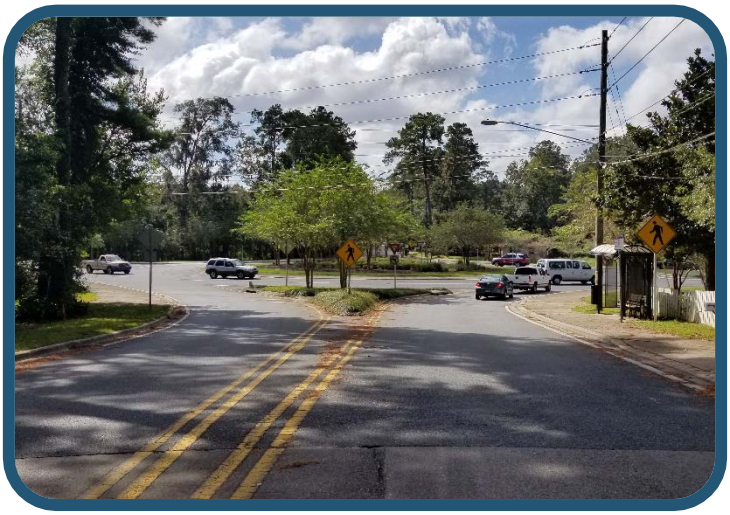
Transit Opportunities

Transit Amenity Level	Amenities
Low	Limited seating, structure
Medium	Seating, structure/shelter, trash cans, lighting
High	Ample seating, structure/shelter, trash cans, lighting, wayfinding, bicycle racks

- Capital Circle Southwest to South Lake Bradford Road:
  - Low Transit Amenities.
- South Lake Bradford Road to North Lake Bradford Road:
  - Low to Medium Transit Amenities.
- North Lake Bradford Road to Springhill Road:
  - Low to Medium Transit Amenities.
- Springhill Road to Wahnish Way:
  - Medium to High Transit Amenities.
  - Relocate the bus stop in front of R. Franks Nims Middle School to opposite side of Orange Avenue.
- Wahnish Way to Monroe Street:
  - Medium to High Transit Amenities.

"Put covered areas at each bus stop along Orange Avenue."
~ Public Comment from District Forum 1

MOTORISTS



Motorists

Analysis Summary

The existing and future conditions analysis indicated that a portion of Orange Avenue is experiencing congestion and capacity issue today, and this is expected to continue into the future, the entire corridor is expected to operate over capacity.

In addition, the crash data indicated that 52% of crashes were rear-end crashes. Rear-end crashes are indicative of congestion. Many of the segment's yearly crash rates are over the statewide average and indicate that there is a safety issue along the corridor. Public involvement comments identified congestion at the signalized intersections to be a concern.

Future development in the area has the potential to impact the corridor with traffic pattern changes, additional intersections, and the need for additional improvements to the bicycle, pedestrian, and transit infrastructure.

Two-lane existing

Right-of-way along the corridor varies and will be considered as part the future PD&E phase through FDOT.

Existing Four-lane - Monroe Street and Orange Avenue

Roadway Opportunities

- Signalized Intersection improvements:
  - All intersection reconstruction, new construction and safety improvements shall evaluate roundabouts as a potential solution per the current FDOT policy on roundabouts.
  - Intersection retiming and coordination improvements may decrease the delay experienced the signalized intersections during peak periods.
- Capacity improvement along the entire corridor:
  - The corridor four-lane typical section should tie into the eastern section of Orange Avenue east of South Monroe Street that was improved in 2013 to accommodate an increase in traffic volume along with improved pedestrian and bicycle facilities.
  - Majority of crashes over the last five years on Orange Avenue were rear-end collisions, indicating congestion. Alleviating that congestion with increased capacity along the corridor will impact the crash rate and improve the corridor safety.
- FDOT's Capital Circle Southwest road widening project is anticipated to provide additional capacity at the intersection of Capital Circle Southwest and Orange Avenue alleviating some of the congestion experiences in existing conditions.
- Access management should be considered when providing any improvements along the corridor. Good access management improves safety at driveways, safety for pedestrians and bicyclists, and helps direct traffic advantageously for businesses and operations along the corridor.
- Future traffic volumes indicate that the roadway segment from South Lake Bradford Road to South Monroe Street is expected to operate over capacity by the year 2040 and the entire corridor is expected to be over capacity by the year 2045. The coupling of the existing crash rates and types and the projected future capacity constraint supports the opportunity for widening the corridor to four lanes. A more detailed traffic analysis will be conducted during FDOT's PD&E study and will determine the ultimate capacity needs along the corridor.

"For future growth, the corridor should include at minimum a 4-lane roadway."
~ Public Comment from the District Forum 1

Existing Facilities Mapping and Opportunities

Appendix C graphically shows the existing facilities and indicates the opportunities by segment and user type. The subsequent maps are broken down by the following five sections of Orange Avenue:

- Capital Circle Southwest to South Lake Bradford Road
- South Lake Bradford Road to North Lake Bradford Road
- North Lake Bradford Road to Springhill Road
- Springhill Road to Wahnish Way
- Wahnish Way to Monroe Street

These maps show the existing facilities along Orange Avenue for pedestrians, bicyclists, and transit riders. This visually shows how many of the existing facilities along Orange Avenue are disconnected or lacking entirely to safely promote multi-modal movement. The possible opportunities, by user type, for each of the sections is included on these existing facilities maps.

Summary of Recommended Opportunities

Through a combination of data collection, traffic analysis, and stakeholder and public outreach, a set of preferred opportunities for Orange Avenue are provided for consideration into the PD&E study.

Capital Circle Southwest to South Lake Bradford Road

This segment of the Orange Avenue Corridor from Capital Circle Southwest to South Lake Bradford Road is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis). An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. The preferred opportunity would be to four-lane the corridor, add a 12-foot multi-use path on one side of the corridor, and add a 6-foot sidewalk on the other side of the corridor. Whichever side of the corridor that the multi-use path should be constructed on will be determined during the PD&E study to reduce right-of-way and environmental impacts. Low to medium transit amenities should be included in this section for increase comfort of transit users. A moderately landscaped median should also be included in the typical section for the corridor to serve as a pedestrian refuge. This segment of the corridor should also include potential intersection realignment and improvements near South Lake Bradford Road, Orange Avenue, and Paul Dirac Road. Please see **Figure 40** below for a typical section of the preferred opportunity.

South Lake Bradford Road to North Lake Bradford Road

This segment of the Orange Avenue Corridor from South Lake Bradford Road to North Lake Bradford Road is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis). An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. The preferred typical section includes four-laning the existing two-lane section, adding a 12-foot multi-use path to one side of the corridor, and adding a 6-foot sidewalk to the other side of the corridor. Whichever side of the corridor that the multi-use path should be constructed on will be determined during the PD&E study to reduce right-of-way and environmental impacts. Low to medium transit amenities should be included in this section. With the proposed new north-south road through Florida State University property North of Orange Avenue in this segment. Please see **Figure 40** below for a typical section of the preferred opportunity.

North Lake Bradford Road to Springhill Road

This section of the Orange Avenue Corridor has many residents and some businesses located directly adjacent to the corridor and is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis) An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. This segment also has high pedestrian traffic so the preferred opportunity for pedestrian facilities would be to add a 12-foot multi-use path on one side of the corridor and add a 6-foot sidewalk on the other side of the corridor. Whichever side of the corridor that the multi-use path should be constructed on will be determined during the PD&E study to reduce right-of-way and environmental impacts. A median in this

segment would be preferred as a pedestrian refuge since there is so much pedestrian traffic. This segment will also require a signalized pedestrian crossing at the Liberty Park neighborhood. Low to medium transit amenities should be included especially near transit stop located near Lake Mary Street. Intersection improvements are needed at Orange Avenue and North Lake Bradford Road as well as at Springhill Road. Please see **Figure 40** below for a typical section of the preferred opportunity.

Springhill Road to Wahnish Way

This existing two-lane section of the Orange Avenue Corridor is expected to be operating over capacity by 2045 (based on a preliminary traffic analysis). An opportunity for widening the roadway to four-lanes is suggested; however, FDOT's PD&E study will further determine the need for additional capacity through this section. The preferred opportunity would be to four-lane the corridor, add a 12-foot multi-use path to one side of the corridor, and add a 6-foot sidewalk on the other side of the corridor. This section is currently operating over capacity warranting corridor expansion. Also, in this segment, it is recommended that a connection between Orange Avenue and the Tallahassee-St. Marks Historic Railroad State Trail via multi-use path or sidewalk is constructed during the road widening project. A signalized pedestrian crossing was heavily supported connecting R. Franks Nims Middle School to the north side of the corridor. Currently, the only crossing from the school to the opposite side of the corridor is at Pasco Street; this deters students who are traveling to the west of the school from using the crossing. Medium to high transit amenities should be included in this section due to the number of business located here, and the number of neighborhoods connected to the north and south of Orange Avenue. The bus stop in front of R. Frank Nims Middle School should be considered for relocation as well. This segment of the corridor should also include intersection improvements at Pasco Street. Please see **Figure 40** below for a typical section of the preferred opportunity.

Wahnish Way to Monroe Street

This segment is the only existing four-lane portion of the Orange Avenue corridor in the Southwest area plan. This area should have improved multi-modal facilities including a 12-foot multi-use path on either the north or south side of the corridor. The existing sidewalk should remain on the side of the corridor that does not have the multi-use path. A pedestrian crossing should be constructed between the FAMU garden and the FAMU Development and Research School. Medium to high transit amenities should be included in this section to the high proximity to Florida A&M University and businesses. Please see **Figure 40** below for a typical section of the preferred opportunity.

Table 8 through **Table 10** details each recommended opportunity component based estimated cost and public support. As a general recommendation, lighting should be included in all typical sections considered with any future enhancement to the corridor.

Typical Section

Figure 40 and **Figure 41** shows two typical sections. The community preferred typical is consistent to what is displayed in **Figure 40** which contains a sidewalk and multiuse path. The other typical section was also presented to the public and was not preferred due to the increased right-of-way impact and the lack of a shared use path.

Figure 40. Community Preferred Typical Section

Figure 41. Typical Section with No Shared Use Path

Preferred Opportunity Components along Orange Avenue are detailed in Table 8 – Table 10. Each opportunity contains an icon for three categories, which are indicative of the estimated cost and the amount of public support.

Icon Key

	LOW COST This opportunity is low cost and will require little monetary investments.
	MEDIUM COST This opportunity is moderately costly and requires investment.
	HIGH COST This opportunity is very costly and requires high monetary investments.

	LOW PUBLIC SUPPORT Few members of the public are supportive of this opportunity.
	MODERATE PUBLIC SUPPORT Members of the public are relatively supportive of this opportunity.
	HIGH PUBLIC SUPPORT Members of the public are largely supportive of this opportunity.

Table 8. Summary of Sidewalk Opportunities

Sidewalk Opportunities	Cost	Public Support
Sidewalks on the north side of the corridor.	$	👥
Sidewalks on the south side of the corridor.[2]	$	👥
Multi-Use path on either side of the corridor.[3]	$	👥
Pedestrian Crossing at Liberty Park Neighborhood.[4]	$	👥
Pedestrian Crossing at R. Frank Nims Middle School.	$	👥
Pedestrian Bridge at R. Frank Nims Middle School.[5]	$	🚶
Pedestrian Crossing at FAMU DRS School and Community Garden.	$	👥

[2] Local agency short-range option would be to place a pre-fabricated sidewalk from the Liberty Park neighborhood on the south side of the corridor to Springhill Road since this area is currently heavily used by pedestrians.
[3] Most heavily supported multi-modal facility type during outreach efforts.
[4] Local agency option would be to construct a pedestrian crossing at Liberty Park to the existing gas station and StarMetro transit stop.
[5] Enhances safety for all users and can be made to be an aesthetic feature for the Southwest area.

Table 9. Summary of Bicycle Opportunities

Bicycle Opportunities	Cost	Public Support
Bicycle Lanes on the north side of the corridor. [6]	$	👥
Bicycle Lanes on the south side of the corridor. [7]	$	👥
Multi-Use path on either side of the corridor. [8]	$	👥
Connection to the St. Marks Trail Pedestrian Bridge with Connecting Paths	$	👥
At Grade Connection to the St. Marks Trail Crossing.	$	🚶
Connection to St. Marks Trail Four-Lane Bridge with Connecting Paths. [9]	$	👥

[6] Many participants expressed safety concerns about riding on the road. 7-foot buffered bike lanes would be preferred if on-road facilities are constructed.
[7] Many participants expressed safety concerns about riding on the road. 7-foot buffered bike lanes would be preferred if on-road facilities are constructed.
[8] Most heavily supported multi-modal facility type during outreach efforts.
[9] The existing bridge does not have any facilities connecting to the trail that runs underneath the bridge to the roadway.

Table 10. Summary of Roadway Opportunities

Roadway Opportunities	Cost	Public Support
4-Lane Roadway from CCSW to South Lake Bradford Road.[10]		
4-Lane Roadway from South Lake Bradford Road to North Lake Bradford Road.[11]		
4-Lane Roadway from North Lake Bradford Road to Springhill Road.[11]		
4-Lane Roadway from Springhill Road to Wahnish Way.[11]		
Intersection Realignment at South Lake Bradford Road and Paul Dirac Road.		
Intersection Improvements Orange Avenue and North Lake Bradford Road.		
Intersection Improvements Orange Avenue and Springhill Road.		
Intersection Improvements Orange Avenue and Pasco Street.		

[10] Expected to operate over capacity by the year 2045.
[11] Expected to operate over capacity by the year 2040.

Next Steps

Through extensive public outreach and stakeholder input, a variety of possible multi-modal improvements for Orange Avenue have been proposed. The improvements include the need for safe and more connected pedestrian facilities such as continuous sidewalks, multi-use path along the entirety of the corridor, and pedestrian crossings near high traffic areas. Public and stakeholder input also indicated the desire for better bicycle facilities and transit amenities to accommodate the variety of user types often seen along Orange Avenue. Future traffic volumes indicate that the roadway segment from South Lake Bradford Road to South Monroe Street is expected to operate over capacity by the year 2040 and the entire corridor is expected to be over capacity by the year 2045. The crash rates over the last five years show rates that are above the statewide average for similar facilities and majority of crash types are rear-end crashes which are indicative of congestion. The coupling of the existing crash rates and types and the projected future capacity constraint supports the opportunity for widening the corridor to four lanes.

The opportunity improvements identified in this corridor plan are based on both data analyses along with public and stakeholder input. It is recommended Florida Department of Transportation Project Development and Environment (PD&E) Study for Orange Avenue consider the opportunity improvements. Coordination with the Capital Region Transportation Planning Agency, Blueprint Intergovernmental Agency, Leon County and the City of Tallahassee should continue as the PD&E better identifies which of the opportunities seem most feasible for implementation.

Appendix A- Synchro Summaries

Appendix A contains the Highway Capacity Manual Summaries from the Synchro Model for the signalized intersections along Orange Avenue.

Appendix B- Public Involvement

Appendix B contains the materials presented at both District Forums along with the sign in sheets and comment forms.

District Forum 1

District Forum 2

Appendix C- Existing Facilities and Opportunities by Segment

Appendix C contains a series of maps that depict the existing facilities along Orange Avenue and the associated opportunities by segment.

Appendix A- Synchro Summaries