

TRANSPORTATION PLAN

North Lake Bradford

Corridor Plan

AUGUST 19, 2019











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Introduction and Project Background

North Lake Bradford Road, along with Orange Avenue, Springhill Road, and South Lake Bradford Road, make up the transportation corridors for the Southwest Area Transportation Plan. The Southwest Area Transportation Plan is a project being jointly led by the Capital Region Transportation Planning Agency



Figure 1. North Lake Bradford Road Corridor

(CRTPA) and Blueprint Intergovernmental Agency (Blueprint). 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.

The Southwest Area Transportation Plan was broken into two phases. Phase 1 focused on Orange Avenue to align with The Florida Department of Transportation

(FDOT) Project Development and Environment (PD&E) study which began

in late 2018. Phase 2 focused on North Lake Bradford Road (shown in **Figure 1**), South Lake Bradford Road, and Springhill Road, and both phases will be incorporated into a final Southwest Area Transportation Plan. **Figure 2** shows the Southwest Area Transportation Plan corridors and the phased approach to public outreach conducted for the Plan.

This corridor plan considers the feasibility of alternatives along North Lake Bradford Road (Figure 3) in relation to environmental, cultural, historical, right-of-way, and contamination issues. Existing conditions along North Lake Bradford Road 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 information gathered and evaluated regarding North Lake Bradford Road is summarized in this corridor plan, which outlines the recommended transportation improvements for the corridor from Orange Avenue to Gaines Street. North Lake Bradford Road is one of three corridors identified in the Airport Gateway Project, which is a Blueprint Intergovernmental Agency project intended to create an urban gateway into Tallahassee from the Tallahassee International Airport. The alternatives for North Lake Bradford Road that are outlined in this document are intended to not only detail potential multimodal improvements along the corridor, but also provide guidance for this upcoming project. Additional planning and design of the Airport Gateway corridors will occur upon completion of this Southwest Area Transportation Plan. It is also important to note that an Access Management Study is being done by FDOT on North Lake Bradford Road which will influence which of the recommended alternatives are most feasible. Additional planning and design of the Airport Gateway corridors will be done by Blueprint upon completion of this Southwest Area Transportation Plan.





Figure 2. Southwest Area Transportation Plan Corridors and Phases

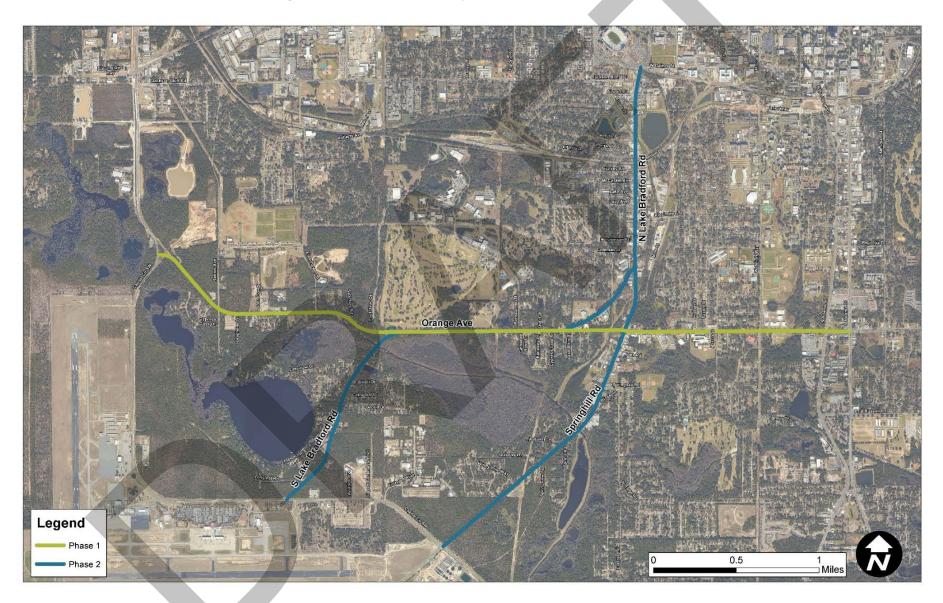
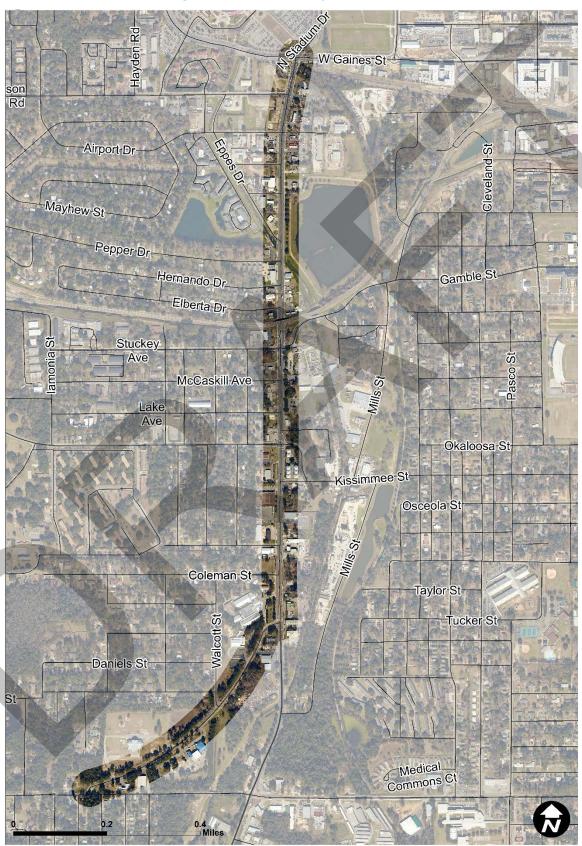






Figure 3. North Lake Bradford Road







Overall Project Goal

The objective for the Southwest Area Transportation Plan is to create a holistic, multimodal transportation 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. This 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 FHWA Code of Federal Regulations §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 Avenue¹
 - 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 Road via Stuckey 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 multimodal facilities through the Airport Gateway project.



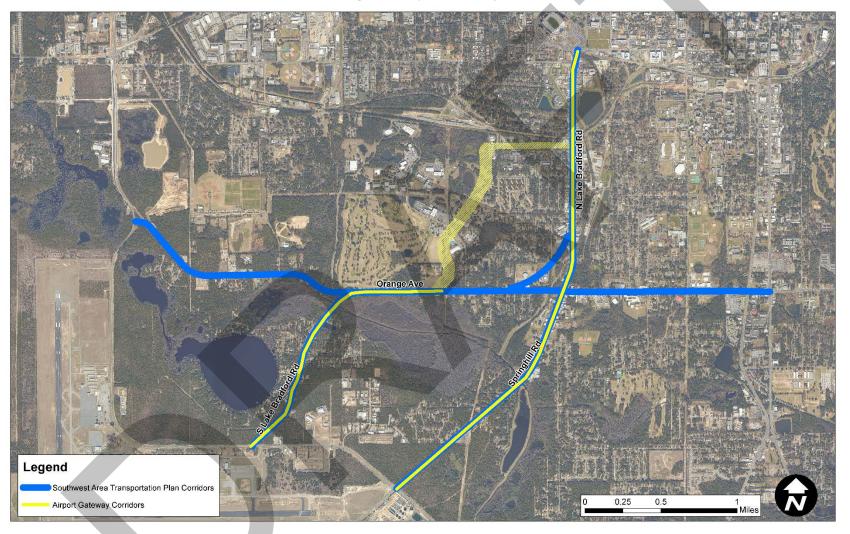


Figure 4 illustrates the location of the corridors that are included in the Airport Gateway. After the Southwest Area Transportation Plan is completed, Blueprint will consider the efforts that went into developing this plan, and its outcomes and recommendations as they move forward to the design and implementation of the Airport Gateway Project.





Figure 4. Airport Gateway Corridors





Existing Land Use

Transportation and Land Use History

The area south of the downtown/urban core of Tallahassee has been the focal point of several efforts over the last decades. As Tallahassee grew over the years, the growth primarily occurred away from the southern area. **Figure 5** shows the 1938 aerial photo, this southern area, which encompassed North Lake Bradford Road as the main north-south transportation artery, was rural, with little to no development.

By 1954, more businesses were developed along the roadway, which was extended to Springhill Road, as shown in **Figure 6**



Figure 5. 1938 Aerial Photo

Figure 6. 1954 Aerial Photo





The development of residential homes and an underpass at the intersection of North Lake Bradford Road at Elberta Drive in 1961 are shown in **Figure 7** By 1963, more businesses and residential areas were developed, as shown in **Figure 8**.



Figure 8. 1961 Aerial Photo

The area near Elberta Drive and the CSX underpass often experienced drainage issues as shown in Figure 9. Today, the southern area has developed primarily with small businesses and commercial, as well as residential and the facility continues to serve as the main north-south corridor in the southern area, providing the connection from Stadium Drive and Gaines Street to Orange Avenue. Figure 10 shows the present-day North Lake Bradford Road.



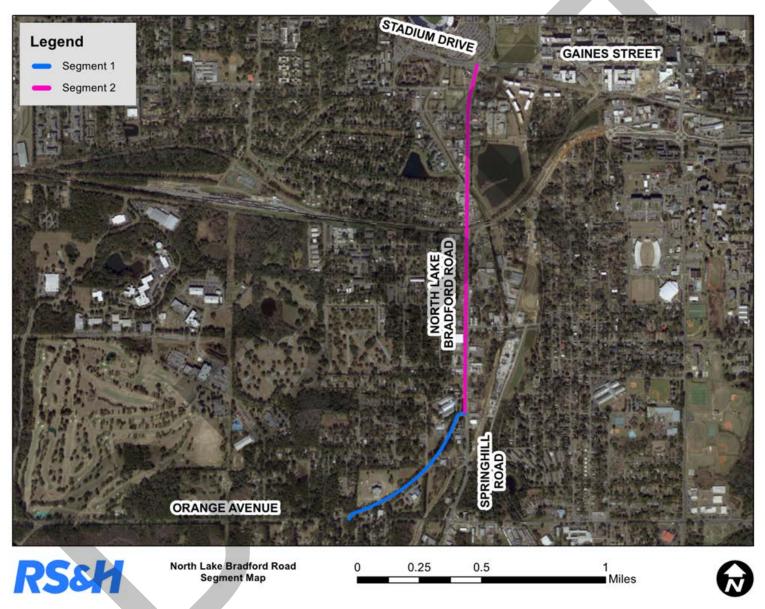
Figure 7. Intersection of Orange Avenue and Springhill Road in 1963



Figure 9. Elberta Drive and CSX Underpass



Figure 10. Present Day North Lake Bradford Road









Although the southern area of Tallahassee has experienced development, the economic development and growth has not kept pace with the remainder of Tallahassee. According to the American Community Survey of the US Census (2017), the census tracts that touch North Lake Bradford Road show that the demographics display an average population of 86.2% African American. The median income for the area is \$16,119, with 41.5% of the residents below the poverty line. These statistics are shown in **Table 1**, as well as the comparison with Tallahassee as a whole.

Table 1. Demographic Comparison between North Lake Bradford Road and Tallahassee

Demographic Statistics				
	North Lake Bradford Road	Tallahassee		
Median Household Income	\$16,119	\$42,418		
African American Population	82.7%	35.2%		
Residents Below Poverty Line	41.5%	27.1%		

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 shown in **Figure 11**.

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 North Lake Bradford Road 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.



TENNESSEE CALL PENSACOLA PENSACOLA APALACHEE BELLE YUE MADISON LAFAVETTE AZALEA ROBERTS Q CLARK LAKE BRADFORD ORANGE Grassy Lake DUPONT SPRINGSAX NOLISH SEASONS, FOUR POINTS GRADY Havana GADSDEN WESTWAY Legend CROSSWAY JEFFE major roads Southern Strategy Area 0 1/2 1 major lakes WAKULLA Miles

Lake Munso

Figure 11. Tallahassee-Leon County Planning Department Southern Strategy Area





Existing Land Use

To understand the existing land use within the study area, a review of the parcels adjacent to the North Lake Bradford Road corridor was conducted and are summarized in the following table. The parcels are shown in the existing land use map found in the figure on the following page. There are 85 total parcels found along the corridor. The majority of land use by number of parcels along North Lake Bradford Road is Vacant with 28.2% of the parcels and approximately 65 acres in this category. The next highest category of use along North Lake Bradford Road is Retail properties with 27.1% and slightly over 15 acres. Approximately 26% of the parcels are in Warehouse, Office, and Religious/Non-profit encompassing approximately 19 acres, with the remainder of the property categories at approximately 4% or less.

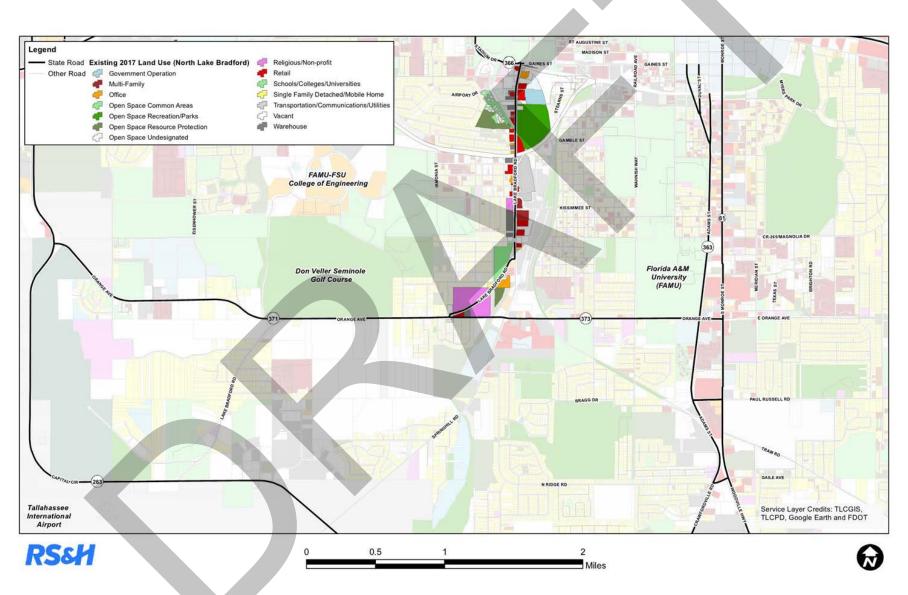
Table 2 provides a summary of existing land uses along North Lake Bradford Road and **Figure 12** shows the locations of these land uses.

Table 2. Existing Land Use Summary

Land Use	# of Parcels	Percent of Total	Total Acreage
Vacant	24	28.2%	64.9
Retail	23	27.1%	15.1
Warehouse	11	12.9%	9.6
Office	7	8.2%	5.1
Religious/Non-profit	4	4.7%	24.0
Single Family Detached/Mobile Home	3	3.5%	0.9
Transportation/Communications/Utilities	3	3.5%	15.1
Multi-Family	2	2.4%	4.2
Open Space Recreation/Parks	2	2.4%	29.8
Open Space Resource Protection	2	2.4%	11.6
Schools/Colleges/Universities	1	1.2%	10.9
Open Space Common Areas	1	1.2%	7.3
Government Operation	1	1.2%	7.0
Open Space Undesignated	1	1.2%	0.8
Grand Total	85	100.0%	206.1



Figure 12. Existing Land Use







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.

According to the Major Ongoing and Proposed Development Report for Tallahassee and Leon County, there is no significant development scheduled within the study area as of this report. The criteria for this designation are defined as 20+ residential units and/or 10,000+ square feet of non-residential construction.

The future land use categories found along North Lake Bradford Road, are shown in below in **Figure 13** 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 in close proximity to the urban core and major universities and is intended to provide a variety of residential types (up to 45 dwelling units per acre), employment (includes light manufacturing), office and commercial activities. Infill and potential redevelopment and/or rehabilitation activity should be encouraged.

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. The 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 is 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 throughout larger portions of the community.

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 development within a







range up to six dwelling units per acre. Consistency with surrounding residential type 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.

• Government Operational

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

University Transition

The primary function of this future land use category is intended to be a compact land use category that provides for higher density residential opportunities up to 50 dwelling units per acre and for non-residential uses that emphasize small scale retail commercial designed to provide essential services to the immediate residents. It is expected that these parcels will house 100 dwellings units per acre.

Transportation

The primary function of this future land use category is to capture internal trips, promote alternatives to single-occupancy vehicle travel and support a mixed-use development pattern. It is the intent of this land use to create communities and supporting transportation system that encourage walkability and pedestrian accessibility, provide a road network with connectivity on0site and to surrounding areas, relieve pressure on adjacent roadways, minimize environmental impacts and encourage transit and other modes of transportation.

The largest categories for the future land uses of the vacant parcels along North Lake Bradford Road are Central Urban, Suburban, and Residential Preservation. **Table 3** displays the 24 total vacant parcels and how they are identified on the future land use map shown in **Figure 13**.

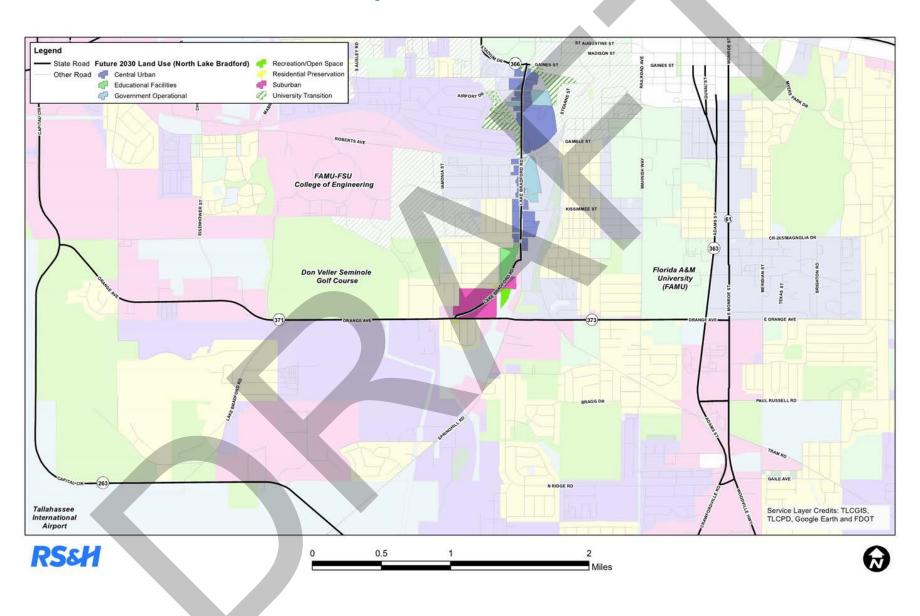
Table 3. Vacant Parcels and Future Land Use Map Identification

North Lake Bradford Road	Vacant
Central Urban	14
Suburban	4
Residential Preservation	3
Government Operational	1
University Transition	1
Transportation	1
Grand Total	24





Figure 13. 2030 Future Land Use







The existing zoning and development codes, when combined with the future land use designations, are critical in understanding the development/redevelopment efforts. **Table 4** below depicts the primary existing land uses along North Lake Bradford Road and the future land use designations. 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 4. Primary Existing Land Uses Along Orange Avenue

North Lake Bradford Road Existing and Future Land Use			
Existing Land Use	Future Land Use		
Vacant Retail Warehouse Office Religious/Non-profit	Central Urban Government/Operations Recreation/Open Space Suburban		

With the existing and future land use designations on the parcels along North Lake Bradford Road, the zoning and allowable development in the future are in place to encourage economic investments, with new development and redevelopment promoting a sustainable economic growth for the area.

Developability

The major existing land use along North Lake Bradford Road is Vacant, Retail, and Warehousing, however there are other uses identified as shown in the tables and on the Existing Land Use map. When cross-referencing the existing land use with the future land use designations, many of the parcels along North Lake Bradford Road are included in future land use designations that incorporate a focus on economic growth and development.

The Central Urban designation promotes a variety of residential types and densities up to 45 dwelling units per acre. Employment, office, and commercial activities are allowed with infill and redevelopment encouraged.

The Suburban category is focused on an environment of economic investment and reinvestment through the development of employment and shopping with convenient access to residential uses. In addition to the single family uses, mixed use development is also encouraged, along with a mix of residential types, with a maximum density of 20 dwellings per acre. Other uses that are allowed and focused on economic investment include commercial and office, and light industrial. In addition to business activities serving the nearby residential, the attraction of shoppers from throughout the community is also a goal.





Corridor Inventory

Structures Inventory

Bridges are regularly inspected by the Florida Department of Transportation (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 are part of the formula used by the Federal Highway Administration to determine funding allocations for bridges. Sufficiency ratings are 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 North Lake Bradford Road were taken from the 2019 FDOT 2nd quarter bridge report.

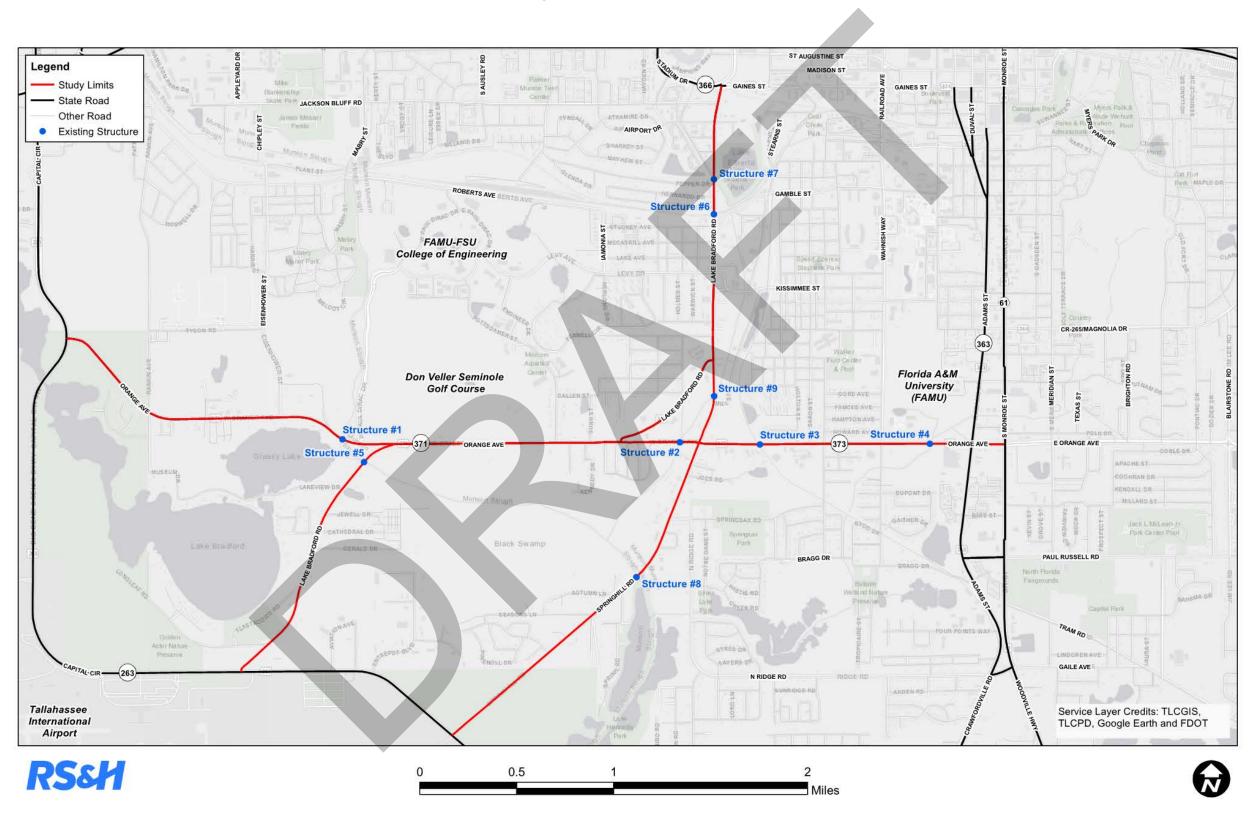
Figure 14 provides an overview of individual structures within the project area. Structure numbers six and seven are located along North Lake Bradford Road, and **Figure 15** and **Figure 16** reflects these structures. An overview has been provided as a reference to easily locate individual structures within the project area. Neither bridge on this corridor is rated as functionally obsolete or structurally deficient.







Figure 14. Structure Locations

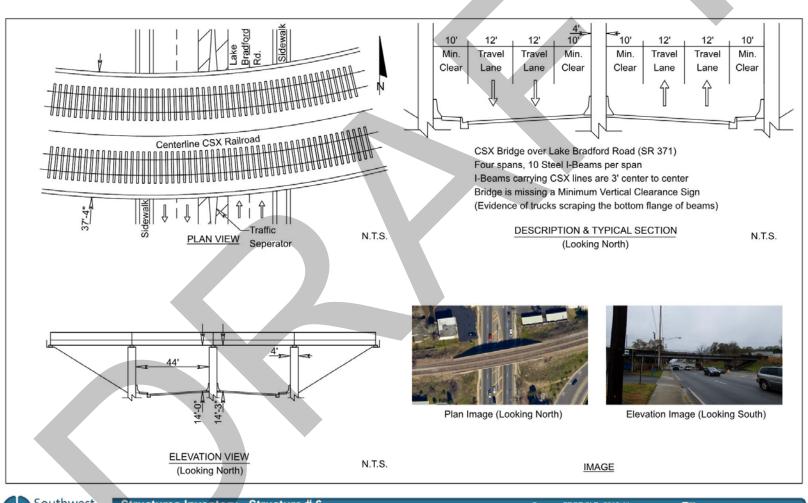






Structure 6 is located between Stuckey Avenue and Elberta Drive spanning North Lake Bradford Road. The grade-separated railroad crossing was built in 1957 and the underpass sufficiency rating is not applicable.

Figure 15. Structures Inventory – Structure #6





Structures Inventory - Structure # 6 Under Pass #550088, Grade Seperated Railroad Crossing

Sources: FDOT SLD, 2018 4th Quarter Bridge Inspections





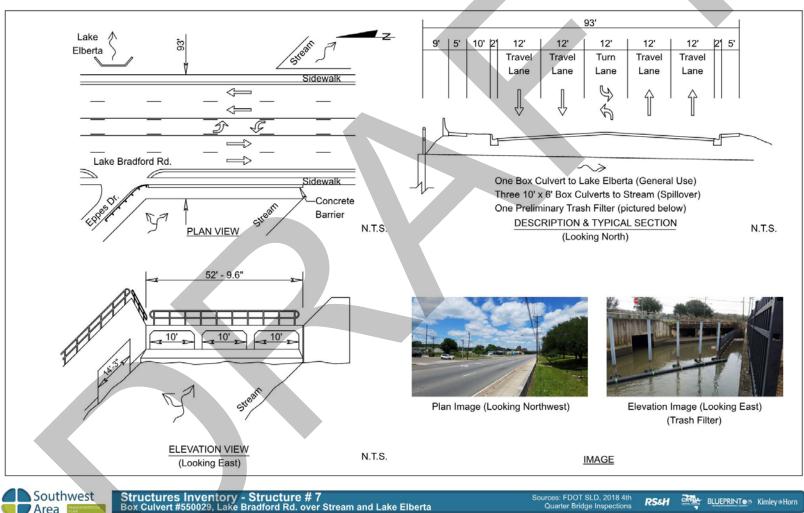
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Structure 7 is located approximately one-half mile south of Stadium Drive. Built in 1969 and last inspected on November 27th 2017, the bridge spans a stream feeding Lake Elberta and has a sufficiency rating of 76.5.

Figure 16. Structures Inventory – Structure #7









Created: 12/18/2018





Utilities

Table 5 shows a summary of the companies identified as having utilities present within the right of way of North Lake Bradford Road, although the exact location of each of the utilities was not determined.

Table 5. Utilities along North Lake Bradford Road

Owner	Point of Contact	Phone
Centurylink	Bill McCloud	(850) 599-1444
	George Mcelvain	(303) 992-9931
Dial Communications	Nelson Sweeney	(850) 877-3282
Hotwire Communications	Walter Davila	(954) 699-0900
Level 3 Communications	Network Relations	(877) 366-8344 [Ext. 2]
Comcast Cablevision	Wade Matthews	(352) 516-3824
MCI	Dean Boyers	(469) 886-4238
Uniti Fibers LLC	DJ Mcauley	(251) 259-0807
Talquin Electric Co-op, INC	Ted Lee	(850) 893-6854
City of Tallahassee Operations	Wayne Bryan	(850) 891-2080
City of Tallahassee Utility Services	William Tolar	(850) 556-5873
Sprint	Jon Baker	(352) 409-5095

Lighting

Figure 17 illustrates the results of a lighting inventory conducted within the Southwest Area Transportation Plan corridors. A total of 204 existing light poles were located on all facilities, with 5 lumineers observed to be out of service during site visits.







Figure 17. Lighting Inventory



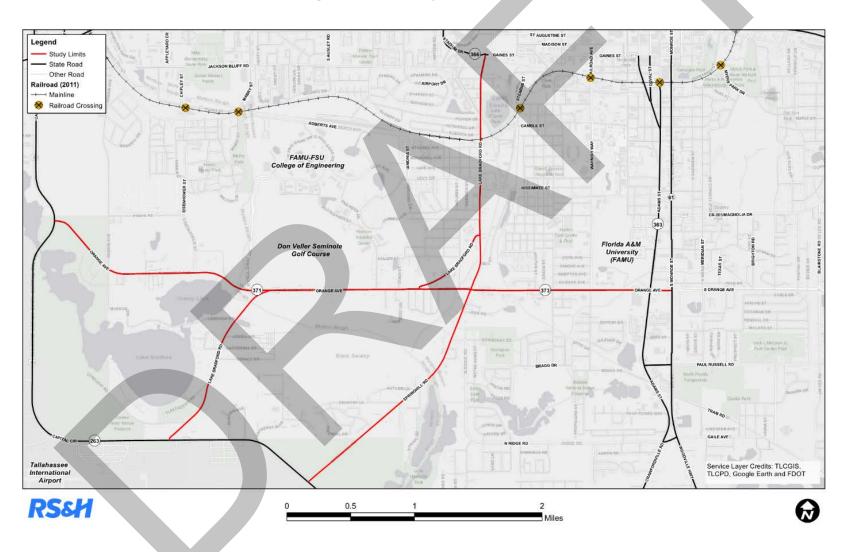




Rail

As shown in **Figure 18**, there is one existing rail line within the Southwest Area Transportation Plan study area. The CSX line runs parallel to Orange Avenue to the north and crosses North Lake Bradford Road approximately one-quarter of a mile south of Stadium Drive.

Figure 18. Railroad Information







Existing Transportation Facilities

Roadway Network

The North Lake Bradford Road section of the Southwest Area Transportation Plan study area spans from Orange Avenue to Gaines Street. North Lake Bradford Road is a 1.8-mile urban minor arterial roadway traveling north-south between Orange Avenue and Gaines Street. The corridor has two distinct segments based on the current cross-sections. The roadway features of each segment are summarized below:

- Springhill Road to Gaines Street
 - Four-lane divided facility
 - 13-foot lanes
 - Two-way left-turn lane (13 feet)
 - Right-of-way along this section varies from 90 to 225 feet.
- Orange Avenue to Springhill Road
 - Two-lane undivided facility
 - 12-foot lanes
 - Right-of-way along this section varies from 95 to 105 feet.

There are four existing signalized intersections along North Lake Bradford Road.

Complete Streets

The Florida Department of Transportation developed a Complete Streets Policy (Topic No.: 000-625-017-a) 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. Because North Lake Bradford Road is an FDOT corridor, complete street context classifications should be taken into consideration. These principles include maintaining safety, mobility, and serving the needs of transportation system user of all ages and abilities including cyclists, freight handlers, motorists, pedestrians, and transit riders (FDOT Complete Streets Implementation Plan, 2015). FDOT's classifications are shown in **Figure 19**.







Figure 19. 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 wellconnected roadway network.

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Driveways and Access Points

The number of access points onto a facility is a key element in both safety and operational efficiency, as well as a major component of the coordination between transportation and land use. North Lake Bradford Road has a total of 104 driveway access points with a density of 59 access points per mile. Driveway materials vary throughout the project and have been inventoried and noted in **Table 6**.

Table 6. Driveway Access Points and Driveway Material

	Concrete	Asphalt	Unpaved	Total	Density (Access/Mile)
Orange Avenue	47	57	4	108	25
Springhill Road	19	24	20	63	29
North Lake Bradford Road	74	26	4	104	59
South Lake Bradford Road	5	8	11	24	19

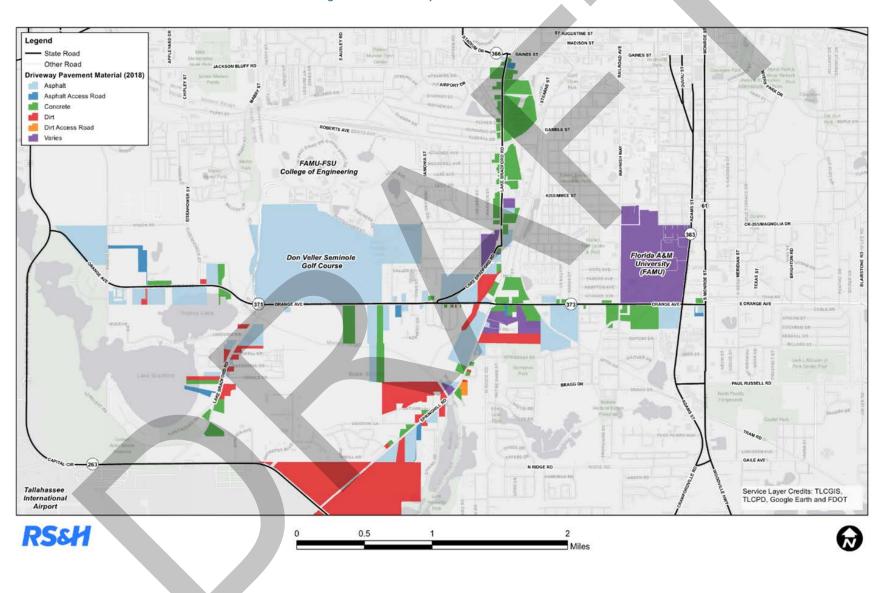
The corridor included in the Southwest Area Transportation Plan has an FDOT access classification of 5. FDOT Design 14-96 shows that for access class 5 with a posted speed limits of 45 mph or less the recommended connection spacing on one side of the roadway should be a minimum distance of 245 feet. To compare the access density along the corridor the 245-foot minimum was converted to 44 access points per mile (considering both sides of the roadway). North Lake Bradford Road (access class 5) has an access point density of 59 access points per mile, which is well above FDOT standards for this roadway classification.

Figure 20 is a graphical representation of the data described in **Table 6** and the spatial distribution of parcels with driveway access; there are parcels that have multiple access points.





Figure 20. Driveway Access Points







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 North Lake Bradford Road 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 data identifies trends and travel patterns rather than a quantifiable volume of trips.

The overall traffic patterns of trips originating in the south end of the study area at the airport are shown in **Figure 21**. Traffic trends indicate 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.

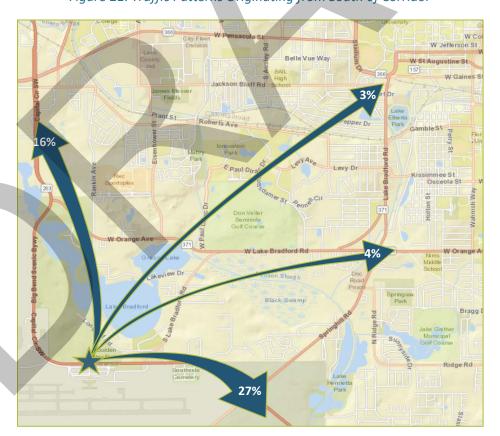


Figure 21. Traffic Patterns Originating from South of Corridor



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 22**). Fifty percent (50%) of the trips travel south on Springhill Road to Capital Circle Southwest and 50% use South Lake Bradford Road.

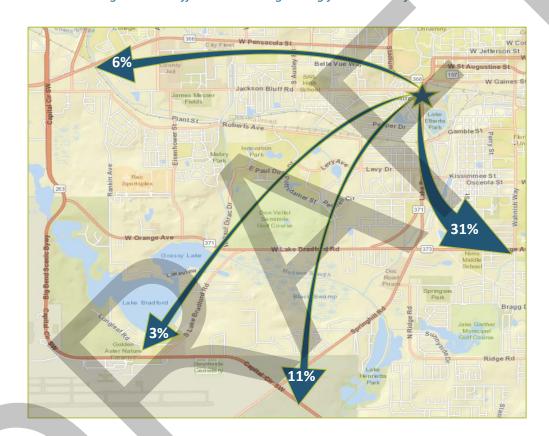


Figure 22. Traffic Patterns Originating from North of Corridor

Capacity Analysis

Signalized intersection data was obtained from the City of Tallahassee. Additional traffic volume data were collected during the analysis period.

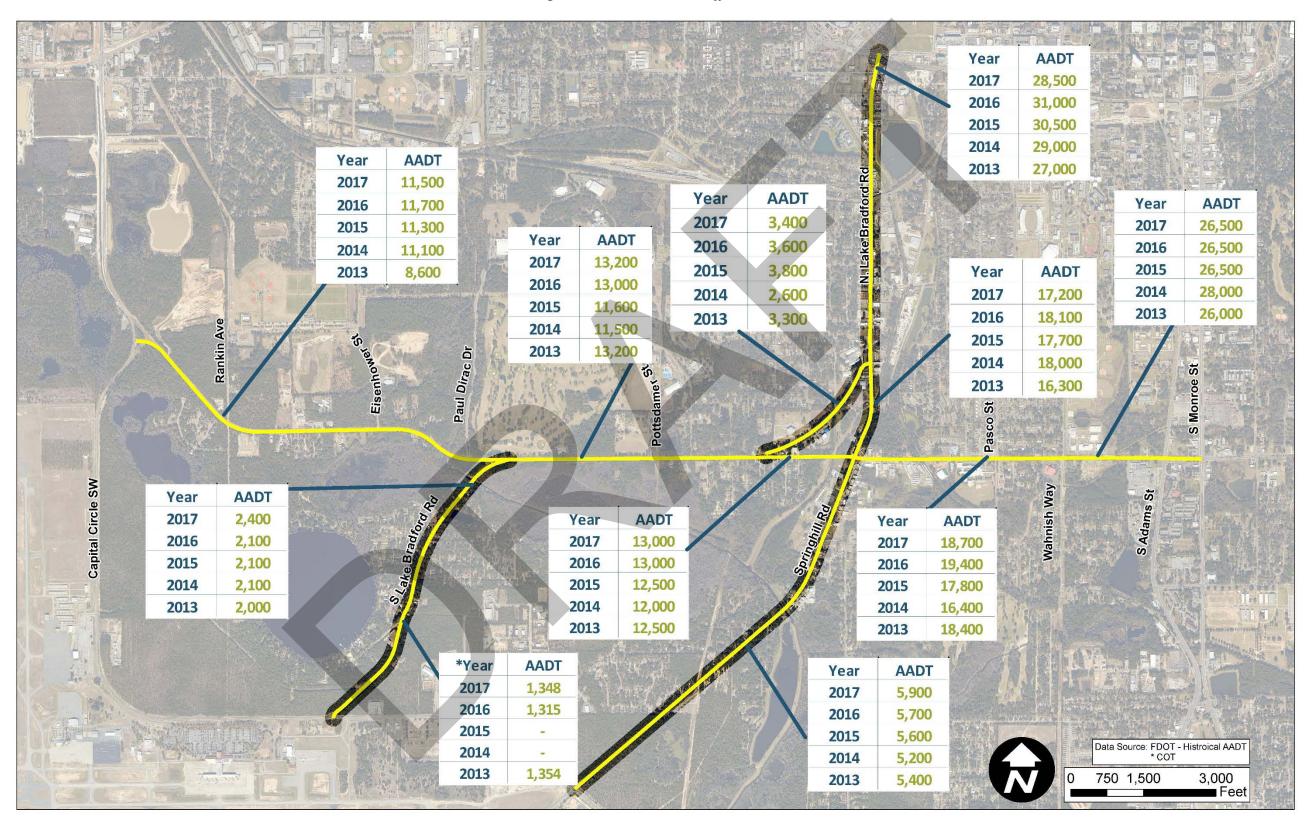
Historical Traffic Volumes and Trends

Annual Average Daily Traffic (AADT) volumes along North Lake Bradford Road 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 three count stations along North Lake Bradford Road, which varied from 0.6% to 1.1%. An annual growth rate of 1% was chosen to provide a conservative approach and applied to the 2017 volumes to project to the 2045 horizon year. **Figure 23** shows the historical traffic volumes throughout the Southwest Area Transportation Plan study area.





Figure 23. Historical AADT Traffic Data



Kimley » Horn



Segment Analysis

The 2017 AADTs along North Lake Bradford Road were compared to FDOT's Generalized Maximum Service Volume Tables (12/18/12). North Lake Bradford Road is categorized as a state signalized arterial. It was determined that all North Lake Bradford Road segments from Orange Avenue to Gaines Street are currently operating under capacity. **Figure 24** shows the existing (2017) capacity conditions along the corridor.

The 2017 traffic volumes were forecasted to the year 2040 and 2045 by applying the 1% annual growth rate to the volumes and it was determined that by 2040, the segment from Springhill Road to Gaines Street will be over capacity. **Figure 25** shows the 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, future widening of Capital Circle Southwest, and future FDOT PD&E along Orange Avenue could impact travel patterns during temporarily during construction.







Figure 24. 2017 AADT Capacity Analysis

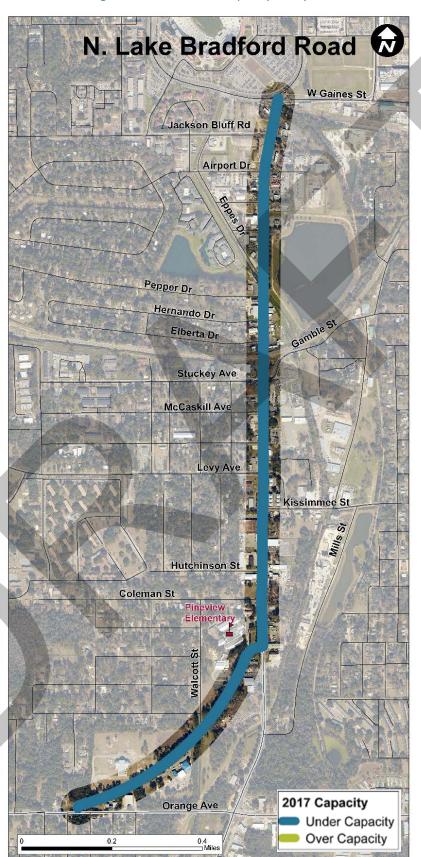






Figure 25. Future Capacity Analysis







Crash Analysis Overview

The University of Florida's SIGNAL4 analytics web application was used to obtain crash data. Crash data for years 2013 to 2017 were obtained for North Lake Bradford Road in Leon County, Florida. At the time of the analysis 2017 was the most recent complete data set available. The data below reflects crashes recorded along the project corridor.

Overall Crashes (543)

A total of 543 crashes along North Lake Bradford Road—including 139 injury crashes and no fatal crashes—were reported over the five-year period between January 1, 2013 to December 31, 2017 (most current and available data at the time of the study). The annual crash frequency varied during the analysis years, with a maximum of 128 crashes in 2015 and a minimum of 100 crashes in 2013 and 2017.

Crash data was analyzed to estimate the severity of crashes and contributing factors. Injury crashes accounted for 26% of all crashes. Crashes that occurred under dark conditions accounted for 28% of all crashes and crashes that occurred on wet surface conditions accounted for 15%. **Table 7** summarizes the crashes that occurred along North Lake Bradford Road during the five-year analysis period. This information is shown in further detail in **Figure 26**.

Table 7. Crashes in Five-Year Period along North Lake Bradford Road

Year	Total Crashes	Injury Crashes	Fatal Crashes	Dark Crashes	Wet Crashes	Alcohol Related Crashes
2013	100	30	0	32	17	8
2014	103	20	0	26	23	2
2015	128	23	0	37	19	3
2016	112	32	0	32	13	2
2017	100	34	0	27	8	1
TOTAL	543	139	0	154	80	16
Average Per Year	109	28	0	31	16	3
Percent of Total Crashes		26%	0%	28%	15%	3%

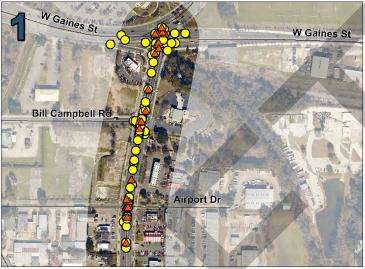
The locations of the 543 crashes recorded along North Lake Bradford Road are shown in Figure 26.

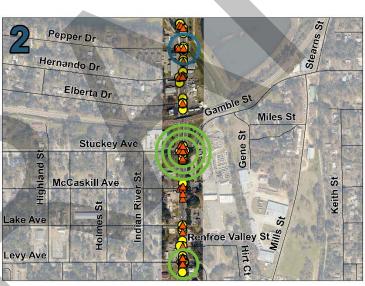




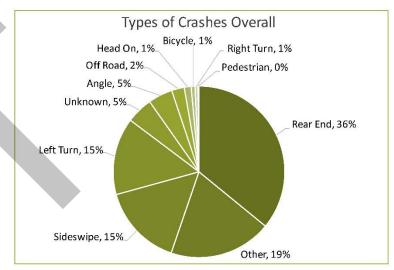
Figure 26. Five Year Crash Data (2013-2017)

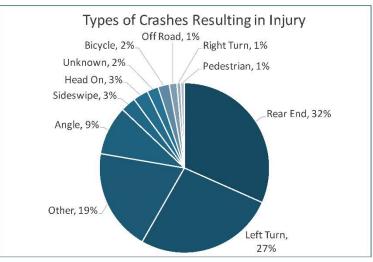


















Crash characteristics were assessed to determine temporal trends in the 543 crashes during the five-year study period, such as monthly, weekday vs. weekend, and hourly variations in crash frequency. October was the most common month for crashes, with 70 (13%) compared to the monthly median of 45 crashes. The day of the week during which the most crashes occurred was Friday, with 106 crashes (20%) compared to the median of 78 crashes. The one-hour period during which the most crashes occurred was between 5:00 P.M. and 6:00 P.M., with 57 crashes (10%) compared to the one-hour median of 23 crashes. **Figure 27** through **Figure 29** depict the monthly, weekly, and hourly patterns observed in the five years of crash data from 2013 to 2017 along the corridor.



Figure 27. Monthly Crash Trends Along North Lake Bradford Road









Figure 29. Hourly Crash Trends Along North Lake Bradford Road

Several parameters were used to determine trends in the crash types that occurred along the corridor from 2013 to 2017. The highest percentage of any crash type along North Lake Bradford Road was attributed to rear end crashes, which accounted for 195 of the 543 crashes (36%). Of the crashes that involved injuries, 32% were rear-end crashes. Error! Reference source not found. below summarizes the five years of crash data by crash type.

Crash Rate Analysis-Segments

Crash rates per million vehicle miles traveled (MVMT) on the corridor were calculated for each year from 2013 to 2017. 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. North Lake Bradford Road from Springhill Road to Gaines Street is classified as an urban, four-lane, divided roadway. North Lake Bradford Road from Orange Avenue to Springhill Road is classified as an urban, two-lane, undivided roadway. 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 8**. Crashes on North Lake Bradford Road from Springhill Road to Gaines Street were over the state average for all years (2013-2017). Statewide average data for 2017 is not yet available but indicated by the trend over previous years, it can be predicted that the 2017 crash rate for North Lake Bradford Road will be well over the statewide average.





Table 8. North Lake Bradford Road Crash Summary by Segment, Rate, and Statewide Average

	Limits	Segment Length (miles)		2013	2014	2015	2016	2017*
Segment 1		1.200	Total Crashes	100	103	128	112	100
	Continent III Dood to		Crash Rate	14.007	13.064	16.511	14.128	13.274
	Springhill Road to Gaines Street		Statewide Average	5.148	5.796	6.163	6.156	-
Segment 2	Orange Avenue to Springhill Road	0.550	Total Crashes	0	0	0	0	0
			Crash Rate	0	0	0	0	0
			Statewide Average	3.194	3.462	3.452	3.892	-

^{*}Statewide average data for 2017 is not yet available.

Crash Analysis Findings

In summary, over the five-year analysis period from 2013 to 2017, North Lake Bradford Road exhibited a high percentage (36%) of crashes resulting from rear end collisons, due at least in part to high traffic volumes and poor access management. The roadway segment exhibited sustained crash rates exceeding the statewide average for similar facilities. Above average crash rates occured during the PM peak period.







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 along North Lake Bradford Road, including Providence, Callen and Bond, and the Neighborhood Associations in this area are very active and engaged. When selecting transportation alternatives, consideration should be given to how the recommendation will impact connectivity and cohesiveness among these neighborhoods and the larger Tallahassee area.

Demographics

An analysis of minority and low-income populations (Environmental Justice (EJ) or Potential EJ populations) was conducted through a review of the American Community Survey of the US Census (2017) and field reconnaissance. In addition, the level of vehicle ownership was reviewed as part of the socioeconomic assessment to give a full picture of the surrounding community and determine what transportation alternatives would be feasible and worth pursuing. This analysis indicated that this area has a high minority population, and some neighborhoods surrounding North Lake Bradford Road are highly impoverished, where over 60% of the households are living below the poverty line. The area is also characterized by a lack of access to vehicles, and in some neighborhoods, over 25% of the households do not own a vehicle. This data strongly supports the need for pedestrian, bicycle, and transit facilities along the corridor. **Figure 30** and **Figure 31** show the poverty and vehicle ownership maps.







Figure 30. US Census Poverty Data

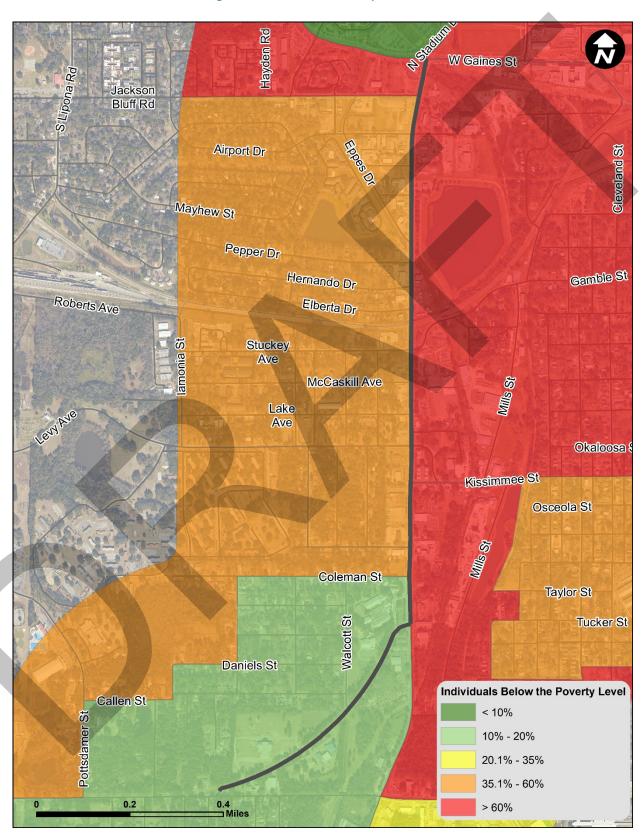
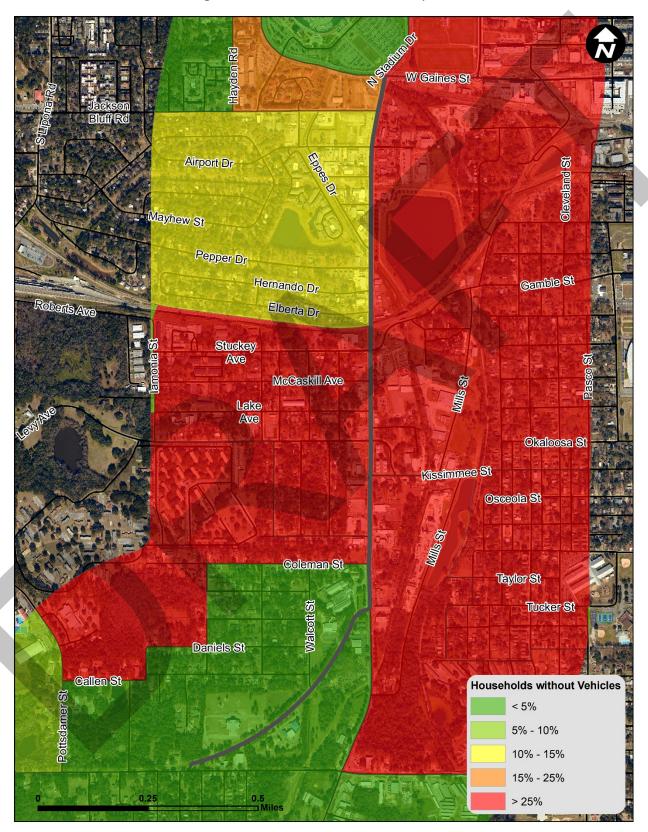






Figure 31. US Census Vehicle Ownership Data







Cultural

Historic Sites/Districts

There are multiple State Historic Preservation Office (SHPO) structures and one SHPO bridge within the Southwest Area Transportation Plan project area. Some of these are located alone North Lake Bradford Road, but none of the structures located here are eligible for listing in the National Register of Historic Places (NRHP) for their significance to transportation and commerce.

Recreational Areas

Recreational facilities and other community facilities near the North Lake Bradford Road corridor are shown in **Figure 32.** There is an elementary school directly on the corridor (Pineview Elementary School) and other schools and universities are in the surrounding area, including FAMU, FSU and TCC. Lake Elberta Park is located on the east side of the northern portion of the corridor. Additionally, the St. Marks Trail, which runs parallel to North Lake Bradford Road, is located just east of the corridor and can be accessed directly from Gamble Street, the Lake Elberta Park Trail, and an access point near the Bank of America at the intersection of Jackson Bluff Road. In the vicinity, the Debbie Lightsey Nature Park Project, which will include trails and greenway connections, is expected to be completed in the next few years. Development of other recreational opportunities in the project area that promote connectivity to regional trail network can be expected in the future. In selecting alternatives to move forward, consideration should be given to the impacts of any potential connections of residential, community centers, recreational, and educational facilities.

Natural

Wetlands and Floodplains

Figure 33 shows the presence of wetlands and flood zones near the Southwest Area Transportation study area. 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 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 Airport Gateway Project.







Figure 32. Recreational and Community Facilities

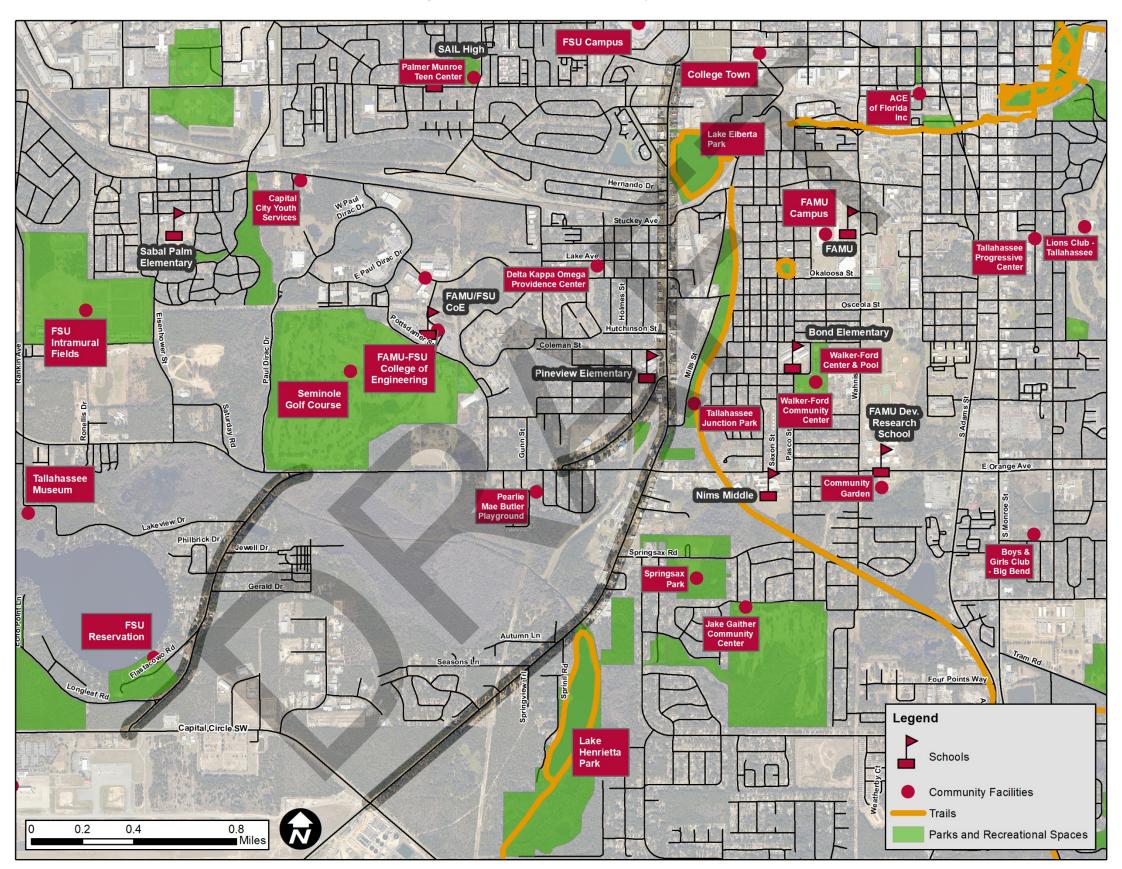
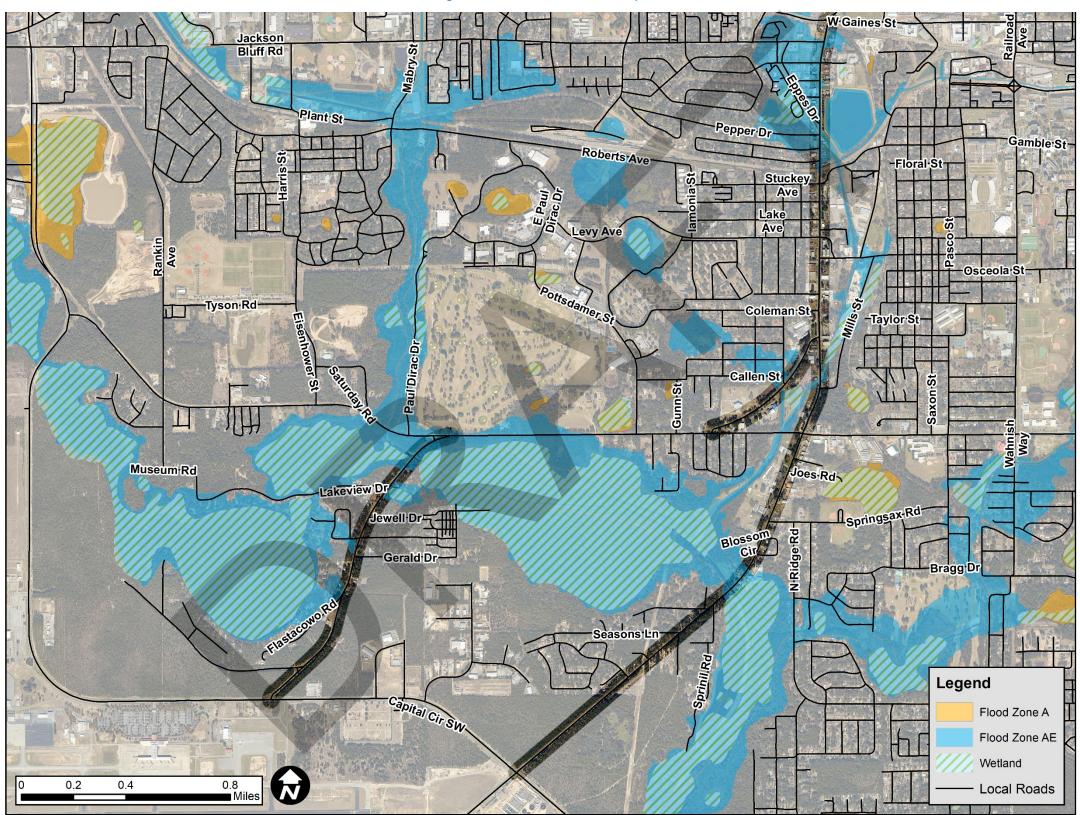






Figure 33. Flood and Wetland Map







Future Projects

There are multiple planned projects in the surrounding area that may impact North Lake Bradford Road. These projects should be considered throughout the next phases of North Lake Bradford Road 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 will 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.

Orange Avenue PD&E

Florida Department of Transportation is currently performing a PD&E study along the Orange Avenue 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

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. The public



Figure 34. District Forum 1 for Phase 2

outreach for Orange Avenue, North Lake Bradford Road, South Lake Bradford Road and Springhill Road was comprised of

- 14 Stakeholder Interviews and Meetings
- 4 District Forums
- 7 Neighborhood Association Meetings
- 1 Open House

To ensure that input and comments were received that addressed concerns and issues on specific roadways, the district forums were held in a manner that focused on either East-Corridors (Orange Avenue) or North-South Corridors (North Lake Bradford Road, South Lake Bradford Road, and Orange Avenue). Although these meetings were planned according to certain roadways, all comments and input were collected regardless of what corridor they addressed. **Figure 34** and **Figure 35** show community members actively participating in District Forum 1.

Following Phase I of the Plan, which was primarily focused on Orange Avenue, Phase II outreach focused on public input regarding North Lake Bradford Road, South Lake Bradford Road, and Springhill Road. Public Outreach for North Lake Bradford Road specifically consisted of 5 Neighborhood Association Meetings with residents from the Callen, Jake Gaither, College Terrace, Liberty Park and Providence neighborhoods, 2 District Forums, and 1 Open House. The District Forums and Open House were also

related to South Lake Bradford Road and Springhill Road, and opportunities were given to the public to comment on all corridors or on specific ones as desired. Each of these meetings provided the opportunity for the public to comment, and express their concerns and desires related to North Lake Bradford Road and potential future improvements.

All public outreach efforts were advertised through multiple avenues including agency websites, newsletters, mailouts, and emails. All public involvement efforts complied with Title VI. The general approach taken to collect public



Figure 35. District Forum for Orange Avenue





input is summarized below, and general feedback and comments are shown in **Figure 36**. The full summary of input is provided in the *Southwest Area Transportation Plan Public Involvement Plan*.

Overall Feedback

Through the extensive outreach conducted focusing on gathering input for North Lake Bradford Road, South Lake Bradford Road and Springhill Road, North Lake Bradford Road received the least amount of interest from participants. Comments received highlighted the fact that while North Lake Bradford Road offers pedestrian facilities, it is lacking safe crossings. Some comments suggested locations for pedestrian crossings at different intersection along the corridor, such as Pepper Drive. Several participants also acknowledged the lack of bicycle facilities along the corridor. Some comments highlighted the congestion that occurs at hours of high traffic volume.





Figure 36. Stakeholder Feedback Map







Transportation Alternatives Along North Lake Bradford Road

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

Pedestrians

- Sidewalks
- Multi-use path
- Pedestrian crossings
- Pedestrian Refuge

Bicyclists

- Bicycle lanes
- Multi-use path
- Trail connections

Motorists

- Traffic-calming measures
- Access management
- Intersection improvements



Figure 37. North Lake Bradford Road

This information should be considered to help provide an understanding of the existing facilities along the corridor (**Figure 37** and **Figure 38**), the need for improved transportation facilities to manage expanding traffic demands, and options to provide safe facilities for other user types. Because FDOT is



Figure 38. North Lake Bradford Road near Pineview Elementary School

undertaking a resurfacing project that includes an access management study, and the Airport Getaway Project will include a survey of North Lake Bradford Road, these recommended alternatives were formulated with the understanding that outcomes related to the study, survey and resurfacing project are still pending.



Pedestrian Facilities

Existing Conditions



Figure 39. North Lake Bradford Road

Along North Lake Bradford Road, sidewalks are present on both sides of the corridor, shown in **Figure 39**. There are no existing multi-use paths adjacent to the corridor to accommodate pedestrians and bicyclists. The sidewalks on the western side of North Lake Bradford Road extend from Gaines Street south to Springhill Road, although business parking lots must be crossed in intermittent locations. On the eastern side, the sidewalks are present from Gaines Street south to the intersection of North Lake Bradford Road and Hutchinson Street. Where sidewalks exist, widths vary between 5 and 6 feet along the corridor as per FDOT Roadway Design

standards. From the Hutchinson Street intersection south, the sidewalk ends, and a noticeable combination of desire paths and miscellaneous pavement extend down to Springhill Road. Field observations have shown a pattern of pedestrians crossing North Lake Bradford Road at the termination of paved sidewalk, despite the lack of crosswalk, in order to avoid walking near traffic with no pedestrian facility. Sidewalks that do exist are in disrepair in several areas along the east side of the corridor and are overgrown with weeds. All of these issues can be limiting in offering a safe space for pedestrians and should be addressed to maintain full connectivity via sidewalks along North Lake Bradford Road.

Public comment received during outreach efforts indicated that pedestrian and bicycle amenities are needed along the corridor to accommodate different types of user groups. North Lake Bradford Road is located within proximity to several residential neighborhoods that are characterized by moderate to high levels of poverty, making sidewalk connectivity and pedestrian safety critical. Additionally, Pineview Elementary School is located along the corridor, and school staff has expressed concern for the safety of students that walk along or cross North Lake Bradford Road to get to and from the school.



Figure 40. Example of Signalized Crossing on Southside of Tallahassee





As noted previously in this corridor plan, FDOT is completing a resurfacing project along North Lake Bradford Road, which will include an Access Management Study. This project is slated for preliminary engineering in 2020 and construction in 2022 and will somewhat influence which of these recommended pedestrian alternatives is viable with consideration to the existing and improved conditions provided by the resurfacing. Improvements to right of way beyond the curb and gutter will be determined by a survey associated with the Airport Gateway Project. Recommended alternatives include maintaining connectivity via clear and adequate sidewalks, providing signalized crosswalks at strategic locations to accommodate safe crossings (example shown in **Figure 40**), and a median on the roadway that will provide pedestrian refuges. If right of way permits, sidewalks should be expanded to serve both pedestrians and bicyclists, and the addition of a multi-use path on either side of the corridor should be considered.

Recommended Alternatives

- Short-term
- Maintenance of existing sidewalk along length of corridor.
- RRFB at Pineview Elementary School to promote access and safety of students.
- Addition of a crosswalk somewhere between Airport Dr. and Pepper Dr.
- Following Access Management Study
- Median islands to serve as pedestrian refuges.
- Following Airport Gateway Survey
- Widening of sidewalks to 8 ft to serve a dual purpose amongst bicyclists and pedestrians.
- If right of way permits, a 10 ft to 12 ft multi-use path.

Provide upgraded pedestrian and bicycle access to North Lake Bradford
Road

-Comment from District Forum #1







Bicycle Facilities

Existing Conditions

Along North Lake Bradford Road, there are no bicycle facilities present, as shown in **Figure 41**. Based on comments received during public outreach efforts and crash data, there is a significant need for bicycle facilities along this corridor. The addition of facilities would provide connectivity to facilities on Levy Avenue and the St. Marks Trail located east of the corridor. Improvements on Orange Avenue will include bicycle facilities, which will provide connectivity from Florida State University to the Southside of

Tallahassee via North Lake Bradford Road. Facilities along North Lake Bradford Road would also provide connections between schools, neighborhoods, and parks. During outreach efforts, the public tended to have more interest in an off-road bicycle facility to accommodate for safer travel for bicyclists.

Available right of way on North Lake Bradford Road is extremely limited, and due to current traffic volumes along the corridor, it does not appear feasible to add a safe, buffered bicycle lane to the roadway at this time. Keeping bicyclist safety and traffic volumes in mind, buffered bicycles are the minimum recommended alternative for North Lake Bradford Road. In the future, in the event of right of way acquisition, a 10 ft. multiuse path would be recommended for either side of the corridor to accommodate bicyclists. Like pedestrian alternatives, bicycle facilities and amenities will be further refined and determined based on the survey being completed by Blueprint during their Airport



Figure 41. North Lake Bradford Road

Gateway Project. sidewalks to serve both bicyclist and pedestrians, addition of a multi-use path, and other improvements.

Bicycle Alternatives

- Following Airport Gateway Survey
 - Widening of sidewalks to 8 ft serve a dual purpose amongst bicyclists and pedestrians.
 - If right of way permits, a 10 ft to 12 ft multi-use path.

Make bike lanes look different than the travel lanes on North Lake
Bradford Road and Springhill Road

-Comment from District Forum #2





Transit

Existing Conditions

Along North Lake Bradford Road, the following types of StarMetro Transit stops exist:

- No seating Pole Only
- Bench with Bus Stop Pole

Of the nine bus stops located along the corridor, the majority are characterized by only a bus stop pole with no seating or shelter, such as the one shown in **Figure 42**. Currently, StarMetro only offers service



Figure 42. Example of Transit Facilities on Orange Avenue

to the north part of Lake Bradford Road at night and on Sundays. During the day time, it is only available from Stuckey Avenue and south, leaving the entire section between Gaines Street and Stuckey Avenue without transit access. This section has bus service from the FSU transit system Innovation route when school is in session but only connects a small part of the university with the FSU/FAMU Engineering Campus. Because of North Lake Bradford Road's proximity to the universities, in addition to high poverty neighborhoods, this area is also home to college students. These groups rely heavily on the transit system, making the need for improved amenities and

routes in this area critical. As the area continues to develop and Innovation Park, FSU, and FAMU expand, it is recommended that improved facilities are provided to accommodate transit users. These amenities can be categorized using the table below, and it is recommended that facilities in the area that get high use be upgraded to medium level facilities. Additionally, more routes will be needed to serve the surrounding residential areas and accommodate increased ridership.

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		

Transit Alternatives

- Improve amenities along the corridor from Low to Medium according to the table provided.

 Provide covered seating for stops at McCaskill Avenue, Levy Avenue, Hutchison Street.
 - Provide better route options for transit users along this corridor.

North Lake Bradford Road needs sheltered bus stops with benches
-Improvement requested by Callen Neighborhood Residents

Kimley » Horn





Motorists

Analysis Summary

The existing and future traffic conditions analysis showed that North Lake Bradford Road from Springhill Road to Gaines Street is currently operating below capacity but is expected to operate over capacity by 2045. North Lake Bradford Road from Orange Avenue to Springhill Road currently operates below capacity and is expected to operate below capacity in the year 2045. In addition, the crash data indicated that 36% of crashes were rearend crashes. Elevated numbers of rear-end crashes is often indicative of congestion and access management issues. In addition, many of the segment's yearly crash rates are above the statewide average for similar facilities. 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.



Figure 43. North Lake Bradford Road

North Lake Bradford Road from Springhill Road to Gaines Street is currently a 4-lane facility with a two-way left turn-lane (**Figure 43**). Right-of-way along the corridor varies. The outside travel lanes are somewhat wider than the inner travel which can lead to high traffic speeds. Alternatives for addressing these concerns includes improved access management as recommended by FDOT, consistent 11-foot lane widths and the addition of a median to replace the existing center two-way left turn-lane. By strategically locating median openings to more closely meet FDOT's access standards. This would create a safer environment on the roadway for left turning motorists. North Lake Bradford Road from Orange Avenue to Springhill Road is currently a 2-lane facility that is expected to operate below capacity in the year 2045.

Motorist Alternatives

- North Lake Bradford Road from Springhill Road to Gaines Street
 - Improved access management along the corridor with the addition of a raised median along the corridor to provide friction and encourage slower travel speeds while managing left turning movements throughout the four-lane corridor.
 - Narrow the outside travel lane to 11-feet.

"Maintain access to businesses from medians"

-Comment from District Forum #2 about potential medians on North Lake Bradford Road



Summary of Recommended Alternatives

Through a combination of data collection, traffic analyses, and stakeholder and public outreach as part of the Southwest Area Transportation Plan, a set of preferred alternatives for North Lake Bradford Road are provided for consideration and inclusion in the Airport Gateway Project (referenced in **Figure 4**) and FDOT's upcoming 3R (resurfacing, reconstruction and rehabilitation) project. These alternatives are presented by user type: pedestrian, bicyclists, transit riders, and motorists. Pedestrian and Bicycle improvements include maintenance and widening of sidewalks, and a multi-use path if future surveys and studies determine that it is feasible given the limited right of way along the corridor. Transit alternatives are related to improving existing amenities and providing more bus routes. These improvements are critical for accommodating residents in the area who are mobility constrained and or may not have access to a vehicle. Recommendations regarding motorists includes the construction of a raised median to improve and control access management from Springhill Road to Gaines Street and narrowing the travel lanes to be consistently 11-feet. Because of upcoming projects, surveys, and studies, these recommendations are made with the understanding that feasible alternatives may change.

Typical Section

Figure 44 and **Figure 45** shows two typical sections for North Lake Bradford Road due to the varying existing conditions and future needs of each segment of the corridor.





Figure 44. North Lake Bradford Road Typical Section (Orange Avenue to Springhill Road)

(INSERT TWO LANE TYPICAL)





Figure 45. North Lake Bradford Road Typical Section (Springhill Road to Gaines Street)







Next Steps

Through extensive public outreach and stakeholder input, a variety of possible multi-modal improvements were identified for North Lake Bradford Road. The improvements include the need for safer and more connected pedestrian facilities such as continuous sidewalks on the eastern side of the corridor, wider sidewalks, a multi-use path along the entirety of the corridor, and pedestrian crossings near schools and 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 North Lake Bradford Road. Future traffic volumes indicate that the roadway segment from Springhill Road to Gaines Street is expected to operate 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. Majority of crash types are rear-end crashes, which can often be indicative of congestion and poor access management. The coupling of the existing crash rates and types and the projected future capacity constraint supports the need for the outlined improvements.

The recommended alternatives identified in this corridor plan are based on both data analyses along with public and stakeholder input. With the Airport Gateway Project set to begin design in late 2019, including a design survey for the corridors, it is recommended that specific improvements be determined through survey, design, additional analyses during those efforts. It is also recommended that improvements outside of the curb and gutter be considered through these analyses as well. Location for medians and access management may be addressed during FDOT's 3R project where they are conducting an access management study. These two projects will better determine the location and types of improved facilities for North Lake Bradford Road.

