USF Muma
College of Business
Monica Wooden Center for Supply Chain Management & Sustainability
UNIVERSITY of SOUTH FLORIDA
Supply Chain Innovation Lab

BDV25-977-71

FDOT Land Use Analysis to Enhance Successful Logistics Activity Center Development in Florida

Final Report

September 2022

PREPARED FOR

Florida Department of Transportation

FDOT Land Use Analysis to Enhance Successful Logistics Activity Center Development in Florida

Deliverable 6: Final Report

Submitted to:
Mr. Rickey Fitzgerald
Manager, Freight and Rail Office
Florida Department of Transportation
605 Suwannee Street, MS 25
Tallahassee, Florida 32399-0450
Email: rickey.fitzgerald@dot.state.fl.us
Phone: (850) 414-2602

Prepared by:
Dr. Seckin Ozkul, P.E. (Principal Investigator - PI)
Director, Supply Chain Innovation Lab
Monica Wooden Center for Supply Chain Management & Sustainability
Muma College of Business, University of South Florida
4202 E. Fowler Ave., BSN 3403 | Tampa, FL 33620-5375 USA
Email: sozkul@usf.edu
Phone: (813) 974-2530

Dr. Robert Hooker (Co-PI)
Associate Professor, Marketing and Supply Chain Management
Muma College of Business, University of South Florida
4202 E. Fowler Ave., BSN 3403 | Tampa, FL 33620-5375 USA
Email: rhooker@usf.edu

Adhithyan Rangarajan
Graduate Research Assistant
ar30@usf.edu

Alysson De Oliveira Silveira
Graduate Research Assistant
alysson@usf.edu

September 2022

Disclaimer

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the State of Florida Department of Transportation.

Unit Conversion Table

APPROXIMATE CONVERSIONS TO SI UNITS

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
LENGTH				
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
AREA				
in^2	squareinches	645.2	square millimeters	mm^2
ft^2	squarefeet	0.093	square meters	m^2
yd^2	square yard	0.836	square meters	m^2
ac	acres	0.405	hectares	ha
mi^2	square miles	2.59	square kilometers	km^2

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liters	L
ft^3	cubic feet	0.028	cubic meters	m^3
yd^3	cubic yards	0.765	cubic meters	m^3
NOTE: volumes greater than 1000 L shall be shown in m^3				

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
MASS				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or "metric ton")	Mg (or "t")

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
TEMPERATURE (exact degrees)				
°F	Fahrenheit	5 (F-32)/9 or (F-32)/1.8	Celsius	°C

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
ILLUMINATION				
fc	foot-candles	10.76	lux	lx
fl	foot-Lamberts	3.426	candela/m^2	cd/m^2

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
FORCE and PRESSURE or STRESS				
lbf	poundforce	4.45	newtons	N
lbf/in^2	poundforce per square inch	6.89	kilopascals	kPa

Technical Report Documentation Page

1. Report No.	2.Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle FDOT Land Use Analysis to Enhance Successful Logistics Activity Center Development in Florida		**5. Report Date** September 2022 **6. Performing Organization Code**
7. Author(s) Seckin Ozkul, Robert Hooker, Adhithyan Rangarajan, Alysson De Oliveira Silveira		**8. Performing Organization Report No.**
9. Performing Organization Name and Address Supply Chain Innovation Lab School of Marketing and Innovation Muma College of Business University of South Florida 4202 E. Fowler Avenue, BSN 3403, Tampa FL 33610		**10. Work Unit No. (TRAIS)** **11. Contract or Grant No.** BDV25-977-71
12. Sponsoring Agency Name and Address Florida Department of Transportation (FDOT) 605 Suwannee Street, MS 36 Tallahassee, FL 32399-0450		**13. Type of Report and Period Covered** Final Report, 7/1/20–9/30/22 **14. Sponsoring Agency Code**
15. Supplementary Notes		

16. Abstract

Florida's massive population growth brings higher emphasis on the freight and logistics aspect in Florida and the challenge of maximizing the economic development potential by attracting more companies to the State. Above mentioned challenge necessitated this project to find optimal areas which are most suitable for logistics activities to be located within Florida as a solution. In this study, the research team performed a literature review, conducted surveys and interviews with experts to validate survey results, developed crucial factors and final weighing scheme for LAC development potential. We acquired GIS Data from trusted sources owned by U.S/ Florida Govt. entities and created a LAC development potential and a corresponding heatmap for the entire State of Florida. All undevelopable lands were removed and then, on the final heat map, spot checks were prioritized based on the development potential of the land parcel and its land use type at the county level based on the combination of final LAC potential of the spot and the Land Use Type (Industrial/Vacant/Commercial/ Agricultural, etc.) shapefiles. Final spots were validated using Google Earth and ArcGIS Pro, and GIS mapping was performed to build a total of five maps for each county: one for validation, two for suitable land use, two for conflicting land use, all parcels with a very high/high or moderate LAC development potential. In this report, five spots are presented for each of the 67 counties of Florida, i.e., a total of 335 maps out of which, for each county; three maps are for suitable land use with successful LAC potential and two maps are for conflicting land use with successful LAC potential which lie near Industrial areas and can be rezoned for Industrial purposes and make them shovel ready. The maps identified all parcels with a very high/high or moderate LAC development potential. Results showed that the methodology used in this study is extremely useful in locating/determining optimal spots at the county level, which can help towards rezoning of future land parcels (which have very high/ high /moderate LAC development potential) to attract emerging businesses and maximize the economic development potential of the State.

17. Key Words		18. Distribution Statement	
Logistics Activity Centers (LAC), LAC Potential, Land Use, Factors, Buffers, Weights, Geographic Information System (GIS), Heat Map			
19. Security Classif. (of this report)	**20. Security Classif. (of this page)**	**21. No. of Pages** 497	**22. Price**

Form DOT F 1700.7 (8-72)   Reproduction of completed page authorized

Acknowledgements

The authors express their sincere appreciation to the Florida Department of Transportation (FDOT) for funding this research project and especially to FDOT Freight and Rail Office Manager, Rickey Fitzgerald, for his full support, excellent guidance and for envisioning and managing this project. The authors would also like to thank Darryll Dockstader, Manager of the FDOT Research Center, as well as Armando Moscoso of the Freight and Rail Office, for their guidance and support throughout this project.

Executive Summary

Florida is the third most populous State in the U.S which has more than half of its growth coming in from three metropolitan areas: Tampa, Orlando, and South Florida. This population growth brings higher emphasis on the freight and logistics aspect in Florida and the challenge of maximizing the economic development potential of Florida by attracting more companies to the State. Given the fact that Florida is a booming economy with a high population growth and good workforce availability, one solution to this challenge is to find top quality Logistics Activity Centers (LACs) and great development potential to attract businesses and high-quality talent to the State of Florida to expand trade and business, thus maximizing Florida's economic development potential.

This challenge of finding land parcels necessitated this project to find optimal areas which are most suitable for logistics activities in Florida, as a supplement to prospectively boost the economy of the State via attracting more emerging companies to the State. Therefore, the major goal of this project was to create a set of LAC development criteria, and find suitable land parcels with very high, high, and moderate LAC development potential to attract companies to Florida. This would then prospectively lead to more job opportunities, trade expansion, higher physical capital, and higher human capital.

To achieve this goal, the research team performed a multitude of different tasks to come up with an action plan to find locations that would serve for successful LACs, and therefore attract businesses and companies to setup and invest in Florida.

The first task that was performed was to conduct a literature review to identify previous research studies that deal with finding the factors that define a successful LACs development and understanding the methodology and importance given to these individual factors. A review of the literature revealed the below 16 most crucial factors pertaining to LAC development which will finalize the LAC development potential criteria.

The newly developed criteria comprised factors such as impact on natural environment, impact on urban environment, hydrology, land cost, access to a large market, utilization of major road networks, utilization of a willing railroad carrier, utilization of air cargo facilities, utilization of port facilities, labor cost, local supplier quantity, local supplier quality, weather, geology and orography, land area and land use, and neighboring communities.

Once these factors were determined, we obtained the trusted sources of GIS (geographic information system) data from trusted ArcGIS portals, which are owned by Florida Department of Transportation (FDOT), Florida Ports Council (FPC), Florida Department of Environmental Protection (FDEP), Florida Department of Agriculture and Consumer Services (FDACS), Florida Natural Areas Inventory (FNAI), and other official data sources available on the Florida Geographic Data Library (FGDL), U.S.

Geological Survey (USGS), U.S. Department of Transportation (USDOT), USDA Forest Service (USDAFS), and, U.S. Fish & Wildlife Service (USFWS).

The above was followed by an online survey to validate the candidate factors and attribute weights to their relative importance. Our team conducted interviews with experts to validate survey results and got feedback on factor's relative importance in the sequence. Both survey results and interview feedbacks served as inputs to create the final factors' weighting scheme i.e., buffers and weights based on its distance from the land parcel. After the validation stage, we defined how to operationalize each factor (e.g., how to measure proximity to a large market) and proceeded with the GIS data acquisition. The data for this analysis was obtained using the shape files owned by FGDL, FDEP, U.S. Forest Service and FDOT available on the ArcGIS portal. A color-coding scheme was developed for the creation of a heat map and this data was then processed and scaled to serve as inputs to a heat map that shows the LAC development potential throughout the whole State of Florida.

In the next step, all undevelopable lands such as Environmental lands, Wetlands, Military lands, Florida Protected lands, etc. were removed from the previous heat map using shapefiles from the Florida National Hydrography Dataset (NHD) and FDEP. For protected lands, military lands and environmental lands, shapefiles from FGDL and U.S. Forest Service on the ArcGIS Portal were used. To determine and find the appropriate land use of the parcels for each county; we sourced Statewide land use land cover data shapefiles from the ArcGIS portal which contains 45 different land types in Florida from the Florida Department of Environmental Protection to find the optimal Industrial/ Vacant type parcels. Land parcels designated as Vacant and Industrial were used to finalize the hotspot land parcels in each county with very high, high or moderate LAC potential.

The hotspot search was prioritized, first based on the level of the development potential i.e., very high/high/moderate, followed by the land use type i.e., Industrial/Vacant for suitable land use areas with successful LAC development potential. In addition, land use type of Agricultural/Commercial/Recreational for conflicting land use with successful LAC development potential, which is in close proximity to Industrial areas and can successfully be rezoned to make them shovel ready.

On the final heat map, spot checks were performed at the county level based on the combination of final LAC potential of the spot and the land use type (Industrial/Vacant for suitable land use areas with successful LAC development potential and land use type of Agricultural/Commercial/Recreational for conflicting land use with successful LAC development potential). These spots were then validated using 2D and 3D existing satellite imagery of the parcel available on ArcGIS Pro and Google Earth, the driving distances and buffer scores of the land parcel, etc. Through this process the research team confirmed that the criteria and the heat map are valid.

After the validation of the spot checks, specific prospective site maps were developed for each of the 67 counties in Florida. In this report, five maps are presented for each of the 67 counties of Florida i.e., a total of 335 maps out of which, for each county: one (1) map is for validation, two (2) maps are for suitable land use with successful LAC potential and two (2) maps are for conflicting land use with successful LAC potential, which lie in close proximity to Industrial areas and can be rezoned for Industrial purposes and make them shovel ready.

Results showed that the methodology used in this study is extremely useful in finding land parcels for the development of high-quality LACs and can help in rezoning of future land parcels with positive LAC development potential to attract businesses and maximize the economic development potential of the state, expand trade, and add to Florida’s competitive advantage.

Table of Contents

List of Figures

List of Tables

1.Introduction

Florida is the third most populous State in the U.S, which has more than half of its growth coming in from three metropolitan areas: Tampa, Orlando, and South Florida. This population growth brings higher emphasis on the freight and logistics aspect in Florida and the challenge of maximizing the economic development potential of Florida by attracting more companies to the State. Given the fact that Florida is a booming economy with high exponential population growth and its high workforce availability, one solution to this challenge is to find top quality sites to develop successful LACs and to attract businesses and high-quality talent to the State of Florida to expand trade and business, thus maximizing Florida's economic development potential.

1.1 Background

This challenge of finding land parcels necessitated this project to find optimal areas which are most suitable for logistics activities in Florida, as a supplement to prospectively boosting the economy of the State via attracting more emerging companies to the State. Therefore, the major goal of this project was to create a set of LAC development criteria, and find suitable land parcels with very high, high and moderate LAC development potential to attract companies to Florida. This would then prospectively lead to more job opportunities, trade expansion, higher physical capital, and higher human capital.

1.2 Project Objectives

The specific project objectives included:

1. Perform a literature review and GIS map(s) of the current land use of Florida.

2. Gain knowledge from survey and interviews of supply chain experts and combine this with previous literature review to understand the most crucial factors for successful LAC development potential.

3. Build a weighing criteria and buffer scores for the finalized factors.

4. Use data from trusted and reputed shape files on the ArcGIS portal and build the final heat map for successful LAC development potential for the entire State of Florida.

5. Perform spot checks, validate, and report the final maps for both suitable and conflicting land use areas for successful LAC development potential in each county of Florida (five maps per county)

1.3 Report Organization

Chapters 1 and 2 deals with the details of the literature review conducted by our research team to identify previous research studies, which deal with finding the factors that define a successful LAC's and understanding the methodology and importance given to these individual factors. Chapter 3 quantifies the results of the online survey, which was administered to validate the candidate factors and attribute weights to their relative importance. Interviews with experts were also used to validate the survey's results and generate feedback on the factors' relative importance."

Chapter 4 includes the factors' weighting scheme (i.e., the creation of buffers and weights for the factors based on survey results and interviews feedback), which served as input for the creation of the final heat map. The weighting scheme also served as input in the GIS Data collection from the ArcGIS portal to determine the crucial factors that have been considered for the weighing criteria. Chapter 5 explains the process of building the heat map, the removal of undevelopable lands, the color-coding scheme, hotspot search prioritization and the final heat map. Chapter 6 includes the validation and GIS mapping of suitable LAC development spots. Chapter 7 shows the visualizations developed in Tableau for the selected land parcels. Chapter 8 includes the validation and GIS mapping of suitable as well as conflicting LAC development spots in Florida. Finally, Chapter 9 summarizes the findings and conclusions of the report and the research project.

2. Literature Review

This study builds on the findings of two previous projects. The first project, titled "Logistics-Led Economic Development," was funded by FDOT's Central Office, performed by USF and identified success factors necessary for the development and fidelity of LACs such as Intermodal Logistics Centers (ILCs), inland ports, etc. The second project, "Land Use Analysis to Enhance Successful LAC Development in FDOT D7", was funded by FDOT D7 and was also performed by USF. While building upon the two previous projects, we also considered the action plan to alleviate Florida's inbound and outbound freight imbalance, developed through another FDOT funded research, "Evaluation of Florida's Inbound and Outbound Freight Imbalance."

This project explicitly supports a State-wide strategy since no boundaries exist between regions in real life. A holistic analysis of the State was needed rather than region by region analyses (i.e., the I-4 corridor rests on multiple FDOT districts, the I-75 corridor runs from north to south through various FDOT districts, etc.).

The selection of optimal sites is a vital part of a logistics strategy that can affect both costs and service levels (Korpela and Tuominen, 1996). While the selection process can involve a complex process of selecting tangible and intangible factors, Korpela and Tuominen (1996) note that effective management of these factors can lead to competitive advantage. The focus of this literature review was to examine relevant works to identify the most pertinent factors that should be taken into consideration when identifying areas that are best suited for logistics activity. Identifying such factors is the first step towards the identification of optimal locations within Florida that can be developed as LACs to help attract more companies to the State and contribute with its economic development.

2.1 Methodology

Literature reviews are essential steps towards the creation of conceptual models and theoretical frameworks and an excellent means of shedding light on pieces of evidence found in multiple works by synthesizing research findings (Snyder, 2019). The three main classifications of literature reviews include: systematic, semi-systematic, and integrative. These different approaches can be distinguished by their structure, goals, and rigidity versus flexibility. Although the scientific rigor of a systematic review is appealing in terms of knowledge building, we strive to find the balance between rigidity and flexibility, keeping in mind that the primary goal of this project is practical and not only theoretical.

Wilding et al. (2012) propose a methodology for systematic literature reviews in the supply chain management domain that contains two phases. The first phase has three stages related to identifying relevant works: (1) question formulation, (2) locating studies, and (3) study selection and evaluation. The second phase focuses on investigating the paper networks. The first three steps suggested by Wilding et al. (2012) are somewhat similar to the sequence proposed by Snyder (2019): designing the review, conducting the review, analysis, and writing up the review. It is also similar to a more rigid approach suggested by Tranfield et al. (2003): planning the review, conducting the review, reporting, and dissemination.

Our approach was a hybrid of the methodologies mentioned above. As the research questions we wanted to answer in this project have already been stated in the introductory chapter, we start with a locating studies section, in which we describe the sources of information and also the terminology and keywords used in our literature search. Next, we present a study selection and evaluation section that clarifies the criteria and presents statistics related to the papers' selection process. Lastly, the reporting section was divided into two subsections: one to present factors obtained through Florida-specific studies and the other to report factors obtained through additional studies.

2.2 Locating Studies

To create a comprehensive yet extremely relevant identification of factors, this study relied on FDOT's previous studies, namely "Logistics-Led Economic Development" and "Land Use Analysis to Enhance Successful LAC Development in FDOT D7‟ together with academic research studies.

Given the volume of available academic research, a critical aspect in conducting new research is in filtering reliable, relevant, and timely information related to the problem being investigated. For reliability purposes, we chose the SCOPUS repository as the primary source of data for academic papers, for being one the most complete and respected database, as stated in this organization's website:

> "Scopus is the largest abstract and citation database of peer-reviewed literature: scientific journals, books, and conference proceedings; delivering a comprehensive overview." (Scopus, 2020)

The SCOPUS repository enables searches of prior research by keywords and titles, which allows researchers to gather information related to the investigation. Also, the relevancy of the documents can be assessed by the number of citations that the work received, while the reputable source assures reliability.

After selecting the source, the next step is to identify keywords that are associated with LACs. The terminology adopted in this work (i.e., LAC) is a term that refers to larger warehouses, inland ports, intermodal logistics centers (ILCs), etc. A LAC is defined here as an area comprised of facilities and operations related to transportation, storage, and distribution of goods for domestic and international transit. The reason for these multiple terminologies is partly because the logistics infrastructure has emerged in diverse geographical settings and serves a wide variety of functions, with various actors involved. After considering the nomenclature divergence, the list of keywords is as follows:

- Freight Distribution Center Location
- Inland Port Location
- Intermodal Logistics Center Location
- Large Warehouse Location
- Logistic Site Selection
- Logistic Site Selection Criteria
- Transport Terminal Location

Following Wilding et al. (2012), to assure the validity of this search, the list of keywords was analyzed and approved by the Principal Investigator, Co-Principal Investigator, and the Investigators of this project. Also, as the SCOPUS search engine returns papers from a variety of fields of study, we applied filters by area. The selection of study fields followed the same validation process as the keywords:

- Engineering
- Business, Management, Accounting
- Social Sciences
- Decision Sciences
- Economics, Econometrics, Finances

2.3 Study Selection and Evaluation

By searching for the keywords mentioned above and applying the area filters, the search produced seven datasets containing 1,436 papers, including 123 duplicates. The output includes the following information about each article:

- Authors
- Author(s) ID
- Title
- Year
- Source title
- Volume
- Issue
- Art. No.
- Page start
- Page end
- Page count
- EID
- DOI
- Link
- Affiliations
- Authors with affiliations
- Author Keywords
- Index Keywords
- Document Type
- Publication Stage
- Access Type
- Source
- Cited by

After removing duplicates, our dataset comprised 1,313 articles, which still required refinement before moving to the next stages. The next step was to assess the relevance of the papers, and to accomplish this we adopted the number of citations as a proxy. The Pareto Chart (Figure 1) shows that the majority of the articles (51%) have only one or no citations. Although the number of citations can be an acceptable proxy for relevance, sorting papers by this measure could benefit older works and eliminate recent ones.

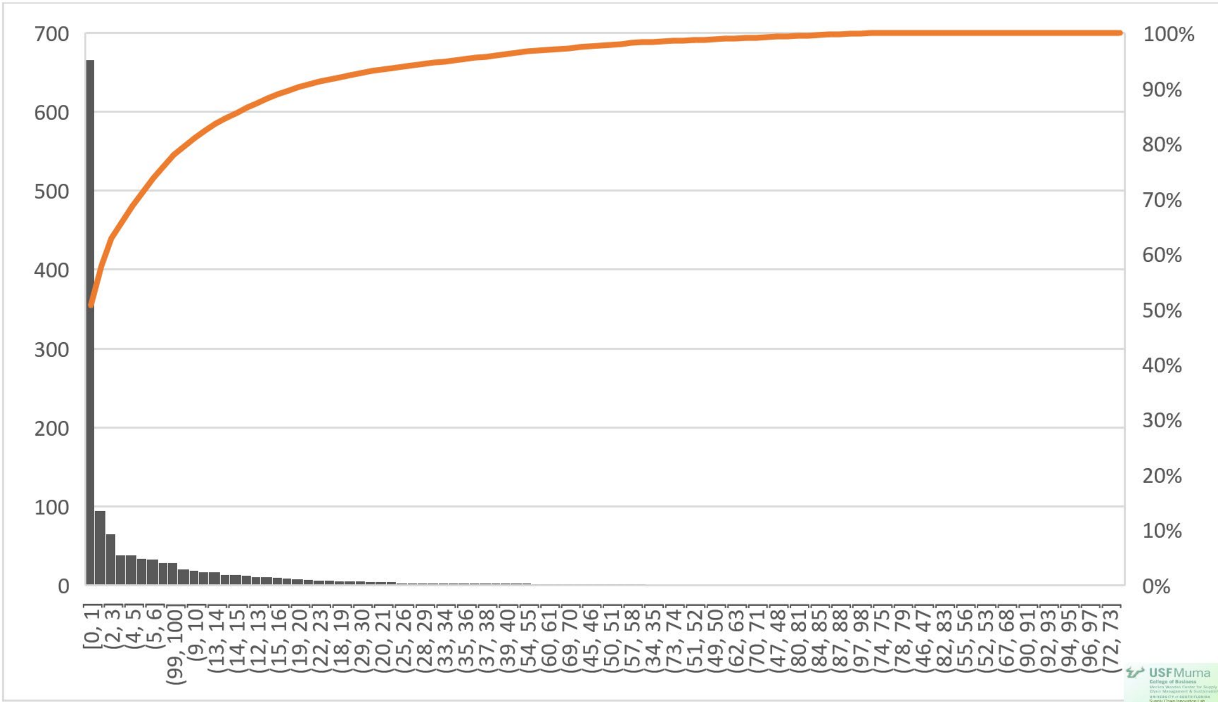

Figure 1. Pareto Analysis of the Number of Citations Received by Articles

It normally takes some time until recently published papers start being cited by other researchers. To avoid removing relevant recent works, we split the dataset into two groups, according to the publication year: (1) published before 2019; and (2) published after 2019. Because older papers tend to receive more citations over time, for the dataset containing the articles published before 2019, we created an index by dividing the number of citations by the paper's age.

The next step was to create a threshold so we could analyze only relevant papers. We determined that for articles published before 2019, we would only proceed with the analysis of those that received above two citations per year, and that we would analyze all recent works, disregarding the number of citations received. By applying these criteria, we selected 448 articles for the next stage.

Although search engines have significantly developed in recent years, the results of their searches are not always accurate. Due to this issue, we had to add human intelligence to computer intelligence to make sure that the selected papers were related to the topic. This refinement stage consisted of reading titles and removing from our pool of candidate articles those with a topic that was not related to the goal of this project. At the end of this stage, we classified 121 articles as related to the subject (81 published before 2019, and 40 published more recently). The last step of filtering the dataset was to analyze each paper's abstract and classify it according to how closely related it is with the purpose of this work. The categorization of the articles is as follows:

- Highly related (19 articles)
- Related (36 articles)
- Possibly related (38 articles)
- Non-related (28 articles)

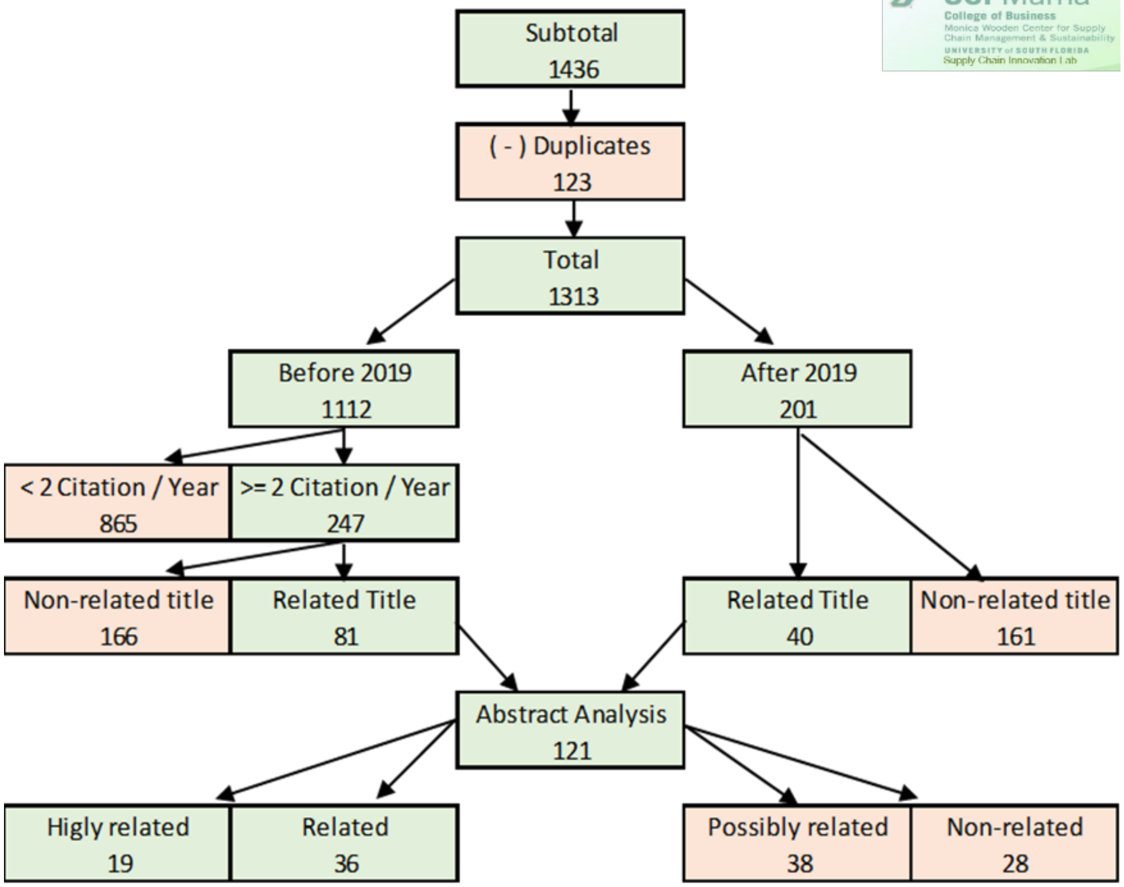

Figure 2. Decision Tree for Articles' Relevance

The research team decided to focus on reviewing only the papers categorized as highly related. We also included other articles identified as extremely relevant through a snowball process (studies cited by the chosen papers). Figure 2 shows a graphical representation of all the steps taken during the refinement process.

2.4 Factors Obtained Through Florida-Specific Studies

This section's goal is to report the identified factors that determine LAC development potential. First, we introduce the factors obtained through Florida-specific studies, followed by the factors obtained through other reviews.

In the Florida-specific studies section, we reviewed and summarized the findings from Logistics-Led Economic Development, and the Land Use Analysis to Enhance Successful LAC Development projects.

2.4.1 Findings of the Logistics-Led Economic Development Project

Freight mobility, trade, and logistics are essential elements of Florida's economic success, not only for fulfilling the growing demand for goods, commodities, and services in Florida, but also for driving the State's economic development and competitiveness. Freight logistics' importance as a driving force for maintaining and creating jobs and fueling economic development has increasingly been recognized by various local, State, and federal transportation programs in the United States. Despite State, regional, and national level efforts to foster logistics-led economic development, there has been little insight into the factors that influence the success or failure of these investments. Therefore, FDOT initiated the Logistics Led Economic Development research project intending to fill this gap by examining the success and deterrence factors of LAC development employing multiple research methods. These methods included an extensive review of the literature, case studies through site visits of selected LACs, and a freight/logistics investment survey of all U.S. State Departments of Transportation (DOTs).

In the first stage of the Logistics Led Economic Development project, a list of factors that could influence the potential success or failure of a LAC was determined based on an extensive literature review. These factors were grouped into five major categories: (1) Strategic Location, (2) Economic Incentives for Development, (3) Champion, (4) Government Support, and (5) Other Factors. They were then applied to evaluate LAC sites identified in the literature. These same factors were investigated later when the project team conducted site visits of major LACs in the country.

2.4.2 Demand Elements

The major component of the demand elements was found to be the access to a large market, and it is highlighted in the subsection below.

Access to a Large Market

A crucial element of the strategic location factor is access to a large population market. A large market nearby will ensure that there are adequate avenues for distributing goods/commodities that are received in a LAC.

2.4.3 Supply Elements

One of the vital components for setting up a successful LAC is the availability of proper infrastructure capabilities. This depends largely on the location of development and technological breakthrough with the help of advanced goods/commodities necessary for the LAC.

Availability of Inexpensive Land

Companies often choose to locate themselves in a LAC due to the availability of inexpensive and developable land. The major factors that govern the availability of inexpensive land are the actual land prices in a location, land ownership, issues related to current and prospective regional development, plans of local governments, and regulation (Tantsuyev, 2012).

Labor Cost

Inexpensive labor is dependent on the local economy and, therefore, is an important parameter to be considered during the process of locating the LAC.

Local Supplier Quantity

This factor refers to the presence or absence of local suppliers around the LAC, which would then use these suppliers once operational.

Local Supplier Quality

This factor refers to the capabilities of the local suppliers near the LAC. These could range from inefficient suppliers with little expertise of technological innovation to internationally competitive suppliers with expertise in new product and process development.

2.4.4 Transport Infrastructure and Accessibility

It should be noted that the utilization of major roadway networks could serve both the local population as well as national and international markets; however, the utilization of a railroad carrier, air cargo, and port facilities most likely serves national and international markets only (Rivera et al., 2014).

Utilization of Major Road Networks

The success of a LAC often correlates with its connectivity to major freeways and other roadway networks. Easy and quick access to high-speed roadways makes the transportation of goods/commodities more efficient, thereby making a LAC very attractive for investment.

Utilization of a Willing Railroad Carrier (if present)

Railroad carriers have the potential to transport a greater amount of goods/commodities more economically in comparison with over-the-road transportation on some long-haul routes. Additionally, railroad carriers help achieve economies of scale through their ability to use the same track structure and locomotives to move both light and heavyweight freight (Bereskin, 2009).

Utilization of Air Cargo Facilities (if present)

Air transport is important to the movement of goods/commodities across national and international supply chains for high value-to-weight freight cargo (Kasarda et al., 2006). Therefore, this factor acts as an enabler for a LAC, if businesses that require air cargo are interested in locating in a LAC (Kasarda et al., 2006).

Utilization of Port Facilities (if present)

The development of a LAC was found to be strongly correlated with the level of activity at nearby ports because ports are major nodes on the global supply chain map (Parola et al., 2013). Therefore, locating a LAC close to a port increases the success of the LAC due to decreased container travel times and drayage costs.

2.4.5 Land Use Analysis to Enhance Successful Logistics Activity Center Development in FDOT D7

The Land Use Analysis to Enhance Successful LAC Development project sought to identify the areas that are most suitable for LACs within the FDOT D7 region, namely Citrus, Hernando, Pasco, Hillsborough, and Pinellas counties. Located within its borders, the Greater Tampa Bay Area proved to be promising due to the immediate access to a gamut of freight generators such as a seaport (i.e., Port Tampa Bay), an international airport (Tampa International Airport), an intermodal rail yard, and major roadway networks (e.g., I-75, I-4, I-275, etc.). Also based on its literature review, and previous FDOT projects, this study presented the following factors as crucial criteria for identifying successful LAC development.

Major Road Networks Accessibility

A multitude of previous research studies agree that the proximity of a LAC to major interstate and State roads increases the probability of success for that LAC as well as making it attractive for investments and business development. Khan (2004) states, "Locations at the crossroads of trade and commerce are more likely to be successful as logistics centers." In this study, a more detailed analysis was implemented to identify the distance criteria for location and access to major roadway networks for LAC development purposes.

Willing Railroad Network Accessibility

Historically, most of the existing intermodal terminals initially served as railroad terminals. The development of intermodal rail terminals was catalyzed by the growth of container shipment in the mid-1980s when APL formed the first transcontinental double-stack container train service. After this, the rail terminals expanded to increase their capacity and provide corresponding container transportation services (Wilmsmeier et al., 2011). It also was found that over-the-rail transportation was more efficient and less costly when comparing it to over-the-road transportation for long distances, usually more than a few hundred miles. Therefore, rail freight availability should also be considered as a requirement for successful LACs. This part of the literature review brings together findings of research papers and case studies regarding railroad network accessibility for successful LAC development.

Cargo Airports Accessibility

Per Kasadra et al. (2006), air transport plays a significant role in local, national, and international supply chains, especially for the delivery of goods with a high value-to-weight ratio. In addition, the author concluded that airport proximity could be a critical factor for LAC development only if companies that require high air cargo volume heavily utilize this LAC. This finding is also supported by the following study that was reviewed as a part of this section.

Freight-Oriented Seaports Accessibility

Per the Logistics-Led Economic Development project, access to a seaport was determined to be one of the key factors that influence the strategic location criterion for successful LAC development. In addition, Roso et al. (2015) found a correlation to "distance from seaports" and "distance from river ports" to account for a little over 17% and 7%, respectively—about 25% of the total LAC development potential of a site resting on its proximity to ports. Findings of the Lowcountry Distribution/Logistics Center Cluster Study are regarding the connectivity of existing or proposed LACs to different port facilities, including distance and characteristics. The authors identified two types of LACs connected to existing port facilities. The first is an Import Center; the main requirement for this type of LAC is its location, which should be within 10 miles from the port. Such distance was found to be optimal due to the minimization of drayage costs from the port to the LAC by truck or rail connector and vice-versa. The second was defined in the study as a Regional Distribution Center, described by the authors as a "second step along the way to the final markets/stores" (Lowcountry Council of Governments, 2005). Hence, the site for Regional Distribution Centers should be located about 20–30 miles from port facilities to serve this need efficiently.

Availability of Land

Almost all the studies in the literature include information on the size of existing and proposed LAC sites. This is necessary and relevant because LACs require minimum site sizes that are much larger than developments such as residential single-family homes, pharmacies, grocery shops, etc.

Based on the existing literature review, as highlighted in this section, the strategic location criteria findings for LAC development can be summarized as follows:

1. Highway Network Accessibility
    - Within 1 mile – Most advantageous
    - Within 1-2 miles – 2nd most advantageous
    - Within 2-5 miles – 3rd most advantageous
    - More than 5 miles – Least advantageous

2. Class I Railroad Accessibility
    - Within 0.5 mile – Most advantageous
    - Within 0.5 - 1 mile – 2nd most advantageous
    - Within 1 - 2 miles – 3rd most advantageous
    - More than 2 miles – Least advantageous

3. Distance to Air Cargo Facilities
    - Within 1 mile – Most advantageous
    - More than 1 mile - Least advantageous

4. Distance to Port Facilities
    - Within 1 mile – Most advantageous
    - Within 1 - 10 miles – 2nd most advantageous
    - Within 10 - 30 miles – 3rd most advantageous
    - More than 30 miles – Least advantageous

5. Land Availability
    - Intermodal yards – 200 - 300 acres
    - Large LACs such as ILCs, Large Distribution Centers – around 500 acres
    - Current and future land use/zoning –ranking system (from 1 to 9 points) based on development cost, etc.

2.5 Factors Obtained Through Other Studies

The revision of the literature resulted in an extensive list of 154 factors identified as success factors necessary for the development of LACs. Some of those factors are either similar or overlap to some extent. When analyzing these factors, the first step was to categorize them by their similarities, before we could proceed with further refinements. Every factor was classified into three levels. The first and most high-level classification is the distinction between micro or macro factors. However, the nomenclature has some similarity with the one used by Nguyen et al. (2020) to classify the design of the papers that those authors reviewed, in terms of not only scope but also method. In this work, the classification between macro and micro factors follows a different logic: macro factors are the ones associated with countrywise or region-wise decision factors, such as national stability and international market location, for instance. All other criteria that are associated with the decision process within a particular region are categorized as micro and are the focus of this study.

The further categorization (second and third level) is an adaptation from Awad-Núñez et al. (2015). These authors suggested grouping the variables that they used in their research into 17 factors that were also arranged in four categories: environmental factors, economic and social factors, accessibility factors, and location factors. In this work, we kept the same four categories (that became sub-categories) but added five new factors: (1) a general accessibility factor, (2) land use and neighboring communities, (3) land area, (4) existing infrastructure, and (5) other location factors. The list of all factors and their respective sub-categories can be found in Table 1. It should be noted that not all of these factors might be used for our current study. However, the most crucial have been considered.

Table 1. Sub-categories and Factors
(Source: Adapted from Awad-Núñez et al. (2015))

Category	Factor
Environmental Factors	Impact on natural environment
	Impact on urban environment
	Hydrology
Economic and Social Factors	Land and construction price
	Potential demand growth
	Hosting municipality range
Accessibility Factors	General
	Accessibility to the rail network
	Accessibility to high-capacity roads network
	Accessibility to airports
	Accessibility to ports
	Accessibility to supplies and services
Location Factors	Weather
	Orography
	Geology
	Land use and neighboring communities
	Land area
	Existing infrastructure
	Relation with other logistics platforms
	Integration into the main supply chain infrastructure
	Potential optimization of the modal shift
	Other

2.5.1 Environmental Factors

Differing environmental factors can, in some cases, appear closely related. For example, Kayikci (2010) suggested a definition of an intermodal freight logistics center that links the degree of accessibility with the need to generate the least possible negative environmental impacts. Distinguishing between factors is a critical aspect of the study.

In our literature review, we identified a great variety of variables that can help us to assess the impact on the natural environment. Some of these variables are tangible, such as energy use and emissions (Kayikci, 2010), the number of isolated spaces, and distance to natural spaces (Awad-Núñez et al., 2015). Some variables such as hazardous materials (Kayikci, 2010) and solid castoff disposal (Li et al., 2011), are somewhat measurable. Also, a set of criteria were found to have an intangible nature such as environmental situation (Theofanis et al., 2010); connectivity on the natural environment (Awad-Núñez et al., 2015); and impacts from construction (Regmi and Hanaoka, 2013). We also found studies in which a whole category was used as a variable. For instance, Pons Sánchez (2008) and Awasthi et al. (2011) suggested environmental impact as a criterion.

The second group of environmental factors is the Impact on Urban Environment. Except for the impacts on residential areas (Pons Sánchez, 2008), all other criteria identified in this group are related to the effects on the local traffic and its consequences, such as congestion (Kayikci, 2010, Li et al., 2011; Onstein et al., 2019); road density (Chang et al., 2015); ease of commuting access (Theofanis et al., 2010); impacts from transport operation (Regmi and Hanaoka, 2013); connectivity on urban environment (Theofanis et al., 2010); accidents (Kayikci, 2010); and distance to urban centers (Awad-Núñez et al., 2015).

Although not yet cited as a potential criterion for choosing a LAC location, in this study, we would like to explore the possible benefits of autonomous vehicles initiatives. These initiatives could benefit companies in terms of accident prevention – and consequentially cost savings – travel time reduction, and a more fuel-efficient operation (Fagnant and Kockelman, 2015). These authors also highlight that, for freight transportation, autonomous vehicles could enable companies to use tightly coupled road-train platoons that can represent a fuel-saving in the order of 10-15%, due to reduced air resistance of shared slipstreams.

The third and last group of environmental factors consists of hydrological factors. This factor and its criteria were proposed by Awad-Núñez et al. (2015) as (1) distance to surface water; (2) flooding level; and (3) groundwater presence. In this case, the author's goal is to understand what environmental factors related to hydrological matters need to be considered when choosing the location of the Logistic Activity Center. In other cases, such as emissions (Kayikci, 2010), for instance, the perspective is more towards how logistic activities can impact the environment. Both aspects are essential for the success and sustainability of the company, and so, we did not find it necessary to segregate the variables in this study. Table 2 shows a summary of the environmental-related variables, factors, and authors that suggested each of them.

Table 2. Environmental Factors and Variables

Factor	Sub-factor	Author(s)
Impact on Natural Environment	Energy use	Kayikci (2010)
	Emissions	Kayikci (2010)
	Hazardous materials	Kayikci (2010)
	Solid castoff disposal	Li et al. (2011)
	Environmental situation	Theofanis et al. (2010)
	Distance to natural spaces	Awad-Núñez et al. (2015)
	Connectivity on natural environment	Awad-Núñez et al. (2015)
	Number of isolated spaces	Awad-Núñez et al. (2015)
	Impacts from construction	Regmi and Hanaoka (2013)
	Environmental impact	Pons Sánchez (2008); Awasthi et al. (2011)
Impact on Urban Environment	Density of the facility area	Awad-Núñez et al. (2015)
	Congestion	Kayikci (2010); Li et al. (2011); Onstein et al. (2019)
	Accident	Kayikci (2010)
	Distance to urban centers	Awad-Núñez et al. (2015)
	Connectivity on urban environment	Awad-Núñez et al. (2015)
	Road density	Chang et al. (2015)
	Ease of commuting access	Theofanis et al. (2010)
	Impacts from transport operation	Regmi and Hanaoka (2013)
	Impacts on residential areas	Pons Sánchez (2008)
Hydrology	Distance to surface water	Awad-Núñez et al. (2015)
	Flooding level	Awad-Núñez et al. (2015)
	Groundwater presence	Awad-Núñez et al. (2015)

2.5.2 Economic and Social Factors

The economic and social factors groups, as analyzed by Awad-Núñez et al. (2015), are land price, potential demand growth, and hosting municipality. In this work, we adapted to accommodate construction costs among the ones related to land. The cost component is present in almost all the papers reviewed, especially when it comes to land cost (Pons Sánchez, 2008; Theofanis et al., 2010; Li et al., 2011; Ka, 2011; Awad-Núñez et al., 2015; Regmi and Hanaoka, 2013; Verhetsel et al., 2015; Onstein et al., 2019). This factor is also enumerated in Awasthi et al. (2011), although more generically, comprising a variety of costs that may be involved in the decision process (land, vehicles resources, among others). Verhetsel et al. (2015) highlighted the trade-off between accessibility and land cost, as the competition among different types of land use may push logistic companies to the peripheral areas. These authors explained that projects that target housing, office, and retail endeavors, can afford to pay higher prices than logistic and also Industrial companies for land in highly urbanized areas.

In addition to land cost, Regmi and Hanaoka (2013) also considered construction costs as an essential aspect. Construction costs may require different investments to build in different locations and may include assessments of terrain characteristics and labor price. Higher construction costs could encourage decision-makers to seek more affordable options.

The second group of factors, potential demand growth, is directly related to the economic factors of candidate areas. Some of the reviewed papers explicitly focused on Industrial -related activities: Industrial production index (Awad-Núñez et al., 2015); Industrial enterprises above designated size (Chang et al., 2015); and connection with other business activities (Elevli, 2014). Alternatively, other authors have focused more on the proximity to consumer markets (Pons Sánchez, 2008; Theofanis et al., 2010; Awasthi et al., 2011), and indicators that may affect consumption, such as employment rate (Awad-Núñez et al., 2015). Prior research has used a combination of features as a single factor, such as the proximity to market, production centers, and consumers (Ka, 2011; Regmi and Hanaoka, 2013; Chang et al., 2015) and even more wide-ranging economic activities measurements: GDP (Ka, 2011; Awad-Núñez et al., 2015); GDP growth (Chang et al., 2015).

The last group of economic and social factors, called hosting municipality range, contains two factors that are directly related to the population of the target locations. Both population level and population density were measures that Awad-Núñez et al. (2015) suggested in their research that investigates dry port location's sustainability. Table 3 presents a summary of economic and social factors.

Table 3. Economic and Social Factors

Factor	Sub-factor	Author(s)
Land and Construction Price	Land Cost	Pons Sánchez (2008); Theofanis et al. (2010); Awasthi et al. (2011); Li et al. (2011); Ka (2011); Awad-Núñez et al. (2015); Regmi and Hanaoka (2013); Verhetsel et al. (2015); Onstein et al. (2019)
	Construction costs	Regmi and Hanaoka (2013)
Potential Demand Growth	Industrial production index	Awad-Núñez et al. (2015)
	Industrial enterprises above designated size	Chang et al. (2015)
	Location and interconnected business activities	Elevli (2014)
	Site proximity to important consuming areas	Pons Sánchez (2008); Theofanis et al. (2010); Awasthi et al. (2011)
	Employment rate	Awad-Núñez et al. (2015)
	Proximity to market, production centers, and consumers	Ka (2011); Regmi and Hanaoka (2013); Chang et al. (2015)
	GDP	Ka (2011); Awad-Núñez et al. (2015)
	GDP growth	Chang et al. (2015)
Hosting municipality range	Population-level	Awad-Núñez et al. (2015)
	Population density	Awad-Núñez et al. (2015)

2.5.3 Accessibility Factors

Accessibility is critical when deciding where to locate a business, independent of the approach adopted, as companies seek to receive and deliver goods in the most cost-effective manner (Verhetsel et al., 2015). Still, according to these authors, the factors related to accessibility are usually expressed in terms of distance or transportation costs, and even by more complex measures.

In terms of transportation modes, roads are still the primary mode of receiving and delivering goods (Verhetsel et al., 2015) (Pons Sánchez, 2008; Theofanis et al., 2010; Regmi and Hanaoka, 2013; Verhetsel et al., 2015; Awad-Núñez et al., 2015). Although this factor is usually measured by the distance or the time required to reach main road networks, it is also possible to include other types of measures. These could include direct access to a high-capacity network and the number of lanes (Awad-Núñez et al., 2015).

Even though road transportation is more flexible and more available, it can pose problems of traffic congestion (Verhetsel et al., 2015) and pollution (Awad-Núñez et al., 2015). The accessibility to other transportation modes, such as railroads (Theofanis et al., 2010; Regmi and Hanaoka, 2013; Verhetsel et al., 2015, Awad-Núñez et al., 2015), airports (Pons Sánchez, 2008; Theofanis et al., 2010; Awad-Núñez et al., 2015), and ports (Pons Sánchez, 2008; Regmi and Hanaoka, 2013; Regmi and Hanaoka, 2013, Verhetsel et al., 2015) has been gaining importance over time. When regarded as substitutes for road transportation, some research has suggested measures other than time and distance. Concerning railroads, Awad-Núñez et al. (2015) proposed the following factors: (1) number of railroad accesses; (2) importance of the railroad environment; and (3) quality of railroad. In terms of accessibility to ports, Theofanis et al. (2010) suggested a generic measure (water access) than can cover both seaports and inland ports, while Regmi and Hanaoka (2013) specifically highlighted the accessibility to inland waterways.

Unlike previous groups of factors, this last one does not concern a specific transportation mode and its infrastructure, but rather considers supplies and services availability. Most authors listed factors related to the supply-side of freight services (Theofanis et al., 2010; Li et al., 2011), but the demand-side was also considered (Regmi and Hanaoka, 2013). Availability of a suitable workforce (Theofanis et al., 2010; Onstein et al., 2019), labor costs (Onstein et al., 2019), and other services and supplies (Pons Sánchez, 2008; Kayikci, 2010; Awasthi et al.,2011; Awad-Núñez et al., 2015) were also listed, along with more specific factors, such as services coordination (Kayikci, 2010) and quality (Kayikci, 2010; Awasthi et al., 2011). Lastly, the existence of business parks could be an advantage in terms of gathering suppliers and consumers, and the potential for shared utilities (Verhetsel et al., 2015; Onstein et al., 2019). All accessibility-related factors are summarized in Table 4.

Table 4. Accessibility Factors

Factor	Sub-factor	Author(s)
Accessibility to high-capacity roads network	Direct access to the high-capacity network	Awad-Núñez et al. (2015)
	Number of lanes	Awad-Núñez et al. (2015)
	Road access	Pons Sánchez (2008); Theofanis et al. (2010); Regmi and Hanaoka (2013); Verhetsel et al. (2015); Awad-Núñez et al. (2015)
Accessibility to the rail network	Number of railroad accesses	Awad-Núñez et al. (2015)
	Importance of the railroad environment	Awad-Núñez et al. (2015)
	Quality of railroad	Awad-Núñez et al. (2015)
	Rail access	Theofanis et al. (2010); Regmi and Hanaoka (2013); Verhetsel et al. (2015)
Accessibility to Airports	Air access	Pons Sánchez (2008); Theofanis et al. (2010); Awad-Núñez et al. (2015)
Accessibility to Ports	Water access	Theofanis et al. (2010)
	Seaports	Pons Sánchez (2008); Regmi and Hanaoka (2013); Verhetsel et al. (2015)
	Inland waterways	Regmi and Hanaoka (2013)
Accessibility to Supplies and Services	Proximity to major retailers & logistic providers	Theofanis et al. (2010)
	Proximity to interstate/regional freight transshipment	Theofanis et al. (2010)
	Freight transport	Theofanis et al. (2010); Li et al. (2011)
	Freight demand	Regmi and Hanaoka (2013)
	Availability of suitable workforce	Theofanis et al. (2010); Onstein et al. (2019)
	Labor cost	Onstein et al. (2019)
	Supplies and services availability	Pons Sánchez (2008); Kayikci (2010); Awasthi et al. (2011); Awad-Núñez et al. (2015)
	Coordination	Kayikci (2010)
	Quality	Kayikci (2010), Awasthi et al. (2011)
	Business Park	Verhetsel et al. (2015); Onstein et al. (2019)

2.5.4 Location Factors

The fourth and final group consists of location factors. It contains criteria related to both natural characteristics of the location - such as geology and weather - and also legal and social aspects (land use and neighboring communities).

Weather conditions are an essential factor when considering the location because weather can directly affect the daily operations of a logistics company (Pons Sánchez, 2008; Li et al., 2011; Awad-Núñez et al., 2015). The existence of winter frosts and the rainfall levels are examples of more specific weather-related measures proposed by Awad-Núñez et al. (2015).

Geology and orography also play a crucial role in terms of location selection because it can affect the cost of construction or even be a non-transposable barrier due to extremely high site preparation costs (Elevli, 2014). Factors related to orography cited in reviewed works were topography and configuration (Pons Sánchez, 2008; Theofanis et al., 2010); terrain curl (Awad-Núñez et al., 2015); landform condition (Li et al., 2011); slope (Awad-Núñez et al., 2015); candidate land shape (Li et al., 2011) and Excavability and compressive strength (Awad-Núñez et al., 2015).

Regarding legal and social aspects, land use is the most critical factor (Kayikci, 2010; Theofanis et al., 2010; Elevli, 2014; Onstein et al., 2019). Theofanis et al. (2010) also suggested other neighboring-related factors, such as pressure from existing uses, the attitude of neighboring communities, and land uses of neighboring sites and conflicts.

For a logistic center to develop its activities and capabilities, the size and shape of the area need to suit the purposes (Theofanis et al., 2010; Li et al., 2011; Elevli, 2014). Also, the possibility of expanding the targeted area is vital for decision making (Theofanis et al., 2010; Awasthi et al., 2011; Elevli, 2014; Onstein et al., 2019). All land area criteria are summarized, together with all other location factors, in Table 5.

Table 5. Location Factors

Factor	Sub-factor	Author(s)
Weather	Rainfall level	Awad-Núñez et al. (2015)
	Winter frosts	Awad-Núñez et al. (2015)
	Weather condition	Pons Sánchez (2008); Li et al. (2011); Awad-Núñez et al. (2015)
Geology and Orography Geology	Terrain curl	Awad-Núñez et al. (2015)
	Slope	Awad-Núñez et al. (2015)
	Landform condition	Li et al. (2011);
	Candidate land shape	Li et al. (2011);
	Topography and configuration	Pons Sánchez (2008); Theofanis et al. (2010)
	Excavability	Awad-Núñez et al. (2015)
	Compressive strength	Awad-Núñez et al. (2015)
Land use and neighboring communities	Land uses of neighboring sites and conflicts	Theofanis et al. (2010)
	Attitude of neighboring communities	Theofanis et al. (2010)
	Pressure from existing uses	Theofanis et al. (2010)
	Land use	Kayikci (2010), Theofanis et al. (2010), Elevli (2014); Onstein et al. (2019)
Land area	Acreage	Theofanis et al. (2010); Li et al. (2011); Elevli (2014)
	Possibility of expansion	Theofanis et al. (2010); Awasthi et al. (2011); Elevli (2014); Onstein et al. (2019)

2.6 Summary and Recommendations

In this section, we presented a summary of factors suggested by both Florida-specific and other studies and criteria used to measure each factor. The research team selected the most crucial factors pertaining to LAC development among these factors and finalized the LAC development potential criteria, as described in this report. In this subsection, we also highlighted the shapefiles acquired.

2.6.1 Summary of Factors

After reviewing Florida-specific and other works, the research team proceeded with a comparison between the different sources to summarize the findings of this literature review. The list that resulted from the broad literature was more comprehensive, and after adjustments to accommodate all variables suggested, the end result was a list containing the most crucial 11 Florida specific factors (Table 6).

To maintain consistency across past and present FDOT projects, the nomenclature proposed for the factor that emerged in both stages of the literature review were maintained. For some of the factors, factor name rephrasing was more straightforward, such as, from accessibility to high-capacity roads network to utilization of major road networks; from accessibility to the rail network to utilization of a willing railroad carrier; from accessibility to airports to utilization of air cargo facilities; and also, from accessibility to ports to utilization of port facilities. One exception is the land and construction price factor. In these cases, we decided to use a new name, land cost, to replace accessibility to inexpensive land, as proposed in previous studies.

For the remaining groups, we either merged or expanded the factors to match previous FDOT studies. For instance, both potential demand growth and hosting municipality range are categories formed by variables that measure the size of the potential market or the economic activities in general. Those two factors were merged into access to a large market, as suggested in Florida-specific studies. On the other hand, we split the group accessibility to supplies and services, that emerged from the broad literature review, into three factors: (1) labor cost; (2) local supplier quantity; and (3) local supplier quality.

The final list contains 16 factors in total, five more than the previous FDOT projects. Table 6 summarizes all factors and shows a comparison between the factors that are present (P) in Florida-specific studies and the ones that were included as a result of this literature review. The research team will select the most crucial factors pertaining to LAC development among these 16 factors and will finalize the LAC development potential criteria, accordingly.

Table 6. LAC Development Potential Factors Comparison

Factor	Florida-specific studies	Other studies
Impact on Natural Environment		P
Impact on Urban Environment		P
Hydrology		P
Land Cost	P	P
Access to a Large Market	P	P
Utilization of Major Road Networks	P	P
Utilization of a Willing Railroad Carrier	P	P
Utilization of Air Cargo Facilities	P	P
Utilization of Port Facilities	P	P
Labor Cost	P	P
Local Supplier Quantity	P	P
Local Supplier Quality	P	P
Weather		P
Geology and Orography		P
Land use and neighboring communities	P	P
Land area	P	P

2.6.2 Proxies and Candidate GIS shapefiles

After summarizing the factors that are critical to LAC development potential, the next step was to propose ways to measure them. Going further, we listed the sources of GIS data that will be used in the following stages of this project to assess the areas with the highest development potential for Logistic Activity Centers.

The term GIS stands for "geographic information system," which is a technology that produces reports and maps by using a combination of geographic data and other types of information, such as classifications, demographics, and so on (O'Looney, 2000). The author highlights the importance of GIS for local governments in terms of management and policy decisions as its capabilities incorporate various technologies, such as (1) statistical analysis; (2) spatial statistical analysis; (3) network analysis; (4) computer-assisted design; (5) automated mapping; (6) facilities mapping; (7) geocoding and global positioning systems; (8) database management systems; (9) land information systems; (10) spatial decision support systems; (11) multimedia, hypertexts, and hot links; (12) expert systems; and (13) automated spatial modeling.

O'Looney (2000) also suggests that GIS can serve different purposes when it comes to public decision making. Possible GIS uses can range from a simple inventory tool, serving as a location tool, to more complex functions such as analytical (e.g., solving routing or pattern modeling problems) or even for planning and policy-making purposes.

In this project, the chosen geographic information system was ESRI ArcGIS:

> ArcGIS is a platform for organizations to create, manage, share, and analyze spatial data. It consists of server components, mobile and desktop applications, and developer tools. This platform can be deployed on-premises or in the cloud (Amazon, Azure) with ArcGIS Enterprise, or used via ArcGIS Online, which is hosted and managed by Esri (Esri, 2020).

ArcGIS can take a variety of file formats as input, including shapefiles that are used to store geographical information together with additional features. In this project, we will use shapefiles from trusted sources, such as:

- Florida Department of Transportation (FDOT)
- Florida Ports Council (FPC)
- Florida Department of Environmental Protection (FDEP)
- Florida Department of Agriculture and Consumer Services (FDACS)
- Florida Natural Areas Inventory (FNAI)
- And other official data sources available on the Florida Geographic Data Library (FGDL)
- U.S. Geological Survey (USGS)
- U.S. Department of Transportation (USDOT)
- USDA Forest Service (USDAFS)
- U.S. Fish & Wildlife Service (USFWS)

Table 7 depicts a list of GIS data available on the aforementioned trusted sources, grouped by factors that they are related to, and also each source. All listed shapefiles are only candidates, as the proper analysis of each file will be conducted during the next stage of this project. During the following phase, some of these files may not be considered, while others that are still not listed will be considered in the project.

Table 7. Candidate GIS data

Factor	Name	Source
Land use and neighboring communities	Generalized land use derived from 2019 Florida parcels	FGDL
	Land use and cover by water management district	FGDL
	Land use and cover by water management district in Florida	FGDL
	Enterprise zones in Florida - April 2015	FGDL
Utilization of Major Road Networks	Designated roads data - shapefiles of GIS roads layers	FDOT
	Roadway characteristic data - shapefiles of GIS road data layers	FDOT
Utilization of a Willing Railroad Carrier	Rail network in Florida – 2017	FGDL
	Intermodal facility parcels in Florida – 2010	FGDL
Utilization of Air Cargo Facilities	Airports in Florida – 2018	FGDL
	Institutional controls registry sites in Florida - July 2019	FGDL
Utilization of Port Facilities	Florida ports council	FPC
	Institutional controls registry sites in Florida - July 2019	FGDL
	Marinas in Florida - January 2017	FGDL
Land Cost	Florida parcel data State-wide – 2018	FGDL
	Parcels dissolved by decade of actual year built in Florida	FGDL
	Right of way parcels in Florida - 2017	FGDL
Hydrology	Navigable waterway	FGDL
	Flood hazard zones of the digital flood insurance rate map (DFIRM)	FGDL
	National wetlands inventory polygons- surface waters and wetlands	FGDL
	Usgs 1:24,000 hydrography – lines	FGDL
	National water information system: web interface	USGS
	National estuarine research reserves (NERR) in Florida - 2011	FGDL
Impact on Natural Environment	Natural parks and reserved land	FDEP
	Park and recreation areas, 2019	FGDL
	Florida managed areas - June 2019 (Florida conservation lands)	FGDL
	Florida State Park management zones - August 2015	FGDL
	Critical wildlife area boundaries in Florida - March 2018	FGDL
	Florida State forests - July 2016	FGDL
	Forest inventory and analysis national program	USDA
	ECOS (environmental conservation online system)	FWS
	FNAI GIS data	FNAI
Potential Demand Growth	Florida projected population growth – 2060	FGDL
	Social security (OASDI) beneficiaries in the State of Florida by zip	FGDL
	Florida demographic information	ArcGIS
Impact on Urban Environment	FDOT annual average daily traffic – Jan 2020	FGDL
	Traffic data - shapefiles of GIS traffic data layers (8 shapefiles)	FDOT
Weather	Annual rainfall	USDA
Geology and Orography	Florida digital elevation model mosaic	FGDL

2.7 GIS Maps of Current Land Use

This study also presents a collection of GIS maps of current land use for the State of Florida as depicted in the subsection below.

2.7.1 Land Use by County

The land use information for the State of Florida, presented in this work, is based on the shapefile named "Generalized Land Use Derived From 2019 Florida Parcels", published by GeoPlan Center, hosted at the Florida Geographic Data Library (FGDL) website. According to the description of this shapefile, "this dataset contains generalized land use derived from 2019 parcel specific land use for the Florida Department of Transportation (FDOT). The original 99 land use classes from the parcel data have been collapsed into 15 generalized classes (FGDL, 2020)."

The amount of data present in this dataset is massive and includes the whole State. We plotted 20 different maps so all 67 Florida counties could be represented in a level of detail in which the reader could identify several land uses, which are shown from Figure 3 to Figure 22. In the majority of the maps, it was possible to include more than one county; but in some cases, especially for large ones, the maps can represent a single county. Also, the same county can appear partially in some maps, but it is possible to see its whole territory in at least one of the maps. As the final product of this project, the research team will make the ArcGIS shapefiles available to FDOT for their records and perusal.

All the maps below follow the same style in which areas are painted in different colors that symbolize their current land use. For the color scheme, we used an even more strict categorization that contains only 11 types of land use: Residential; Vacant residential; Public/semi-public; Commercial (replacing retail/office); Vacant nonresidential; Parcels with no value; Agricultural; Institutional; Industrial; Acreage not zoned for agriculture; and others.

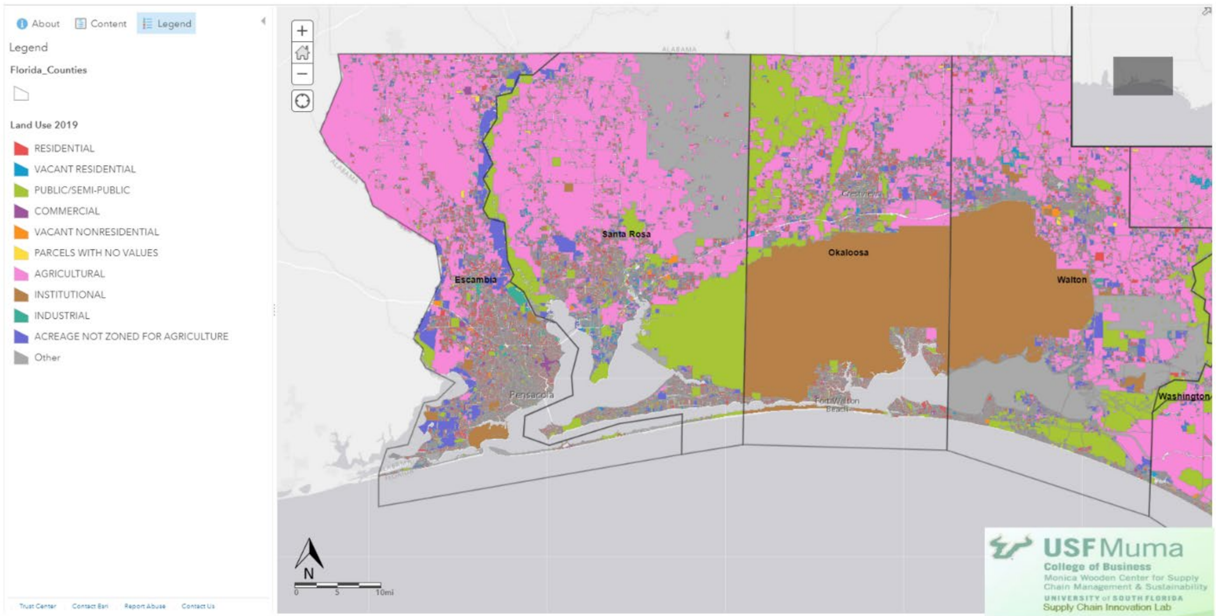

Figure 3. Land Use for Escambia, Santa Rosa, and Okaloosa Counties

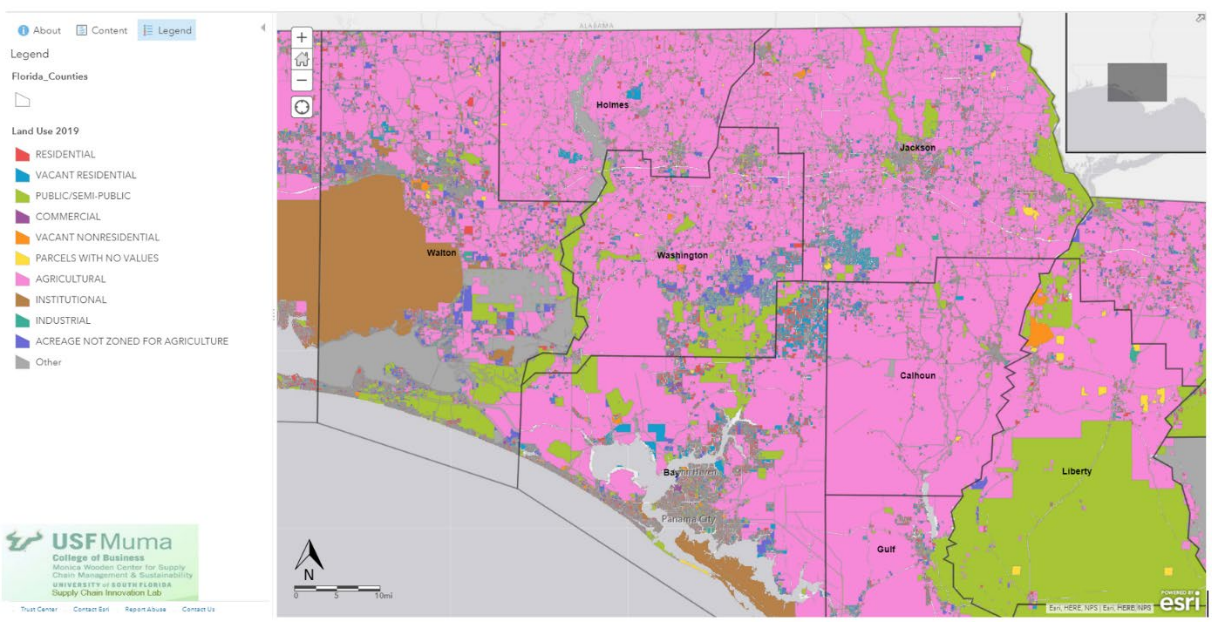

Figure 4. Land Use for Walton, Holmes, Washington, Jackson, and Calhoun Counties

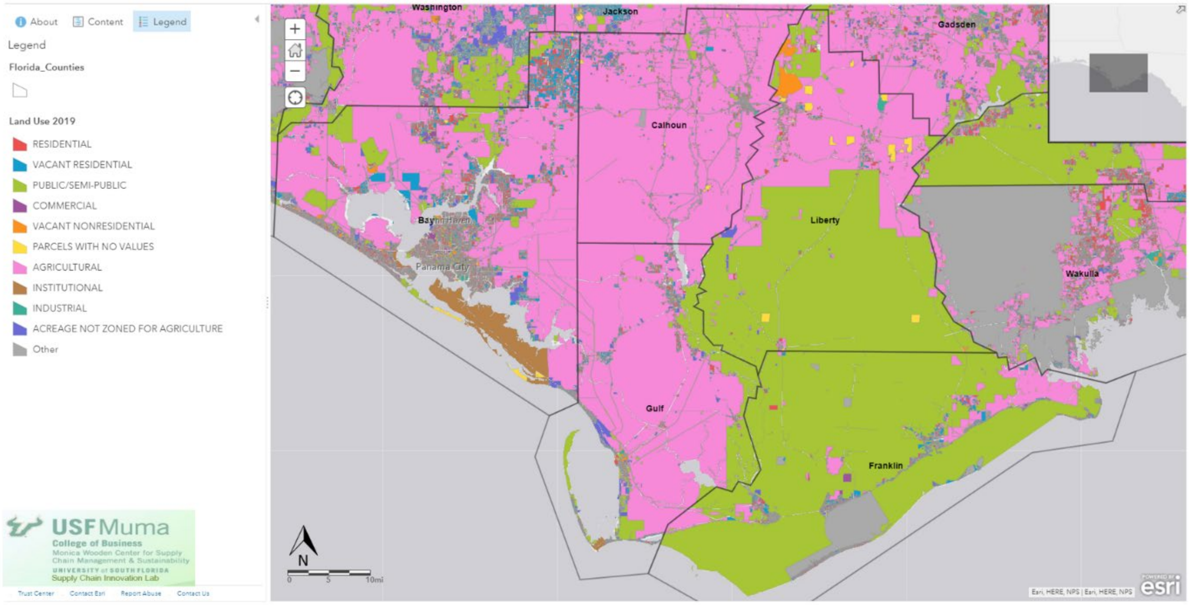

Figure 5. Land Use for Bay, Gulf, Franklin, and Liberty Counties

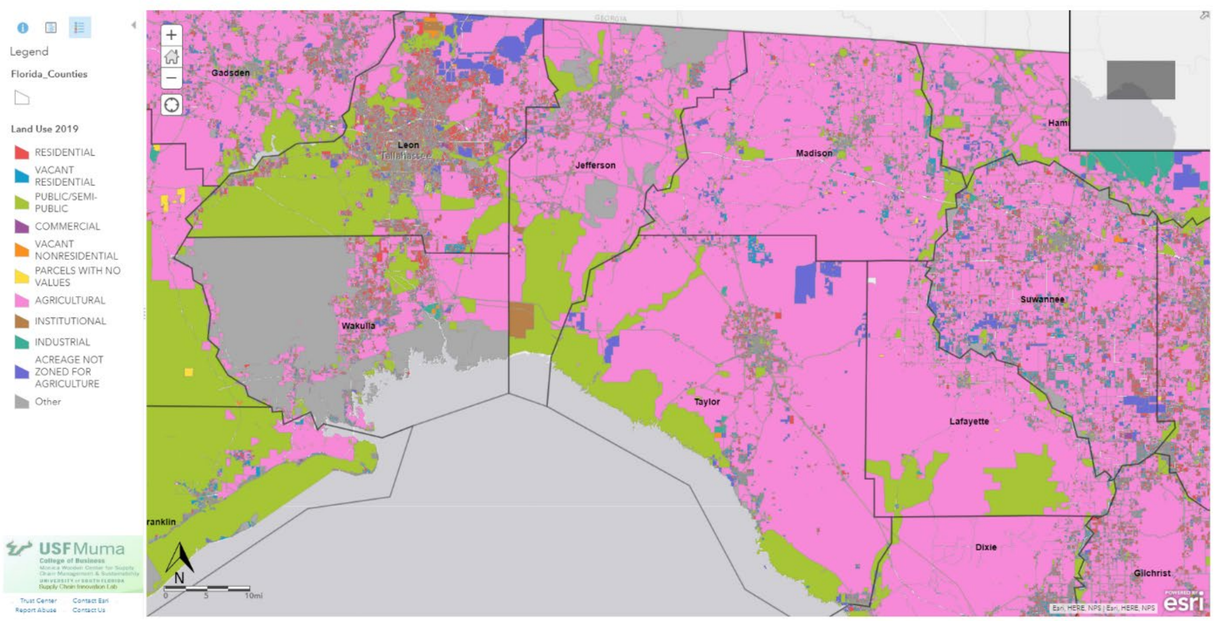

Figure 6. Land Use for Wakulla, Gadsden, Leon, Jefferson, and Madison Counties

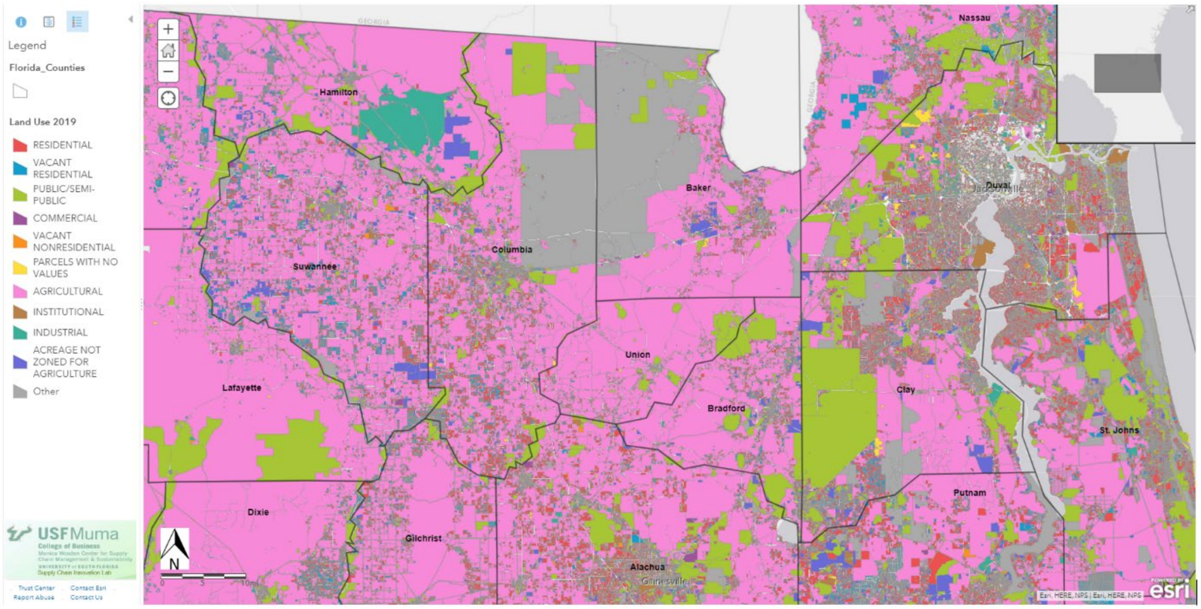

Figure 7. Land Use for Hamilton, Columbia, Baker, Lafayette, Suwanee, Union, Bradford, and Clay Counties

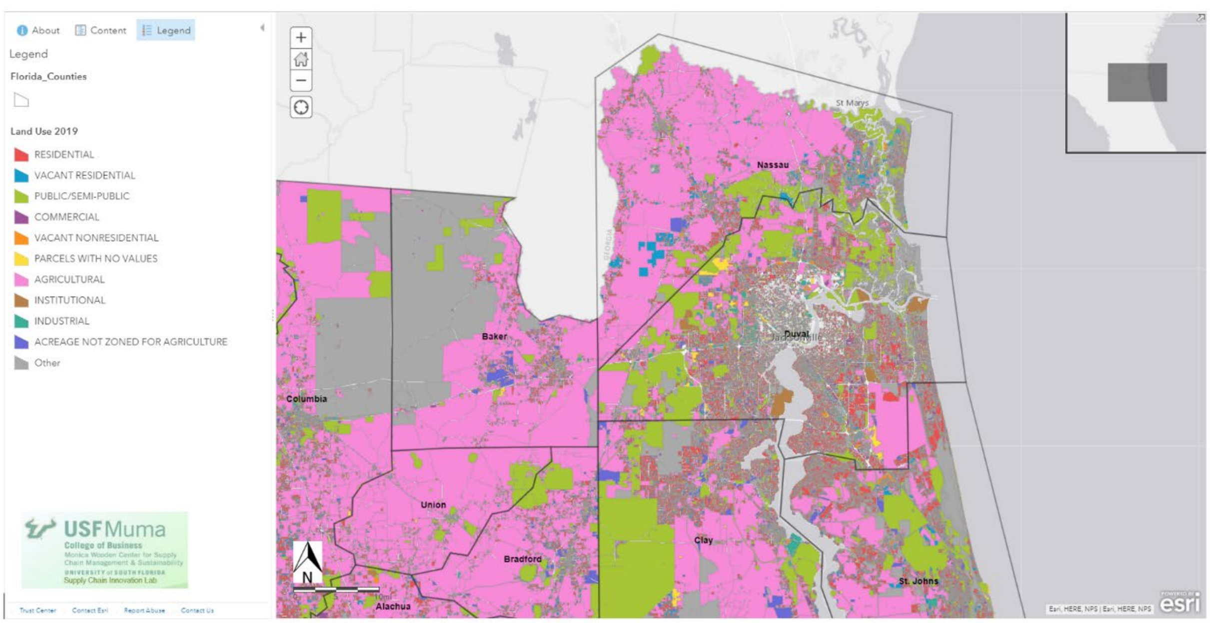

Figure 8. Land Use for Nassau and Duval Counties

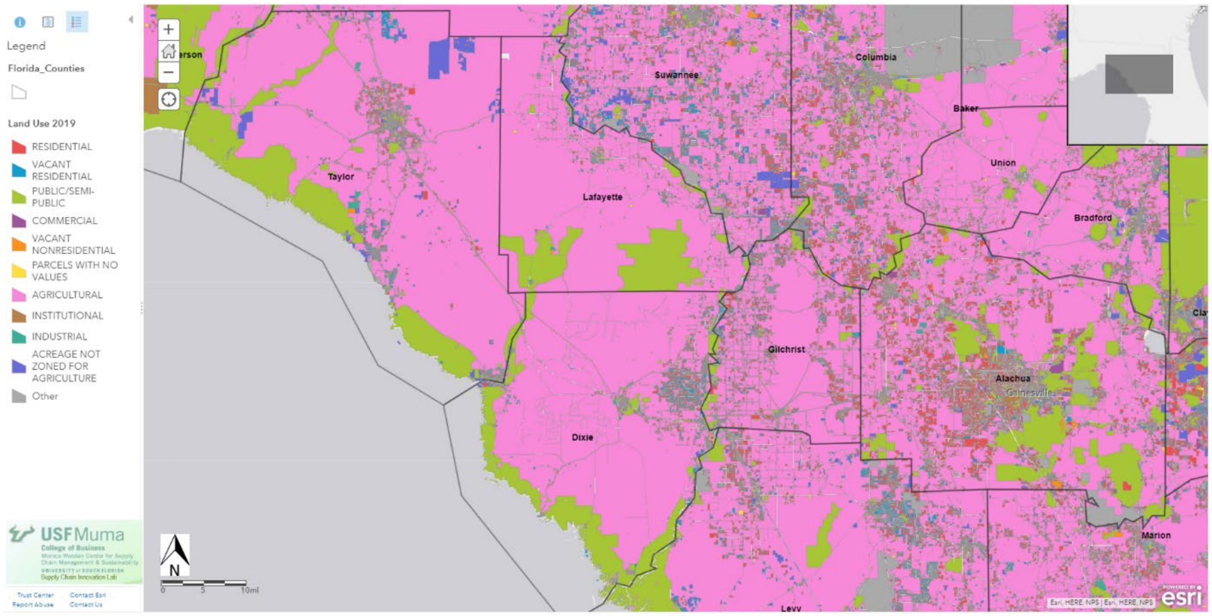

Figure 9. Land Use for Taylor, Gilchrist, and Alachua Counties

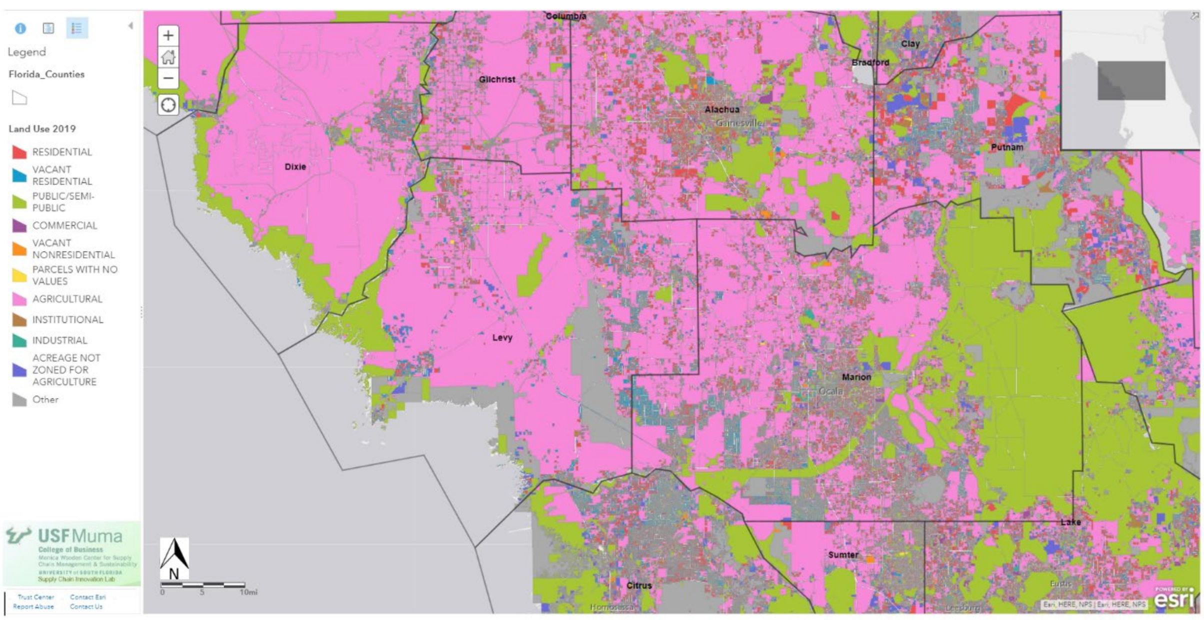

Figure 10. Land Use for Dixie, Levy, and Marion Counties

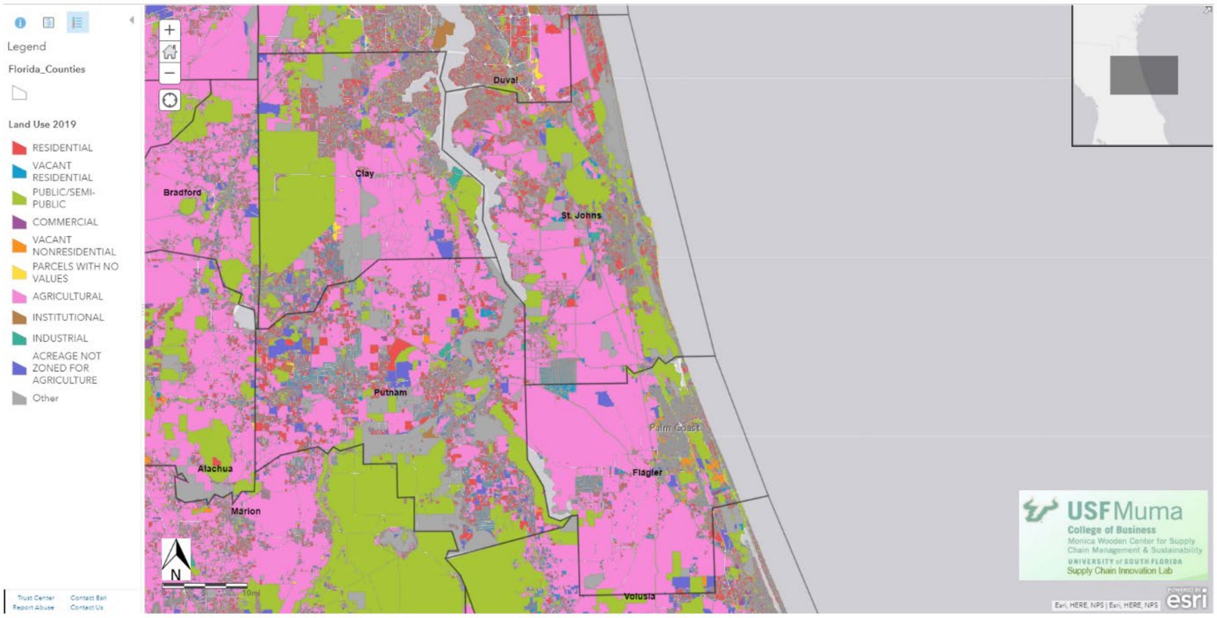

Figure 11. Land Use for Putnam, St. Jones, and Flagler Counties

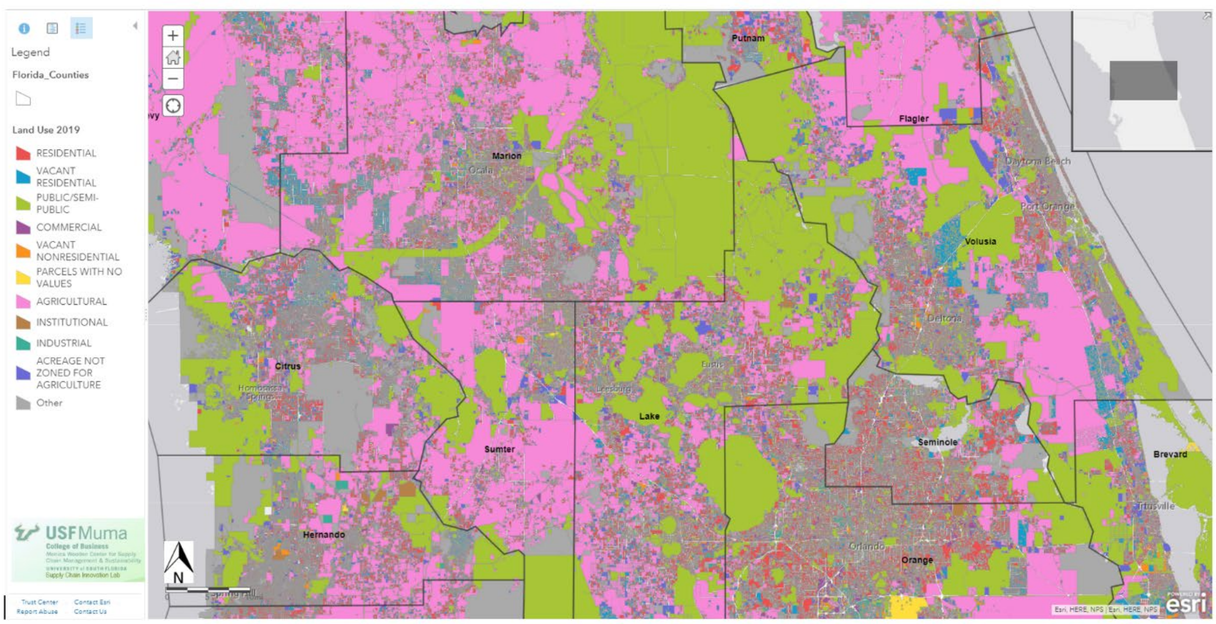

Figure 12. Land Use for Citrus, Volusia, and Seminole Counties

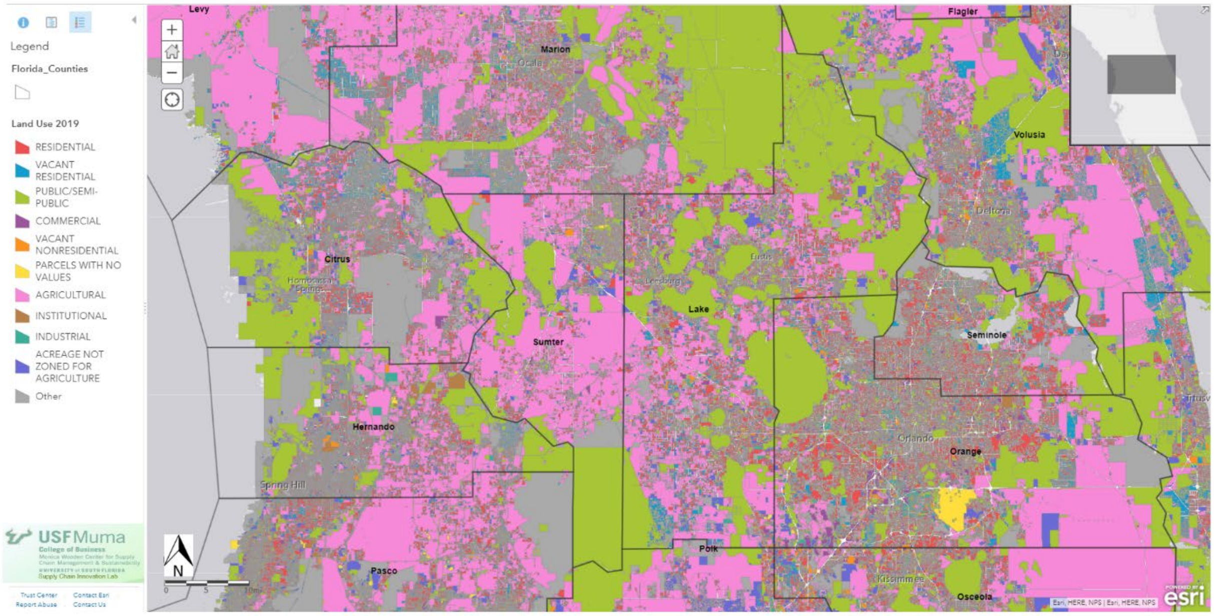

Figure 13. Land Use for Hernando, Sumter, and Lake Counties

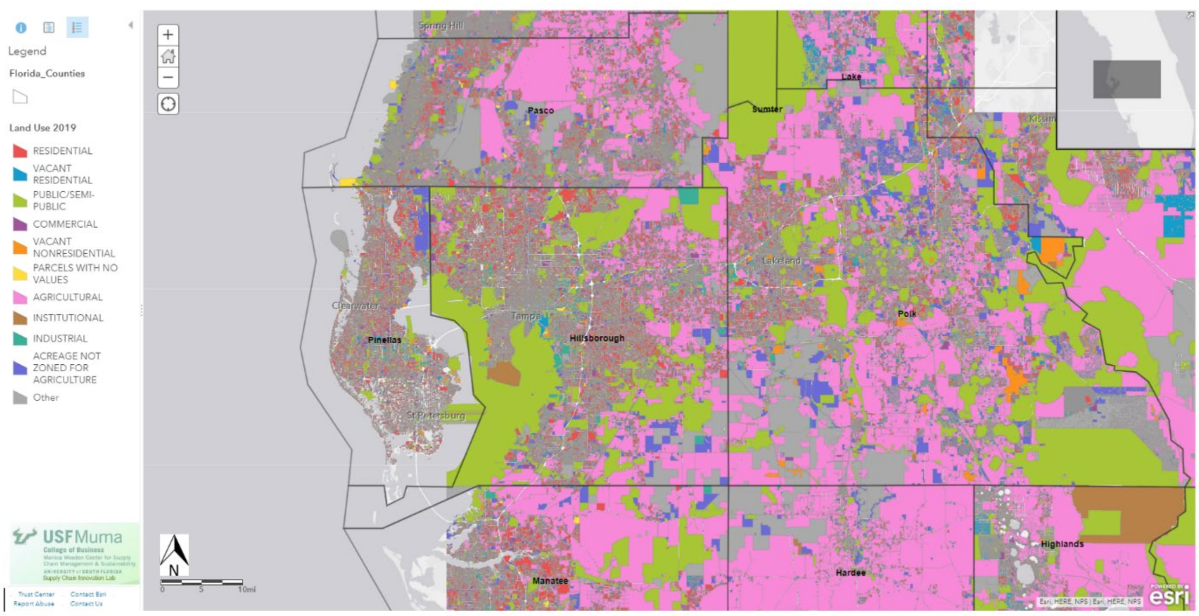

Figure 14. Land Use for Pasco, Pinellas, Hillsborough, and Polk Counties

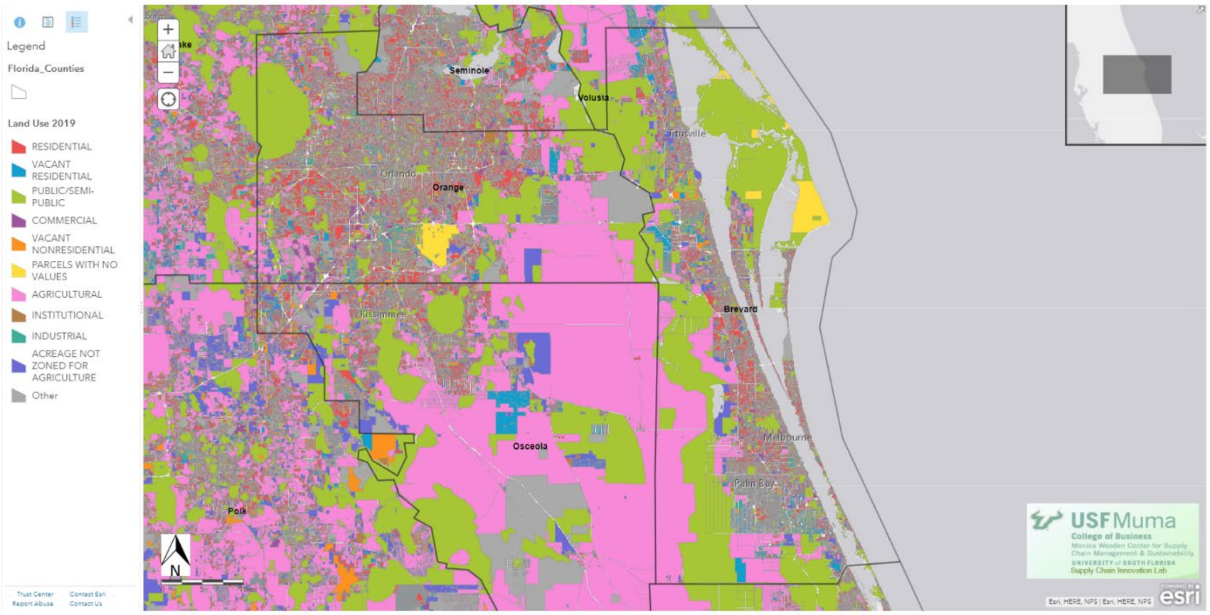

Figure 15. Land Use for Orange and Brevard Counties

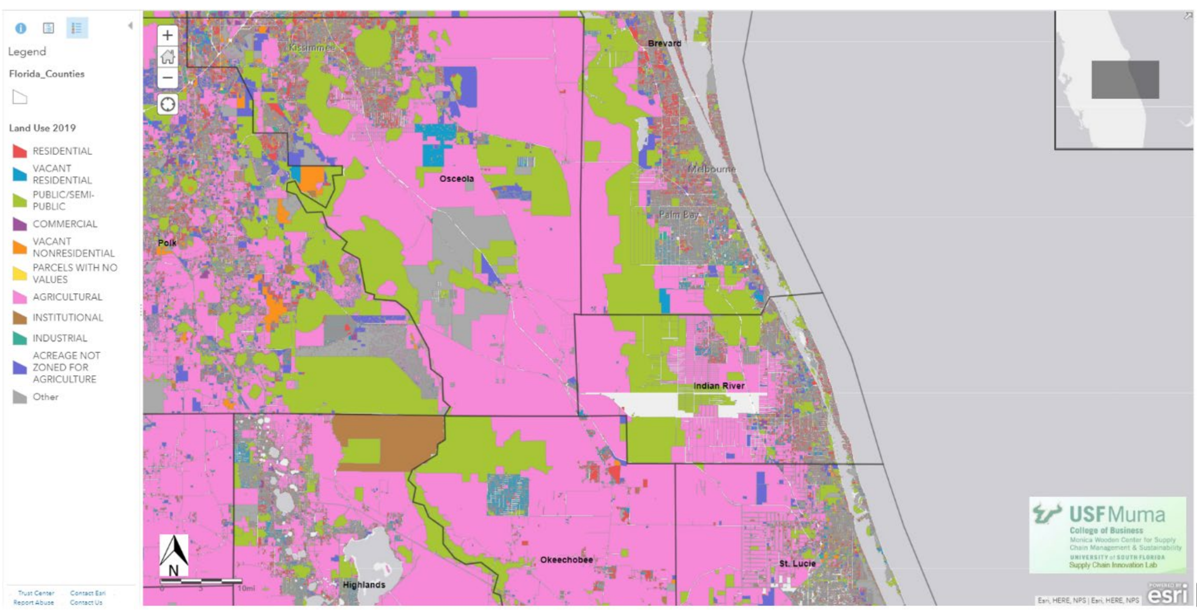

Figure 16. Land Use for Osceola and Indian River Counties

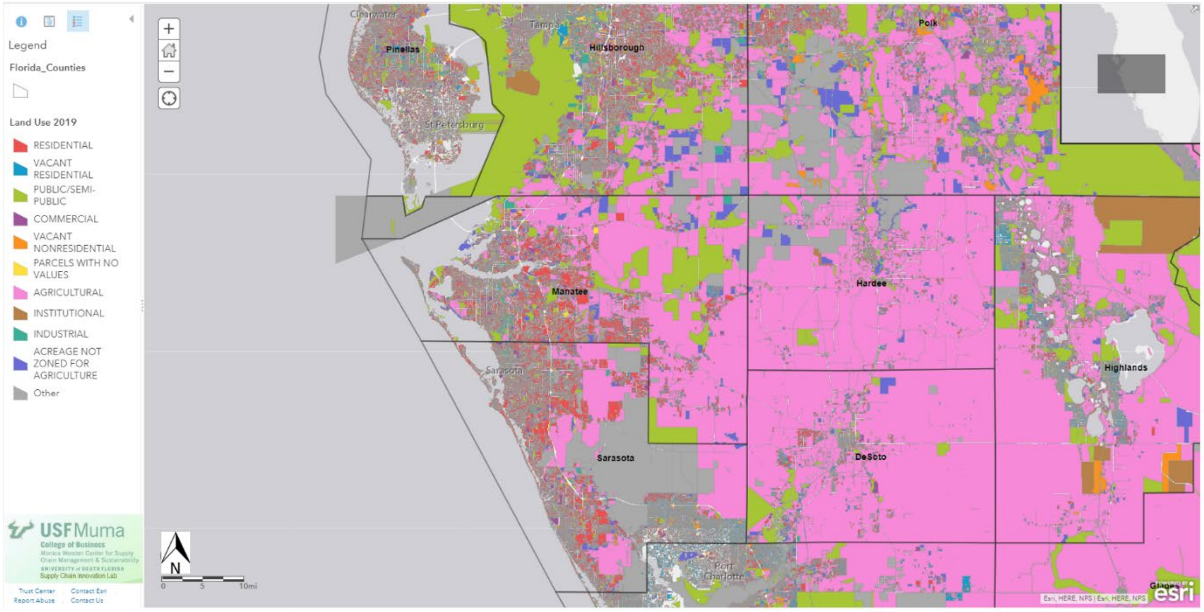

Figure 17. Land Use for Manatee, Hardee, Sarasota, and DeSoto Counties

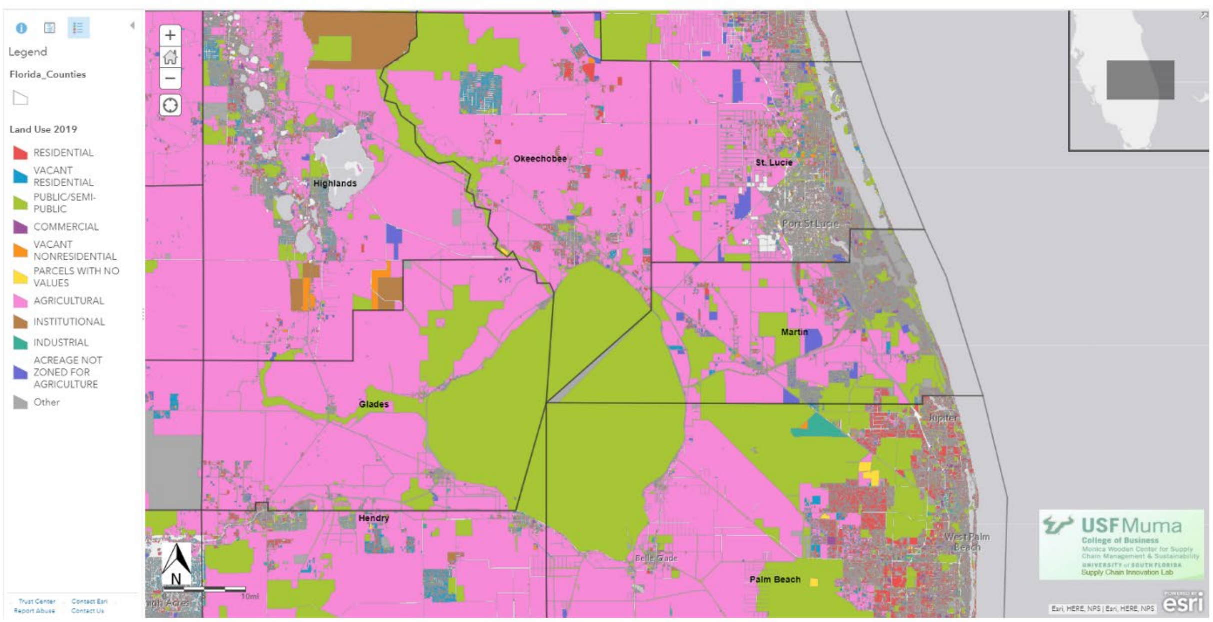

Figure 18. Land Use for Highlands, Okeechobee, St. Lucie, Martin, and Glades Counties

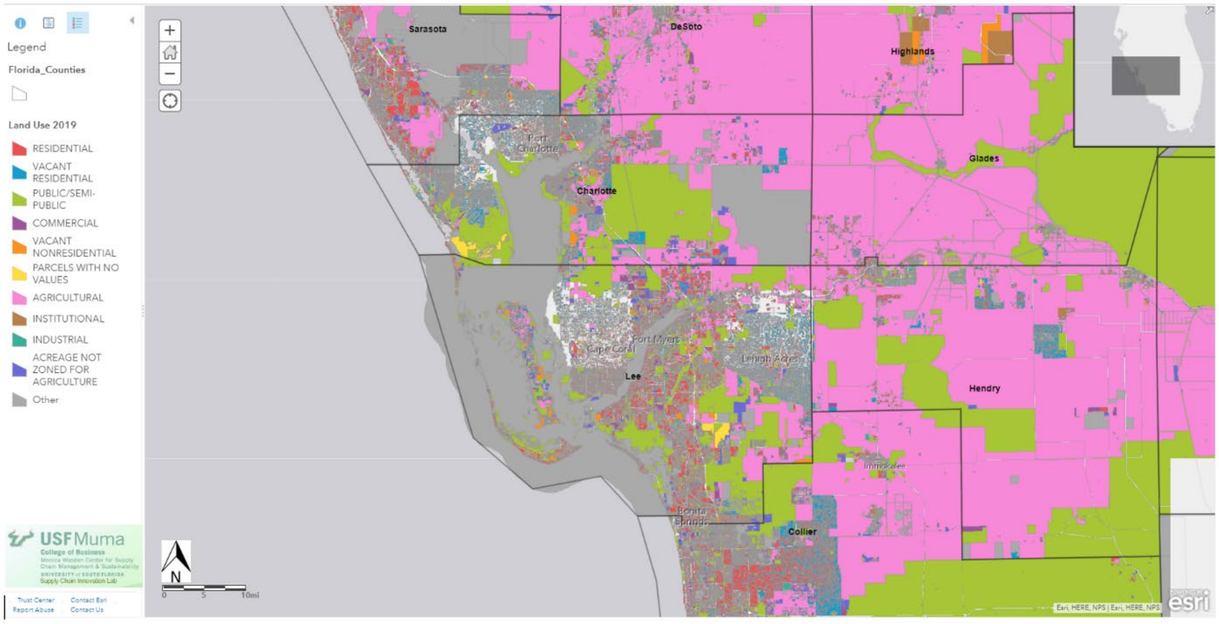

Figure 19. Land Use for Charlotte, Lee, and Hendry Counties

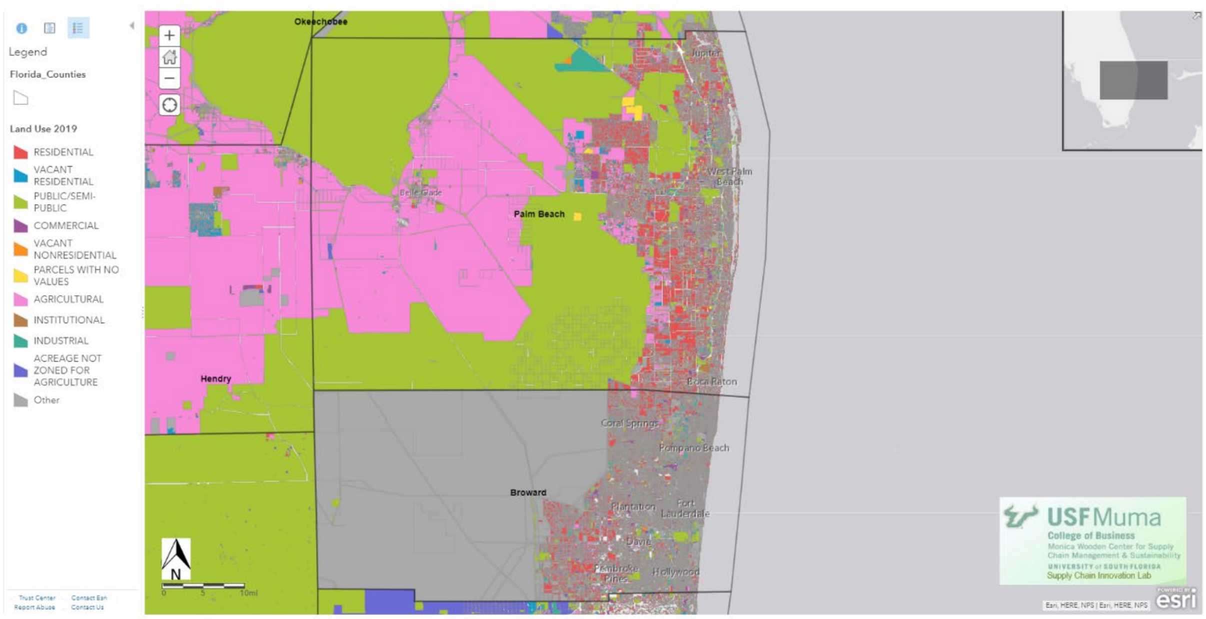

Figure 20. Land Use for Palm Beach and Broward Counties

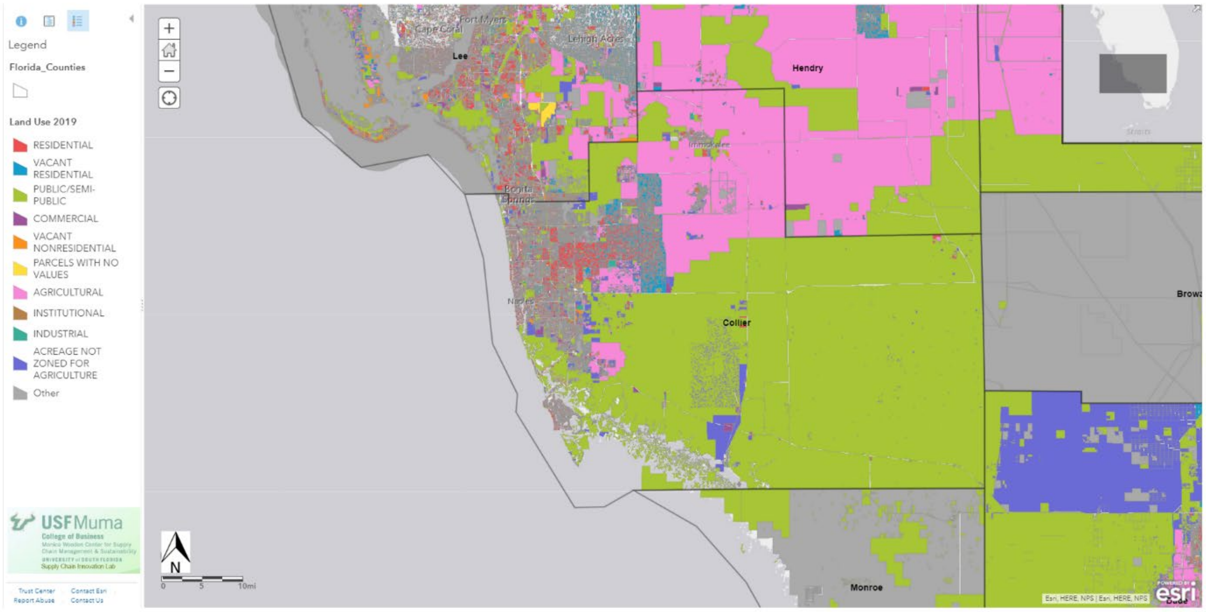

Figure 21. Land Use for Collier County

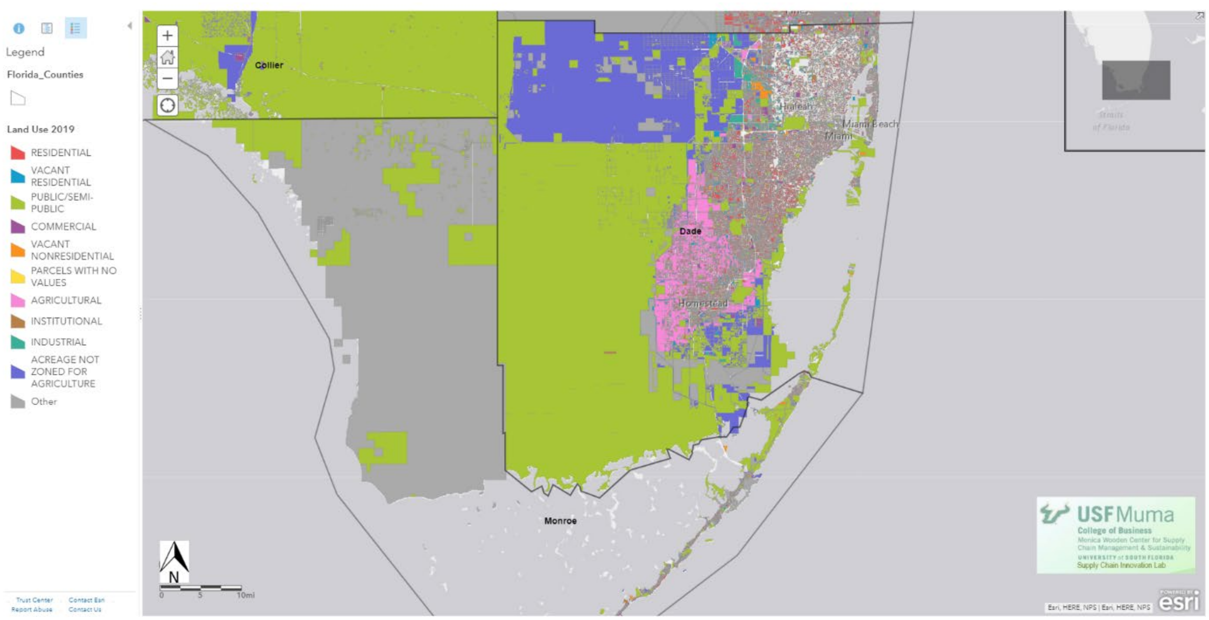

Figure 22. Land Use for Monroe and Miami-Dade Counties

3. International Freight Survey and Expert Interviews

As discussed in the previous section, our aim is to identify areas in Florida with successful LAC development potential, by developing a new set of criteria by reviewing the criteria developed using the previous FDOT D7 study and the extensive literature review completed. In addition, an online survey was administered to validate the candidate factors and attribute weights to their relative importance.

Our team conducted interviews with experts to validate survey results and get feedback on factor's relative importance in the sequence. Both survey results and interview feedbacks served as inputs to create the final factor's weighting scheme.

After the validation stage, we defined how to operationalize each factor (e.g., how to measure proximity to a large market) and proceeded with the GIS data acquisition. This data was then processed and scaled to serve as inputs to a heat map that shows the LAC development potential throughout the whole State of Florida.

This section presents the design, pre-testing, administration, and results of our international freight survey conducted online between 11/17/2020 and 12/18/2020. The survey was designed for freight/logistic experts and site selection/logistic real estate experts that work on fields that are relevant to the purpose of this study, such as (i) distribution; (ii) freight-related activities; (iii) governmental agency; (iv) manufacturing; (v) retail; and others.

3.1 Freight Survey Instrument Design

The survey was designed based on the candidate factors that emerged from our literature review and previous FDOT studies. In total, we assessed the importance of the factors that are shown in Table 8. These factors were grouped by type, and respondents were asked to rank them in order of importance within each group (e.g., Please rank the following factors - "1" being the most important and "6" being the least important). The order of importance of each group was also evaluated using the same measurement (rank orders). The order of the factors appeared in random order for every respondent to avoid biases. Also, the reordering of the ranks was mandatory to prevent incomplete answers from being computed as valid results.

Specifically for Accessibility/Location factors, we were interested in assessing the relative importance among the factors and identifying optimal distances that a LAC should ideally be from each of them. Therefore, we asked respondents to assign the maximum distance that an optimal LAC location would be from each of the facilities and provided the following answer options:

- Less than 2.5 miles
- Between 2.5 and 5 miles
- Between 5 and 10 miles
- More than 10 miles
- Distance is not important

Table 8. Summary of Factors

Group	Factor
1. Accessibility/Location Factors	Freeways (interchange locations)
	State and US roads (truck routes)
	Intermodal logistics center (rail-truck)
	Direct rail track access
	Air cargo facility
	Seaport facility
2. Land Use/Land Size Factors	Suitable land use/zoning (Industrial, Commercial, etc.)
	Public opinion on the development of a LAC
	Appropriate land area/size/shape
	Possibility of expansion
3. Economic and Social Factors	Land cost
	Proximity to a large market (pop density)
	Proximity to production/manufacturing centers
	Workforce availability
	Labor cost
4. Environmental and Other Factors	Low impact on the natural environment
	Low impact on residential areas
	Low traffic congestion level
	Low traffic accident level

In addition, we also collected (optional) personal/professional data from our respondents (name, organization name, email, and phone) to better understand our sample. Finally, we also included two questions regarding autonomous vehicles to evaluate this technology regarding current and future importance when choosing a place to install an LAC.

3.2 Freight Survey Pre-testing

Pre-testing the instrument (Survey) is crucial for a research project to certify that the respondents clearly and easily understand the questions. Thus, we pre-tested our survey with five experts from four distinct organizations between 10/30/2020 and

11/04/2020. The feedback provided by this group helped us to re-frame few questions to improve their clarity and fix some minor operational issues within the online platform. After the changes, the same group had access to the survey again and to test and validate our questionnaire. The final version of the survey questionnaire, which received approval from USF's Institutional Review Board (IRB) before data collection, is available in Appendix C.

3.3 Freight Survey Administration

The survey was mainly targeted for freight/logistics/site selection experts, and selecting possible respondents was an important step. The research team invited only professionals and organizations that are knowledgeable about the LAC development decision process. The survey was to be accessed through a link sent via an email invitation and was available for 31 days between 11/17/2020 and 12/18/2020. During the data collection period, a total of 69 responses were received to the survey, which was found to be statistically significant. Most respondents are affiliated with government agencies, freight carriers, and NGOs in terms of organization type. However, some respondents chose not to disclose that organization type or selected the option 'other’. The distribution of organization types is shown in Figure 23.

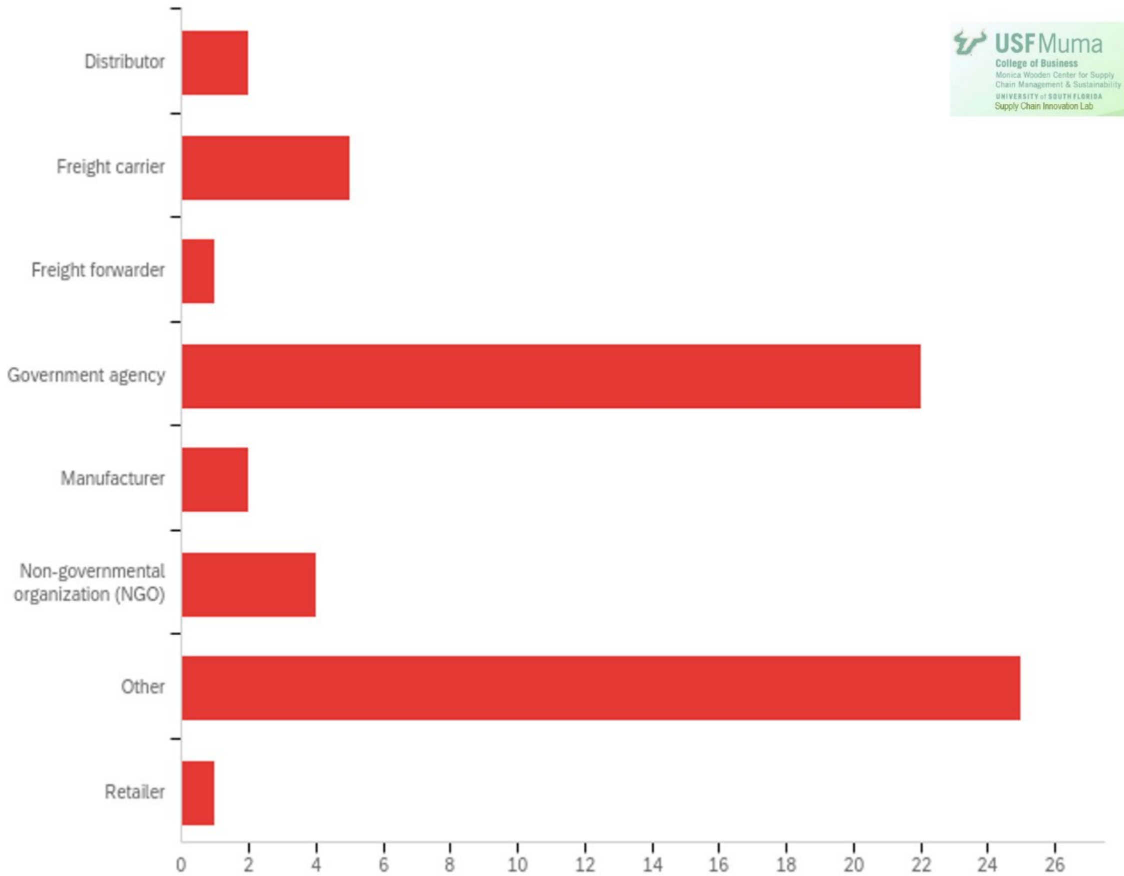

Figure 23. Distribution of Respondents by Organization Type

In addition to the survey's broad reach in terms of the respondents background, it also captured the opinion of experts from six different countries (US, Mexico, Colombia, Switzerland, Italy, and India). Also, when it comes to US respondents, we notice that the survey takers are distributed all over the country, covering a diversity of states, as shown in Figure 24.

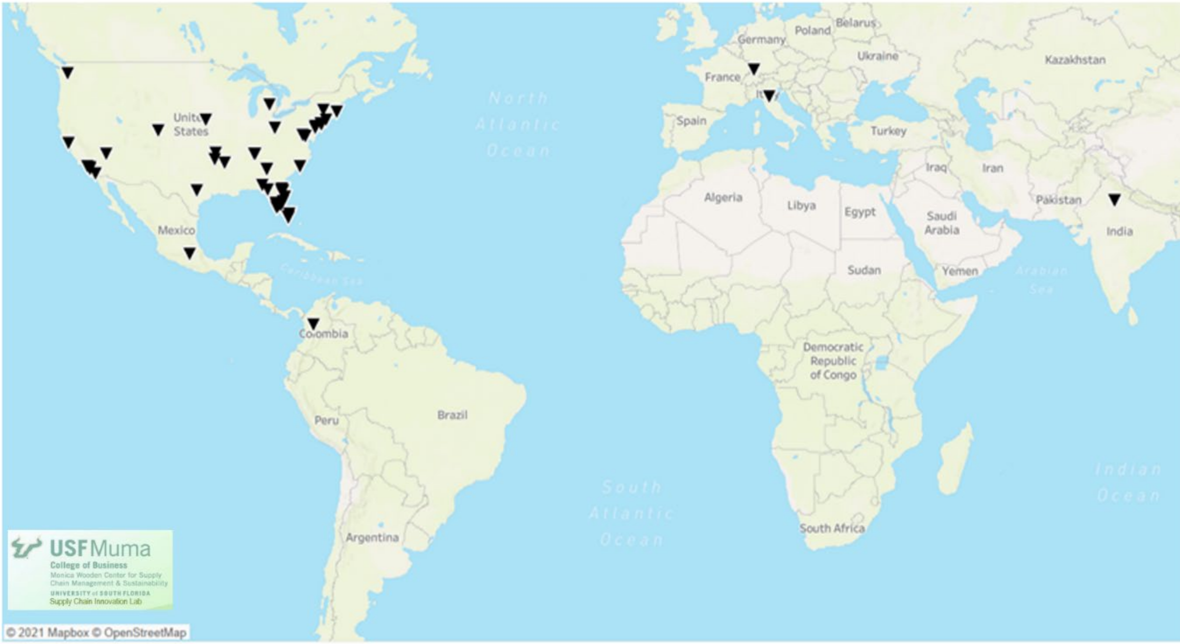

Figure 24. Survey Respondent's Location

When analyzing the location from surveys taken within Florida, we observe this study obtained feedback from experts from most regions throughout the State, as depicted by Figure 25. Gathering the perception from experts from several regions only benefits the study as it adds different points of view that likely consider the State's diversity. In contrast, a narrow sample could have biased the results, as the responses can reflect the essential factors for a particular region due to its specific resources, and consequently, less likely to be generalized.

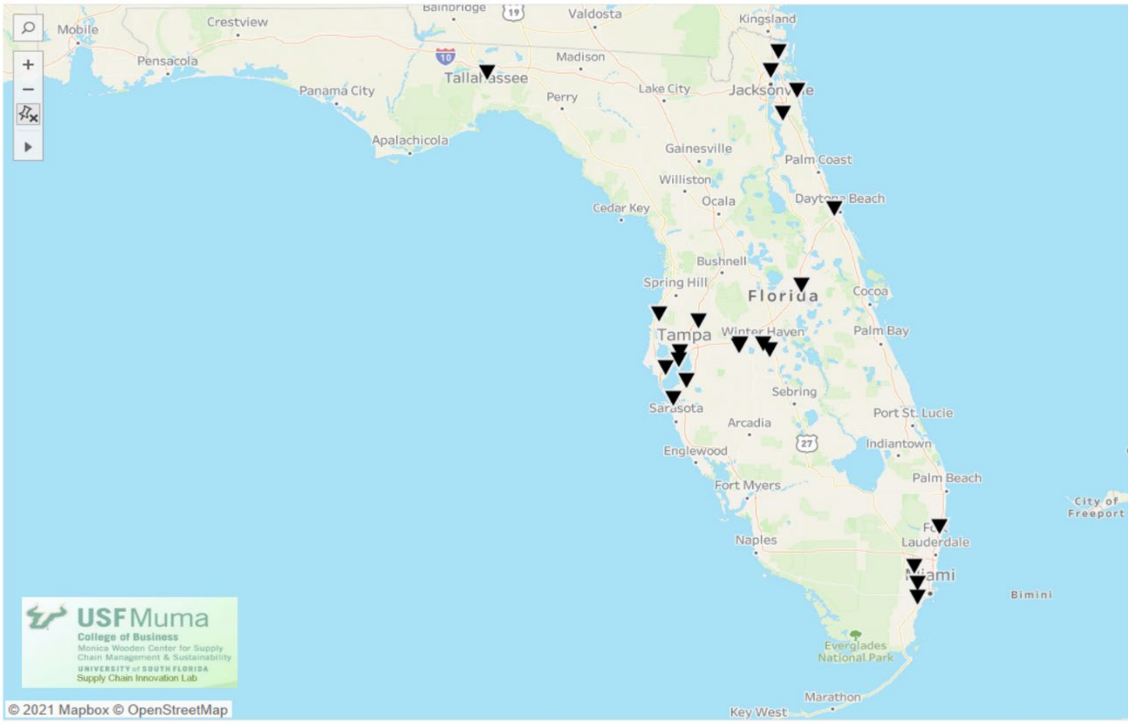

Figure 25. Survey Respondent's Location Within Florida

The diversity of respondents is further depicted in Figure 26, showing the number of survey takers by City in Florida.

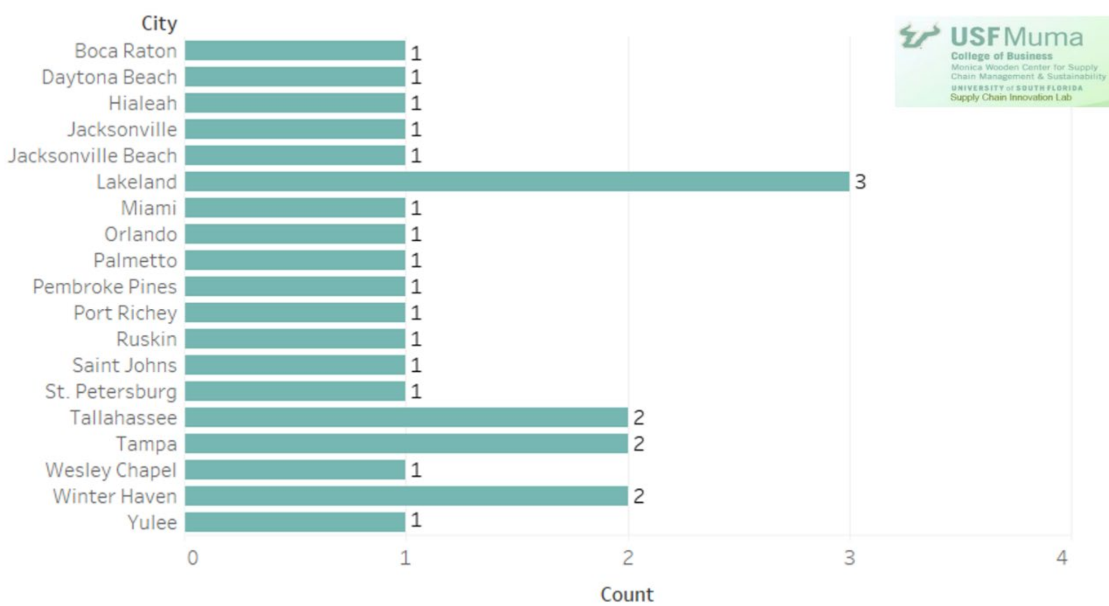

Figure 26. Number of Respondents by City in Florida

3.4 Freight Survey Results

Besides the screening questions, the first block of our survey was intended to assess not only the importance of Accessibility/Location factors but also what would be the maximum distance that an optimal LAC should be located from facilities such as freeways, State and US roads, intermodal logistic centers, railroads, airports, and seaports.

Most respondents (86.84%) believe that a LAC should be at most 5 miles away from a freeway interchange, as 34.21% believe it should be located within 2.5 miles and 52.63% between 2.5 and 5 miles. State and US roads were also very concentrated as 92.11% indicated that a LAC should be maximum of 5 miles away. On the other hand, the results for the intermodal logistics center (ILC) are more spread, although 47.37% believe that a LAC should be within a 5 miles range, the majority indicated that this type of facility could be 5 miles distant or more. Direct rail track access should be within 10 miles of a LAC for 78.94% of the respondents. Unlike previous facilities, airports and seaports do not seem to be required to be as close to the LAC, ideally. Although 57.90% of respondents indicated that a LAC should be at most within 10 miles of an airport, for 42.11%, this distance can be either greater than 10 miles or is not important. A similar distribution was found regarding seaports as 50.01% believe a LAC should be located within 10 miles, while the distance is not crucial for the other half. A summary of optimal distances to investigated facilities is shown in Table 9.

Table 9. LAC Optimal Distances to Logistic Facilities

Facility Type	Less than 2.5 miles	Between 2.5 and 5 miles	Between 5 and 10 miles	More than 10 miles	Distance is not important
Freeways (interchange locations)	34.21%	52.63%	5.26%	5.26%	2.63%
State and US roads (truck routes)	65.79%	26.32%	7.89%	0.00%	0.00%
Intermodal logistics center (rail-truck)	31.58%	15.79%	26.32%	18.42%	7.89%
Direct rail track access	39.47%	18.42%	21.05%	10.53%	10.53%
Air cargo facility	13.16%	15.79%	28.95%	26.32%	15.79%
Seaport facility	10.53%	13.16%	26.32%	34.21%	15.79%

We also investigated each type of logistic facility's relative importance for a LAC by asking the experts to rank them from the most important to the least. Freeways (interchange location) and State and US roads were classified as the most important. 39.47% of experts indicated that proximity to an interchange location is the most important, while 36.84% believe proximity to State and US roads is the top priority. The third most voted as the first facility type in order of importance is ILC (18.42%), followed by direct rail track access and seaport facility, both with 2.63%, while no respondent ranked airports as first shown in Table 10.

Table 10. Rank Order of Logistic Facilities

Facility Type	Rank Order					
	1	2	3	4	5	6
Freeways (interchange locations)	39.47%	47.37%	2.63%	0.00%	7.89%	2.63%
State and US roads (truck routes)	36.84%	34.21%	10.53%	15.79%	2.63%	0.00%
Intermodal logistics center (rail-truck)	18.42%	2.63%	26.32%	28.95%	13.16%	10.53%
Direct rail track access	2.63%	7.89%	31.58%	15.79%	21.05%	21.05%
Seaport facility	2.63%	5.26%	13.16%	26.32%	28.95%	23.68%
Air cargo facility	0.00%	2.63%	15.79%	13.16%	26.32%	42.11%

Although the proportion of respondents who ranked as first a particular facility is a meaningful piece of information, the distribution of all ranking orders is equally interesting. For instance, although the proportion of respondents that ranked proximity to Freeways or State and US roads as number one is similar, we can see that a higher proportion has ranked the latter as neither first nor second (28.95%) when compared to the Freeways (13.15%). In this case, aggregating rank orders can contain more valuable information about facilities' relative importance. In sum, the relative importance of logistic facilities is shown in Table 11, ordered by the average of rank orders.

Table 11. Rank Order Aggregation by Logistic Facility Types

Facility Type	Rank Order Aggregations			
	Minimum	Maximum	Mean	Std Deviation
Freeways (interchange locations)	1.00	6.00	1.97	1.25
State and US roads (truck routes)	1.00	5.00	2.13	1.15
Intermodal logistics center (rail-truck)	1.00	6.00	3.47	1.52
Direct rail track access	1.00	6.00	4.08	1.38
Seaport facility	1.00	6.00	4.45	1.27
Air cargo facility	2.00	6.00	4.89	1.19

Unlike the first group of factors (accessibility/location), in which we wanted to analyze optimal distances to certain facilities, we were only interested in assessing the relative importance of Land Use/Size Factors. As shown in Table 12, 56.75% of the respondent have ranked suitable zoning as the first factor among its group, while 27.03% indicated appropriate land area/size/shape as the most important, and the remaining respondents chose either public opinion or the possibility of expansion (8.11% each).

Table 12. Land Use and Land Size Rank Orders

Land Use/Land Size Factors	Rank Order			
	1	2	3	4
Suitable land use/zoning (Industrial, Commercial, etc.)	56.76%	13.51%	21.62%	8.11%
Public opinion on the development of a LAC	8.11%	21.62%	13.51%	56.76%
Appropriate land area/size/shape	27.03%	48.65%	18.92%	5.41%
Possibility of expansion	8.11%	16.22%	45.95%	29.73%

The aggregated rank orders demonstrate the relative importance among the Land Use/Size Factors, as shown in Table 13. Also, by analyzing the mean value, we can clearly distinguish between the first and last two factors. For example, the distance between the first and second and third and fourth is less than 0.2, while the distance between the second and the third is 0.94. These distances have served as proxies to attribute different weights to the factors, explained in more detail later in this work.

Table 13. Rank Order Aggregation by Land Use/Size Factors

Land Use/Land Size Factors	Rank Order Aggregations			
	Minimum	Maximum	Mean	Std Deviation
Suitable land use/zoning (Industrial, Commercial, etc.)	1.00	4.00	1.81	1.04
Appropriate land area/size/shape	1.00	4.00	2.03	0.82
Possibility of expansion	1.00	4.00	2.97	0.88
Public opinion on the development of a LAC	1.00	4.00	3.19	1.04

Economic and Social Factors have shown some exciting results. For instance, cost-related factors such as land cost and labor cost were the least ranked first among this group. On the other hand, proximity to a large market was ranked as number one by 43.24% of the respondents, workforce availability by 27.03%, and proximity to production centers by 18.92% as shown in Table 14.

Table 14. Economic and Social Rank Orders

Economic/Social Factors	Rank Order				
	1	2	3	4	5
Land cost	5.41%	10.81%	24.32%	29.73%	29.73%
Proximity to a large market	43.24%	16.22%	18.92%	5.41%	16.22%
Proximity to production/manufacturing centers	18.92%	18.92%	13.51%	21.62%	27.03%
Workforce availability	27.03%	29.73%	27.03%	16.22%	0.00%
Labor cost	5.41%	24.32%	16.22%	27.03%	27.03%

Moreover, rank order aggregations yielded insightful results as workforce availability appeared the most critical factor among its group. Although this factor was not the most ranked first, it was the only one that did not appear in the last place in any survey response, as shown in the maximum column in Table 15.

Table 15. Rank Order Aggregation by Economic and Social Factors

Economic/Social Factors	Rank Order Aggregations			
	Minimum	Maximum	Mean	Std Deviation
Workforce availability	1.00	4.00	2.32	1.04
Proximity to a large market	1.00	5.00	2.35	1.47
Proximity to production/manufacturing centers	1.00	5.00	3.19	1.49
Labor cost	1.00	5.00	3.46	1.26
Land cost	1.00	5.00	3.68	1.16

Finally, among Environmental and Other Factors, low traffic congestion level was the most ranked first (45.95%), followed by impact on natural environment (24.62%) and impact on residential areas (21.62%). Traffic crash level was ranked as first only by 8.11% of the respondents. A summary is found in Table 16 and Table 17.

Table 16. Environmental and Other Factors Rank Order

Environmental and Other Factors	Rank Order			
	1	2	3	4
Low impact on natural environment	24.32%	29.73%	24.32%	21.62%
Low impact on residential areas	21.62%	29.73%	37.84%	10.81%
Low traffic congestion level	45.95%	24.32%	24.32%	5.41%
Low traffic crash level	8.11%	16.22%	13.51%	62.16%

After analyzing the aggregations, traffic congestion level was still the most important among Environmental and Other Factors and relatively distant from second and third places, impact on residential areas and impact on natural environment, respectively. The distance between the third and the last factor was also significant (0.87), evidencing that traffic crash level is not a strong factor when selecting the location to develop a LAC.

Table 17. Environmental and Other Factors Rank Order Aggregation

Environmental and Other Factors	Rank Order Aggregations			
	Minimum	Maximum	Mean	Std Deviation
Low traffic congestion level	1.00	4.00	1.89	0.95
Low impact on residential areas	1.00	4.00	2.38	0.94
Low impact on natural environment	1.00	4.00	2.43	1.08
Low traffic crash level	1.00	4.00	3.30	1.01

Ideally, we would have assessed the relative importance of all factors together to generate a single ranking. However, it is highly crucial to keep the survey as straightforward and easy to complete as possible, and a large number of candidate factors can generate confusion among the respondents. To increase the survey's conciseness and consequently the chances of completion by the respondents, the factors were split into four groups. After ranking all factors within their respective groups, we asked respondents to rank the groups of factors from the most to the least important, and the distribution of ranking orders is shown in Table 18.

Table 18. Groups of Factors Rank Orders

Group of Factors	Rank Order			
	1	2	3	4
Accessibility/Location Factors	40.54%	40.54%	5.41%	13.51%
Land Use/Land Size Factors	10.81%	27.03%	45.95%	16.22%
Economic and Social Factors	35.14%	27.03%	29.73%	8.11%
Environmental and Other Factors	13.51%	5.41%	18.92%	62.16%

Similar to how we analyzed factors' relative importance within groups, we also generated aggregated results for the group of factors. As presented in Table 18, the most critical group was Accessibility/Location, followed by Economic and Social, Land Use/Size, and Environmental and Other. By analyzing minimum and maximum values, it is interesting to notice that all groups were ranked as the most and least important by the respondents, at least once. The standard deviation shows that the rank orders usually do not vary so much, since they are all close to one.

Table 19. Rank Order Aggregations by Groups of Factors

Group of Factors	Rank Order Aggregations			
	Minimum	Maximum	Mean	Std Deviation
Accessibility/Location Factors	1.00	4.00	1.92	1.00
Economic and Social Factors	1.00	4.00	2.11	0.98
Land Use/Land Size Factors	1.00	4.00	2.68	0.87
Environmental and Other Factors	1.00	4.00	3.30	1.06

Although autonomous vehicles are still not commonly listed as crucial in the LAC development literature, this is an emerging technology that can profoundly impact logistic activities. Due to the high expectation around this technology, we included the following two questions in the survey:

- Presently, how important is it to choose a LAC location within a region with the required infrastructure to support autonomous/connected vehicles?
- Within five to ten years from now, how important will it be to choose a LAC location within a region with the required infrastructure to support autonomous/connected vehicles?

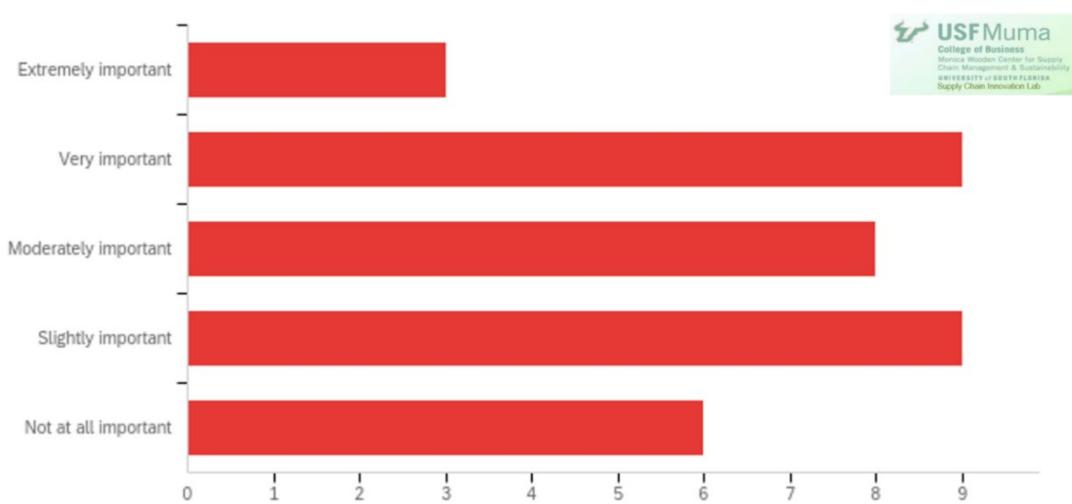

Figure 27. Importance of Autonomous Vehicles on LAC Development Presently

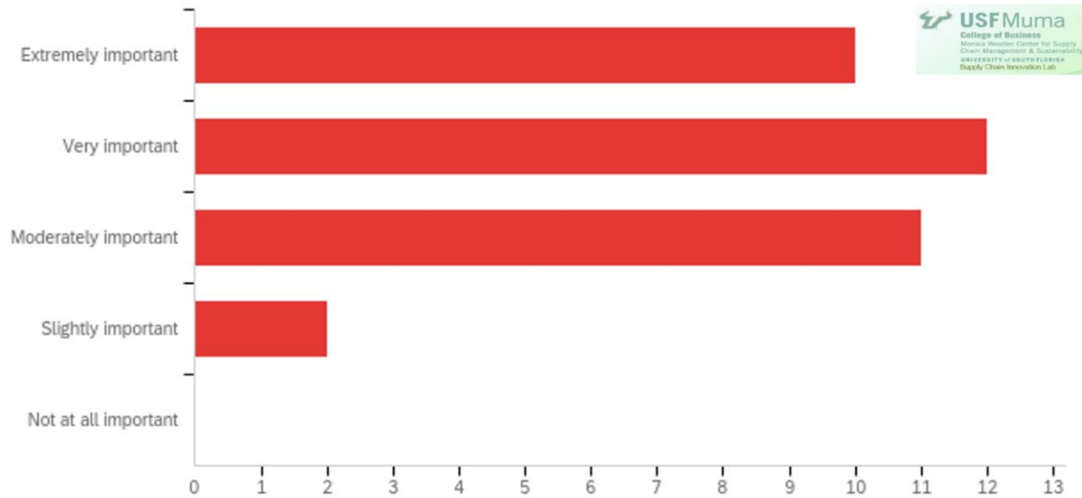

Figure 28. Importance of Autonomous Vehicles on LAC Development Within 5 to 10 Years

The results from Figure 27 and Figure 28 show that although autonomous vehicles are expected to have a high impact on the LAC location choice, it is not a concern for decision-makers in the present. For example, 34.28% of the respondents asserted that this technology is either extremely or very important presently, but 62.86% believe it will become extremely important within five to ten years. On the other hand, for 42.85% of the respondents, autonomous vehicles are just slightly or not important now, while 5.71% believe it will remain the same within five to ten years. It is also interesting to note that none of the respondents believe that this technology will not be important when deciding the location of a LAC in the future. A summary, in percentage, is shown in Table 20.

Table 20. Importance of Autonomous Vehicles on LAC Development

Order of Importance	Presently	Within 5 to 10 Years
Extremely important	8.57%	28.57%
Very important	25.71%	34.29%
Moderately important	22.86%	31.43%
Slightly important	25.71%	5.71%
Not at all important	17.14%	0.00%

3.5 Expert Interview Summaries

Surveys are usually great instruments because of their reach and clarity of the outputs. In this research, the survey was employed to assess the relative importance of the criteria pointed as relevant in the literature. However, although surveys provided us breadth in terms of a large number of criteria we explored, it lacks some depth, as it does not provide explanations of why one criterion should be prioritized instead of another, or if and how they are related. In order to have a deeper comprehension of the criteria that we are investigating, we conducted a series of interviews with experts from different backgrounds. These interviews served to provide more robustness to our survey results and added new factors that are not present in the literature, such as the personal preferences of the people responsible for making decisions on where to place a LAC. Such factors can be perhaps difficult to measure or investigate in research projects but cannot be ignored in the decision-making process.

Due to safety measures adopted during the COVID-19 outbreak, all interviews were conducted remotely via Microsoft Teams.

3.5.1 Interview Summaries

The below are the summaries of the 4 expert interviews that were held as a part of this research study.

Interview 1

Interview #1 was conducted on April 6, 2021. The interviewee is a real estate expert who is based in Florida. Many criteria were cited during the conversation, but most were related to Economic factors (Land Cost, Proximity to Large Markets, and Workforce Availability). Location factors were the second most mentioned (ILCs and State and US roads), while Environmental factors were the third (Low Impact on Residential Area and Low Traffic Congestion Level). At last, Land Use was also mentioned by the interviewee.

In addition to factors already present in prior studies, the interviewee also brought new perspectives, such as the rise of autonomous vehicles and their impact on businesses and people's lives. Also, the interviewee was very emphatic on pointing how the company's executives play a crucial role when deciding the location of a LAC, as they tend to weigh how the chosen location would affect their quality of life and even how similar the local culture is to their own. Other factors that were not available in the literature review are: (a) education – proximity to good universities; (b) strategic location in the State - easiness of access from the whole State; and (c) proximity to upcoming markets, especially in the case of retailers.

Interview 2

The second interview occurred on April 9, 2021. The interviewee is a real estate expert mainly focused on Industrial sites. The most frequently mentioned criteria were related to Economic factors, mainly Land Cost, but also Proximity to Large Markets and Workforce Availability. The second most frequent group of factors was

Land Use. The interviewee emphasized the appropriate land use (zoning) at the time of the land acquisition. According to the interviewee, zoning changes can take a long time, and businesses are usually not prone to waiting. Appropriate Land Size, Shape, and Area, and Public Opinion were also cited as important factors. Location (State and US Roads, Freeways, and Direct Rail Track Access) and Environmental factors (Low Traffic Congestion) were also cited.

During the interview, the quality of life of the firm's executives was also spontaneously mentioned, likewise in our first interview. This interviewee also called attention to the need to develop 'shovel-ready locations' in the State of Florida. According to him, timing is crucial when deciding the location of a LAC, and so, parcels that have not only utilities but also permits in place are much more likely to be chosen. In addition to that, some states advertise their 'shovel-ready' locations on websites to attract new businesses.

At last, truck driver's regulations were also mentioned, more specifically driving time limits. Consequently, strategically located parcels are more valuable, as the driver can reach their destinations within regulatory limits.

Interview 3

The third interview occurred on April 14, 2021. The interviewee is a member of a trucking association. During this conversation, the most frequently cited criteria were related to Economic factors (Land Cost, Proximity to Large Markets, Proximity to Production Centers, and mainly Workforce Availability). Location factors were also mentioned, including (a) Direct Rail Track Access; (b) Freeways; (c) ILCs; (d) Seaports; and (e) State and US Roads. Similar to our first interviewee, the rise of autonomous vehicles was spontaneously mentioned during the conversation.

Interview 4

The fourth interview occurred on April 14, 2021. The interviewee is a member of an economic development organization. Like previous interviews, the most frequently mentioned factors were Economic (Labor Cost, Land Cost, Proximity to Large Markets, and Workforce Availability) and Location (Air Cargo Facilities, Direct Rail Track Access, ILCs, and Seaport Facilities). One environmental factor was also cited: Low Traffic Congestion Level.

This interviewee also mentioned factors that were not found in our literature review, such as, Tax Benefits, Education (proximity to good universities), and Access to Support Services. That last factor was mentioned in the context of how companies tend to form clusters with similar activities. The Aerospace cluster located nearby Cape Canaveral and the Biotechnological cluster on Tampa Bay are some examples. These clusters tend to attract service providers and create a different environment for businesses.

3.6 Expert Interview Analysis and Results

Summarizing interviews is more complex than analyzing survey results, given their qualitative nature. In this study, the first step was to generate a transcript of the interviews and assign labels to interviewees and interviewers. Second, we focused only on the interviewees' part of the transcripts and proceeded with the coding stage. At the coding stage, we attributed themes (or codes) to every sentence of our collection of transcripts (corpus), a process that can be either theory-driven or data-driven (c). On the one hand, theory-driven coding is the one in which codes are pre-defined, which was done by researching previous studies and validated through a survey.

On the other hand, data-driven coding is done by letting the themes emerge from the corpus. For example, proximity to an airport is a pre-defined code in our work, and researchers analyzed the transcripts and highlighted every passage that referred to it. Also, some criteria that emerged from our interviews were not found in previous studies, such as the proximity to good universities or the quality of life of the decision-maker. In these cases, the emergent criteria also became codes in our qualitative analysis.

Transcripts and codes were managed through the NVivo software that is specifically designed for this purpose. First, we created the coding scheme using the criteria present in our literature review and, consequently, our survey. Then, we applied a tree structure in which the nature of the themes (theory-driven) is the root, group factors (i.e., location, land use/size, economic and social, and environmental factors) are in the second level, the criteria are in the third and last level (see Table 1). In the sequence, as we started to code the interviews, new themes emerged and were added to the second branch of our coding scheme that is classified as data driven. As the codes emerged during the first round of analysis, all interviews were later recoded to every theme that could be considered an option for our corpus's sentences. Finally, two researchers conducted the coding to avoid bias or misinterpretations, and the divergences were discussed and resolved.

It is essential to highlight that the sentences of our transcripts could have been coded using any level of our coding scheme. In other words, if the interviewee mentioned the importance of economic and social factors in a broad sense without mentioning a particular criterion (e.g., land cost or labor cost), we coded the sentence as 'economic and social factors.' This explains why the number of references of the groups of factors is not necessarily equal to the sum of their belonging categories.

3.6.1 Data-Driven Factors

The qualitative analysis of the interview transcripts began by loading the theory-driven factors to the NVivo software following the structure shown in Table 8.

Access to support services – companies from different industries tend to require different services to support their business. Among other reasons, such as specialized workforce, the availability of specific support services also influences the formation of clusters of companies, in which business from the same segment tends to be geographically close. For instance, in Florida, there is a cluster of companies related to the space industry around Cape Canaveral.

Autonomous vehicles – this emerging technology was mentioned during interview sections as something that can potentially cause significant changes in the logistic segment and how the buildings are designed. For instance, autonomous vehicles may require less parking space and free up valuable locations in big cities.

Ease of access from the whole State – a central location in Florida was mentioned as an essential feature for certain types of LAC. As the State is in a peninsula, most of its' borders are with the ocean, and places that provide strategic access to the whole State are even more valuable.

Education (proximity to good Universities) – the availability of a qualified labor force is associated with good universities nearby, and, consequently, this could be a factor that companies consider when selecting the LAC site.

Executives' buying power – according to interviewed experts, to some extent, the executives' personal preferences can play a hole when deciding the LAC location. One of these 'personal factors' is the buying power or a lower cost of living when compared to other states. Also, the house prices in the surroundings of the LAC are considered by the executives before deciding.

Executives' cultural similarities – another personal factor mentioned during the interviews is the cultural similarities between the executives and the locals.

Executives' quality of life – factors that influence the executives' quality of life are also weighted when firms chose the LAC location. Some examples of such factors are the climate, commuting time to and from work, and proximity to good supermarkets and restaurants.

Proximity to upcoming markets – businesses in which proximity to final customers is essential should pay extra attention to upcoming markets. As the State has been receiving high volumes of new residents, especially during the COVID-19 pandemic, numerous new residential areas are being developed and will attract businesses.

Shovel-ready locations – the timing was considered an essential aspect of a LAC development project by one of the interviewees. Most decision-makers prefer locations in which the company can start to develop the LAC as soon as possible. Therefore, locations with utilities in place and, most importantly, with the appropriate permits are far more attractive. Also, it was mentioned that identifying the 'shovel-ready' locations beforehand and promoting them to prospective companies can be a competitive advantage to the State.

Taxes – lower tax rates than other states and tax incentives offered to companies were mentioned as influential in locating the LAC.

Truck driver's regulations – as the number of hours a truck driver can drive in one day is limited, locating the LAC where the deliveries can be made within the time limits is vital for certain businesses.

Except for three factors regarding the executive's personal factors, the other topics that emerged from the analysis were diverse. Therefore, unlike the theory-driven factors, only one group was created among the data-driven factors we called Executive's Preferences.

3.6.2 Qualitative Analysis Results

The first analysis we performed was to assess the frequency that each factor was cited during the interviews. For this type of analysis, NVivo presents two levels of frequency summarizations: files and references. The file's frequency refers to the number of documents in which the topic was mentioned. In our case, a document is an interview (transcript files). The second type of frequency refers to how many times the topic was referenced amongst all files. In this work, as the level of analysis were the sentences, the number of references refers to the number of sentences in which the topic was mentioned during the interviews.

Although the number of references is not exactly a direct measure of the factor's importance, it is expected that essential topics be more frequently mentioned during the interviews, and so, higher or lower frequencies can carry some meaning in this type of analysis. This analysis is shown in this section, where we first present the results for theory-driven factors clustered by factor groups and later the data-driven factors.

First, we present the Accessibility/Location factors frequencies sorted by the number of times the topics were cited in all interviews (references).

Table 21 shows that, among this group of factors, the proximity to State and US Roads and seaport facilities were the most frequent during the interviews, with 17 and 14 references, respectively. On the other hand, proximity to direct rail track access and air cargo facilities were the least mentioned – 4 times each. Together with seaport facility, direct rail track access was the only Accessibility/Location factors mentioned during all four interviews.

Table 21. Interview Results of Accessibility and Location Factors

Factor	Files	References
State and US roads (truck routes)	3	17
Seaport facility	4	14
Freeways (interchange locations)	3	6
Intermodal logistics center (rail-truck)	3	5
Direct rail track access	4	4
Air cargo facility	2	4

Unlike Accessibility/Location, no factor stood out in the frequency analysis of the Land Use and Land Size group. Appropriate land area/size/shape and suitable land use/zoning were the most referenced factors (6 times), although the first was mentioned in two interviews, while the latter was referenced all six times in one interview. Public opinion was also mentioned in two interviews (4 times), and the possibility of expansion only was referred once in one interview. The results are shown in Table 22.

Table 22. Interview Results of Land Use/Land Size Factors

Factor	Files	References
Appropriate land area/size/shape	2	6
Suitable land use/zoning	1	6
Public opinion on the development of a LAC	2	4
Possibility of expansion	1	1

Regarding Economic and Social factors, three factors were significantly more frequently cited: workforce availability (24 occurrences), land cost (18 occurrences), and proximity to a large market (17 occurrences). It is also noteworthy that these factors were also referenced during all interviews. Nevertheless, labor cost was mentioned eight times during three interviews, and proximity to production/manufacturing centers was cited eight times, but only by two interviewees. A summary of Economic and Social factors is shown in Table 23.

Table 23. Interview Results of Economic and Social Factors

Factor	Files	References
Workforce availability	4	24
Land cost	4	18
Proximity to a large market	4	17
Labor cost	3	8
Proximity to production/manufacturing centers	2	8

Environmental and Other factors were the less cited group of factors overall. The only factor cited more than once was low traffic congestion level, mentioned six times during three out of four interviews. Both impacts on the natural environment and impact on residential areas were cited only once, while low traffic accident/crash level was the only factor that was not referred to during an interview. A summary of Environmental and Other factors is shown in Table 24.

Table 24. Interview Results of Environmental and Other Factors

Factor	Files	References
Low traffic congestion level	3	6
Low impact on the natural environment	1	1
Low impact on residential areas	1	1
Low traffic accident/crash level	0	0

Besides the intra-group comparisons between factors, we also analyzed the frequency that each group was referred. As stated before, the group frequency is not exactly the sum of its' factors because they can be referred to in a broader sense. Unlike the survey results, the most frequently cited group of factors during the interviews was the Economic and Social Factors, which was mentioned 95 times and was present in all four interviews. The second most frequent group was Accessibility/Location Factors, which was cited slightly fewer times than the previous group (79). Moreover, Land Use/Land Size Factor was mentioned 21 times in three interviews and was the third most frequent. The least frequent group - Environmental and Other Factors – was mentioned ten times during three interviews. The summary of group frequencies is presented in Table 25.

Table 25. Interview Results of Theory-Driven Groups

Group	Files	References
Economic and Social Factors	4	95
Accessibility/Location Factors	4	79
Land Use/Land Size Factors	2	21
Environmental and Other Factors	3	10

Lastly, we present the frequency analysis of data-driven factors. As only one group was created within this type of factor (executives' preferences), we displayed the results of all data-driven factors together, as shown in Table 26.

The most frequently cited factor was Executives' Quality of Life, which appeared eight times in two interviews. Education and Taxes were both cited five times in two interviews and were the second most frequent factors. In the sequence, Autonomous Vehicles, Access to Support Services, and Shovel-Ready Locations were all referred three times, although the first factor appeared in two interviews while the other only in one interview each. Finally, easiness of access from the Whole State and Truck Driver's Regulations were both cited twice in one interview, while Proximity to Upcoming Markets, Executives' Buying Power, and Executives' Buying Power only appeared once.

Table 26. Interview Results of Data-Driven Factors

Factor	Files	References
Executives' Quality of life	2	8
Education (proximity to good Universities)	2	5
Taxes	2	5
Autonomous vehicles	2	3
Access to support services	1	3
Shovel-ready locations	1	3
Easiness of access from the whole State	1	2
Truck driver's regulations	1	2
Proximity to upcoming markets	1	1
Executives' buying power	1	1
Executives' cultural similarities	1	1

To summarize the frequency analysis, we present a set of hierarchy charts that are a type of visualization that the size of the boxes is proportional to when the topic was mentioned during the interview. Different levels of aggregations are also taken into consideration in this type of chart. The lower levels (most granular) are represented in a lighter color, while higher levels are darker. For instance, the most granular level in this analysis is the factor itself (e.g., land cost, workforce availability, or labor cost), so they are colored in light green. The groups of factors (e.g., Economic and Social or Location/Accessibility) are represented in a darker color and contain all the "boxes" of factors that belong to its' group. The highest level is divided into theory-driven or data-driven, which are represented by the darkest colors. Besides the size of the rectangles, the larger groups are also placed in the left corner of the chart, while the smaller is on the bottom right side.

In Figure 29, all factors are presented in a hierarchy chart in which we can see the theory-driven factors represented by the biggest rectangle (dark green) on the left-hand side of the image and the smaller dark green rectangle on the right side representing the data-driven factor. The size of each dark rectangle gives us the idea of how theory-driven factors were more often cited than data-driven ones. In this type of chart, it is also possible to visually compare factors that belong to different groups. It is evident that workforce availability, and economic and social factor, was more frequently cited than seaport facilities, a location/accessibility factor.

Because of the high number of factors and the discrepancy in frequency, some factors are not visible in Figure 29. For better visualization, we present theory-driven and data-driven factors apart in Figure 30 and Figure 31.

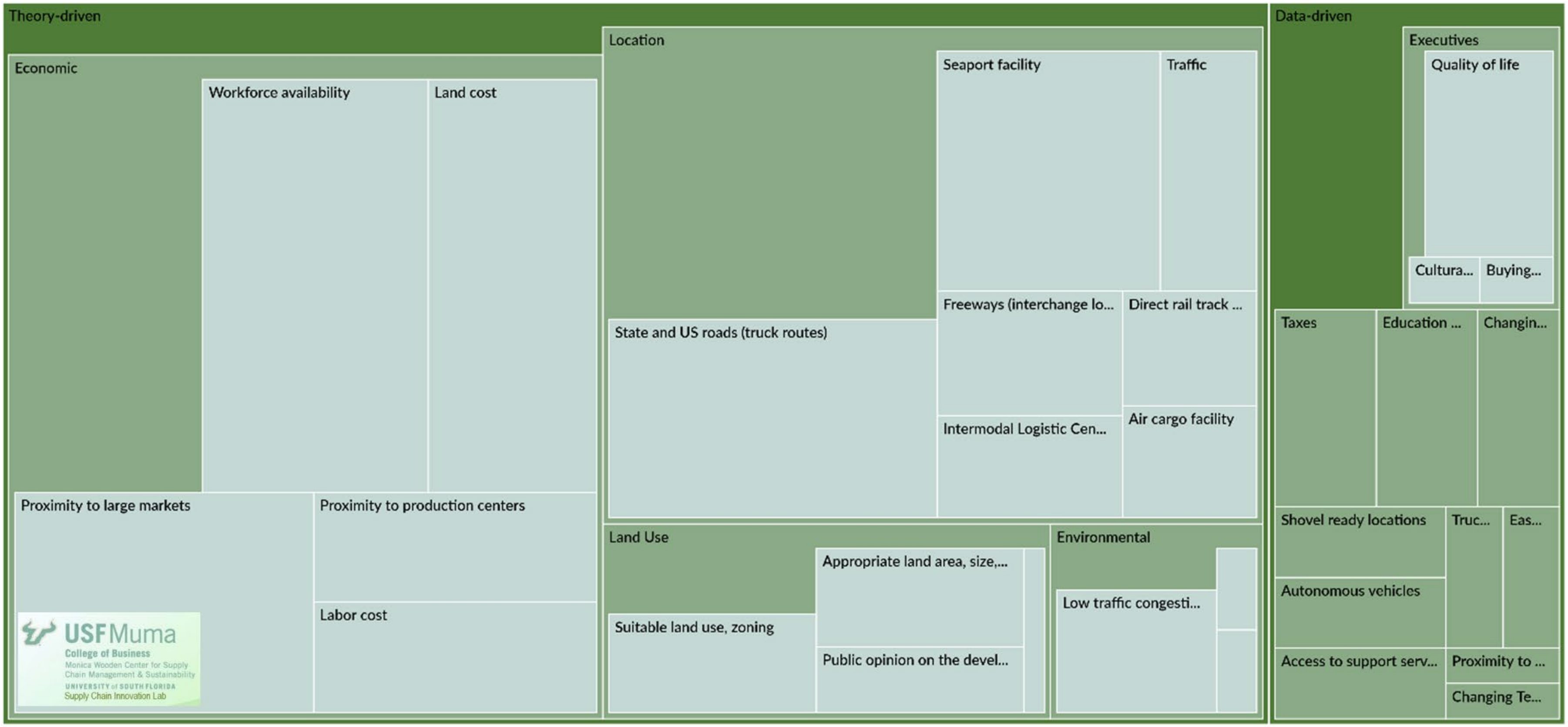

Figure 29. NVivo Hierarchy Chart of Data-Driven and Theory-Driven Factors

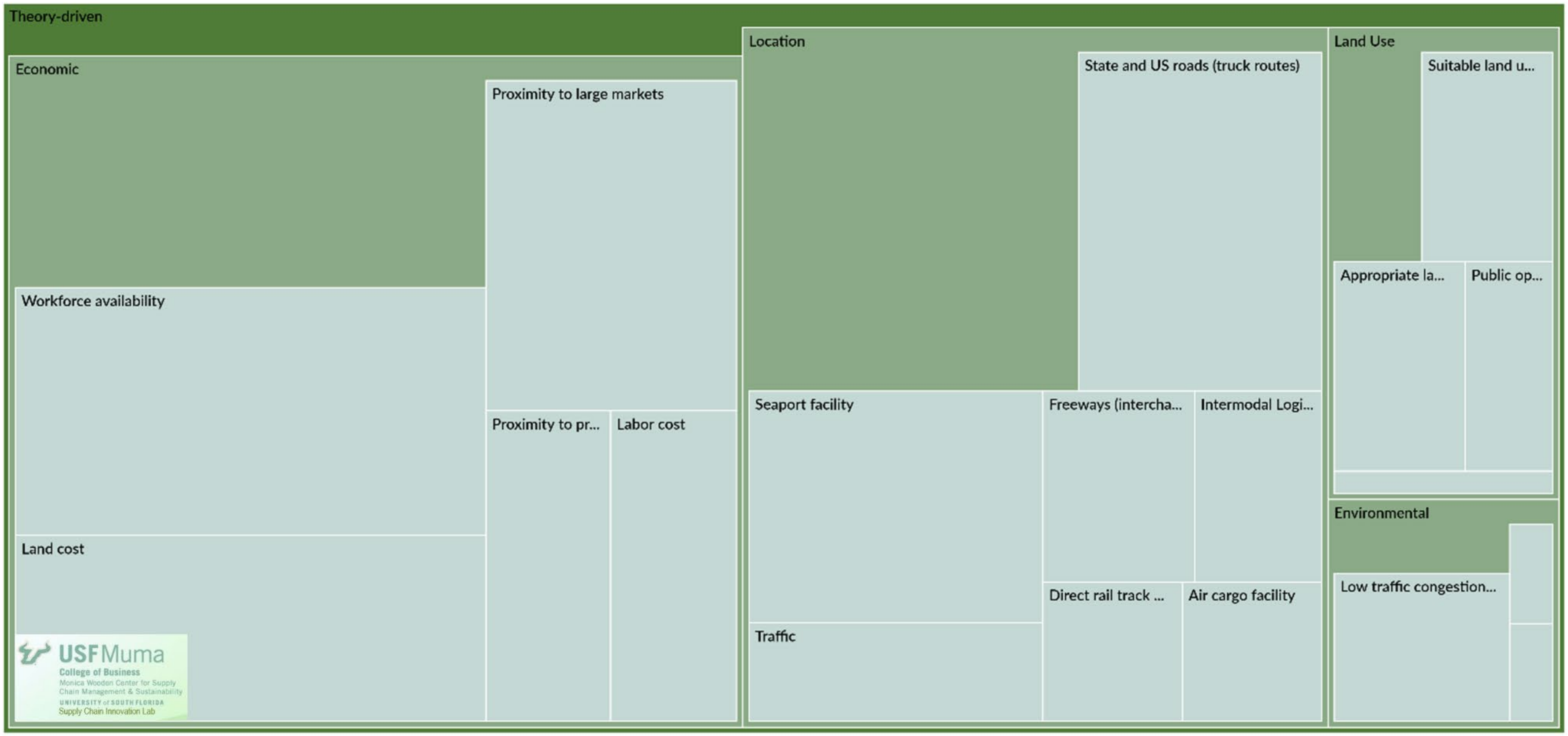

Figure 30. NVivo Hierarchy Chart of Theory-Driven Factors

Figure 31. NVivo Hierarchy Chart of Data-Driven Factors

We also analyzed the frequency that the factors appeared during the interviews separately. For example, Figure 29 shows the hierarchy chart of the first interviewee, a real estate expert based in Florida, in which most of the topics were related to land cost, workforce availability, proximity to State and US roads, and executives' quality of life. We also notice that many different factors were mentioned during the interview, covering all groups of factors present in this study.

The most cited factors by the second interviewee, who also acts in the real estate business, were similar to the first interview: workforce availability, proximity to production centers and large markets, land cost, and proximity. Anyhow, it is evident that most of the factors were related to either economic or location factors (see Figure 33).

Like in the first interview, the third expert, a member of a trucking association, also covered a wide variety of topics. As shown in Figure 34, the most cited factors were proximity to large markets, workforce availability, proximity to truck routes, and suitable land use.

Unlike the previous, the fourth interviewee focused on different location factors, such as seaports, air cargo facilities, and traffic. In addition, economic factors like workforce availability and labor cost were also frequently mentioned, as shown in Figure 35.

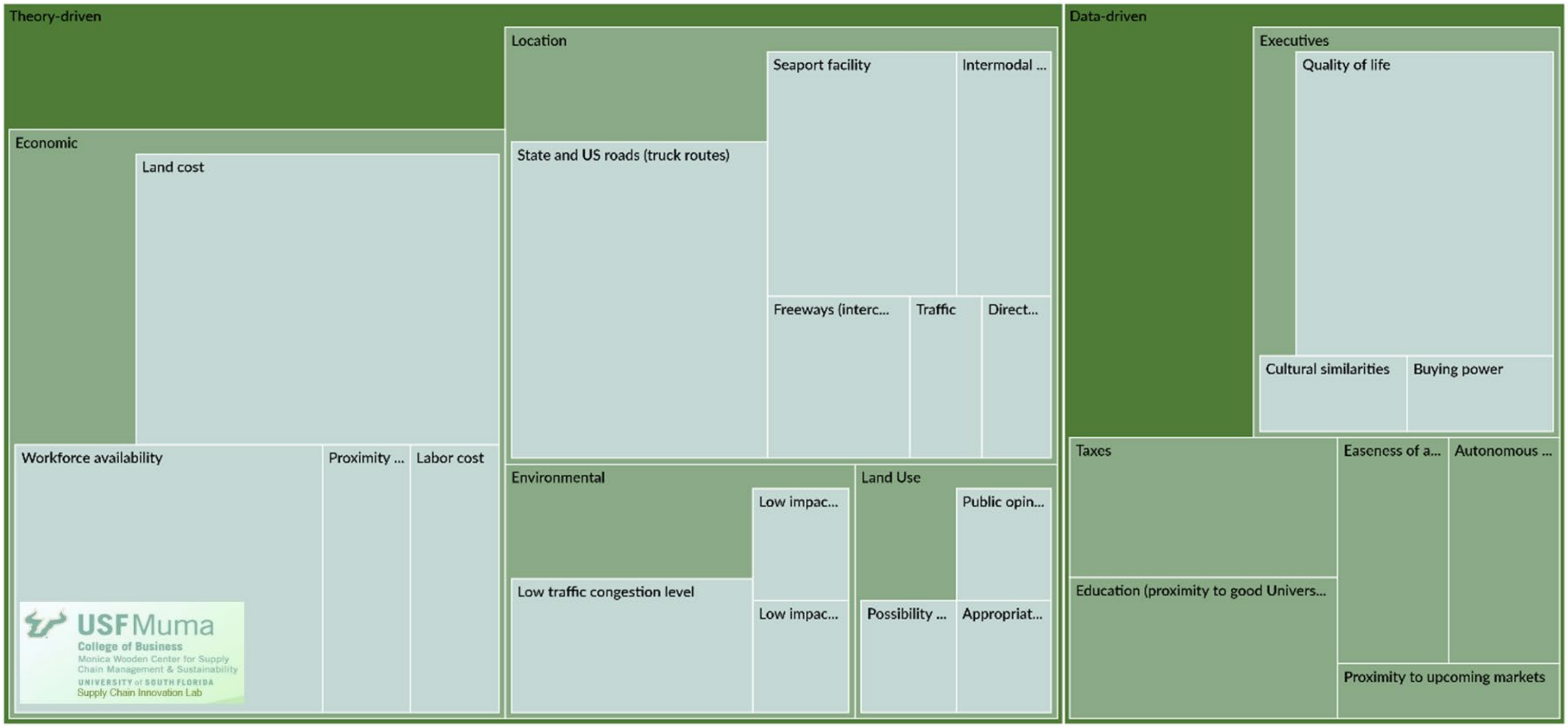

Figure 32. NVivo Hierarchy Chart of First Interview

Figure 33. NVivo Hierarchy Chart of the Second Interview

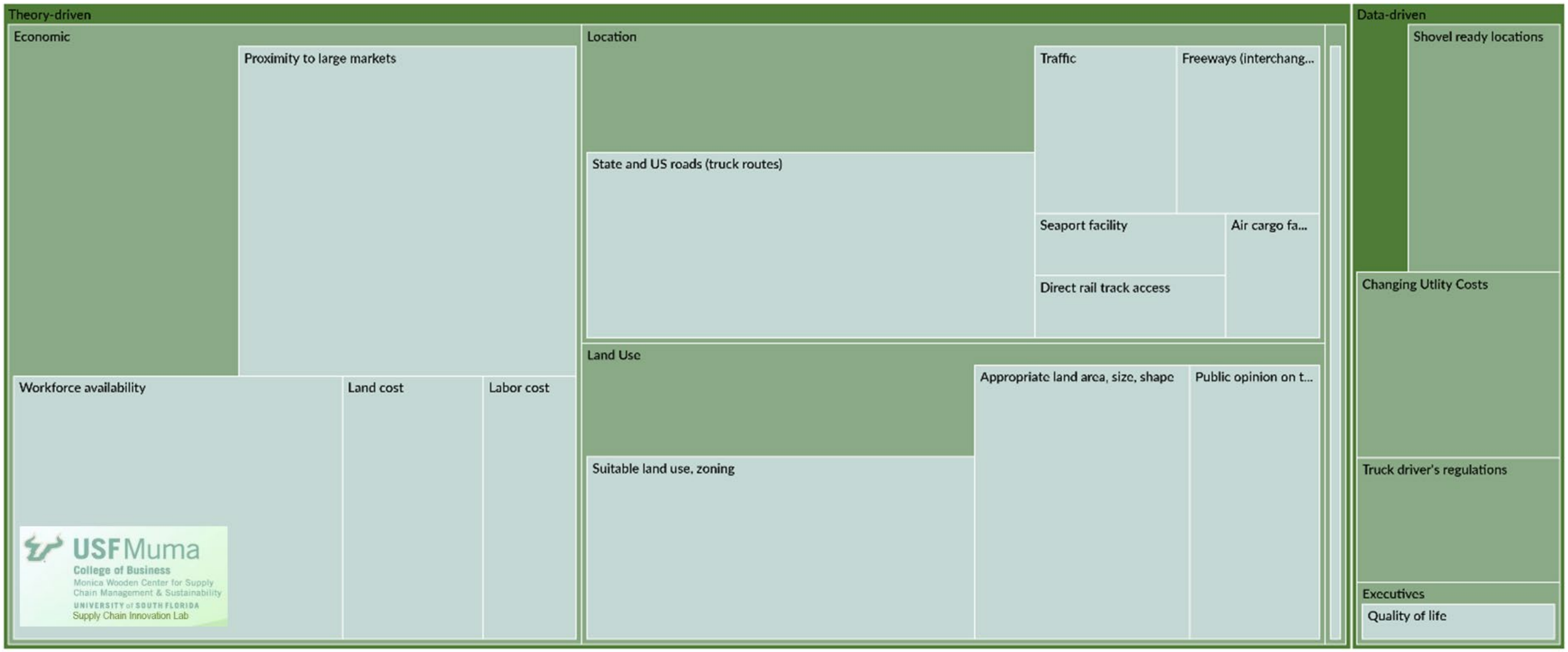

Figure 34. NVivo Hierarchy Chart of the Third Interview

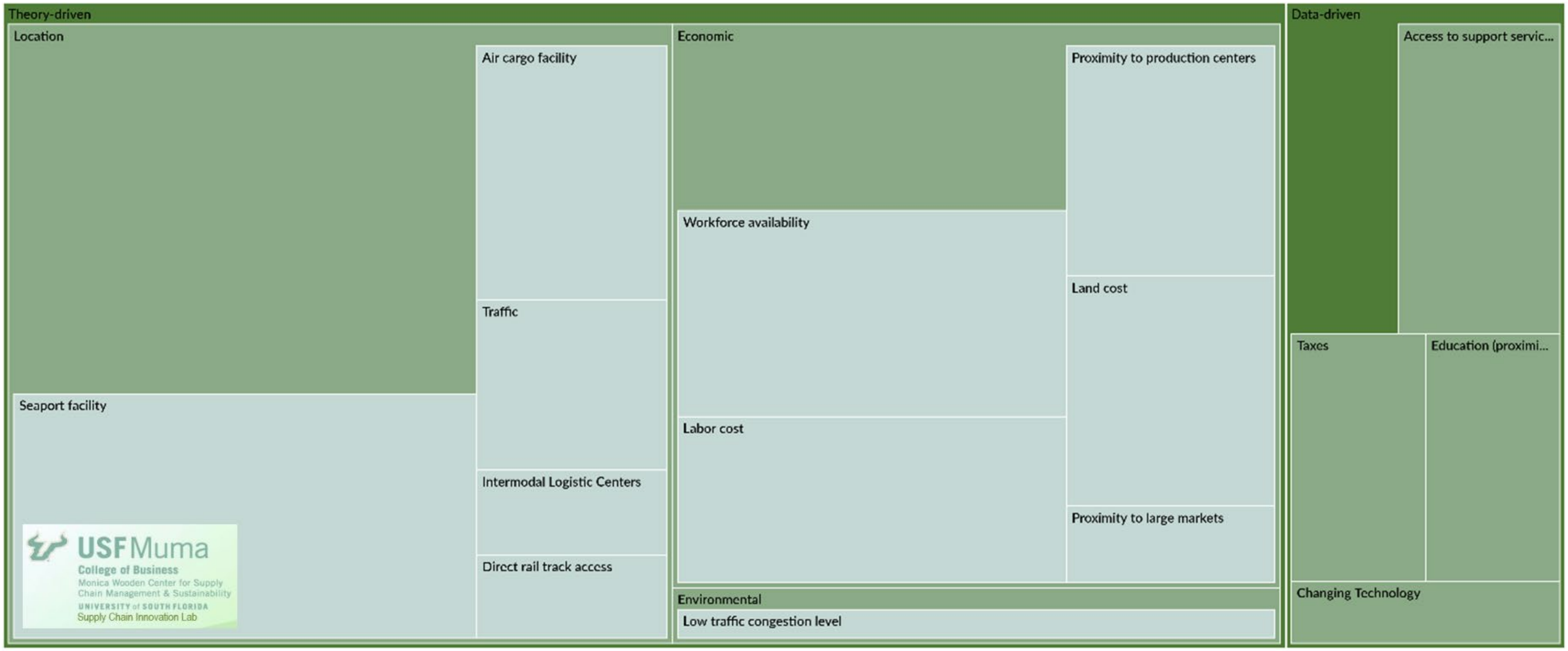

Figure 35. NVivo Hierarchy Chart of the Fourth Interview

In addition to topics related to the factors that we study in this work; we also analyzed the frequency of words in each interview transcript. This type of analysis can help to unveil meaningful information from the transcripts beyond the LAC development factors. To help with this kind of evaluation, NVivo features a word cloud visualization, in which the font size represents the frequency of words. In word cloud visualization, the more frequent the words, the bigger they are shown. Also, to focus the analysis on potentially more meaningful words, this type of visualization usually excludes stop words – ubiquitous words that add very little value to the sentence, such as "the," "a," "an," "which."

Both first and second interviews word clouds (see Figure 36 and Figure 37) have shown words related to geographic notions, like for instance: "State," "regional," "municipalities," and "cities." Also, words that denote change appeared very frequently, such as "changed," "coming," "moved," and "landing." This seems to relate to the fact that the interviewees built their narrative around historical changes in Florida over the last decades.

Figure 36. Word Cloud of the First Interview

Figure 37. Word Cloud of the Second Interview

Nevertheless, the third interview word cloud seems to highlight words related to supply chain topics, such as "distribution," "center," "congestion," "trucking," "factories," and "facilities," as shown in Figure 38.

Figure 38. Word Cloud of the Third Interview

The word cloud of the fourth interview, shown in Figure 39, is closer to the first two interviews as the highlighted words denote geographical concepts, such as "regional," "State," "cities," and "municipalities."

Figure 39. Word Cloud of the Fourth Interview

The last word cloud visualization (shown in Figure 40), combines all interviews and shows some interesting topics. For instance, it seems to be a particular interest for the Miami area and factors related to "people" and "labor." These factors are followed by supply chain-related words, such as "distribution," "center," and "industrial."

Figure 40. Word Clouds of all Four Interviews Combined

4. Determination of LAC Development Criteria

The main goal of this study was to develop a new set of LAC development potential criteria and to present a heat map containing the best locations to develop LACs within the State of Florida, based on the criteria identified and validated through a survey and interviews with experts. To accomplish this task, we needed to identify the most important criteria and operationalize them and have access to the data. In other words, to be considered as a variable in the final heat map, a criterion needs to fulfill the following requirements:

1. Be recognized as crucial in the literature.
2. Be considered relevant, when compared to other criteria, in our survey and interviews with experts.
3. Be measurable directly or through a proxy.
4. Has available data that is recent and from a reputable source.

4.1 Criteria Selection

After analyzing the requirements afore mentioned, the candidate criteria were split into three groups: (i) criteria that were considered for the creation of the heat map; (ii) criteria that will be used to qualify the areas that were identified as high potential for LAC developments; and (iii) criteria that will not be included for the purposes of this study. The variables considered in the heat map creation stage are present in Table 27 and will be further analyzed in the following section, in which we explain the weights attributed to each factor.

Table 27. Factors Considered in Heat Map Development

Group	Factor
Location	Freeways (interchange locations)
	State and US roads (truck routes)
	Intermodal logistics center (rail-truck)
	Direct rail track access
	Seaport facility
	Air cargo facility
Economic	Workforce availability
	Proximity to a large market
	Proximity to production/manufacturing centers
	Land cost
Environmental	Low traffic congestion level

Four factors were not initially considered in the development of the heat map, however, will be included in the analysis in a later stage:

- Suitable land use/zoning
- Appropriate land area/size/shape
- Possibility of expansion
- Low impact on residential areas

These factors were not included at this stage, because they could narrow down the options of highly suited LAC development locations disproportionally by considering elements that are either highly dependent on the type of LAC (e.g., land size, the possibility of expansion, and impact on residential areas) or can be altered (e.g., land use).

In addition, the following criteria were not considered for the purposes of this study or were included in another way in the analysis:

- Public opinion on the development of a LAC (difficult to capture since it is based on each specific land upon the possibility of development)
- Labor cost (similar averages throughout Florida)
- Low impact on the natural environment (naturally protected lands will be removed from the heat map, accounting for this factor)
- Low traffic crash level (this factor did not come up in the survey and interviews as a LAC development must, and was correlated in this study to the low congestion level of the roadways)

All these factors have in common the fact that our survey respondents considered them the least important within their groups, but other reasons also weighted in the decision to drop them from the analysis. Besides its relative unimportance, 'public opinion on the development of a LAC' is also hard to measure. Creating a variable based on this factor would require the consultation of the population all over the State about their opinion on the development of a LAC in their neighborhood, which is impractical.

Unlike public opinion, labor cost is more easily measurable, and this data is readily available, but it seems to be an essential factor in a macro scale, for instance, when comparing different countries or even different states with distinct characteristics. As labor cost is relatively similar across the State, it was not considered a significant concern in the decision-making process. Figure 41 and Figure 42 present the median earnings of transportation occupations by county, and we can see both in the map colors and in the histogram that the earnings levels tend to be very concentrated. Again, due to the lack of variation across the State, this factor was not considered in our analysis.

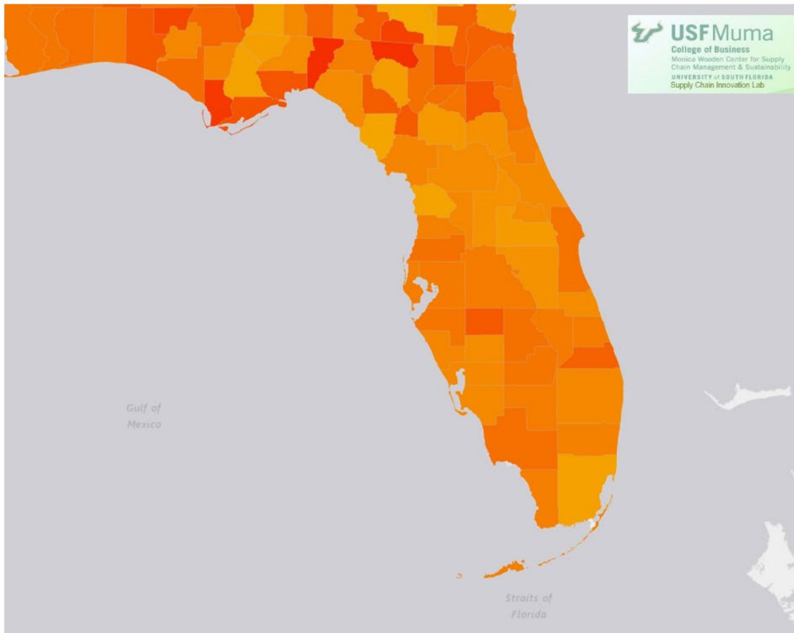

Figure 41. Median Earnings of Transportation Occupations in Florida by County (USD)

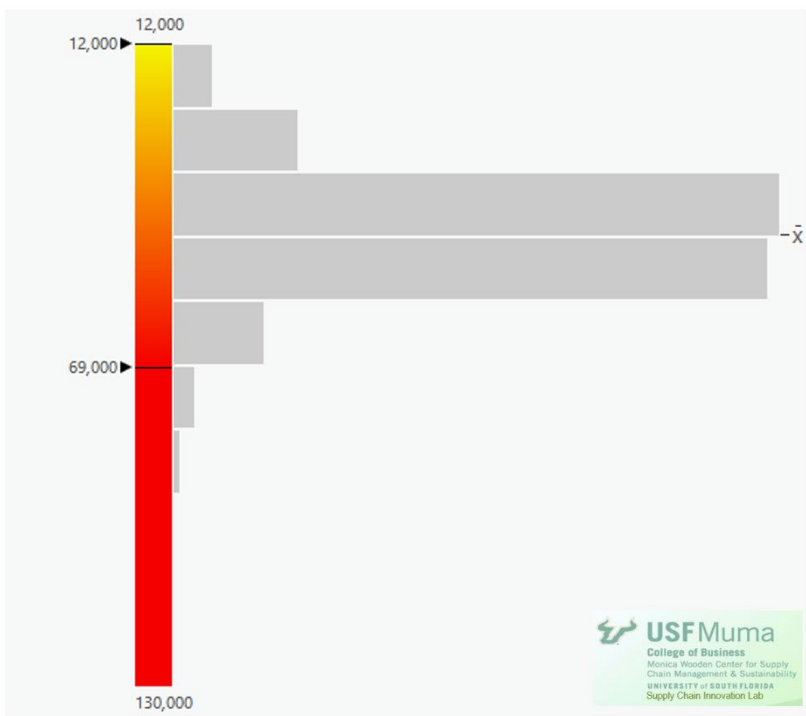

Figure 42. Distribution of Earnings of Transportation Occupations in Florida by County (USD)

Finally, the last two factors (low impact on the natural environment and low traffic crash level) were not considered in the analysis for similar reasons as they are already somehow related to other variables. For instance, impact on the natural environment is already considered on the land use classifications, and traffic crash levels are directly correlated to traffic congestion levels.

4.2 Buffers and Weights

After determining which factors would be considered on the heat map analysis to show LAC development potential, we proceeded with the definition of how to collect the data required and operationalize the factors - that will be presented in the following section - and what weights to attribute to each variable. In the case of location factors, the distance was another dimension to be considered, so we also refined buffers considering the survey and interview results.

Unlike the other groups of factors, another dimension needs to be considered for Accessibility/Location. We considered the relative importance between the logistic facilities and the distance between the LAC and logistic facilities. Merely attributing more weights to more voted distances could cause distortions. For instance, regarding the optimal maximum distance from freeways (interchange locations), most respondents chose the option 'between 2.5 and 5 miles', and the second most chosen option was 'within 2.5 miles.' As it makes no practical sense to attribute less weight to the second option, we interpreted the result as most respondents evaluated that the optimal distance is within 5 miles, and so we assigned the highest weight to this 'new category.' To better match the survey results, we let the categories of distances vary by facility type, and the outcome can be found in Table 28. Although the optimal distance categories may differ among facilities, we kept the number of categories the same (four), which we named 'Very High', 'High', 'Moderate', and 'Minimal'. We also defined different types of buffers for the facilities (driving distance or linear) using the same scheme as the previous project (FDOT District 7 Land Use Analysis) to keep consistency.

Table 28. Buffer Distances by Facility Type

Facility type	Buffer Type	Buffer Distance (miles)			
		Very High	High	Moderate	Minimal
Freeways (interchange locations)	Driving Distance	5.00	7.50	10.00	>10
State and US roads (truck routes)	Simple (Linear)	2.50	3.75	5.00	10
Intermodal logistics center (rail-truck)	Driving Distance	2.50	6.25	10.00	>10
Direct rail track access	Simple (Linear)	2.50	6.25	10.00	>10
Seaport facility	Driving Distance	2.50	5.00	10.00	>10
Air cargo facility	Driving Distance	2.50	5.00	10.00	>10

Finally, we assigned weights to each facility type and their buffer distance categories keeping the relative distances between mean rank order scores (see Table 11) and normalizing the scores so the Very High column could sum up to 100 to represent a "perfect" site. The remaining weights were assigned, so if a LAC falls within the buffers of the High column for all facilities, it will score 74. If it falls within the Moderate distance for all facilities, it will receive 41 points and 26 if it is classified as minimal for all facilities. A summary of weights by facility type and buffer distance are shown in Table 28 and Table 29.

Table 29. Buffer weights by Facility Types

Facility type	Buffer Type	Buffer Weight			
		Very High	High	Moderate	Minimal
Freeways (interchange locations)	Driving Distance	26	14	03	03
State and US roads (truck routes)	Simple (Linear)	24	17	09	03
Intermodal logistics center (rail-truck)	Driving Distance	15	14	12	09
Direct rail track access	Simple (Linear)	13	10	07	03
Seaport facility	Driving Distance	12	11	06	05
Air cargo facility	Driving Distance	10	08	04	03
Total		100	74	41	26

Workforce availability, an Economic and Social factor, were measured in terms of the size of the labor force per county. The data is available at the Florida Department of Economic Opportunity website and was gathered in January 2021, relative to December 2020. The counties were grouped into four categories, and the distributions of weights are shown in Table 30.

Table 30. Work Force Availability Weights

Workforce Available	Weight
> 450,000	+15
250,000 < x =< 450,000	+10
100,000 < x =< 250,000	+5
=< 100,000	0

Considering the aggregation level, we chose to work with (counties), production centers are highly correlated with the large markets. Including both variables would be an unnecessary duplication, and so we merged both factors in a singles measure: county population. As shown in Table 31, the counties were grouped according to their population, and those below 249,000 were assigned weight zero, while the counties with a population above 250,000 received extra 10 points.

Table 31. Proximity to Large Markets Weights

County Population	Weight
>= 250,000	+10
< 250,000	0

The last Economic and Social factor, land cost, was measure in terms of the average cost per square foot. This extensive GIS analysis was done based on the GeoPlan Statewide Parcel Data in Florida – 2019 shape file available on the ArcGIS portal. The data was sourced by the Florida Department of Revenue and the respective County Property Appraiser's Office. In this analysis, which is presented with more details in a later section of this report, we calculated the average cost per square foot based on the just value of each parcel in the whole State. Each portion (with 1 square mile) was then assigned a weight according to the scheme shown in Table 32. We created five classes of land costs, and the most affordable locations received positive points (very low and low), while spots with an average cost per square foot above 25 dollars were assigned negative points. At last, locations with moderate cost (from 15 to 25) were not assigned any weights.

Table 32. Land Cost Weights

Class	Cost Range	Weight
Very low	0-8	+10
Low	8-15	+5
Moderate	15-25	0
High	25-50	-25
Very high	50+	-75

Traffic Congestion Level was the only factor from the Environmental and Others group considered in the heat map analysis. This factor was measured in terms of annual average daily traffic (AADT). The Florida Department of Transportation provides this information, and the classification scheme (with seven classes) is per several FDOT reports. The classes and its' weights are shown in Table 33.

Table 33. Traffic Congestion Level

AADT	Weight
5000 < x< 7500	+15
7500<x<10,000	+10
10,000<x<20000	+5
20,000<x<40,000	0
40,000<x<80,000	-5
80,000<x<160,000	-10
>160,000	-15

4.3 GIS Data Collection as per LAC Development Criteria

In this section, we present the GIS analysis conducted to calculate and generate the final heat map. In addition, we present data sources, characteristics, processing, and GIS visualizations for each layer.

4.3.1 Freeways (interchange locations)

The shape file used to calculate buffer distances from interchange locations was developed by the FDOT Transportation Data and Analytics Office (TDA) and is part of the FDOT Roadway Characteristics Inventory data (FDOT, 2021a). As stated at the ArcGIS portal, this shape file contains the "most recent inventory performed" and shows the location of the interchanges and their type (see Figure 43).

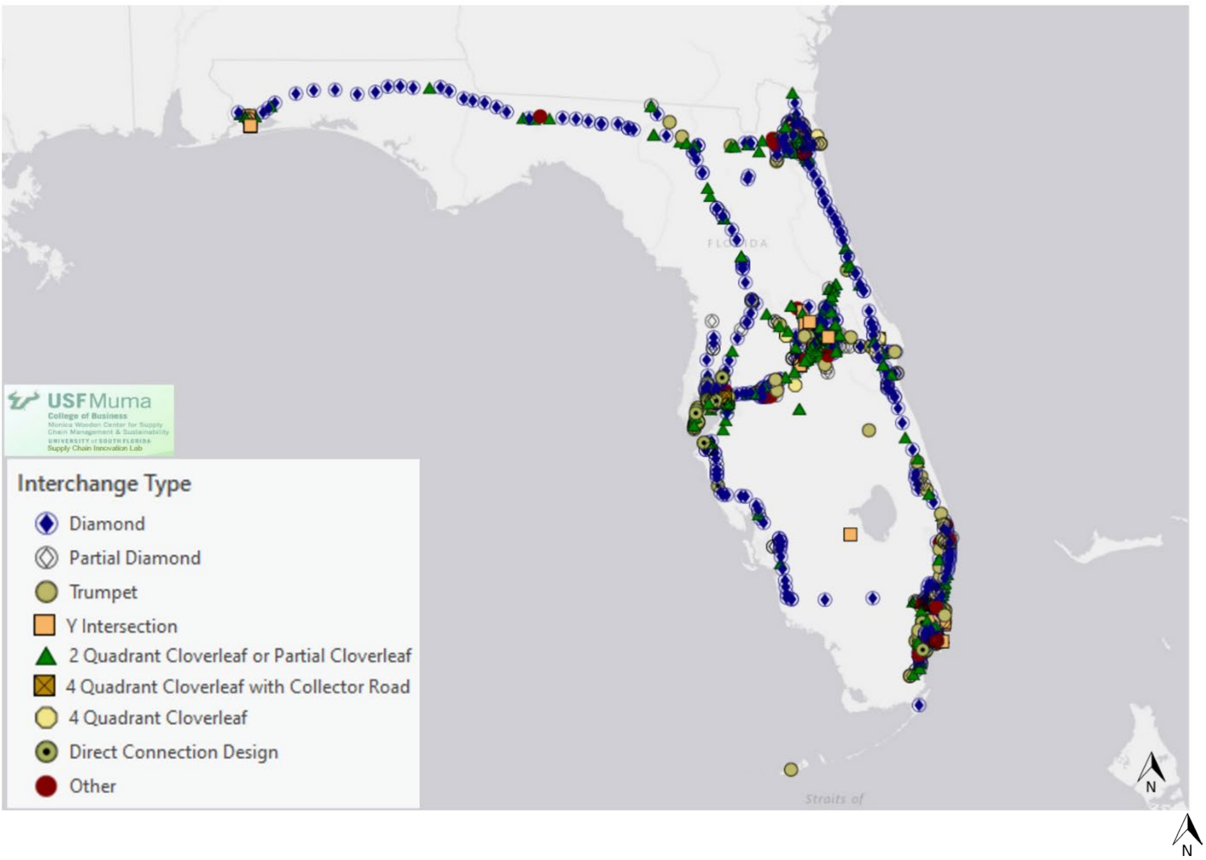

Figure 43. Interchange Locations

After acquiring the data, we proceeded with a GIS analysis called Service Areas, in which the driving distance from each interchange location was calculated. ArcGIS offers interesting features in this type of analysis, such as choosing roads in which trucks are allowed and avoiding unpaved or private roads. Other parameters of this analysis are break values (how distant or how far in terms of time) and break units (miles, kilometers, hours, minutes, etc.) which were defined according to the previous sections of this report (see Table 28). The result is shown in Figure 44.

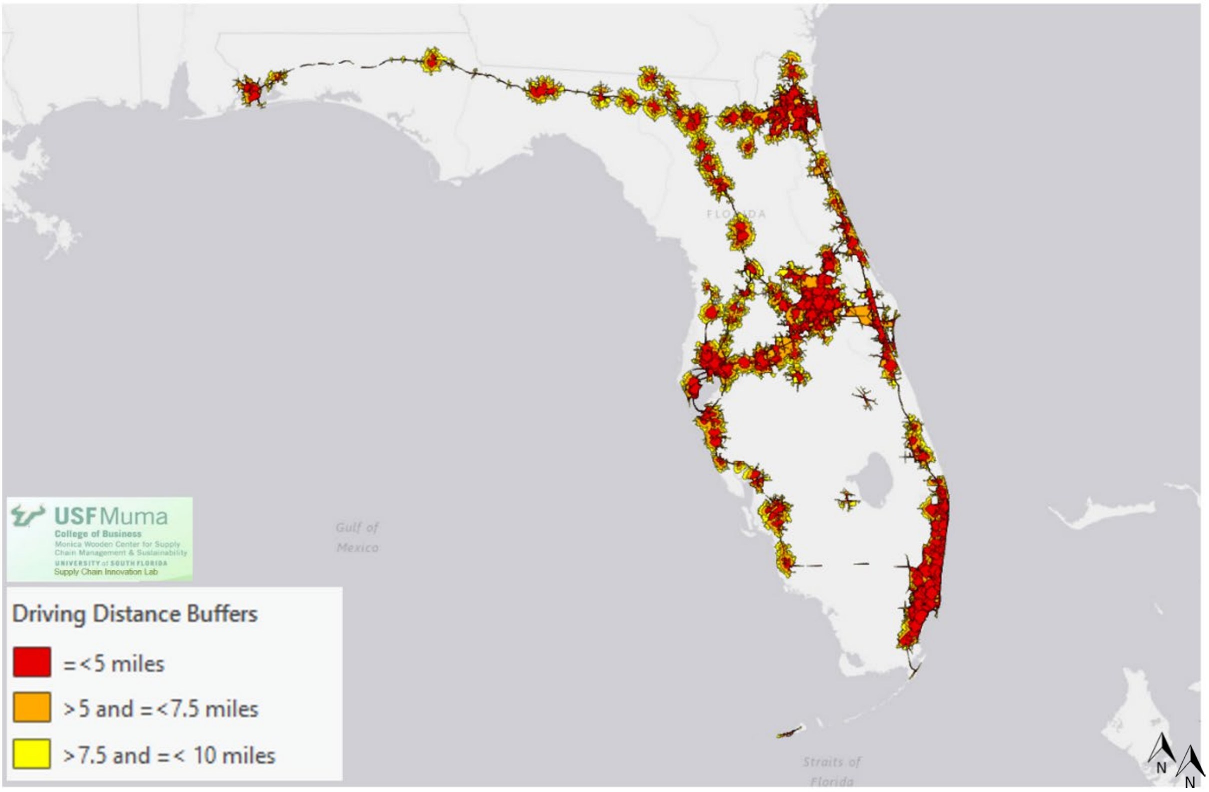

Figure 44. Driving Distances to Interchange Locations

4.3.2 State and US roads (truck routes)

Similar to the previous item, the source of the shape files of State and US Routes was also the FDOT Roadway Characteristics Inventory data from the FDOT Transportation Data and Analytics Office (TDA) (FDOT, 2021b; FDOT, 2021c). The original visualization is shown in Figure 45.

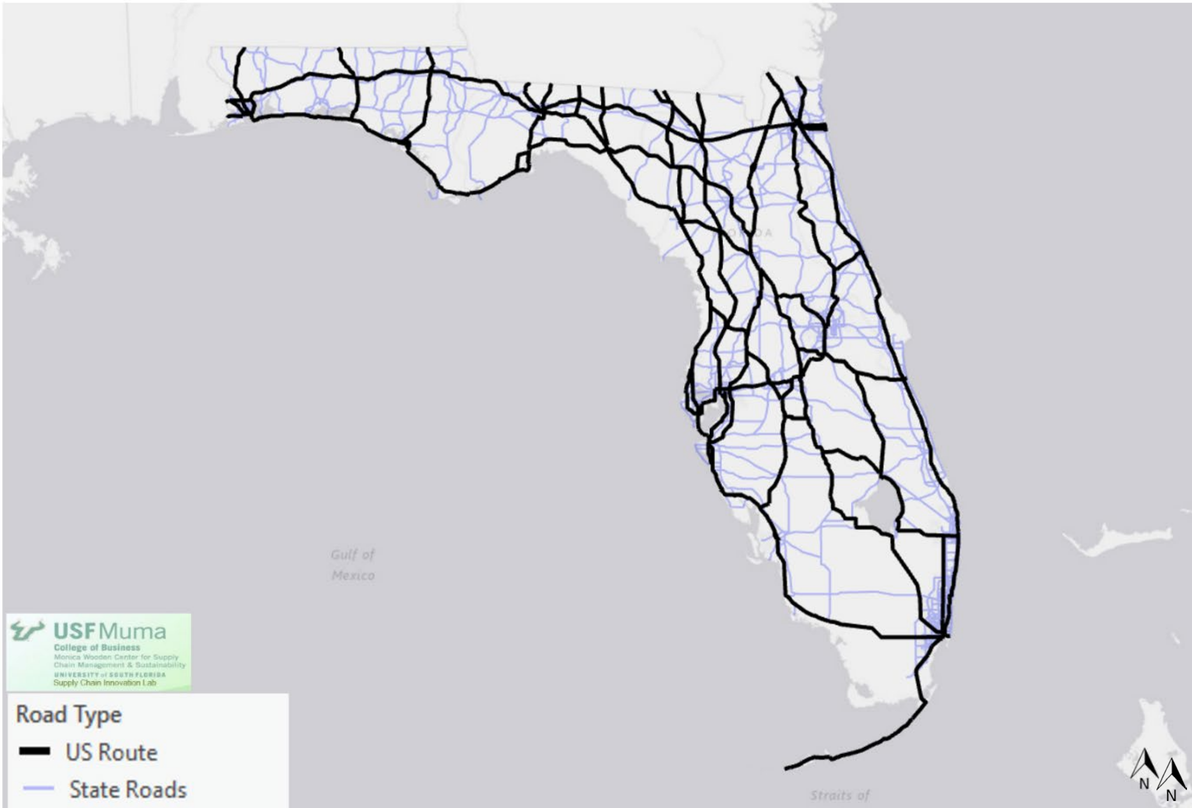

Figure 45. State and US Roads

Unlike interchange locations, the GIS analysis performed for State and US roads was based on simple (linear) distances. In this case, the geoprocessing tool applied is called Buffer. We created different buffers following the classes that were defined in the previous stages of this project, and the results can be found in Figure 46.

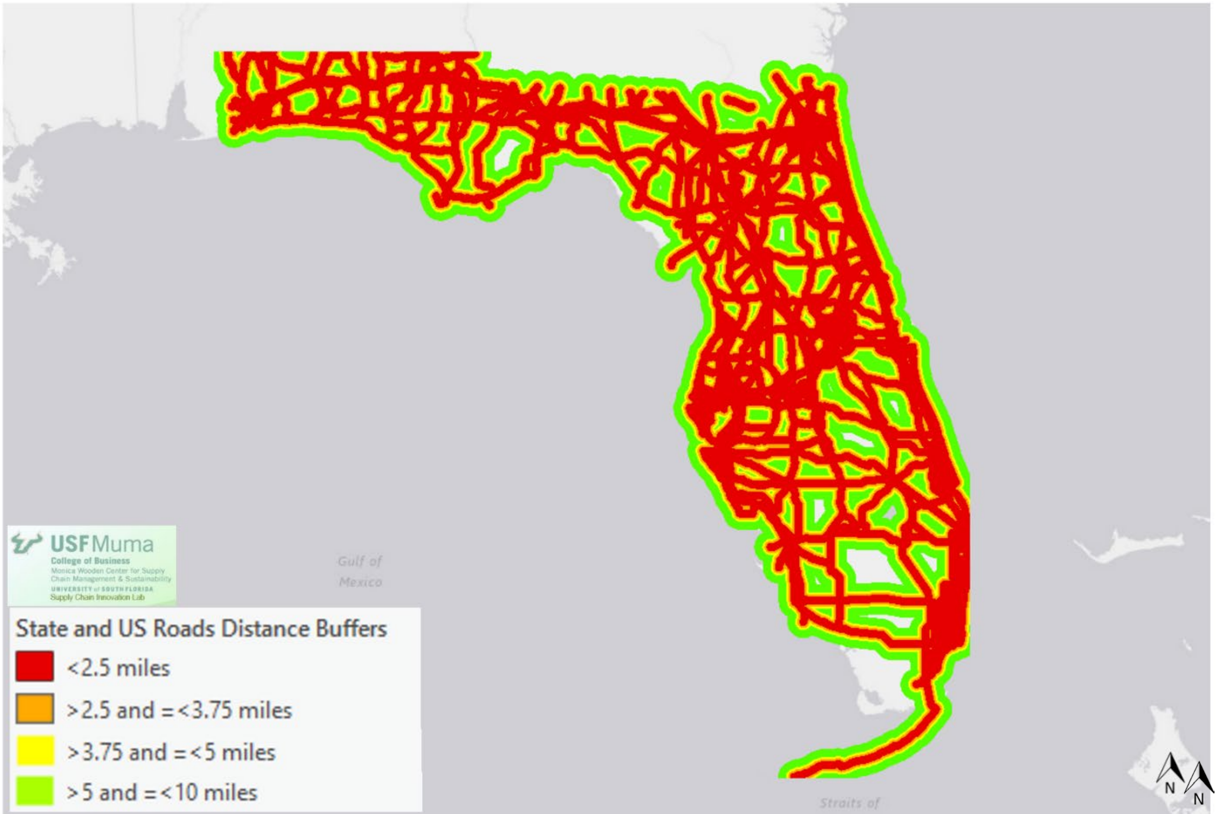

Figure 46. State and US Roads Buffers

4.3.3 Intermodal Logistics Center (rail-truck)

The Strategic Intermodal System (SIS) Facilities shape file (FDOT, 2021d; FDOT, 2021e), maintained by the FDOT's Systems Implementation Office (SIO), was used to assess the distance between parcels and several types of logistics facilities, including intermodal logistic centers. According to FDOT (2020), this GIS file "… includes facilities of statewide or interregional significance based on recommendations by the SIS Steering Committee to designate the system." The criteria and thresholds are adjusted as needed. Two tiers of facilities are collectively known as "The SIS": SIS facilities meeting high levels of people and goods movement, generally supporting major flows of interregional, interstate, and international trips; and Strategic Growth facilities are smaller in nature and generally designated based on economic connectivity, supporting underserved or niche geographic and economic communities.

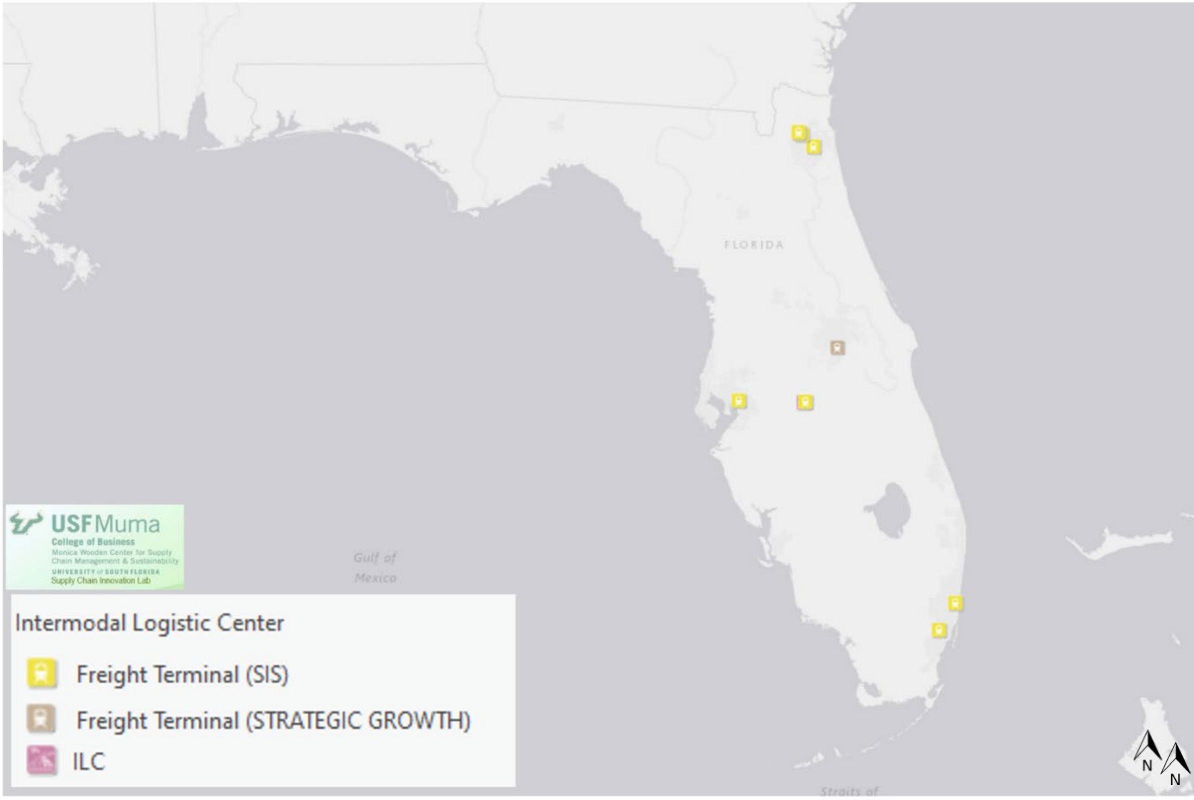

Figure 47. Intermodal Logistic Centers

Besides ILCs, to create the Intermodal Logistics Centers buffers, we also considered freight terminals, as shown in Figure 47. As we wanted to assess driving distances from such facilities, the buffers were built through the Generate Service Area ArcGIS tool using the buffer distances shown in Table 28. The resulting buffers are presented in Figure 48.

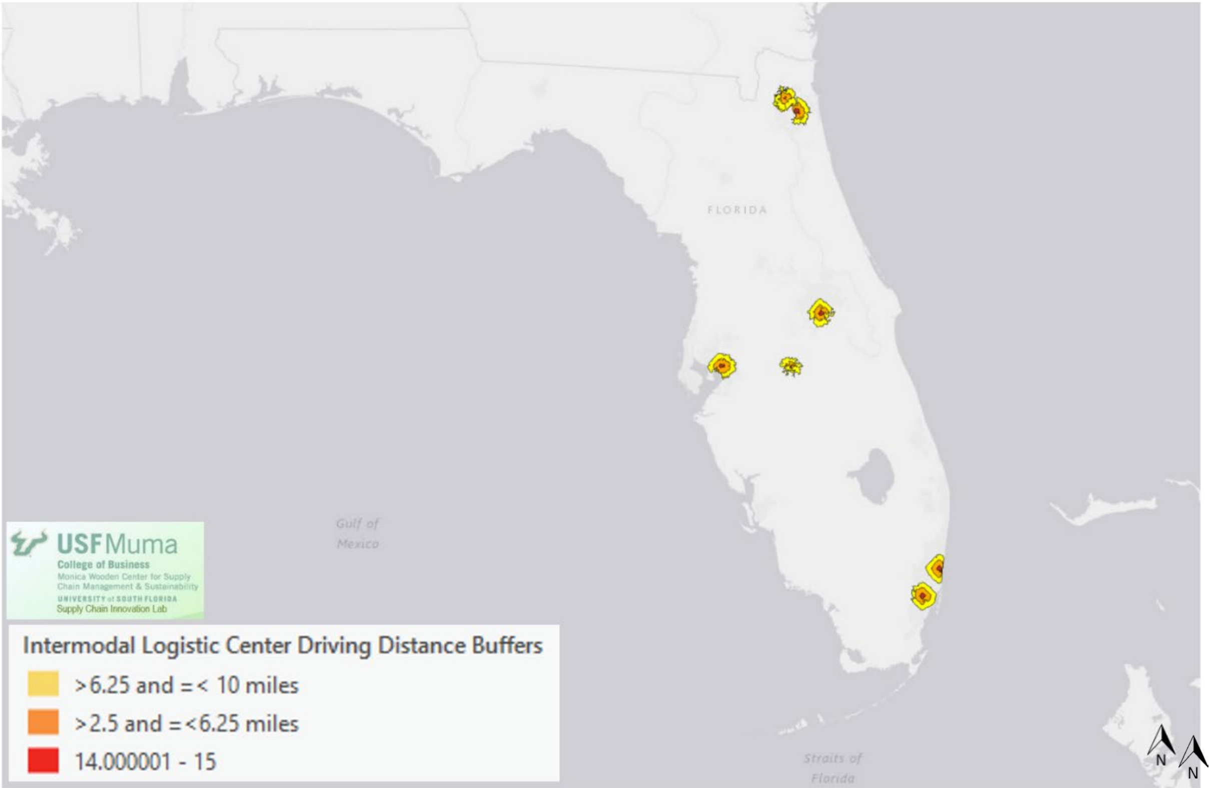

Figure 48. Intermodal Logistic Centers Buffers

4.3.4 Direct Rail Track Access

The Strategic Intermodal System (SIS) Facilities shape file was also the source of rail track locations (FDOT, 2021f), as shown in Figure 49.

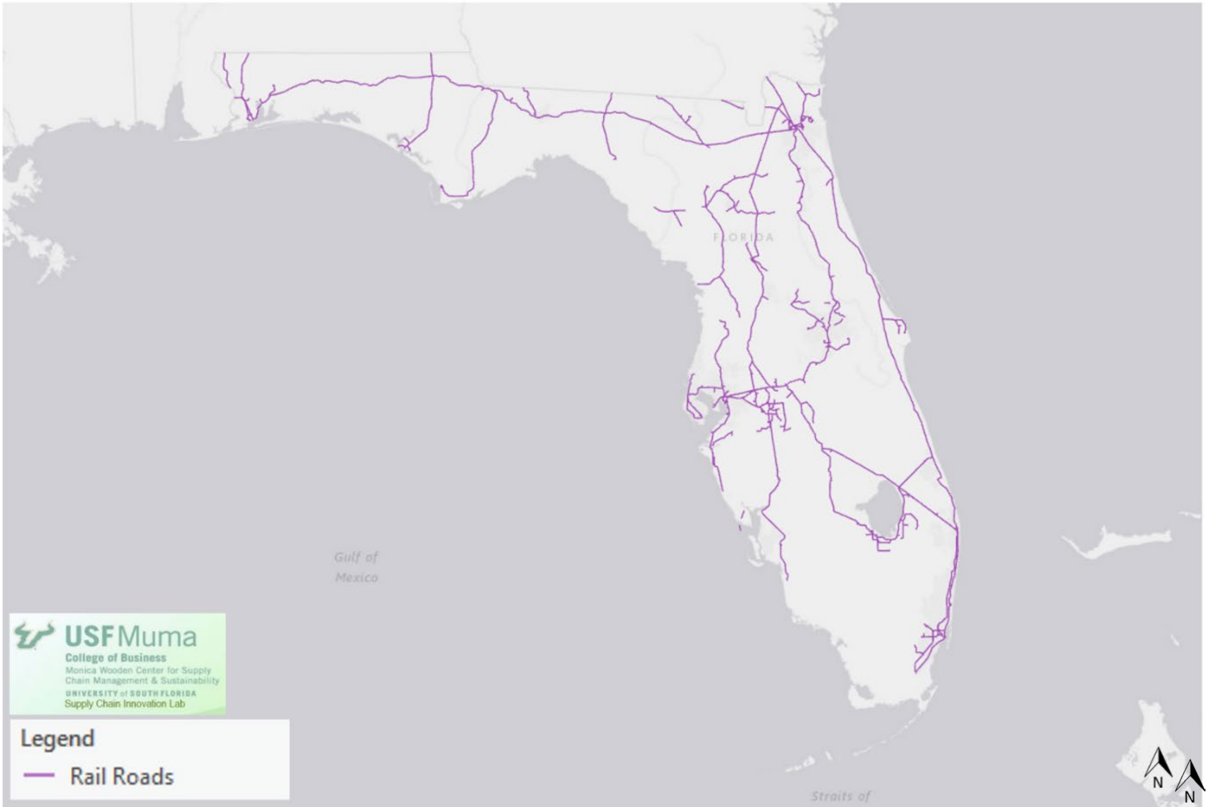

Figure 49. Florida Railroads

The buffers were created using simple distance from the railroads and were calculated based on the thresholds presented in Table 28. The resulting map is shown in Figure 50.

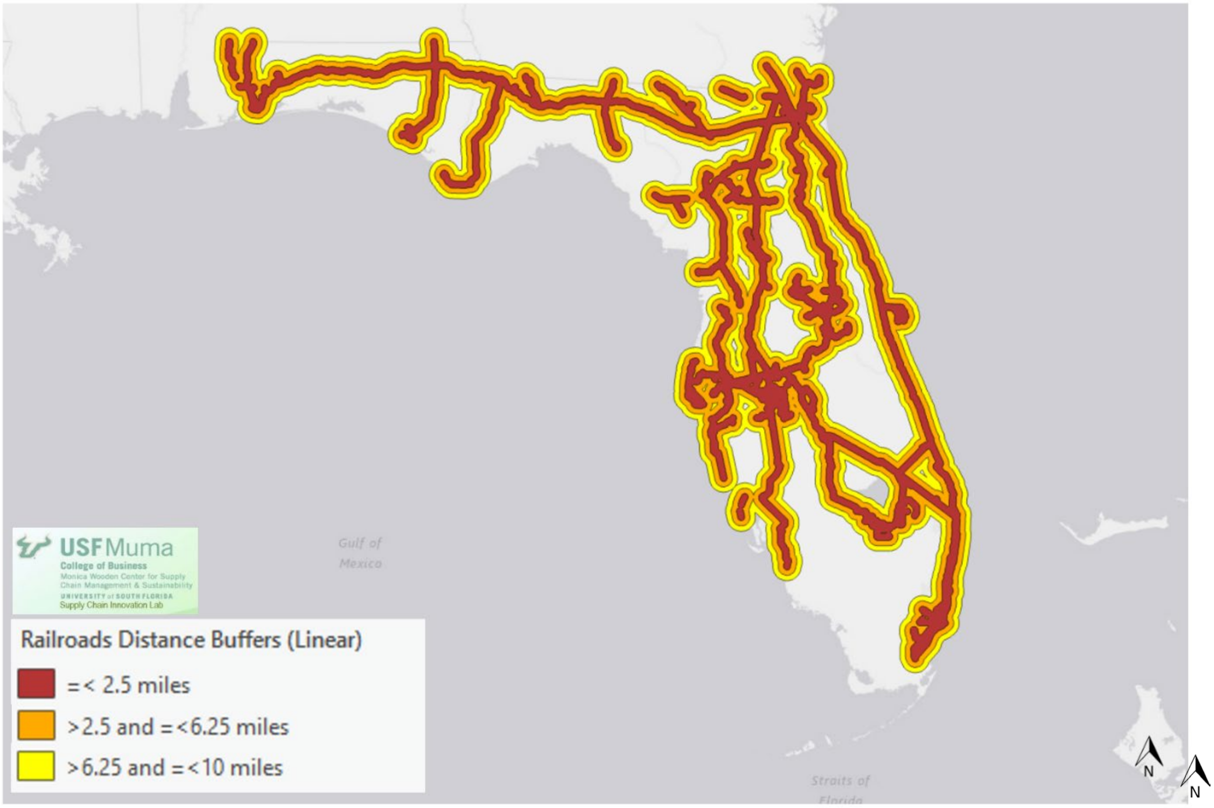

Figure 50. Railroads Distance Buffers

4.3.5 Seaports

Similar to Intermodal Logistic Centers/Freight Terminals, the Seaports are classified according to their actual capacity and strategical importance (FDOT, 2021g). In Figure 51, seaports that already present high levels of good movements are displayed in blue, while those identified as strategical growth are shown in brown.

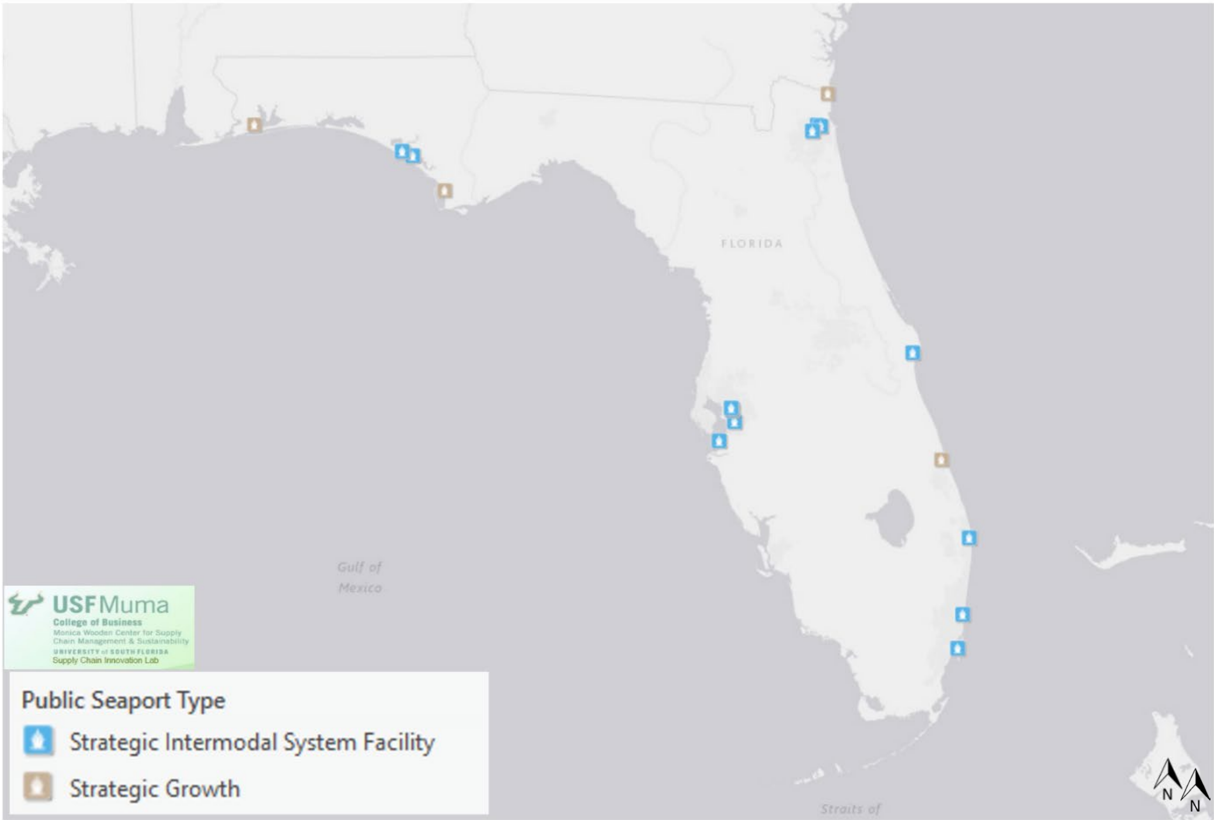

Figure 51. Florida Seaports

We calculated the driving distance to all seaports using the Generate Service Area tool with the thresholds defined in the previous sections of this work (see Table 28), and the result is presented in Figure 52.

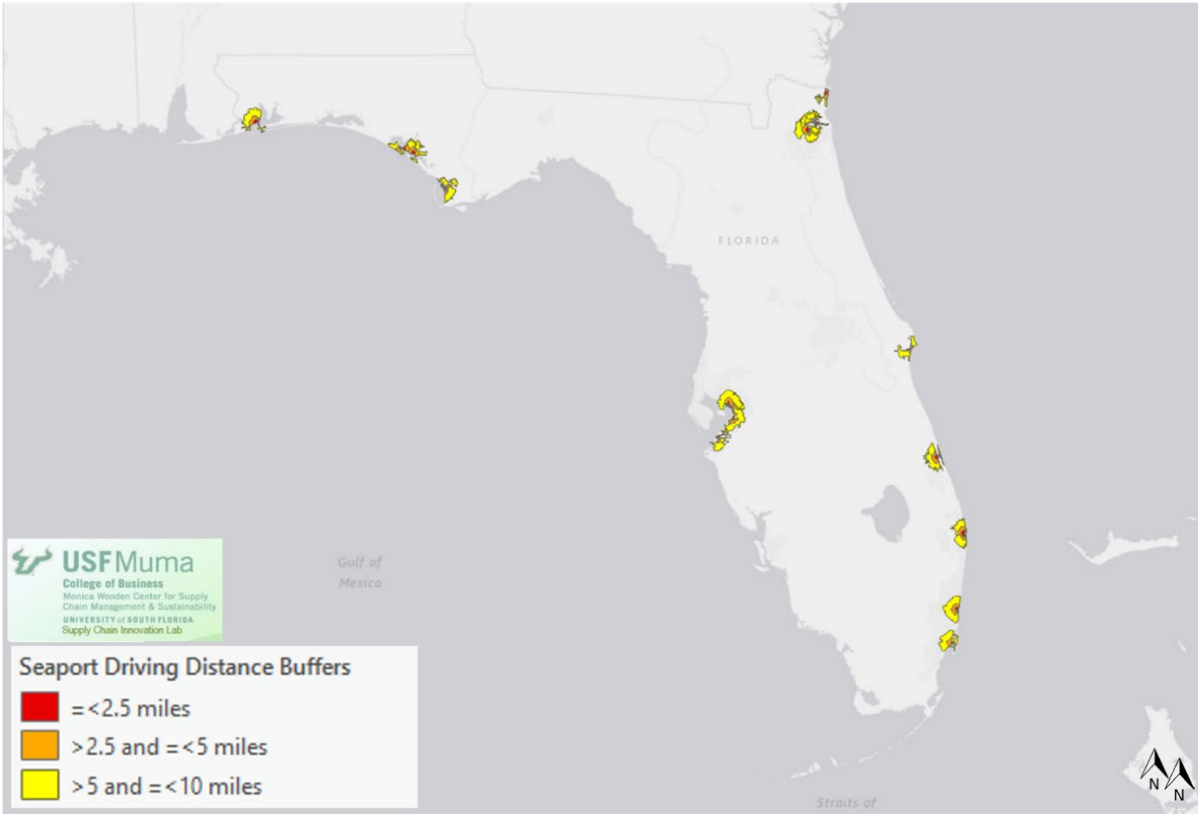

Figure 52. Seaports Driving Distance Buffers

4.3.6 Air Cargo Facility

The air cargo facilities' locations were also derived from the FDOT's Strategic Intermodal System (SIS) Facilities shape file (FDOT, 2021h). Similar to seaports, these facilities were also classified according to their actual level of activity and importance. Thus, the airports colored in green are those "supporting major flows of interregional, interstate, and international trips," while the ones colored in brown are strategically important and expected to have higher activity levels in the future as shown in Figure 53.

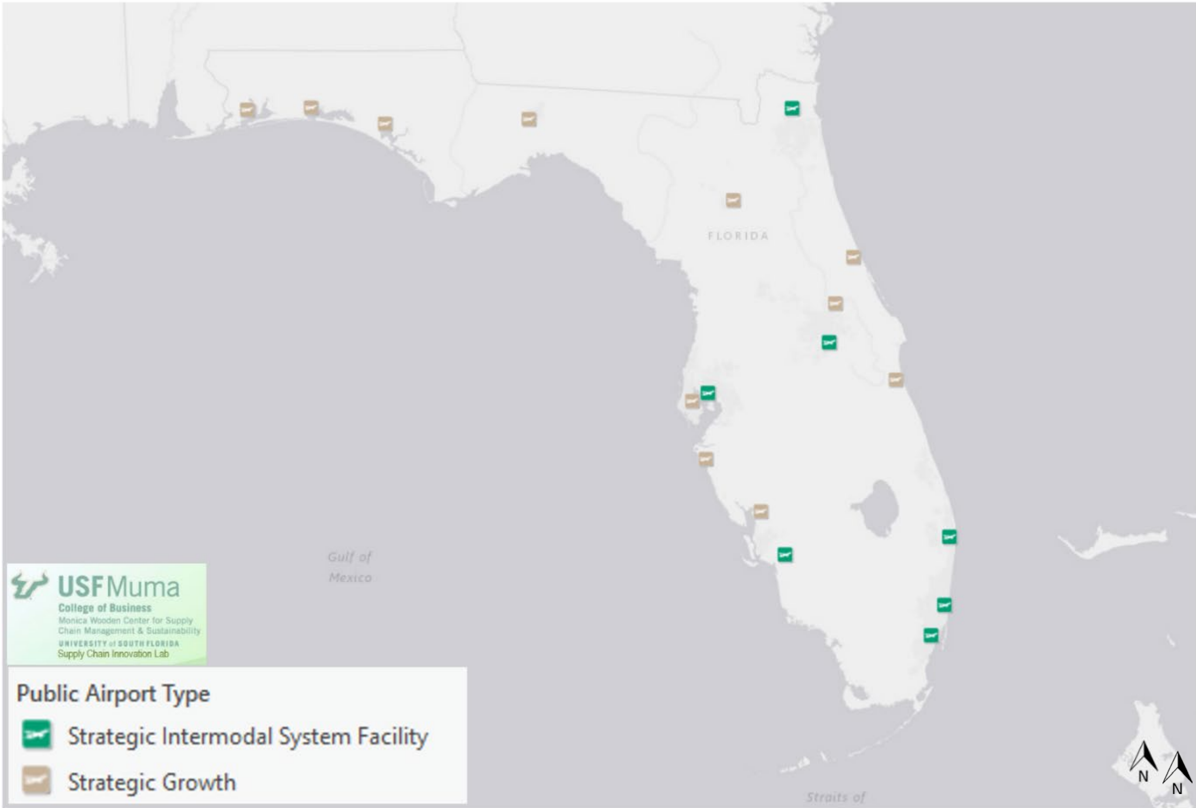

Figure 53. Airport Facilities

In terms of analysis, the driving distances to each airport were calculated through the Service Area tool in ArcGIS. The resulting map is shown in Figure 54.

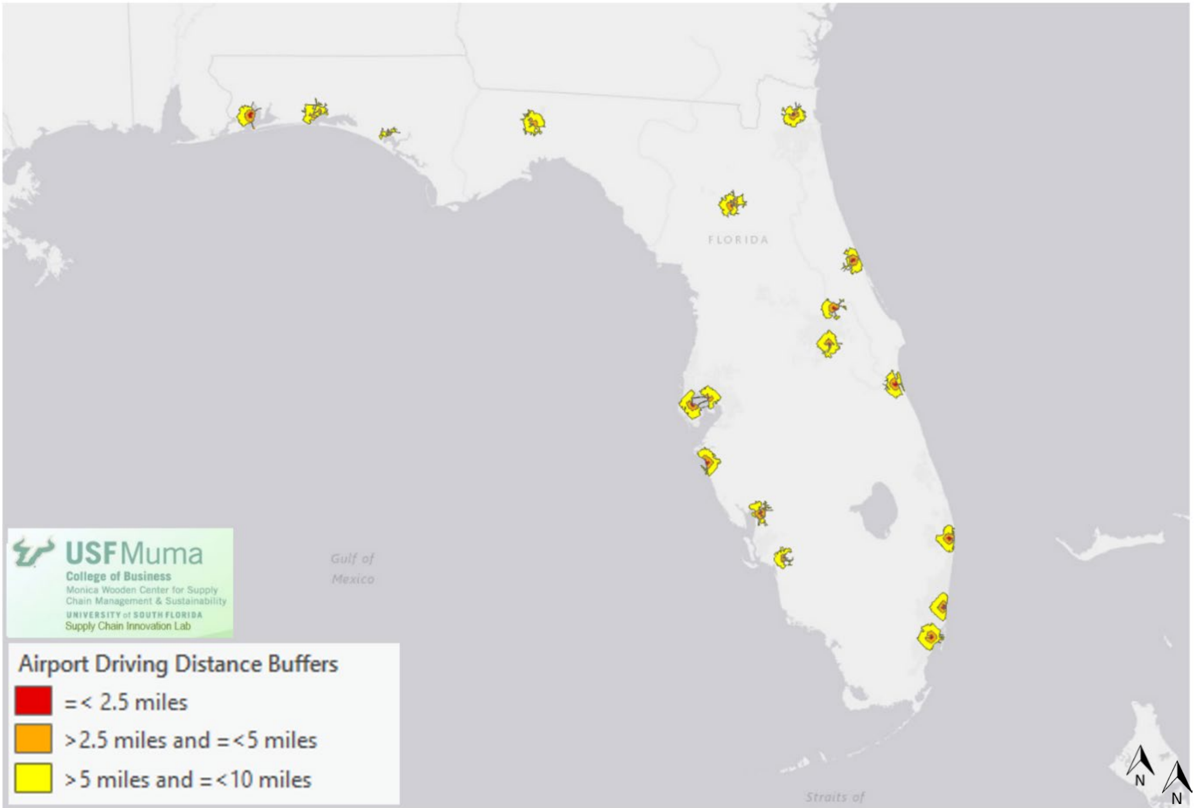

Figure 54. Airports Driving Distance Buffers

4.3.7 Workforce Availability

As presented in the previous section, workforce availability was measure in terms of the number of workers available per county. Workforce availability data is provided by the Florida Department of Economic Opportunity (DEO, 2021), which we transformed into a shape file, as shown in Figure 55.

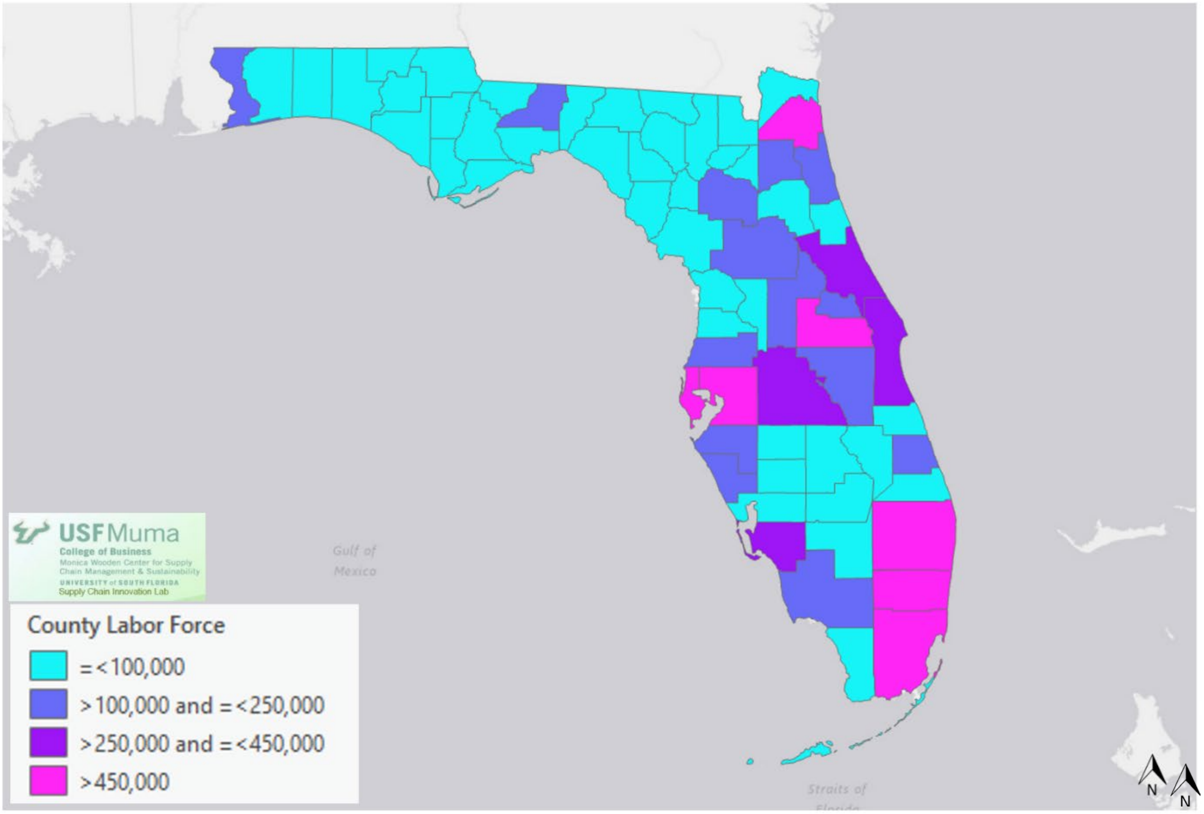

Figure 55. Labor Force by County in Florida

4.3.8 Proximity to a Large Market and Production/Manufacturing Centers

In this project, large markets were measured in terms of the county population. Figure 56 shows in green color counties above 250,000 people, which we considered as a large market. Counties with a population below 250,000 are shown in red and are considered small(er) markets.

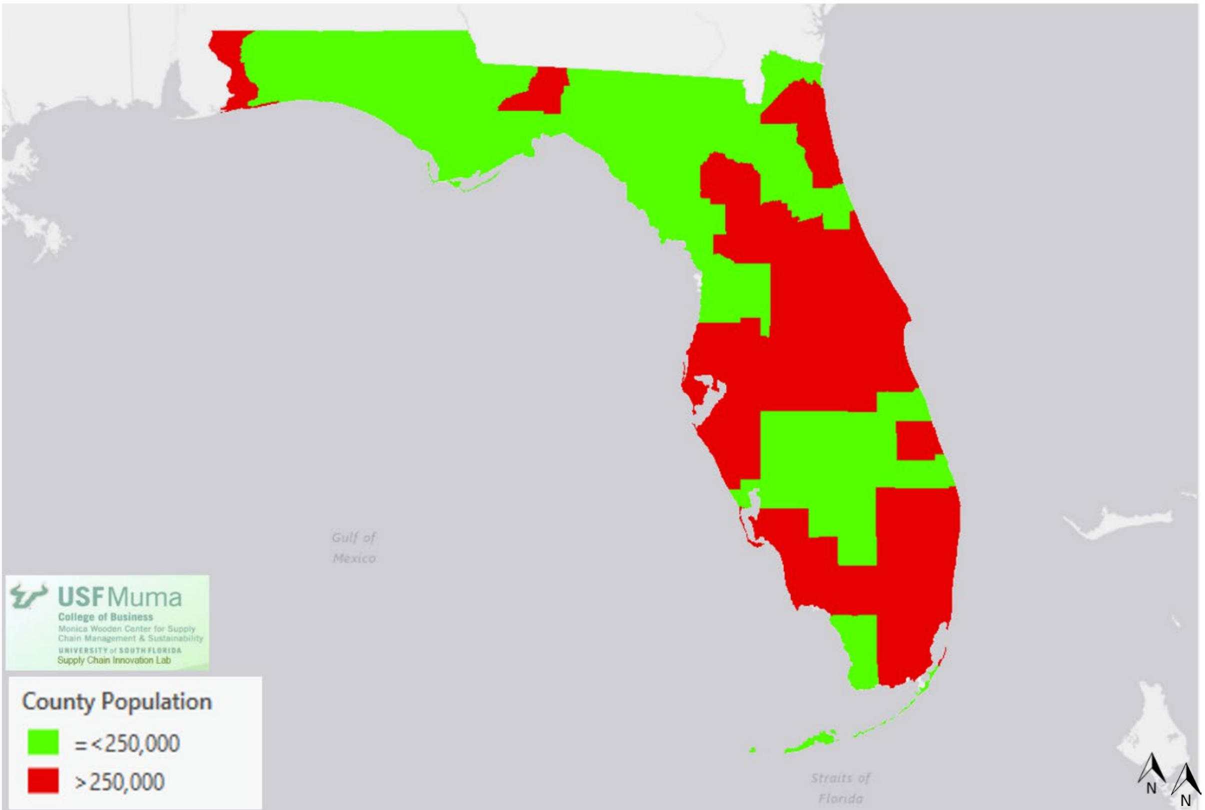

Figure 56. County Populations in Florida

4.3.9 Land Cost

The land cost shape file is the most detailed data set present in this work and consequently the biggest in terms of file size and complexity. We used the GeoPlan Statewide Parcel Data in Florida – 2019 maintained with data from the Florida Department of Revenue and respective County Property Appraiser's Offices (FDR, 2020).

This shape file consists of more than 10 million parcels throughout the whole State of Florida. Each parcel presents 69 different fields, including the land value, building value, most recent sales information, and size. In this work, we chose to use the just value as the measure of price. According to the shape file documentation, the just values account for land value, building value, and special features. In addition, it considers factors such as location, size, improvements, and condition. An example of how detailed this shape file is can be found in Figure 57.

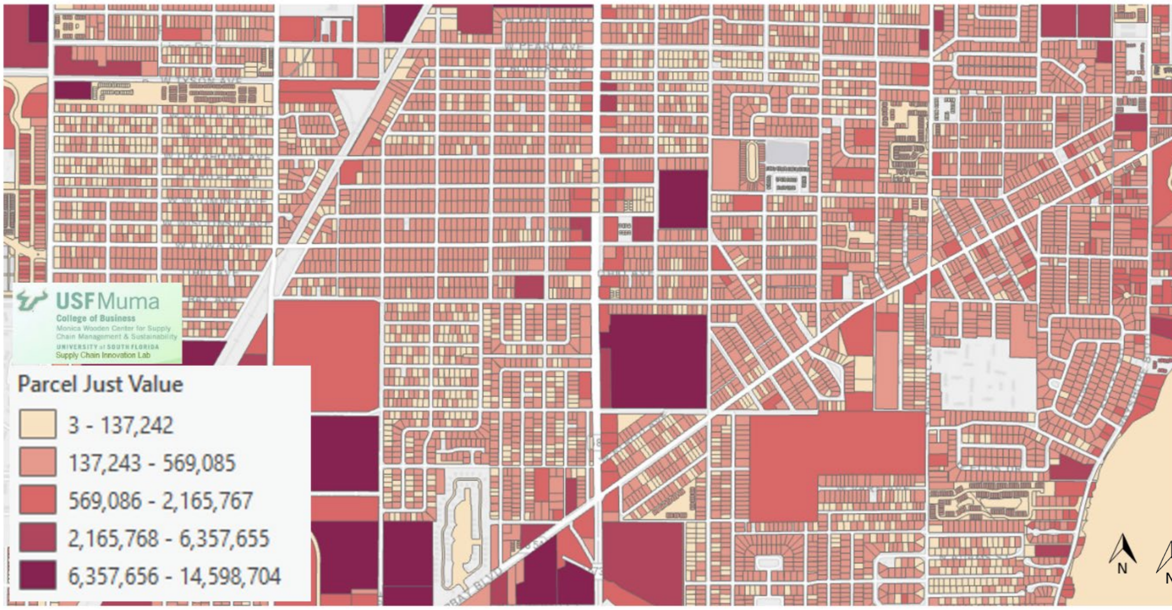

Figure 57. Just Land Value by Parcel

Although statewide parcel data is an extremely rich data set, we had to aggregate the cost information at a less granular level to proceed with our analysis. We used a GIS tool called fishnet to create squares with 1-mile height and 1-mile width, as shown in Figure 58.

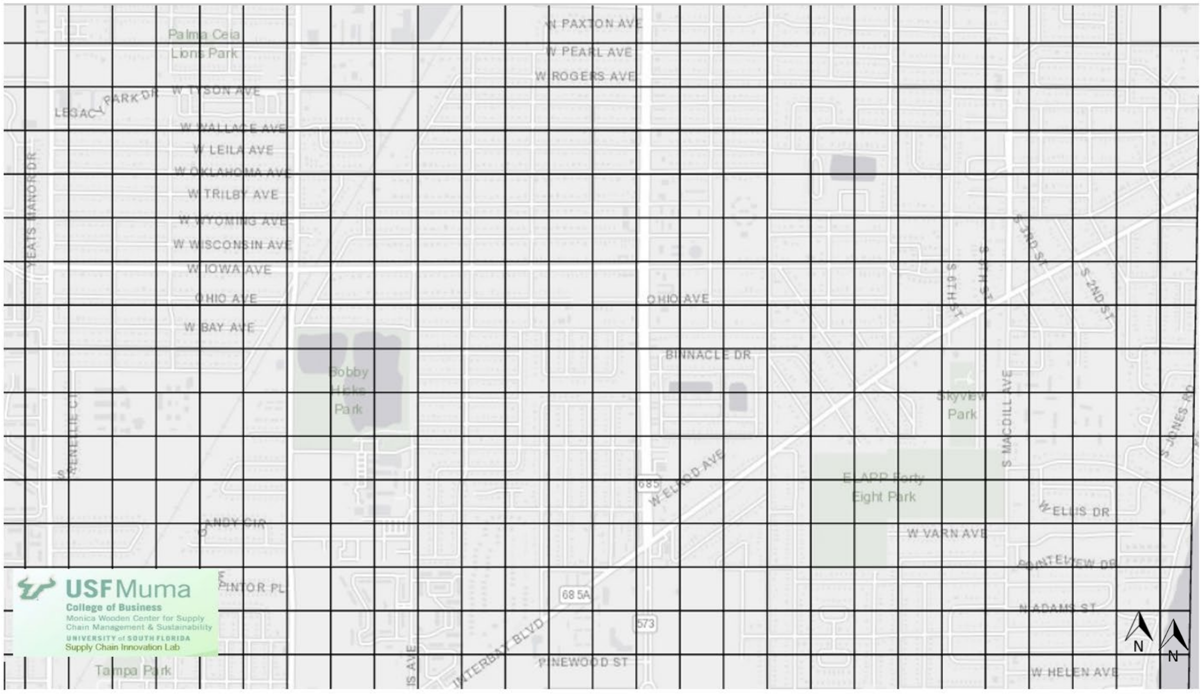

Figure 58. Fishnet Example

After creating a fishnet that covered the whole State, we performed spatial joins to aggregate the value of parcels within each square mile area. To increase our precision level, we also aggregated the size of each parcel to later divide the cost by the exact size of the parcels contained in each square. This is useful because, although every square has an area of one square mile, the area of the parcels contained in it can vary, as we have areas that have no price, such as streets and public places.

Performing this type of analysis with such big data can be challenging as ArcGIS has some limitations regarding the dataset's size. After performing spatial joins to more than 20 subsets and merging them into a single shape file, the resulting map is shown in Figure 59.

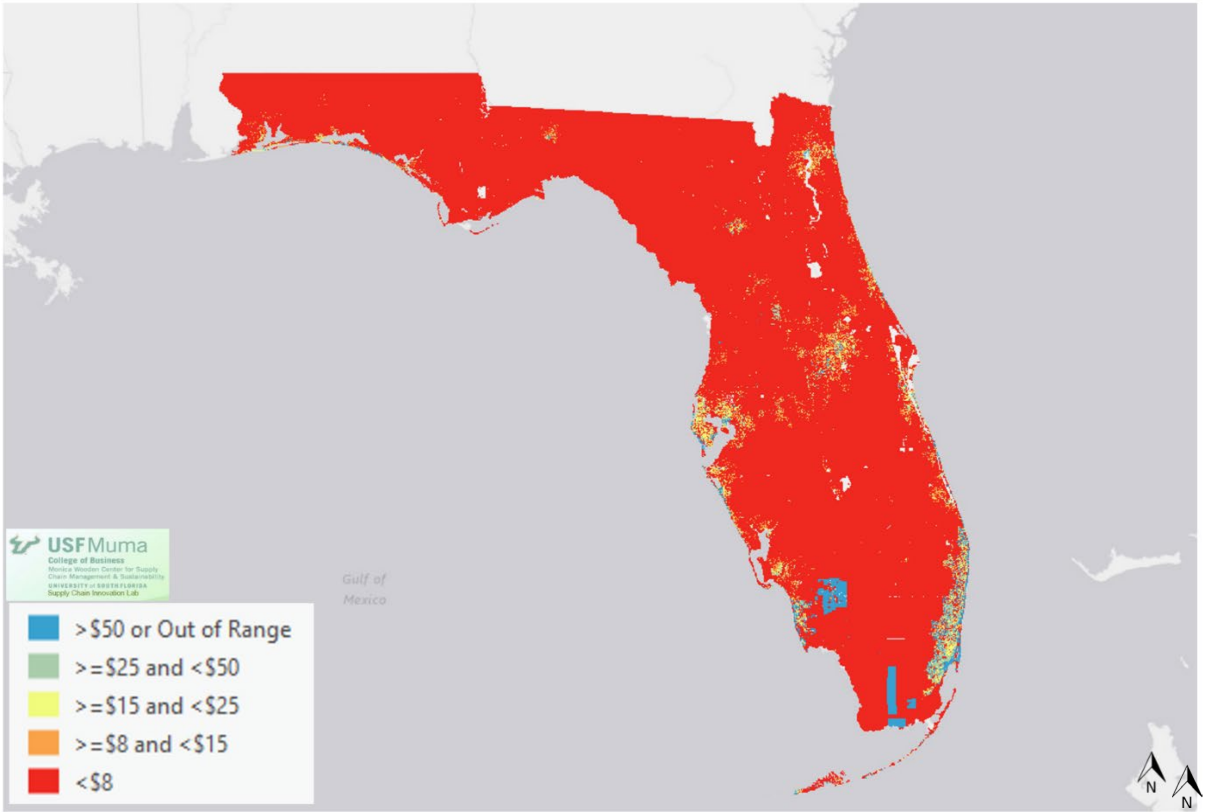

Figure 59. Just Land Value per Square Foot

4.3.10 Low Traffic Congestion Level

The AADT information used in this project is derived from the Annual Average Daily Traffic TDA shape file that FDOT manages (FDOT, 2021i). This indicator is calculated as the total volume of traffic on a particular road divided by 365. Therefore, the higher the AADT more congested is the road, and the distinction between congestion levels was made by grouping the roads into seven different groups, as shown in Figure 60.

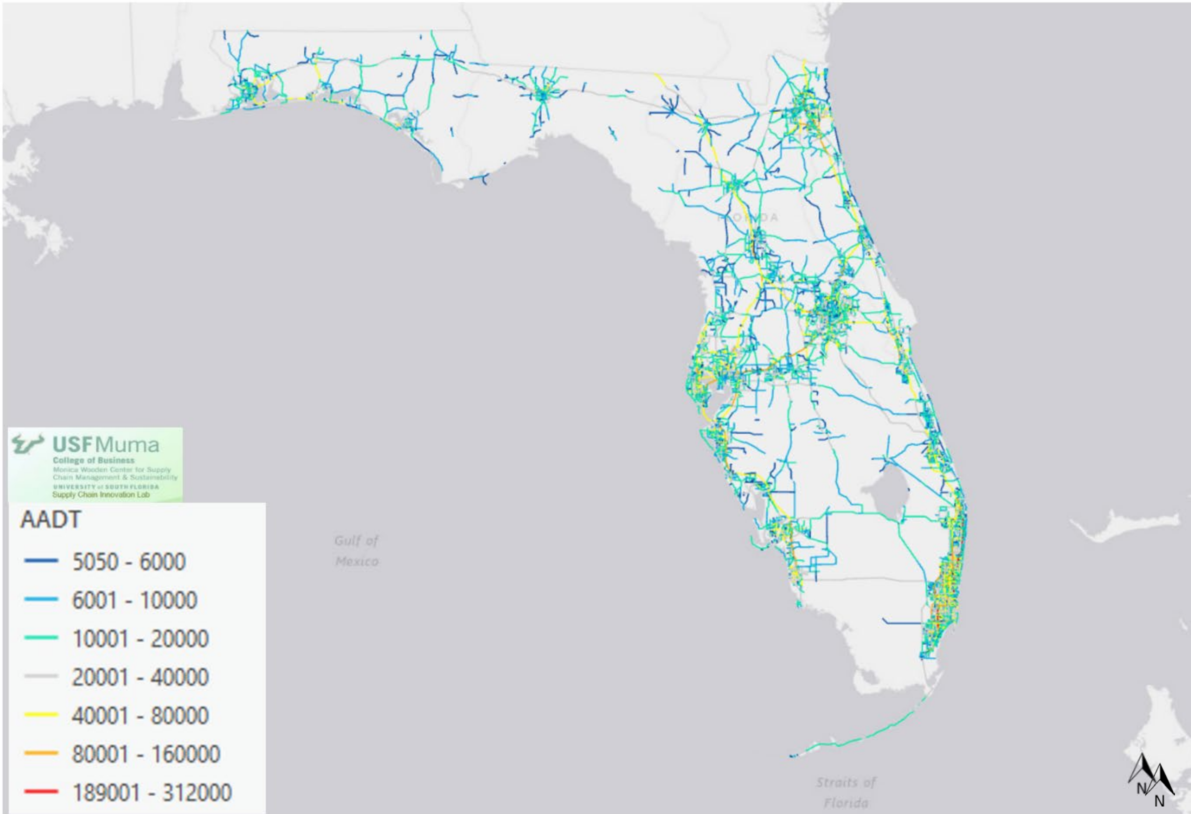

Figure 60. AADT Levels in Florida

Later, each class of roads was transformed into a separate shape file in which we performed a buffer analysis using a linear distance of 2.5 miles. The resulting layers were then rasterized and reclassified, so each layer's values correspond to their respective weights (see Table 33). Finally, all seven layers were combined using cell statistics using the minimum value as the aggregation function. This means that, in places in which there are overlapping buffers, we considered the one with the lowest weight, or in other words, the one with the highest congestion level. The final congestion level layer is shown in Figure 61.

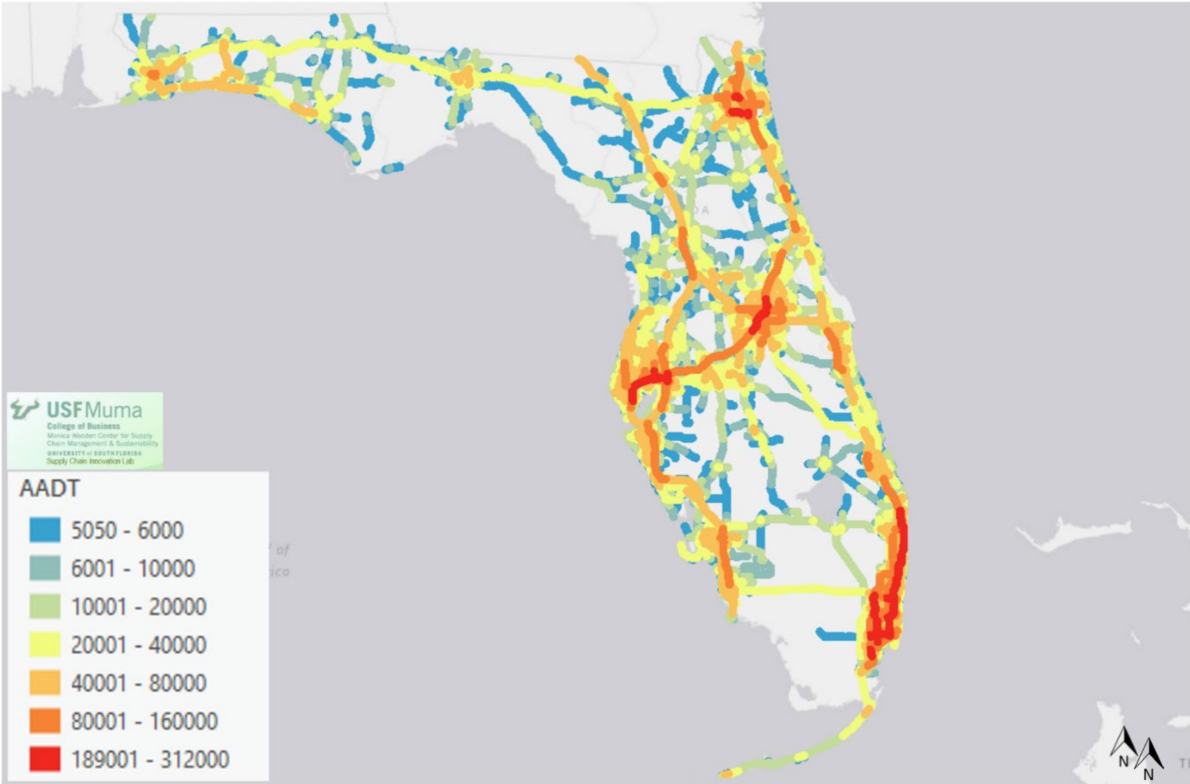

Figure 61. Traffic Congestion Level Buffers

5. Geographical LAC Heat Map Development

This section presents the final heat map, together with the GIS processes required to calculate the weights for each location in the map.

5.1 Heat Map Rasterization

The calculation of the final heat map involved processing all the layers mentioned above with the tools that were appropriate to each case (e.g., service areas, linear buffering, spatial join, etc.). After all those transformations, all layers were then rasterized and had values assigned to each class according to the weights discussed in the previous sections of this work. Finally, all the layers were overlapped, and their values were summed up to create the final heat map. These steps are explained in more detail in this section.

The first step, rasterization, is what allows attributing values to images. In this type of process, the image is treated as a matrix, with columns and rows, in which the cells are called pixels (see Figure 62). This tool is crucial for few reasons: first, we can attribute values to each pixel according to different criteria, such as color, altitude, or polygons, like the ones we created while buffering distances from logistic facilities. Second, because it is possible to overlap several layers and summarize their values, our study is critical, as we need to sum weights from different factors attributed to every spot within the State of Florida.

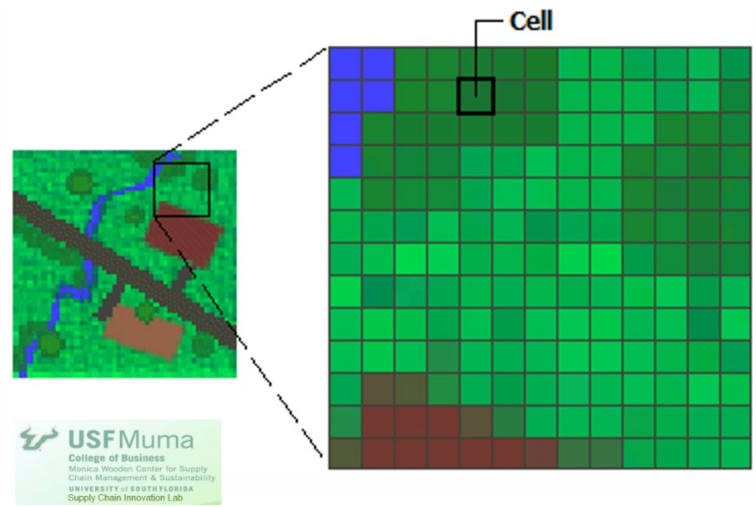

Figure 62. Example of Raster (source: ArcGIS, 2021a)

5.2 Heat Map Reclassification & Cell Statistics

After creating the raster, the second step is to reclassify the values attributed to each cell, as exemplified in Figure 63. This is the stage in which we ensure that the pixels' values are defined according to the weights we proposed to each factor.

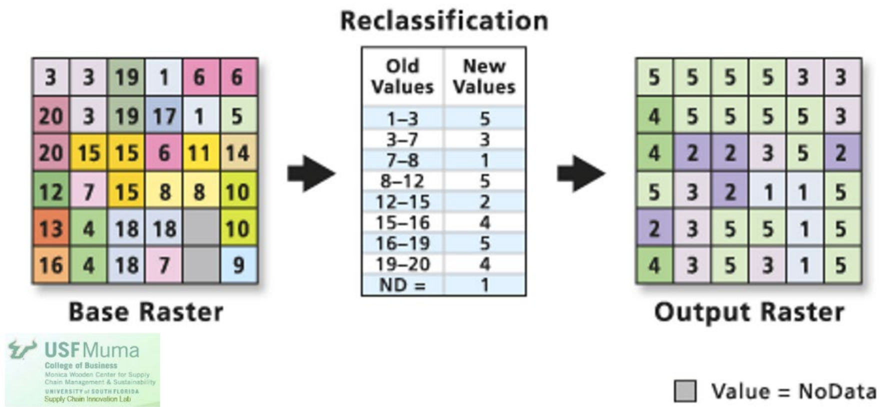

Figure 63. Example of Reclassification (source: ArcGIS, 2021b)

For instance, in this study, we created buffers according to the driving distances from seaports. The thresholds were defined as: (i) below 2.5 miles; (ii) between 2.5 and 5 miles; (iii) between 5 and 10 miles; and (iv) more than 10 miles (see Table 21). When creating the raster file from these buffers, the weights originally attributed to each cell are defined by the thresholds used in the buffer analysis. For instance, every cell within the 2.5 buffer polygon will be equal to 2.5. However, according to the weights we defined, these cells should be equal to 12. The result of this stage is exemplified in Figure 64.

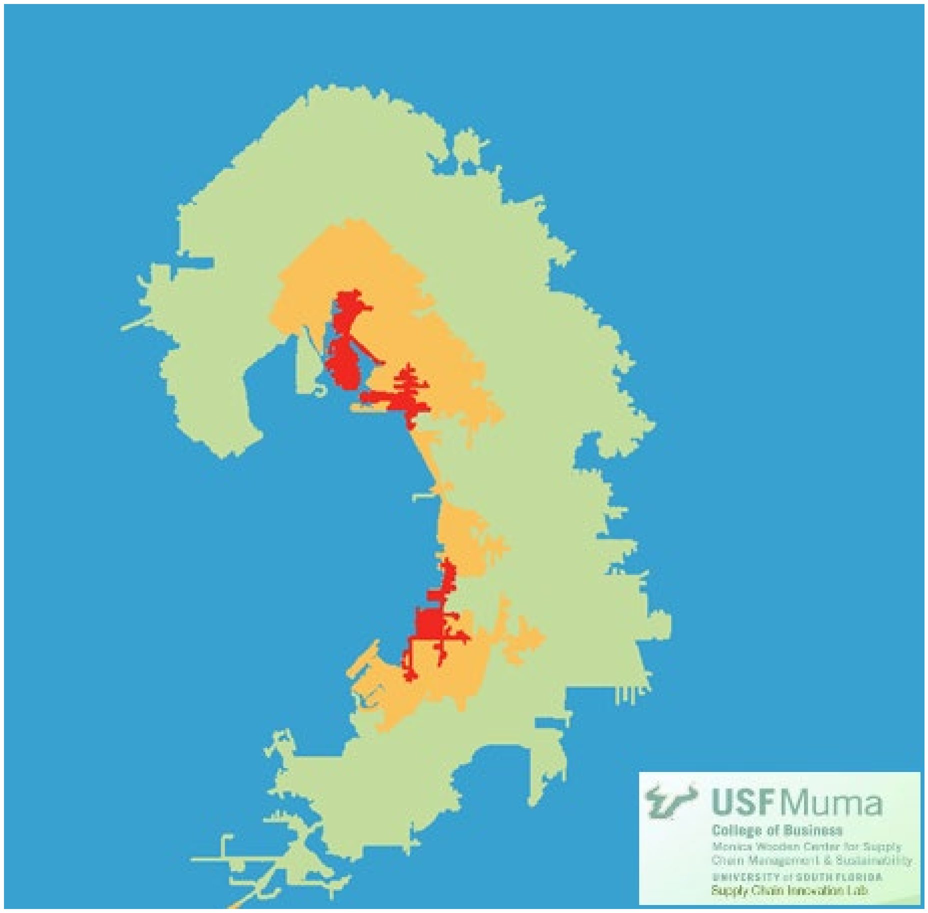

Figure 64. Example of Proximity to Seaport Layer Reclassification

In the sequence of reclassifying the values of each raster, we proceed with the summarization of several layers to create our final heat map. In this geoprocessing tool, the layers (and their weights) are overlapped, and the values of each cell (pixel) are aggregated. We used the sum of the values as the summarization method.

Finally, after rasterizing and reclassifying the pixel's values, we normalized the final scores, so they do not exceed 100 points and determined the classes of LAC development potential (and their respective colors) according to the thresholds shown in Figure 65.

Color	Upper value	Label
	≤ 13.0	Low
	≤ 26.0	Minimal
	≤ 51.0	Moderate
	≤ 72.0	High
	≤ 100.0	Very high

Figure 65. Final LAC Development Potential Threshold

The final scores were calculated for more than 1 billion pixels (1,082,671,686), and the mean normalized score was 46.75 with a 15.82 standard deviation. The resulting draft heat map is presented in Figure 66.

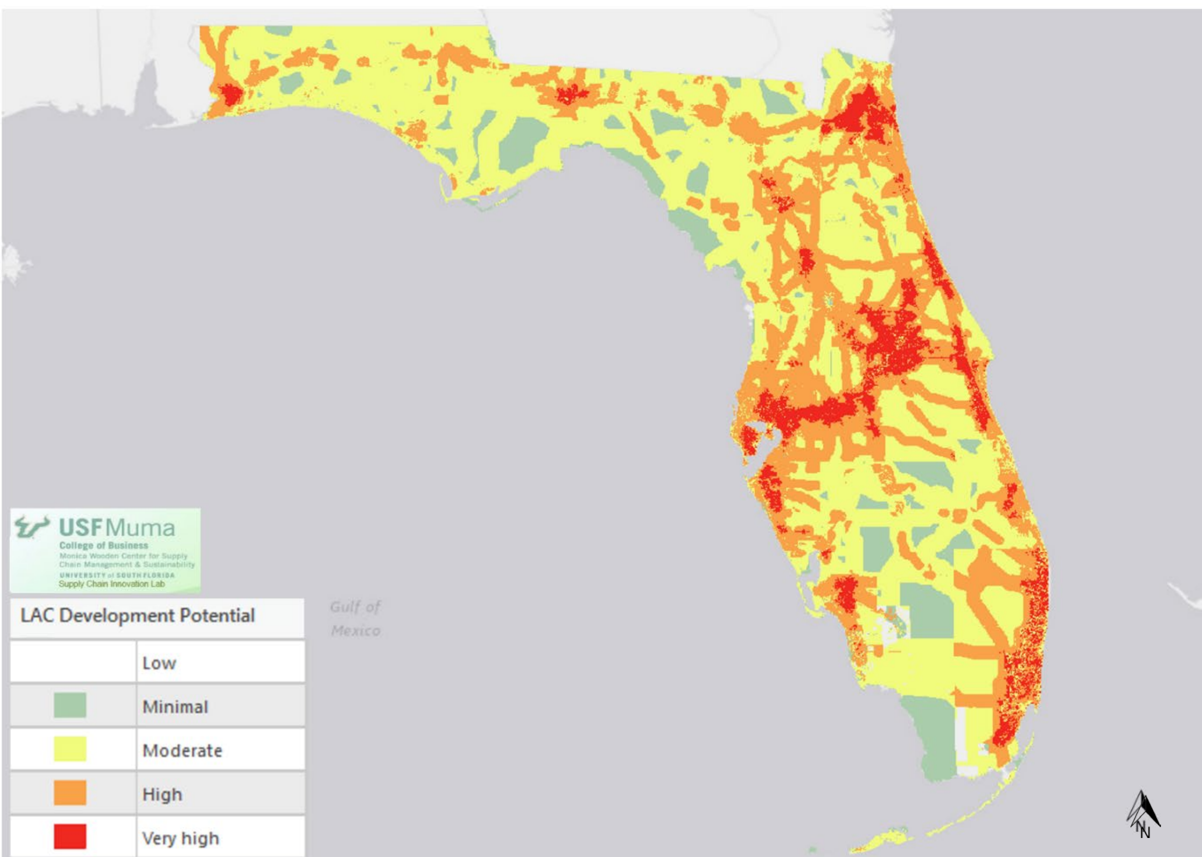

Figure 66. Final Draft Heat Map of LAC Development Potential

5.3 Heat Map Validation

To further evaluate our final heat map, we pursued data that can depict the locations currently of interest of companies when it comes to developing LACs in Florida. For instance, Figure 67 shows how Industrial facilities are distributed across the State, according to the CoStar real estate data.

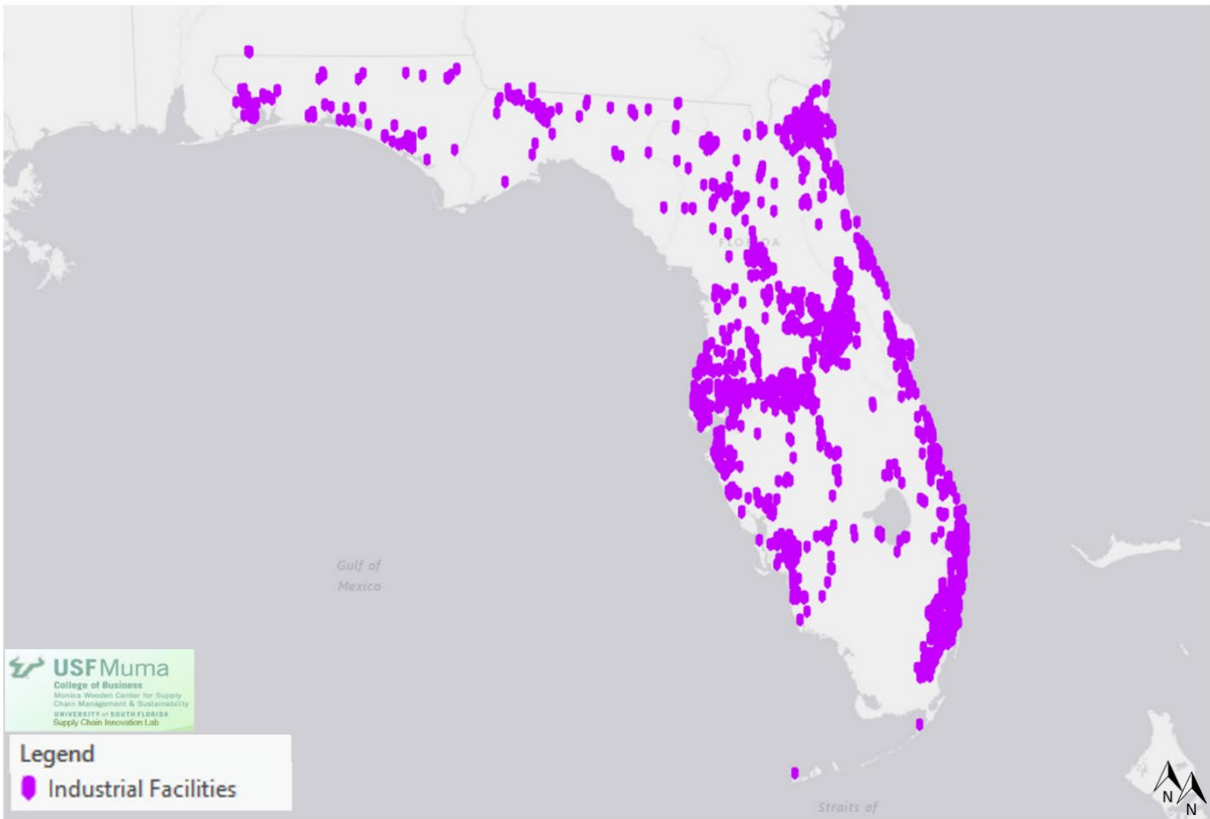

Figure 67. Industrial Facilities in Florida

As the LAC development potential depends on factors that are not highly dynamic by nature (infrastructure, population, etc.) it is expected that, if the criteria were defined correctly, most Industrial facilities are already placed in the locations with the highest potential. Thus, this study can help identify locations with outstanding potential underexplored by companies and attract new businesses to these places. Figure 68 serves to validate the criteria used in this study, as most Industrial facilities are located in the red (highest potential) areas and to point to locations that can be better explored.

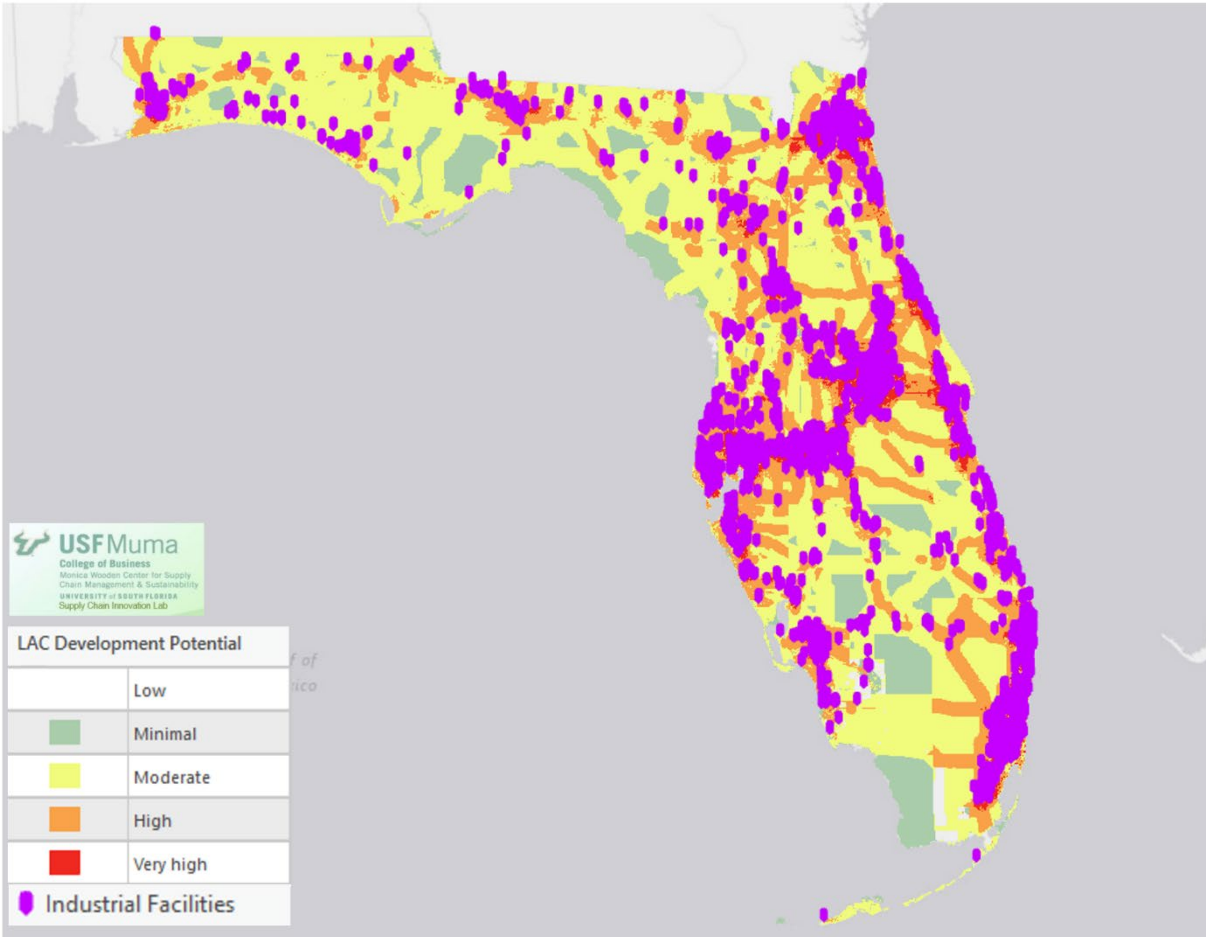

Figure 68. Industrial Facilities and LAC Development Potential

It can be observed from Figure 69 that the Industrial facilities in Florida fall on the major heat areas for LAC developed as developed by this study.

Similarly, we also assessed the validity of the heat map with the current level of freight activity in different areas of the State. In Figure 69, the darker areas represent locations with the highest logistic activity levels, and Figure 70 presents this same information overlapped with the LAC development potential. Again, it is possible to notice that most freight activity occurs in areas with higher LAC development potential, but we can also identify locations in which this activity can be further explored.

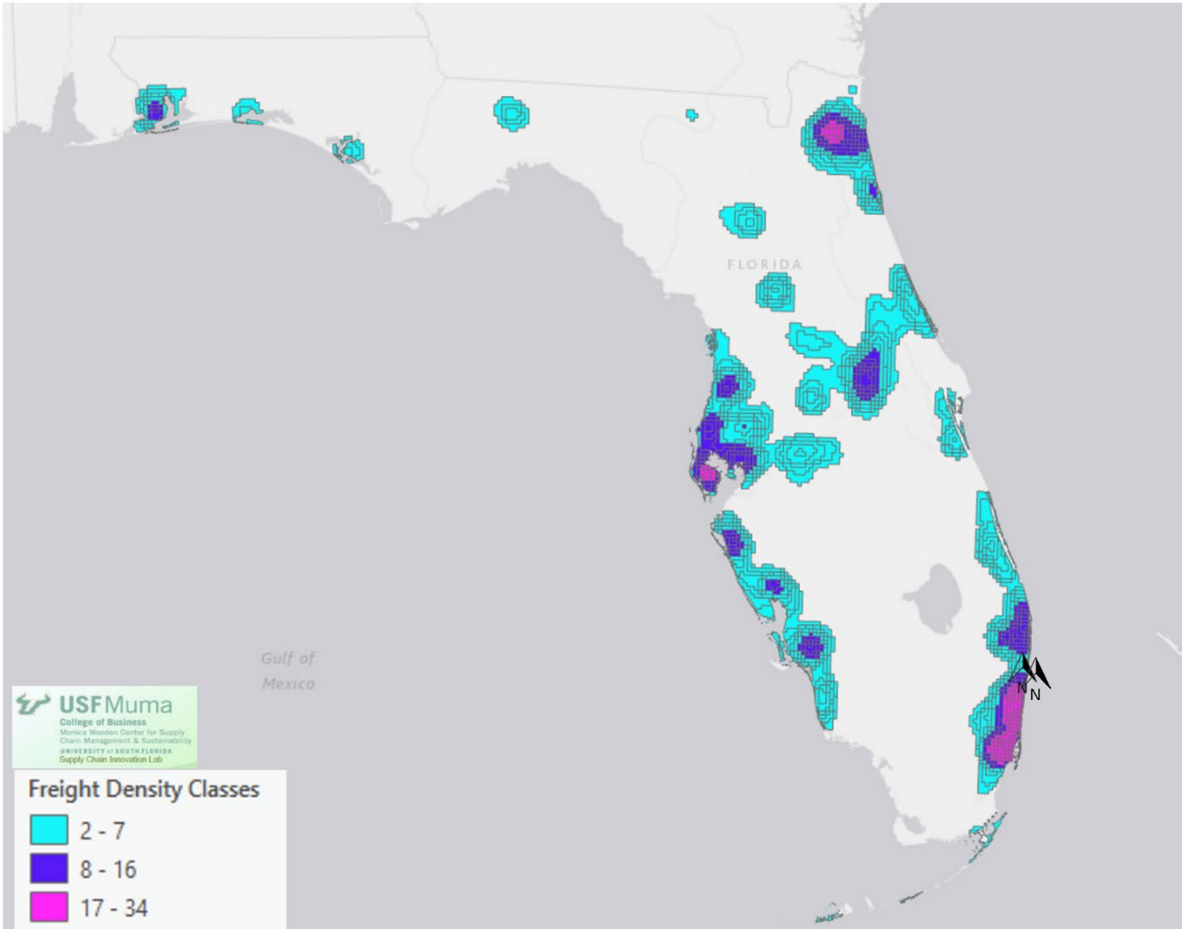

Figure 69. Areas with High Freight Activity in Florida

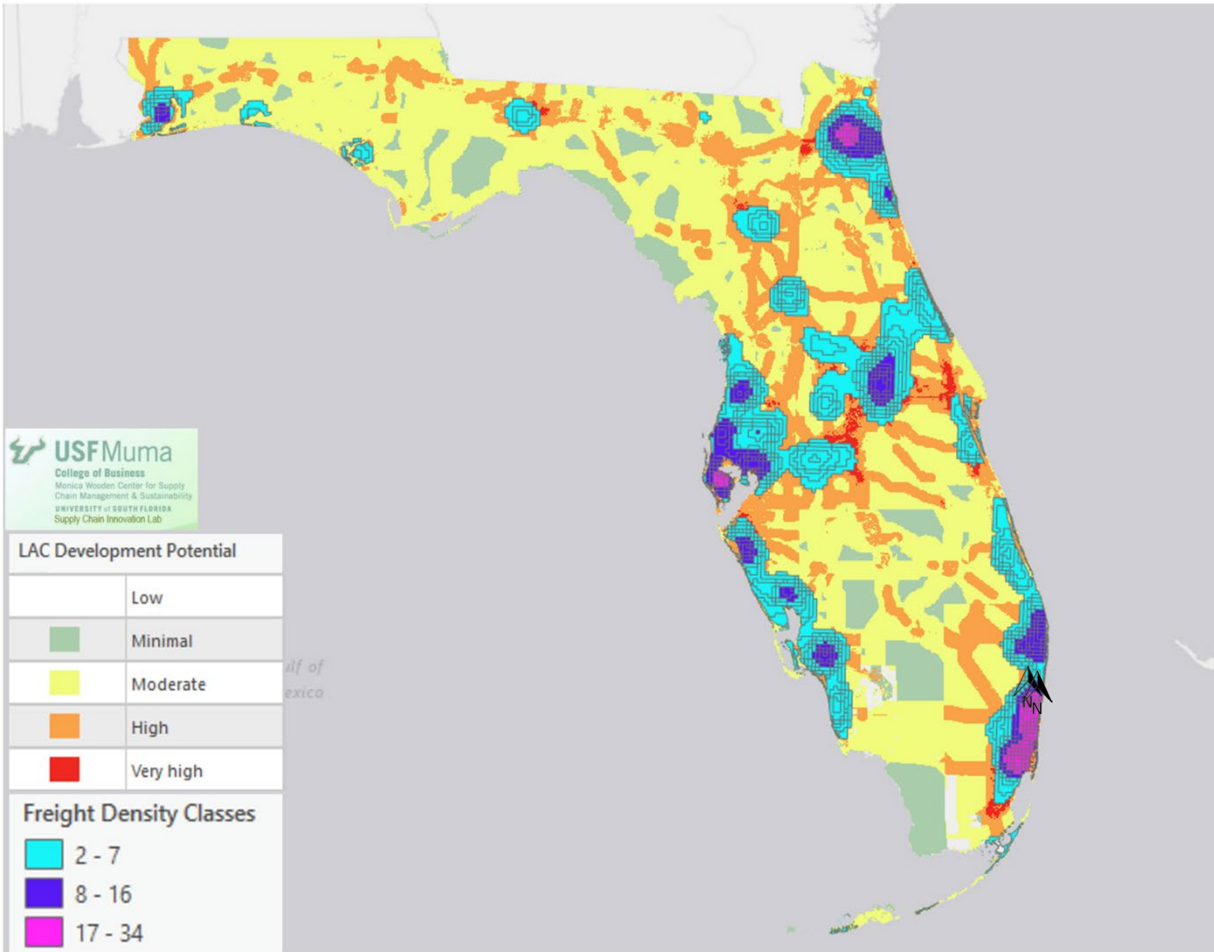

Figure 70. Freight Intensive and LAC Development Potential

Similar to the previous validation, using the freight intensive areas in Florida and the LAC development potential heat developed by this study, it can be observed that there is significant match, validating our study's findings.

We investigated the importance of LAC development factors & surveyed experts from six countries and several states in the US to assess the relative importance of such factors and interviewed four experienced professionals from diverse backgrounds to validate our findings and explore other factors that did not appear in the literature review.

In the sequence, we assigned weights and suggested ways to measure each of the important factors. We also gathered the necessary data to source our analysis and performed GIS analysis to create a heat map that shows the potential of development of LAC throughout the whole State of Florida.

Once the heat map was developed, using existing LAC data sources, we also validated where these existing facilities are located within the State versus where our study's findings (per the heat map) were. It was found that there is significant match on where existing facilities are located and where high levels of LAC development potential was observed on the heat map developed by this study, pointing in the direction that the findings of this study are valid.

5.4 Land Use and Logistics Activity Center Development Survey

The complete survey form and details are available in Appendix C**.**

5.5 Removing Undevelopable Lands

All undevelopable lands which cannot be developed, such as Environmental lands, Wetlands, Military lands, Florida Protected Lands etc. were taken out from the initial heat map. For Wetlands, this extensive GIS Analysis to remove lands was done using the Florida National Hydrography Dataset (NHD) - Waterbodies (24k) Shape file available on the ArcGIS portal. The data was sourced by the Florida Department of Environmental Protection. Coming to protected lands, military lands and environmental lands, shapefiles from Florida Geographic Data Library (FGDL) and U.S. Forest Service on the ArcGIS Portal were used.

To determine and find the appropriate Land Use of the parcels for each county, we sourced Statewide Land Use Land Cover data shapefiles from the ArcGIS portal which contains 45 different land types in Florida from the Florida Department of Environmental Protection to find the optimal Industrial/ Vacant type parcel. Land parcels designated as Vacant and Industrial were used to finalize the hotspot land parcels in each county with Very High, High or Moderate LAC potential (in that order).

5.6 Hotspot Search Prioritization

The priority of sourcing, finding and finalizing a land parcel as a final spot in each county was done in the below order, 1 being the highest and 6 being the lowest priority. Priority level 1,2 and 3 was given to land parcels designated as Industrial with the LAC Potential as Very High, High and Moderate respectively. Priority level 4,5 and 6 was given to land parcels designated as Vacant with the LAC Potential as Very High, High and Moderate respectively.

5.6.1 Hotspot Search Prioritization for Suitable LAC Development Land Use

Note – Land Parcels of level 4,5,6 was selected in certain counties only when 1,2 and 3 were not available as the parcel size selected has to meet a minimum threshold of it being at least 10 acres, or in some cases, a minimum of 5 acres in area size.

Priority 1 -> LAC= Very High + Land Use= Industrial

Priority 2 -> LAC= High + Land Use= Industrial

Priority 3 -> LAC= Moderate + Land Use= Industrial

Priority 4 -> LAC= Very High + Land Use= Vacant

Priority 5 -> LAC= High + Land Use= Vacant

Priority 6 -> LAC= Moderate + Land Use= Vacant

5.6.2 Hotspot Search Prioritization for Conflicting LAC Development Land Use

The prioritization of sourcing, finding, and finalizing a land parcel as a final spot in each county for conflicting LAC Development was done in the below order, 1 being the highest and 3 being the lowest priority. Priority level 1,2 and 3 was given to land parcels designated as -

- Priority 1 ->
  LAC Development Potential = Very High + Land Use= Agricultural/ Commercial / Recreational
- Priority 2 ->
  LAC Development Potential = High + Land Use= Agricultural/ Commercial/Recreational
- Priority 3 ->
  LAC Development Potential = Moderate + Land Use= Agricultural/ Commercial/Recreational

Land Parcels of level 3 were selected only when level 1 and level 2 were not available and similarly, land parcels of level 2 were selected only when level 1 was not available in that county as the parcel size selected must meet a minimum threshold of it being at least 5 acres in land size.

5.7 Color Coding Scheme and Reading the Heat Map

For Color Coding, as per the heat map shown in Figure 66, the same color scheme has been used for the 3 LAC development potential levels. Very High is denoted by Red, High by Orange and Moderate by Yellow, respectively. The color codes assigned to Industrial Land Use is Dark Purple and to Vacant Land Use is Green in order to get different distinctions in merged color output for the 6 possibilities as shown from Figure 71 to Figure 75. The hotspots that are developed for the final maps are an intersection of the LAC Potential (the red layer in the below figure) and the Land Use Type (the dark purple layer). For all the 6 possibilities discussed in the above section, the merging of the two colors produces the intersection area with a distinct different color hue, which is used to measure the area of the land parcel using ArcGIS's accurate built-in area measurement tool.

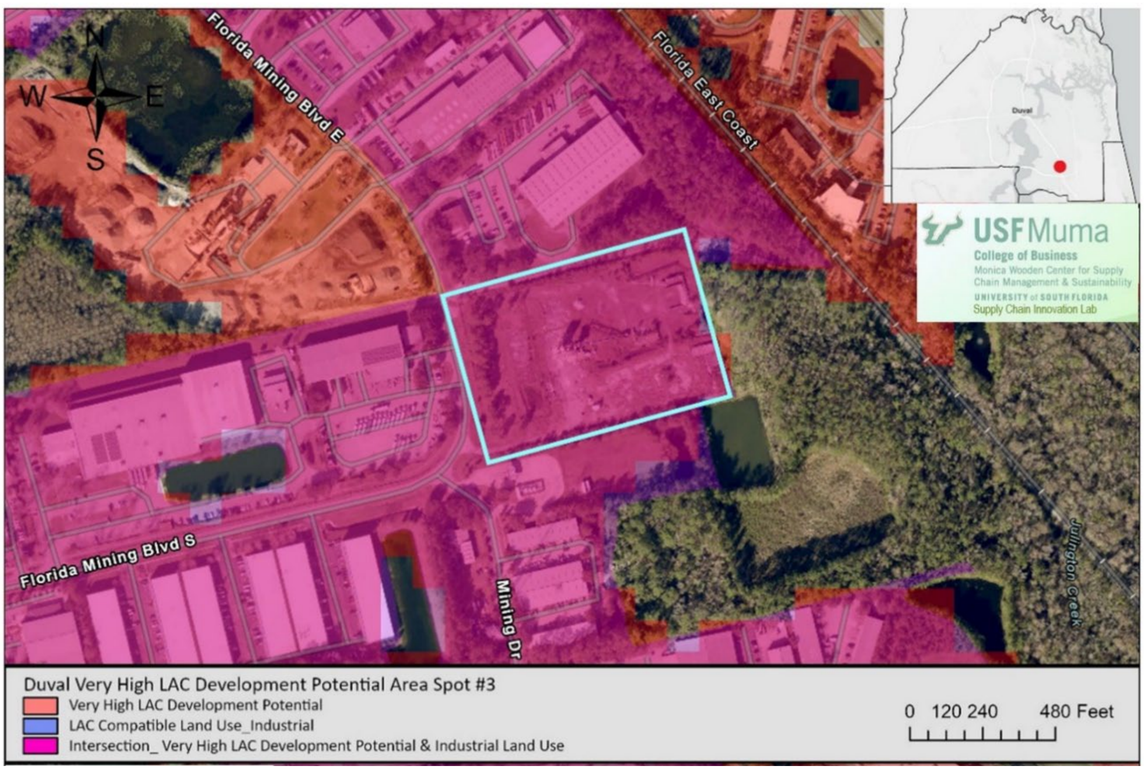

Figure 71. Industrial Land Use Color – Dark Purple

Figure 72. Vacant Land Use Color – Green

Similarly, for the three types of land use which we are considering for conflicting land use with successful LAC Development Potential, "i.e.," for Agricultural, Recreational, and Commercial the colors used are light violet, cyan (light blue) and navy blue respectively as shown in Figure 73, Figure 74, and, Figure 75.

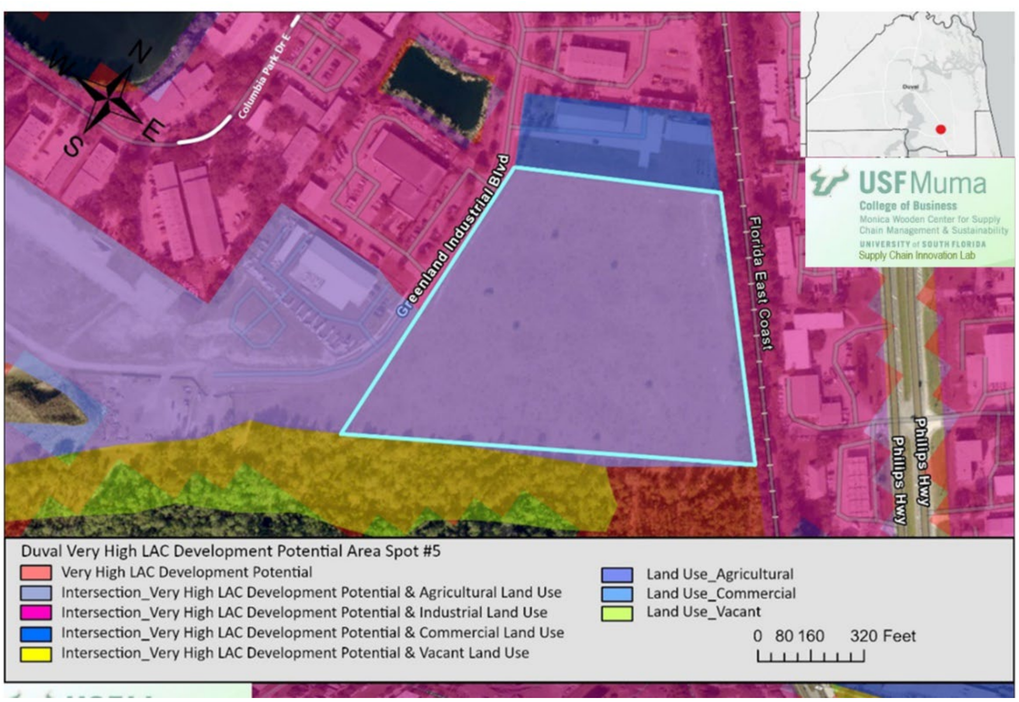

Figure 73. Agricultural Land Use Color – Light Purple

Figure 74. Recreational Land Use Color – Cyan

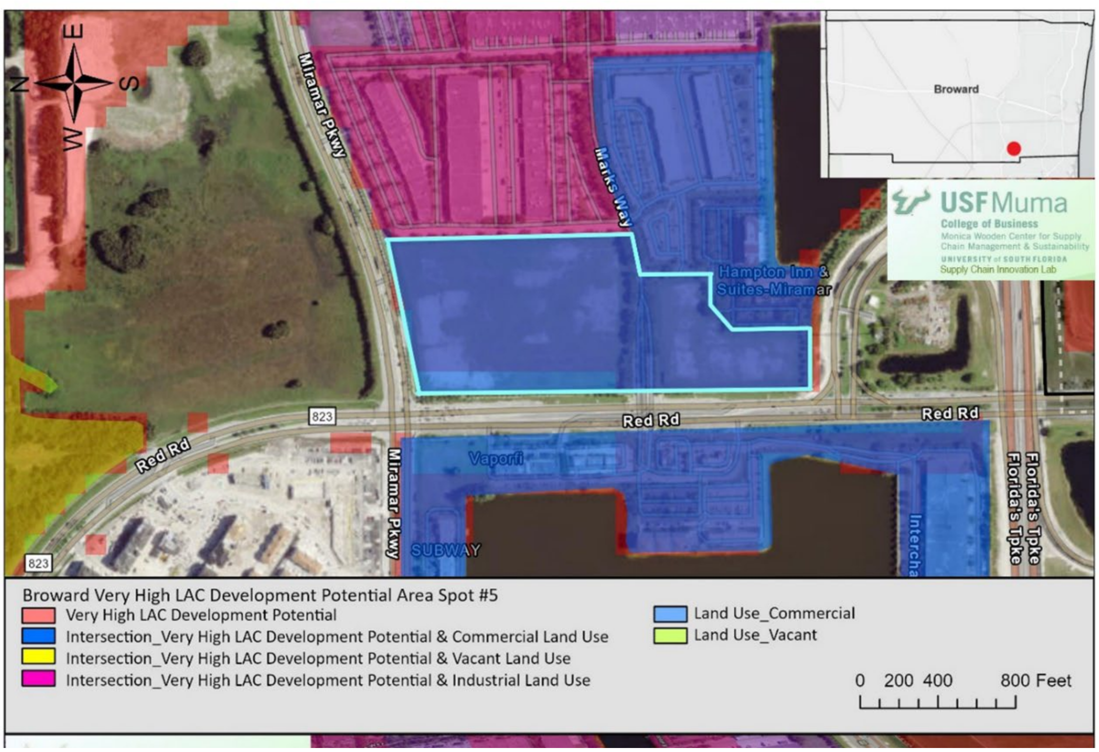

Figure 75. Commercial Land Use Color – Dark Blue

These colors were chosen to ensure that the 15 possible combinations of colors as shown below “i.e.,” Industrial, Vacant, Agricultural, Commercial, Recreational when mixed with Very High (Red), High (Orange) or Moderate LAC (Yellow) Development Potential in the maps have clear color distinction for the reader.

- Industrial land use + Very High LAC Development Potential
- Industrial land use + High LAC Development Potential
- Industrial land use + Moderate LAC Development Potential
- Vacant land use + Very High LAC Development Potential
- Vacant land use + High LAC Development Potential
- Vacant land use + Moderate LAC Development Potential
- Agricultural land use + Very High LAC Development Potential
- Agricultural land use + High LAC Development Potential
- Agricultural land use + Moderate LAC Development Potential
- Commercial land use + Very High LAC Development Potential
- Commercial land use + High LAC Development Potential
- Commercial land use + Moderate LAC Development Potential
- Recreational land use + Very High LAC Development Potential
- Recreational land use + High LAC Development Potential
- Recreational land use + Moderate LAC Development Potential

Figure 76 depicts an example of a finished map, detailing all of its components. Each of these components in the figure, identified by regions numbered ranging from 1 through 11 in the figure, is described below the image.

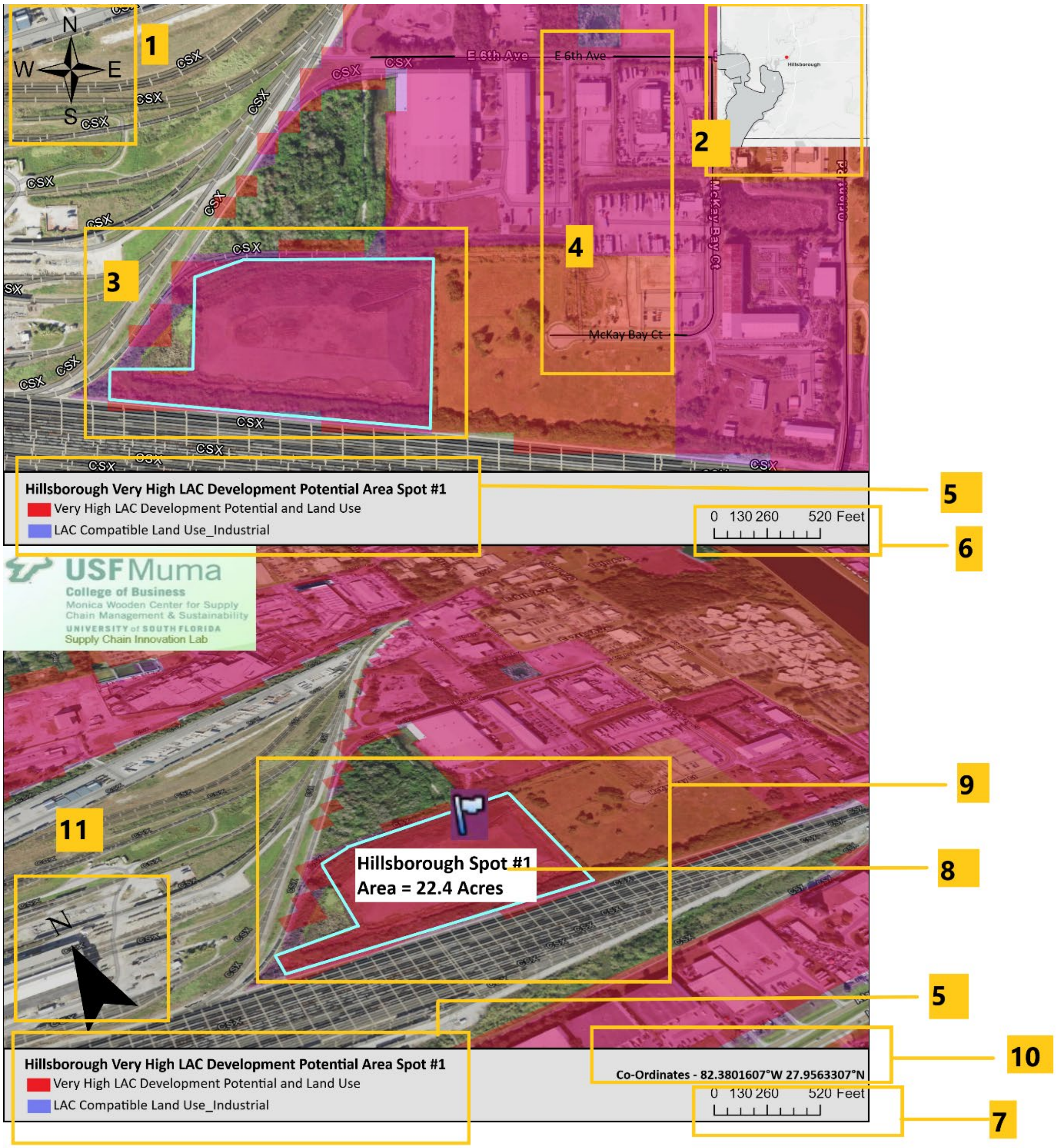

Figure 76. Sample Heat Map for Each County

Compass- 2D View

1 - Standard compass showing the north, south, east, and west directions relative to the current map of the 2D frame in the top half of the image.

County Overlay Map

2- This is a location map showing the approximate location of the land area under consideration on a larger spatial scale in order to depict its location at the county level. The red highlighted dot inside the overall location map is the designated spot as shown in the analysis site map (e.g., in Figure 5, it shows where the site is located in Hillsborough County)

Land Parcel Boundary – 2D

3- The blue-bordered zone signifies the selected land portion which is Industrial or Vacant with Very High/High/Moderate LAC Potential that has satisfied the heat criteria and has potential for LAC development.

Road Names

4- Each map has at least 2 Road names visible in the 2D or 3D frame, and the availability of roadway data helped label existing roads that are close to the analysis area. This should provide guidance in finding the location easily through any external mapping engine. The roadways are labeled with possible abbreviations wherever applicable to prevent overcrowding of the map using standard Esri's Hybrid Imagery layers. In Figure 5, the analysis area can easily be found by finding the spot near the intersection of McKay Bay Ct and E 6th Avenue in the Hillsborough County.

ArcGIS Map Legend

5- The ArcGIS Map Legend shows the current LAC development potential classification and all nearby LAC-compatible lands with their respective color codes.

NOTE – The additional colors in the legend show the respective LAC Potential and the intersection color combination of the different land uses in the maps for suitable and conflicting land use type (maps are in Appendix A & Appendix B).

Scales

6 and 7 – The scales of the two maps i.e., of the 2D frame in the first half and the 3D frame in the second half are shown by 6 and 7 respectively. This scale will differ in each map based on the land parcel size and the top angle view orientation.

Area in Acres

8- This depicts the approximate area the analysis boundary covers in acres. Since most LACs (e.g., warehouses, logistics hubs, etc.) require larger land parcels for development, it was decided to classify each analysis boundary in acres.

Land Parcel Boundary – 3D

9- Region 9 shows the blue-bordered zone signifying the selected land portion which is Industrial or Vacant with Very High/High/Moderate LAC Potential that has satisfied the heat criteria and has potential for LAC development in a 3D view while compared to region 3 which is for the 2D view.

Co-Ordinates

10- The Co-Ordinates of the final land parcel are shown in region 10.

Compass- 3D View

11- Standard compass showing the north direction relative to the current map of the 3D frame in the bottom half of the image.

5.8 Final Heat Map

The research team conducted interviews with experts to validate survey results and get feedback on the relative importance of various factors in LAC development. Both the survey and interview results served as inputs to create the final factor weighting scheme. These buffers and weights as shown in the Table 28 to Table 33 were used to map the final score of the land parcel based on its pixel value in ArcGIS and the development of the heat map.

All undevelopable lands such as Environmental lands, Wetlands, Military lands, Florida Protected Lands etc., have been cropped out from this final heat map. For Wetlands, this extensive GIS Analysis to remove lands was done using the Florida National Hydrography Dataset (NHD) - Waterbodies (24k) Shape file available on the ArcGIS portal. The data was sourced by the Florida Department of Environmental Protection. Coming to protected lands, military lands and environmental lands, shapefiles from Florida Geographic Data Library (FGDL) and U.S. Forest Service on the ArcGIS Portal were used.

The final heat map after the removal of all the undevelopable lands in shown below in Figure 77.

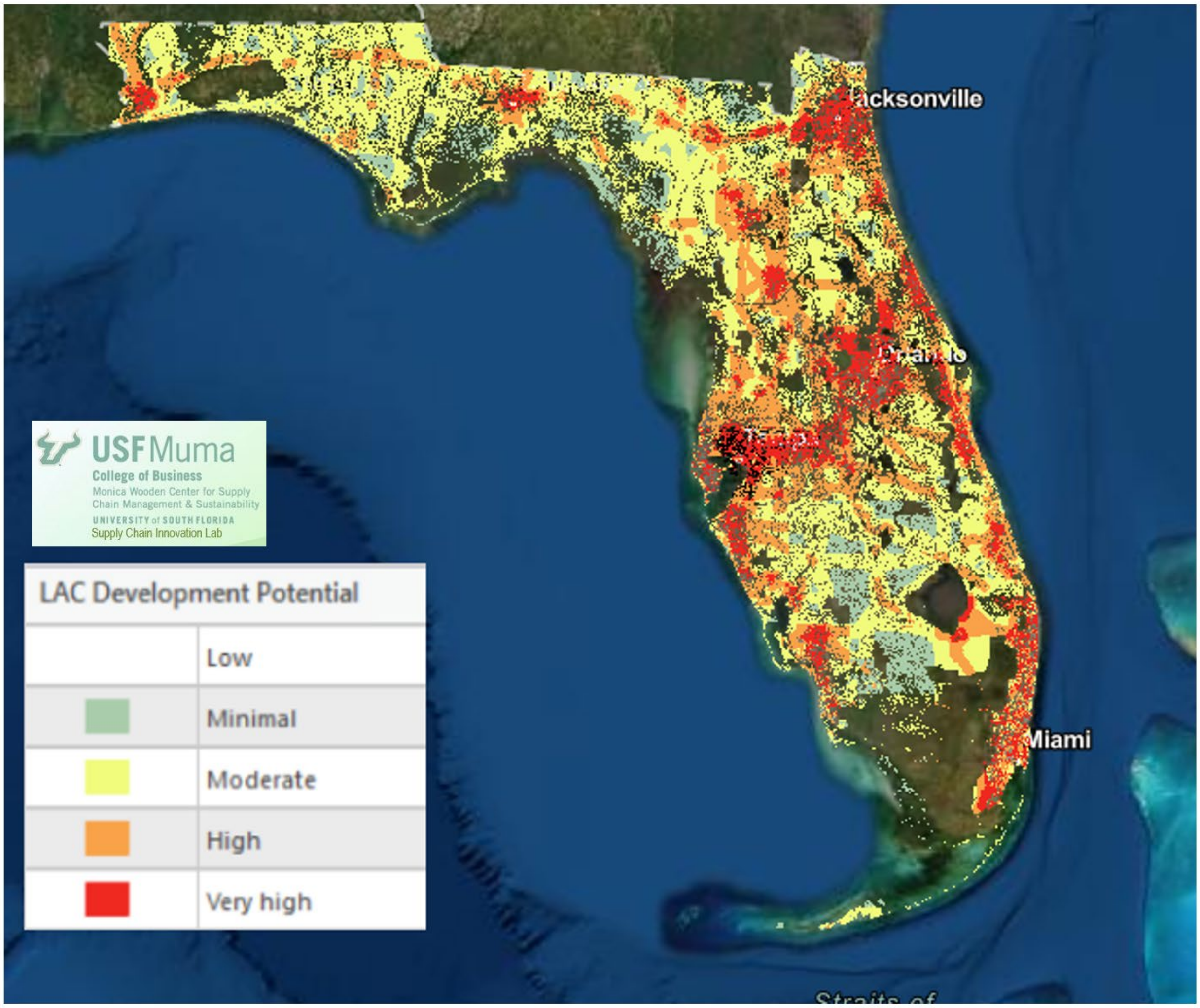

Figure 77. Final Heat Map Showing LAC Development Potential

6. Validation of Areas with Suitable LAC Development Potential

As described previously, we removed all lands from the heatmap which cannot be developed such as Wetlands, Military Lands, Environmental and Protected Lands etc. building on the initial heat map generated. After the removal of these undevelopable lands, we successfully analyzed and validated the GIS mapping of areas with successful LAC development potential and developed maps of land parcels (1 spot per county) with Very High, High or Moderate LAC development potential for all the 67 counties in Florida with appropriate land use i.e., Industrial (mainly) and Vacant land sites using ArcGIS. The maps have been developed using ArcGIS and we spot-checked a these "very high, high and moderate LAC development potential" areas in urban and rural settings in Florida via Google Earth to validate and determine the surroundings of these areas, existing satellite imagery of the parcel, the driving distances and buffer scores of the land parcel etc., and we confirm that the criteria and the heat map are valid. Next, we will develop GIS maps depicting suitable and conflicting land use areas for successful LAC development in Florida building on the progress.

The validation maps (1 site per each Florida county) are included in Appendix A.

7. Tableau Visualizations

In order to create some data visualizations of the selected land parcels in each county, we used the Tableau software as it provides clear and beautiful GIS visualizations which make it easy for a user to understand the representation, meaning and distinction on a map for the selected land parcels to answer business questions and provide insights.

Below are the visualizations for the respective scores of the land parcel confirmed and finalized in this report for the validation maps i.e., 1 spot per county. The maps represent the Land Type, Land Use Type (combination), the LAC Potential and Area of the parcel in that county followed by the Overall Pixel score of the land parcel in Figure 78, Figure 79, Figure 80 and Figure 81, respectively.

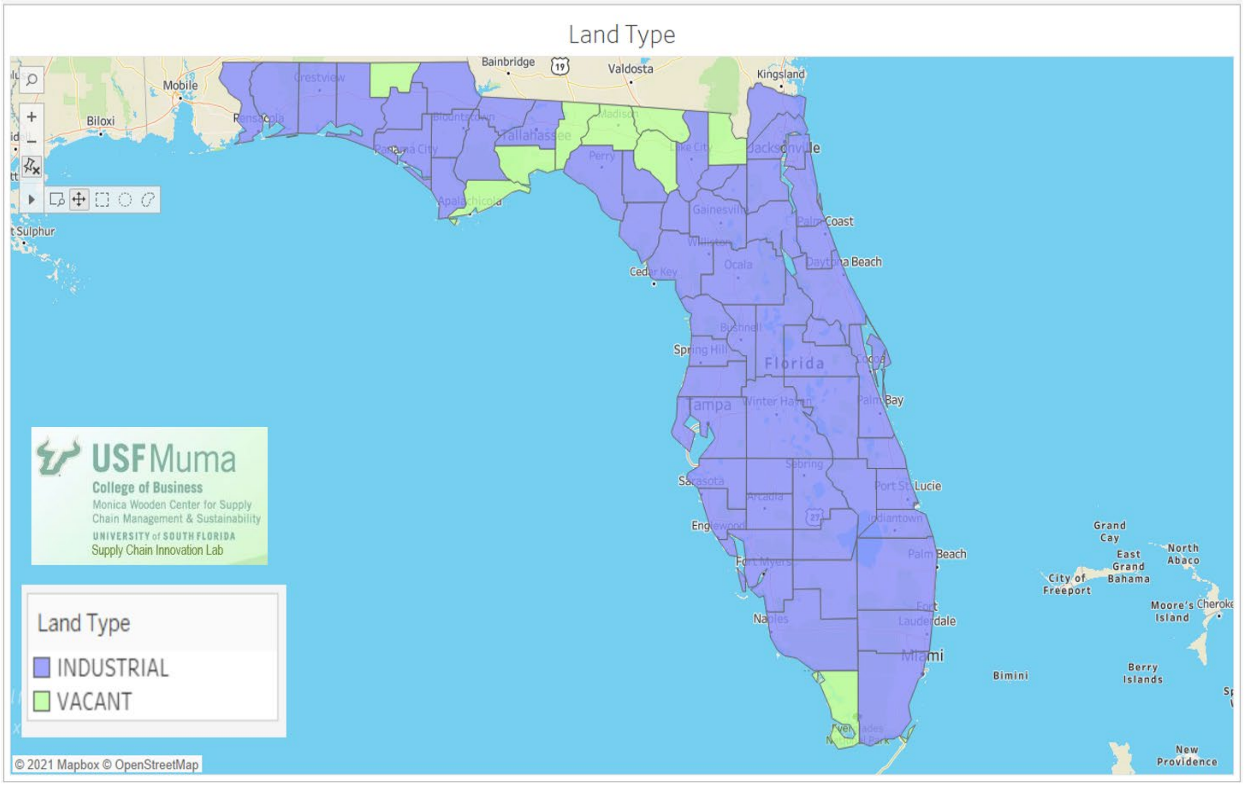

Figure 78. Land Type of the Finalized Land Parcel in Each County

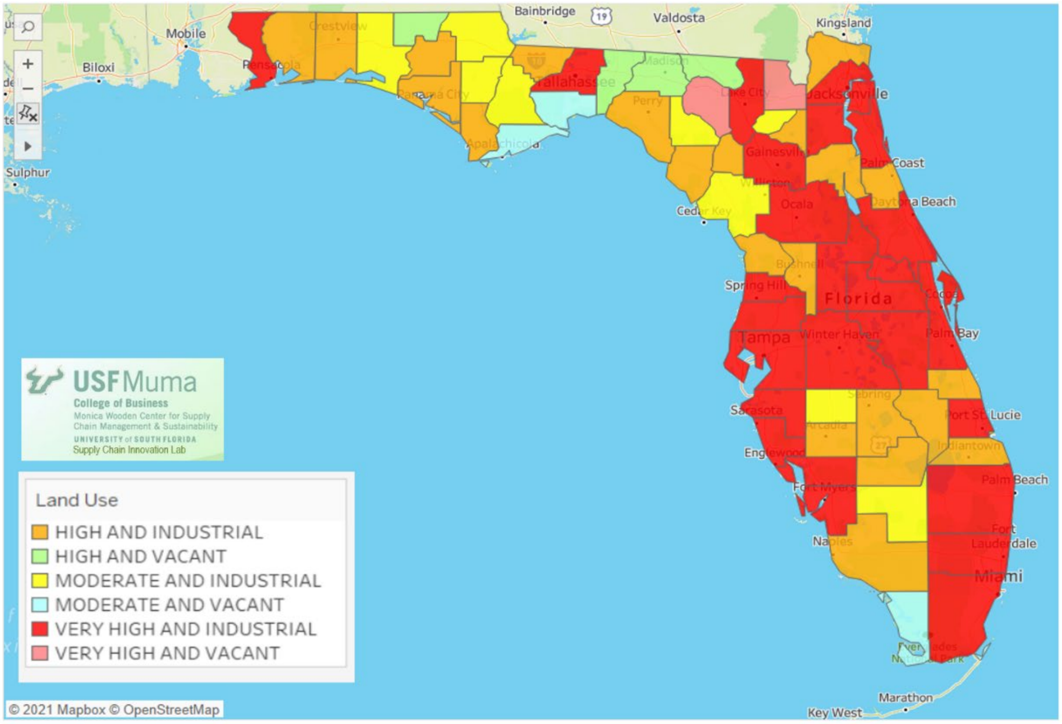

Figure 79. Land Use of the Finalized Land Parcel in Each County

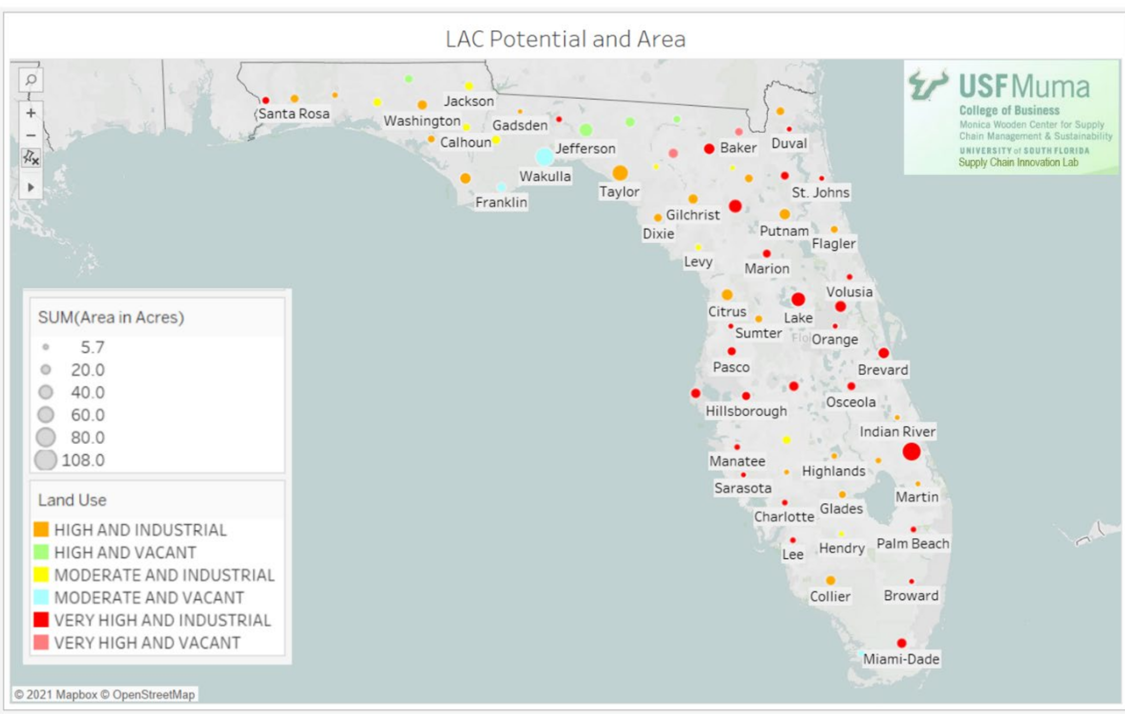

Figure 80. LAC Potential and Area of Final Parcel-Circle Map.

Each land parcel has buffers and scores assigned to it for all the facility types based on which the final scores were calculated for each of the 67 land parcel maps shown in this report. The below figure shows the total score of the particular selected parcel in each county. Each of the 67 land parcels (one per county) have weights and scores which when added give the overall land score of the parcel based on which the LAC Development Potential is determined as shown in Table 34.

Table 34. LAC Development Potential and Overall Land Score

Overall Land Score	LAC Development Potential
100 to 146	Very High
76 to 100	High
41 to 76	Moderate

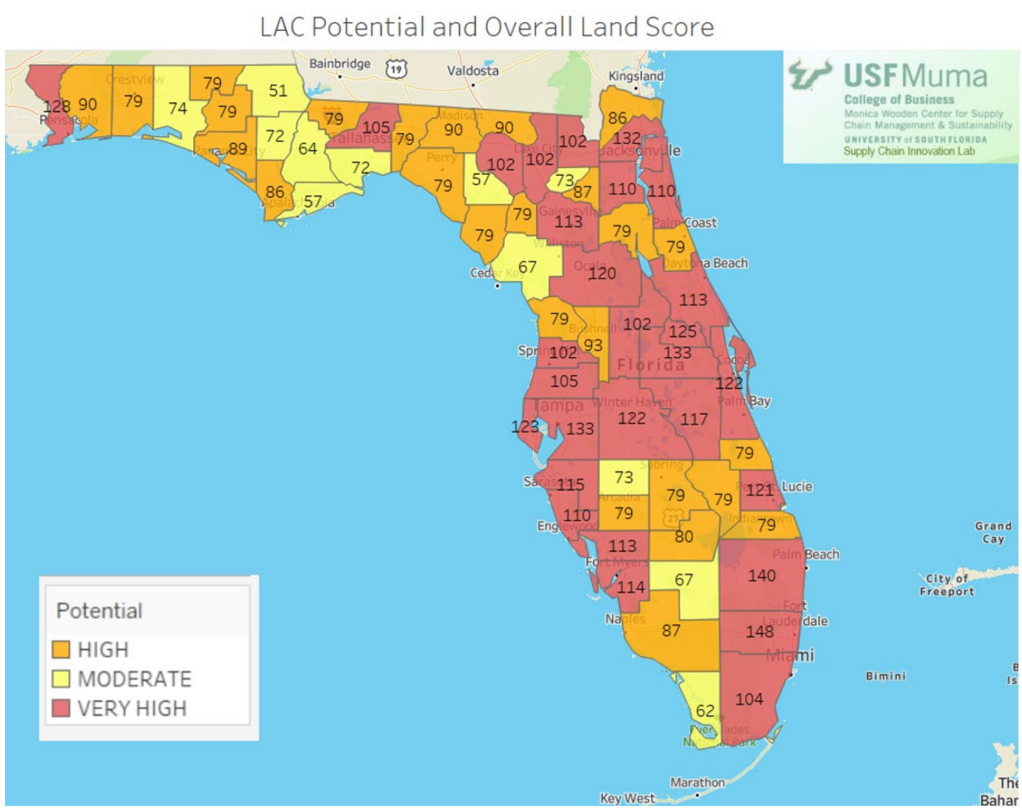

Figure 81. Overall Land Parcel Score from Heat Map with LAC Development Potential

Table 35 below shows the number of counties which had either Very High or High or Moderate LAC Development Potential with appropriate Industrial or Vacant Land Use. Unfortunately, some counties in Florida do not have Industrial or Vacant lands with Very High or High LAC Potential as they scored low on the buffer weights and scores. As a result, this report shows land parcels with Moderate LAC Development Potential for those counties.

Table 35. County Classification by LAC Development Potential and Land Use Type

Development Potential	Land Use Type	Number of Counties
Very High	Industrial	27
High	Industrial	22
Moderate	Industrial	9
Very High	Vacant	2
High	Vacant	4
Moderate	Vacant	3

From the above table, we can clearly observe that the majority of the selected final parcels fall in Very High LAC with Industrial Land Use (40% of parcels) and High LAC with Industrial Land Use (33% of parcels) followed by Moderate LAC with Industrial Land Use (14% of parcels). For Vacant Land Use, we have 3% of parcels with Very High LAC, 6% with High LAC and 4% with Moderate LAC.

Unfortunately, some counties in Florida do not have Very High or High LAC with Industrial land use and hence were developed with the same potential level for Vacant lands or in even lower priority cases, with Moderate potential for vacant lands as they didn't satisfy the high buffer scores and weights.

Figure 82 and Figure 83 show the visualizations developed in Tableau for each of the finalized 335 maps "i.e.," 67 maps from section 6 for the validation spot checks (one per county) and 268 maps from section 7 (4 spots per county- suitable and conflicting LAC) for the 67 counties in Florida ("i.e.," five validation parcel maps per county). The Tableau Visualizations for the different scores of the land parcel finalized as the hotspot was consolidated into an excel sheet to create required visualizations. In sum, a sample overview of the dataset is as shown in the below Figure 84.

The LAC Development potential of the 335 maps is shown below in Figure 82 and the size of the bubble indicates the area of the parcel ("i.e.," larger the bubble size, larger the area of the selected parcel).

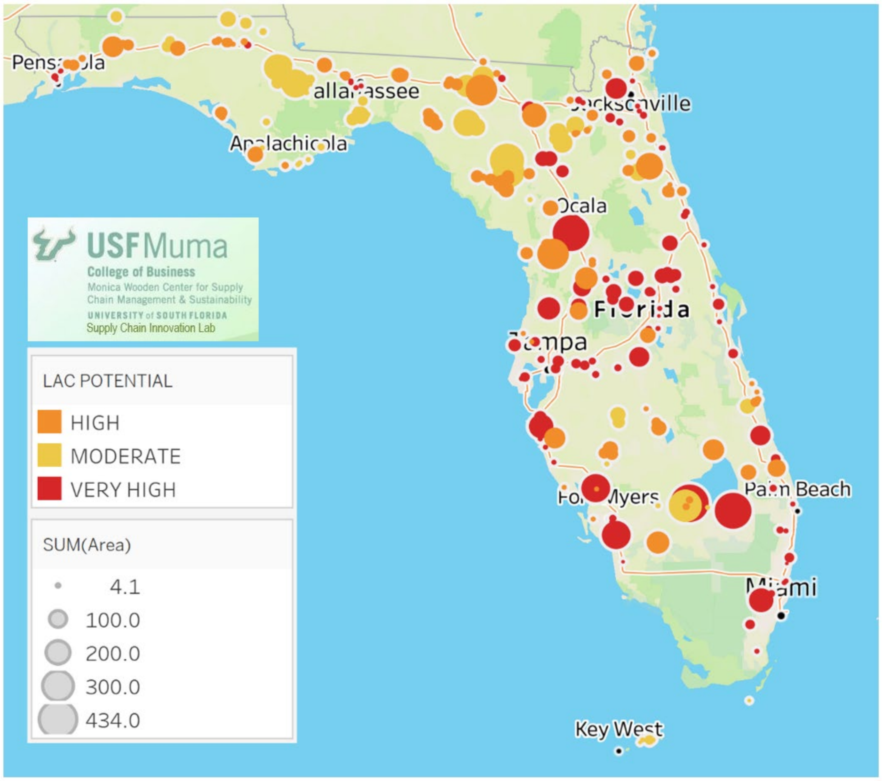

Figure 82. LAC Development Potential and Respective Area of Each Validation Parcel in Each Florida County

The Land Use Type of the 335 maps is shown below in Figure 83. We can see that the major share of parcels is of Industrial Land Use (colored in bright pink) for suitable LAC maps and of Agricultural Land Use (colored in light purple) for conflicting Land Use, which is suggested to be considered for rezoning.

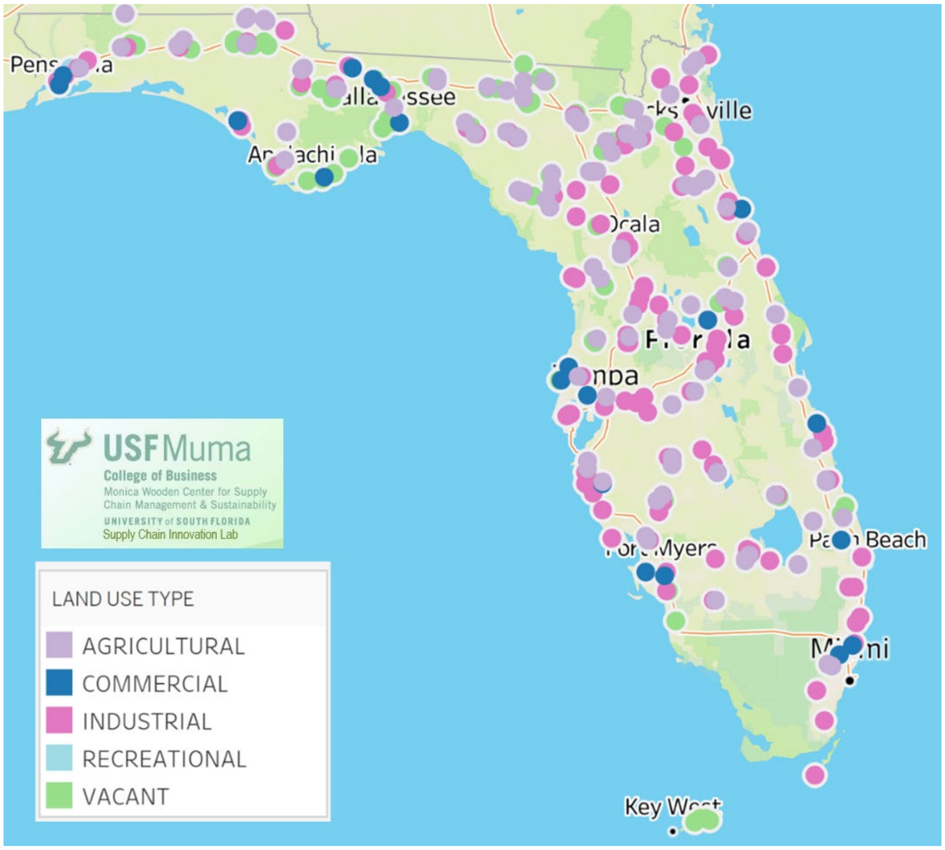

Figure 83. Land Use Type of Each Validation Parcel in Each Florida County

8. GIS Mapping of areas with suitable and conflicting LAC Development Potential

This section of the report shows the four maps for each county "i.e.," two with suitable land use and two with conflicting land use, which is suggested to be considered for rezoning for all the 67 counties in Florida.

Each of Florida's 67 counties were analyzed. Attention was paid to conflicting land use of land parcels with successful LAC Development Potential, which can be rezoned for development according to the criteria developed using the previous FDOT D7 study.

Here, appropriate land use indicates Industrial land use or vacant land use (if Industrial is not available). Similarly, conflicting land use indicates land use of either Agricultural, Commercial, or Recreational type which lies next to or in very close proximity of Industrial areas and can be successfully rezoned for development.

To determine and find the appropriate land use of the parcels for each county, we sourced Statewide Land Use Land Cover data shapefiles from the ArcGIS portal which contains 45 different land types in Florida from the Florida Department of Environmental Protection to find the optimal Industrial/Vacant type parcel as well as for the conflicting land use types of agricultural, commercial and recreational.

Land parcels designated as vacant and Industrial were used to finalize the hotspot land parcels in each county with Very High, High or Moderate LAC potential (in that order) for suitable land use and successful LAC Development.

Similarly, land parcels designated as agricultural or commercial or recreational (lying next to or in close proximity of Industrial areas) were used to finalize the hotspot land parcels in each county with Very High, High or Moderate LAC potential (in that order), which can be rezoned for successful LAC Development.

Some maps might have a slight color difference due to the nature of the underlying satellite imagery "i.e.," the color hue for plain barren land vs. plain grassy land vs. dense greenery will always have a small color difference for the same color coding of the chosen land use "i.e.," Industrial/Vacant/Agricultural/Commercial/ Recreational.

8.1 Final Built Dataset and Simple Statistics

Shown in Figure 84 below, is a snapshot of the dataset that was built manually using the buffer scores of the finalized parcels.

SPOT	County	Location	Area	Freeway Score	US Roads Score	ILC	Direct Rail	Seaport Score	Airport Score	Land Cost	Workforce	Traffic	Overall Pixel Score	POTENTIAL	LAND TYPE
1	Alachua	82.3269710°W 29.6797142°N	55	14	24	9	13	5	8	10	5	0	113	VERY HIGH	INDUSTRIAL
2	Alachua	82.4849978°W 29.7879433°N	15	26	24	9	13	5	3	10	5	-5	120	VERY HIGH	INDUSTRIAL
3	Alachua	82.6388897°W 29.6486379°N	33	3	24	9	13	5	3	10	5	5	94	HIGH	INDUSTRIAL
1	Baker	82.1654051°W 30.2821917°N	21	26	24	9	13	5	3	10	0	0	102	VERY HIGH	VACANT
[illegible]	[illegible]	[illegible]128164°W 30.2668565°N	10	26	24	9	13	5	3	10	0	0	102	VERY HIGH	VACANT
[illegible]	[illegible]	[illegible]394390°W 30.2885162°N	19	14	24	9	13	5	3	10	0	15	90	HIGH	VACANT
[illegible]	[illegible]	[illegible]187608°W 30.1390833°N	17	3	24	9	13	12	3	10	0	0	89	HIGH	INDUSTRIAL

Figure 84. Final Built Dataset

For the 201 suitable maps out of the total 335, we could draw the following inferences based on the buffer scores and their respective driving distances previously shown in Table 28 and Table 29.

- The average buffer score for US roads proximity was 23.9 pointing to the access to US Roads within 2.5 miles from the selected parcel location.
- The average direct rail access score was 11.35 pointing to the access to direct rail within 2.5 to 6.25 miles from the selected parcel.
- On average, the land area of the parcels was found to be around 25.6 Acres.
- The average land cost score was 9.95 pointing to an average land cost less than $8 per square foot.
- The average airport buffer score was 4.6, pointing to the access to cargo airports within 10 miles of the selected parcel.

The suitable and conflicting maps (a total of four sites per each Florida county) are included in Appendix B.

9. Conclusions, Recommendations & Future Research

Florida's massive population growth brings higher emphasis on the freight and logistics aspect in Florida and the challenge of maximizing the economic development potential by attracting more companies to the State. This challenge necessitated this project to determine optimal areas which are most suitable for logistics activity to be located within Florida.

In this study, the research team performed literature review, conducted surveys & interviews with experts to validate survey results, developed crucial factors and final weighing scheme for a new set of LAC Development criteria. We acquired GIS Data from trusted sources owned by U.S/ Florida Govt. entities & created a LAC development potential heatmap for the entire State of Florida.

All undevelopable lands were removed from the final heat map to ensure that the lands analyzed could be developed as LACs. Spot checks were prioritized based on the development potential of the land parcel and its land use type at the county level based on the combination of final LAC potential of the spot and the Land Use Type (Industrial/Vacant/Commercial/Agricultural etc.).

Final spots were validated using Google Earth and ArcGIS Pro, and GIS mapping was done to build five maps for each county, one for validation, two for suitable land use, two for conflicting land use, all with LAC development potential included in each map.

For this activity, the research team used the Statewide Land Use Land Cover data shapefiles from the ArcGIS portal which contains 45 different land use types in Florida from the Florida Department of Environmental Protection to find the optimal land use type "i.e.," Industrial/ Vacant type parcel (for suitable Land Use) as well as for the conflicting land use types of Agricultural/Commercial/Recreational (suggested to be considered for rezoning).

After the spot check maps to determine the validity of the heat map and LAC development potential criteria developed, four additional maps were developed for each county (two suitable & two conflicting land use maps). The maps have been developed using ArcGIS and were checked for "very high, high and moderate LAC development potential" areas in urban and rural settings in Florida via Google Earth to validate and determine the surroundings of these areas, existing satellite imagery of the parcel, the driving distances and buffer scores of the land parcel, etc.

The findings of this study are extremely useful in locating/determining optimal spots at a county level and can help in rezoning of future land parcels with desirable LAC development potential and plan them in a manner to get them to be shovel-ready in order to attract businesses to Florida and maximize the economic development potential of the State.

As future research, the research team strongly suggests a corridor analysis using the heat map developed by this current study, to determine areas and corresponding transportation corridors to help ensure the roadways around these prospective future logistics clusters have freight friendly design features. This in return will ensure the growth of the logistics clusters and help attract businesses to Florida.

References

- Awad-Núñez, S., González-Cancelas, N., Soler-Flores, F., & Camarero-Orive, A. (2015). How should the sustainability of the location of dry ports be measured? A proposed methodology using Bayesian networks and multi-criteria decision analysis. *Transport*, *30*(3), 312-319.
- Awasthi, A., Chauhan, S. S., & Goyal, S. K. (2011). A multi-criteria decision-making approach for location planning for urban distribution centers under uncertainty. *Mathematical and Computer Modelling*, *53*(1-2), 98-109.
- Chang, Z., Notteboom, T., & Lu, J. (2015). A two-phase model for dry port location with an application to the port of Dalian in China. *Transportation Planning and Technology*, *38*(4), 442-464.
- Elevli, B. (2014). Logistics freight center locations decision by using Fuzzy-ROMETHEE. *Transport*, *29*(4), 412-418.
- Esri (2020), Retrieved from https://developers.arcgis.com/labs/what-is-arcgis/ (August, 2020)
- Fagnant, D. J., & Kockelman, K. (2015). Preparing a nation for autonomous vehicles: opportunities, barriers and policy recommendations. *Transportation Research Part A: Policy and Practice*, *77*, 167-181.
- FGDL. Florida Geographic Data Library (2020). Generalized Land Use Derived From 2019 Florida Parcels. Retrieved from: https://www.fgdl.org/metadataexplorer/explorer.jsp (August, 2020)
- Ka, B. (2011). Application of fuzzy AHP and ELECTRE to China dry port location selection. *The Asian Journal of Shipping and Logistics*, *27*(2), 331-353.
- Kayikci, Y. (2010). A conceptual model for intermodal freight logistics centre location decisions. *Procedia-Social and Behavioral Sciences*, *2*(3), 6297-6311. Korpela, J., & Tuominen, M. (1996). A decision aid in warehouse site selection. *International Journal of Production Economics*, *45*(1-3), 169-180.
- Kasarda, J. D., Appold, S. J., & Mori, M. (2006). The impact of the air cargo industry on the global economy. *University of North Carolina*.
- Li, Y., Liu, X., & Chen, Y. (2011). Selection of logistics center location using Axiomatic Fuzzy Set and TOPSIS methodology in logistics management. *Expert Systems with Applications*, *38*(6), 7901-7908.
- Munoz, D., & Rivera Virgüez, M. L. (2010). Development of Panama as a logistics hub and the impact on Latin America (Doctoral dissertation, Massachusetts Institute of Technology).
- O'Looney, J. (2000). Beyond maps: GIS and decision making in local government. ESRI, Inc.
- Onstein, A. T., Tavasszy, L. A., & van Damme, D. A. (2019). Factors determining distribution structure decisions in logistics: a literature review and research agenda. *Transport Reviews*, *39*(2), 243-260.
- Parola, F., Notteboom, T., Satta, G., & Rodrigue, J. P. (2013). Analysis of factors underlying foreign entry strategies of terminal operators in container ports. Journal of Transport Geography, 33, 72-84.
- Pons Sánchez, A. (2008). Localizaciones óptimas para puertos secos.

- Regmi, M. B., & Hanaoka, S. (2013). Location analysis of logistics centres in Laos. *International Journal of Logistics Research and Applications*, *16*(3), 227-242.
- Rivera, L., Sheffi, Y., & Welsch, R. (2014). Logistics agglomeration in the U.S. Transportation Research Part A: Policy and Practice, 59, 222-238.
- Scopus (2020). Retrieved from https://service.elsevier.com/app/answers/detail/a_id/15534/supporthub/scopus/#tips (August, 2020)
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of Business Research, v. 104, p. 333-339.
- Tantsuyev, A. (2012). Perspectives for logistics clusters development in Russia (Doctoral dissertation, Massachusetts Institute of Technology).
- Theofanis, S., Boile, M., Gilbert, P., & Strauss-Wieder, A. (2010). Feasibility of Freight Villages in the NYMTC Region: Task 4–Measure of Relevance. *Rutgers Center for Advance Infrastructure and Transportation*. Available from Internet: https://www.nymtc.org/portals/0/pdf/Fright%20planning/Task%205%20PresentationV7.pdf
- Tranfield, D., Denyer, D., Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. British journal of management, v. 14, n. 3, p. 207-222.
- Van Nguyen, T., Zhang, J., Zhou, L., Meng, M., & He, Y. (2020). A data-driven optimization of large-scale dry port location using the hybrid approach of data mining and complex network theory. *Transportation Research Part E: Logistics and Transportation Review*, *134*, 101816.
- Verhetsel, A., Kessels, R., Goos, P., Zijlstra, T., Blomme, N., & Cant, J. (2015). Location of logistics companies: a stated preference study to disentangle the impact of Accessibility. *Journal of Transport Geography*, *42*, 110-121.
- Wilding, R., Wagner, B., Colicchia, C., & Strozzi, F. (2012). Supply chain risk management: a new methodology for a systematic literature review. Supply Chain Management: An International Journal.
- Gibbs, G.R.: Analyzing Qualitative Data. Sage, Thousand Oaks, CA (2007).
- NVivo qualitative data analysis software; QSR International Pty Ltd. Release 1.4.1, 2021.
- Florida Department of Transportation (FDOT), 2020. Strategic Intermodal System Handbook. Available online at https://www.fdot.gov/planning/systems/documents/brochures/default.shtm#maps
- ArcGIS, 2021a. What is a raster data?. Available online at https://desktop.arcgis.com/en/arcmap/10.3/manage-data/raster-and-images/what-is-raster-data.htm. Last accessed on 06.11.2021.
- ArcGIS, 2021b. Reclass by ranges of values. Available online at https://desktop.arcgis.com/en/arcmap/10.3/tools/spatial-analyst-toolbox/reclass-by-ranges-of-values.htm. Last accessed on 06.11.2021.
- Florida Department of Transportation (FDOT). "Interchange_TDA" [Feature Layer]. Scale Not Given. "Interchange_TDA". 2021a. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Interchange_TDA/FeatureServer (January 2021).

- Florida Department of Transportation (FDOT). "State_Roads_TDA" [Feature Layer]. Scale Not Given. “State_Roads_TDA”. 2021b. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/State_Roads_TDA/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "US_Routes_TDA" [Feature Layer]. Scale Not Given. "US_Routes_TDA". 2021c. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/US_Routes_TDA/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "Freight Terminal" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities – Freight Terminal". 2021d. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "ILC" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - ILC". 2021e. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "Rail" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - Rail". 2021f. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "Seaport" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - Seaport". 2021g. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "Airport" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - Airport". 2021h. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Economic Opportunity (DEO). Current Employment Statistics. 2021. URL - https://floridajobs.org/workforce-statistics/data-center/statistical-programs/current-employment-statistics (January 2021)
- Florida Department of Revenue (FDR). "GeoPlan Statewide Parcel Data in Florida - 2019" [Feature Layer]. Scale Not Given. "GeoPlan Statewide Parcel Data in Florida - 2019". 2020. URL – https://services.arcgis.com/LBbVDC0hKPAnLRpO/arcgis/rest/services/parcels_2019/FeatureServer (October 2020).
- Florida Department of Transportation (FDOT). "Annual_Average_Daily_Traffic_TDA" [Feature Layer]. Scale Not Given. "Annual Average Daily Traffic TDA (SECTADT)". 2021i. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Annual_Average_Daily_Traffic_TDA/FeatureServer (January 2021).
- ArcGIS - Calculating area, length, and other geometric properties – Available online at https://desktop.arcgis.com/en/arcmap/latest/manage-data/tables/calculating-area-length-and-other-geometric-properties.htm

- World Imagery- Esri- https://www.arcgis.com/home/item.html?id=226d23f076da478bba4589e7eae95952
- Florida Department of Transportation (FDOT). "Annual_Average_Daily_Traffic_TDA" [Feature Layer]. Scale Not Given. "Annual Average Daily Traffic TDA (SECTADT)". 2021i. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Annual_Average_Daily_Traffic_TDA/FeatureServer (January 2021).
- Florida Department of Revenue (FDR). "GeoPlan Statewide Parcel Data in Florida - 2019" [Feature Layer]. Scale Not Given. "GeoPlan Statewide Parcel Data in Florida - 2019". 2020. URL – https://services.arcgis.com/LBbVDC0hKPAnLRpO/arcgis/rest/services/parcels_2019/FeatureServer (October, 2020). https://www.arcgis.com/home/item.html?id=a53ce1ffb46a4c919e2dd8e3753371c7
- Statewide Land Use Land Cover - Florida Department of Environmental Protection https://www.arcgis.com/home/item.html?id=2f0e5f9a180a412fbd77dc5628f28de3
- Florida National Hydrography Dataset (NHD) - Waterbodies (24k) – Florida Department of Environmental Protection- https://www.arcgis.com/home/item.html?id=121cffac550f4937a98caf615454b595
- Florida Geographic Data Library (FGDL)- https://www.fgdl.org/metadataexplorer/explorer.jsp
- Florida Military Bases - Florida Department of Environmental Protection- https://www.arcgis.com/home/item.html?id=5c1552b247474fceae115e31480285bb
- Administrative Forest Boundaries – U.S. Forest Service https://www.arcgis.com/home/item.html?id=ec3a61c6cd814342a60d5fa75b605c8a
- Florida Department of Transportation (FDOT). "Airport" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - Airport". 2021h. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "Seaport" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - Seaport". 2021g. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "Rail" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - Rail". 2021f. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "ILC" [Feature Layer]. Scale Not Given. "Strategic Intermodal System (SIS) Facilities - ILC". 2021e. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/Strategic_Intermodal_System_(SIS)_Facilities/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "US_Routes_TDA" [Feature Layer]. Scale Not Given. "US_Routes_TDA". 2021c. URL – https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/US_Routes_TDA/FeatureServer (January 2021).
- Florida Department of Transportation (FDOT). "State_Roads_TDA" [Feature Layer]. Scale Not Given. “State_Roads_TDA”. 2021b. URL –

https://services1.arcgis.com/O1JpcwDW8sjYuddV/arcgis/rest/services/State_Roads_TDA/FeatureServer (January 2021).

- Florida Port Facilities - Florida Department of Environmental Protection- https://www.arcgis.com/home/item.html?id=4df99f8c282748ab80e320400abbca5e.
- Airports – U.S Dept of Transportation- https://data-usdot.opendata.arcgis.com/datasets/airports/explore?location=26.604990%2C-80.553325%2C7.81
- Florida Department of Environmental Protection - Florida National Hydrography Dataset (NHD) - Waterbodies (24k)- https://geodata.dep.state.fl.us/datasets/florida-national-hydrography-dataset-nhd-waterbodies-24k/explore
- Florida Department of Environmental Protection- Florida Lakes- https://geodata.dep.state.fl.us/datasets/florida-lakes/explore

Appendix A

Validation Heat Maps – 1 site per county

ALACHUA COUNTY

As per the criteria developed in this study, the huge 54-acre land parcel in the below image (Figure A 1) located near the Gainesville Animal Hospital has very high LAC development potential in the Alachua County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access, less than 5 miles from air transport facilities which confirms the very high LAC development potential and has a below $8 average land cost per square foot as per the criteria developed in this study.

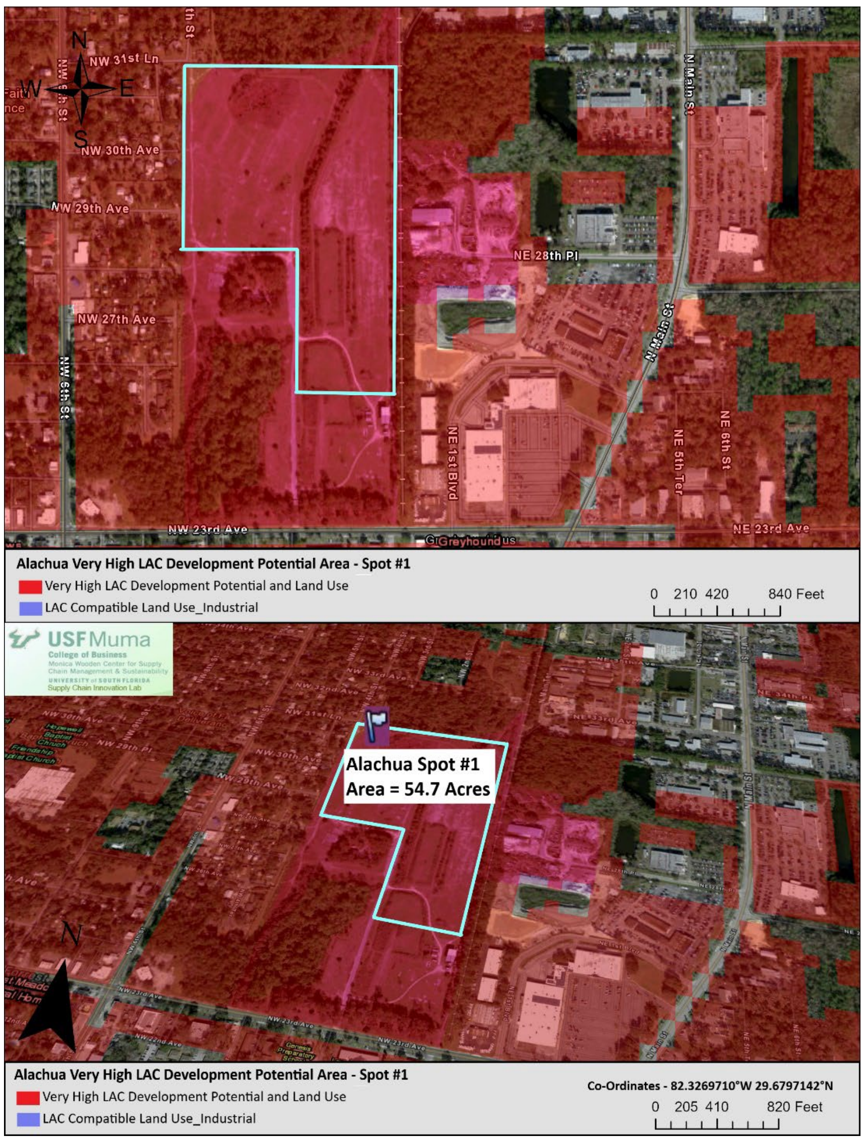

Figure A 1. Alachua County Spot 1

BAKER COUNTY

As per the criteria developed in this study, the 20-acre land parcel in the below image (Figure A 2) located near the Baker County High School has very high LAC development potential in the Baker County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

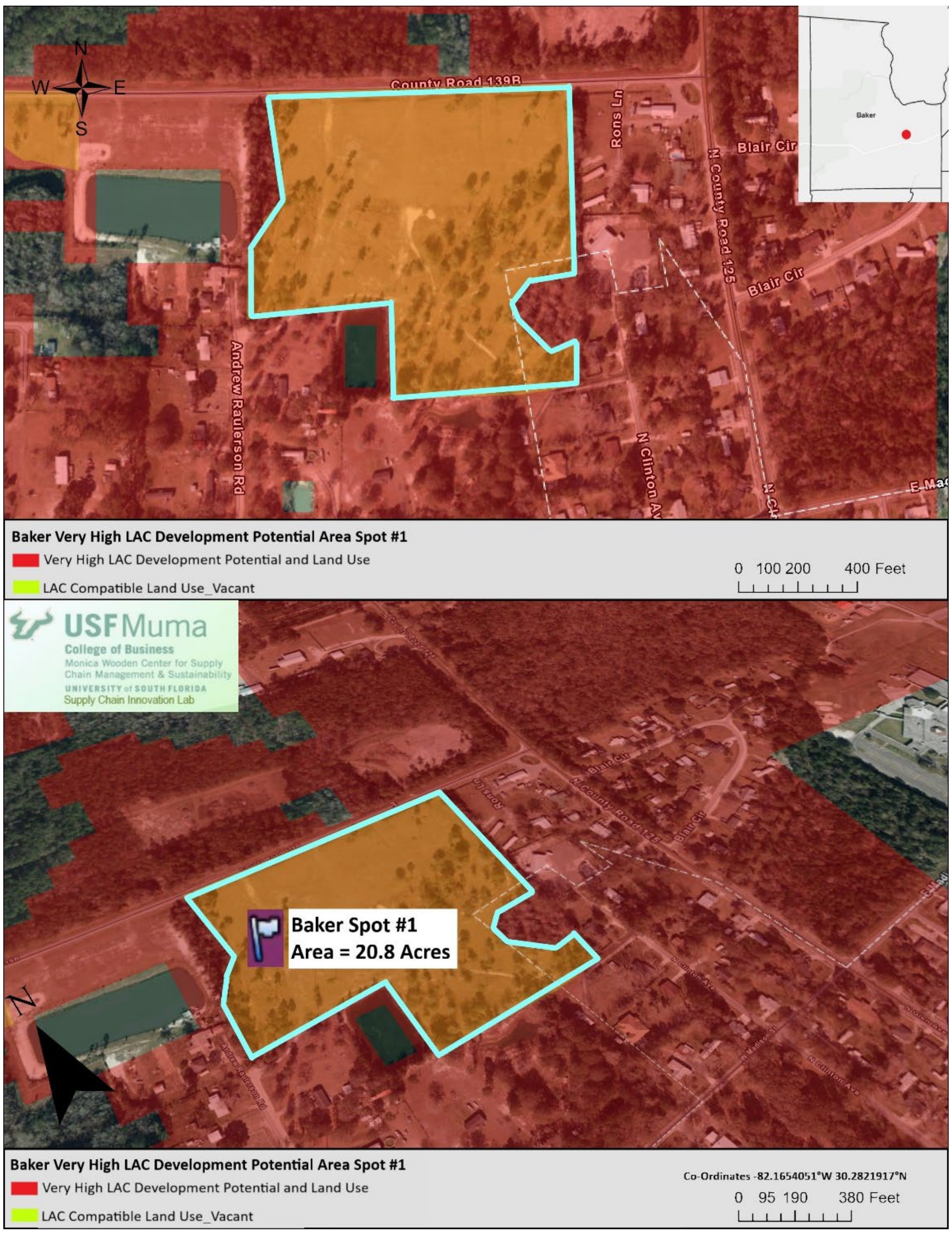

Figure A 2. Baker County Spot 1

BAY COUNTY

As per the criteria developed in this study, the 17-acre land parcel in the below image (Figure A 3) located near the Eastern Shipbuilding Yard has high LAC development potential in the Bay County. It is less than less than 2.5 miles from State roads, less than 2.5 miles from rail access, less than 10 miles from nearest Seaport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

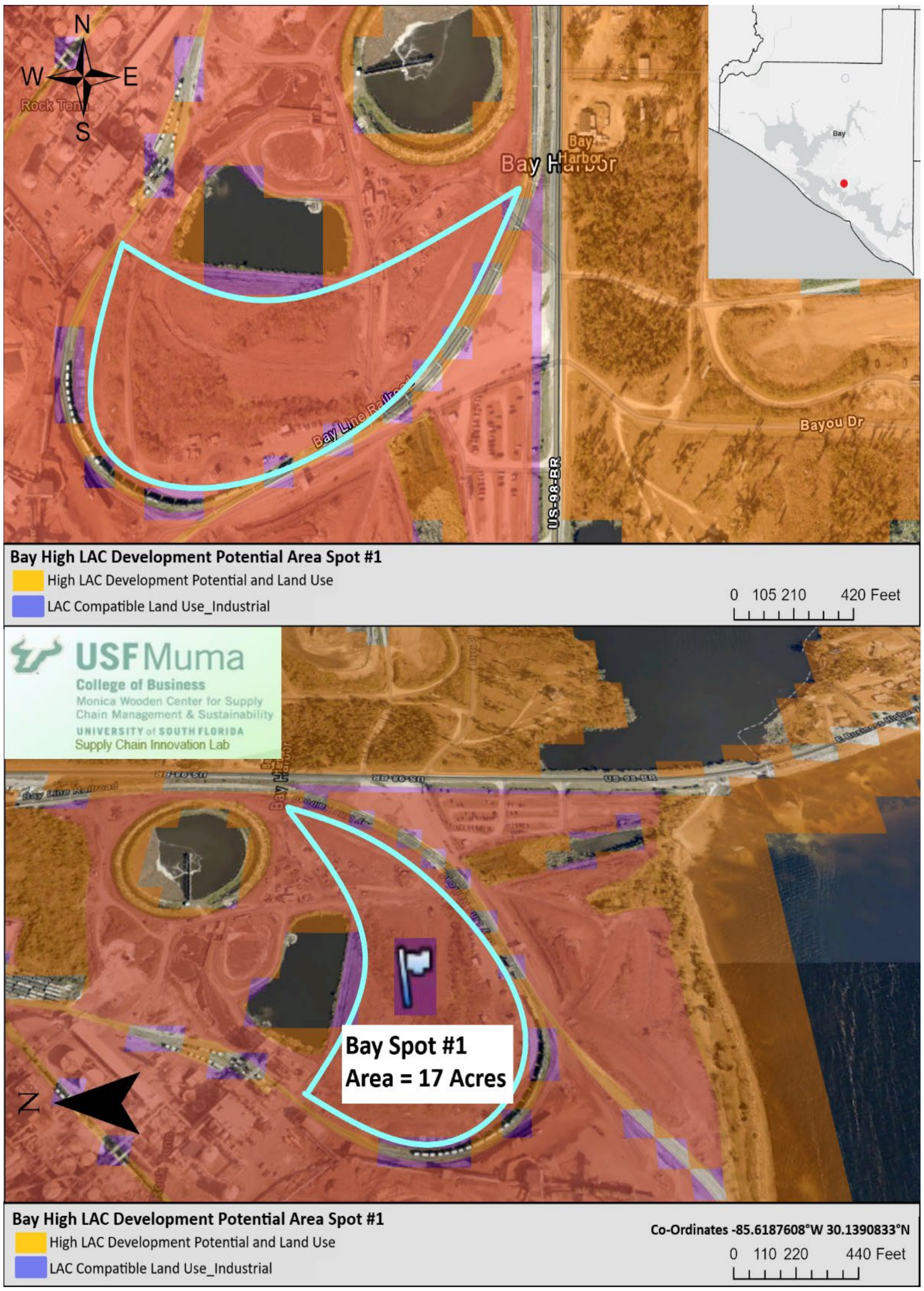

Figure A 3. Bay County Spot 1

BRADFORD COUNTY

As per the criteria developed in this study, this huge 21-acre land parcel in the below image (Figure A 4) located at the intersection of NW 86th Ave and NW 188 St has high LAC development potential in the Bradford County. It is less than less than 7.5 miles from freeways, less than 2.5 miles from State roads, less than 5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

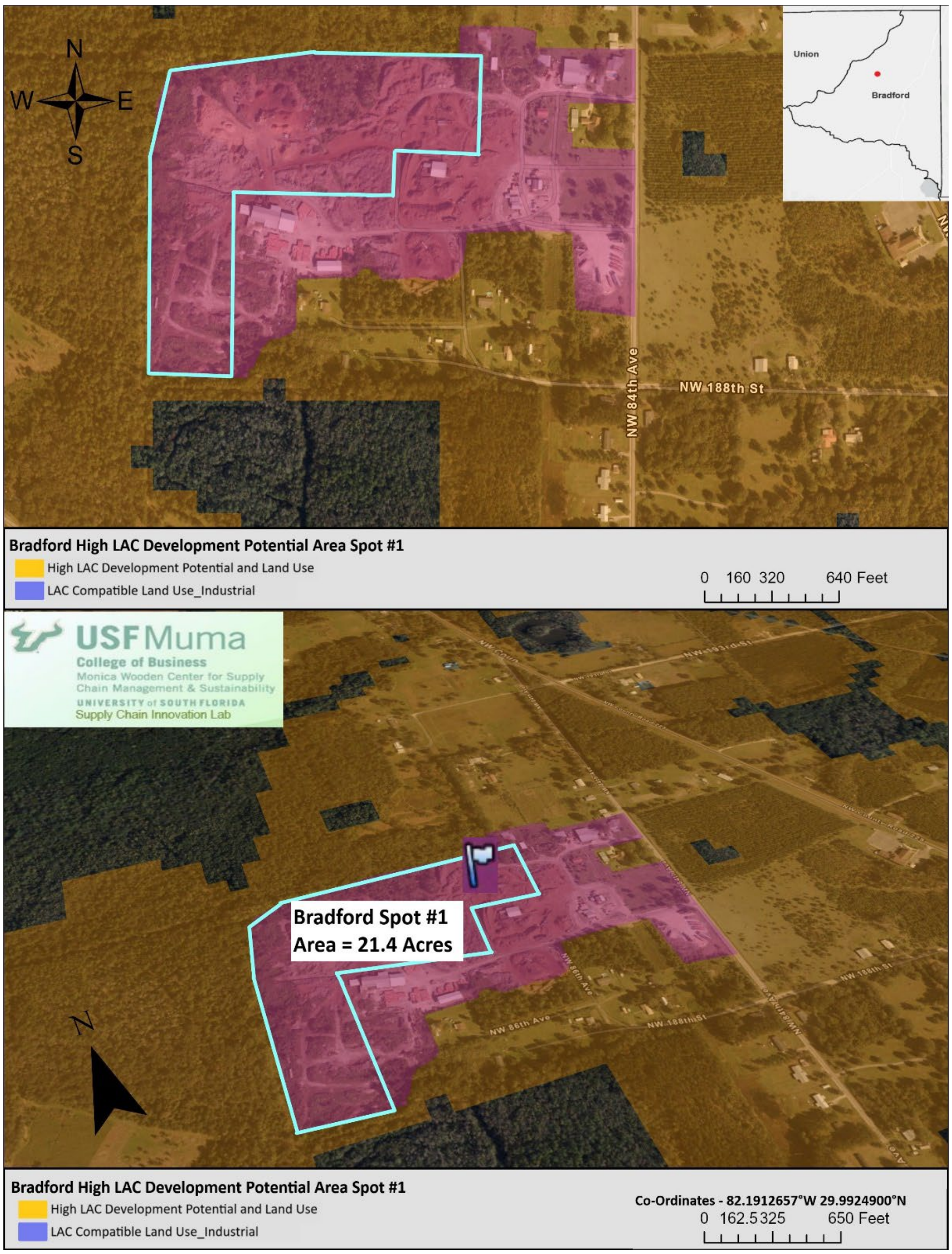

Figure A 4. Bradford County Spot 1

BREVARD COUNTY

As per the criteria developed in this study, the 37-acre land parcel in the below image (Figure A 5) located near the Space Coast Regional Airport has very high LAC development potential in the Brevard County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

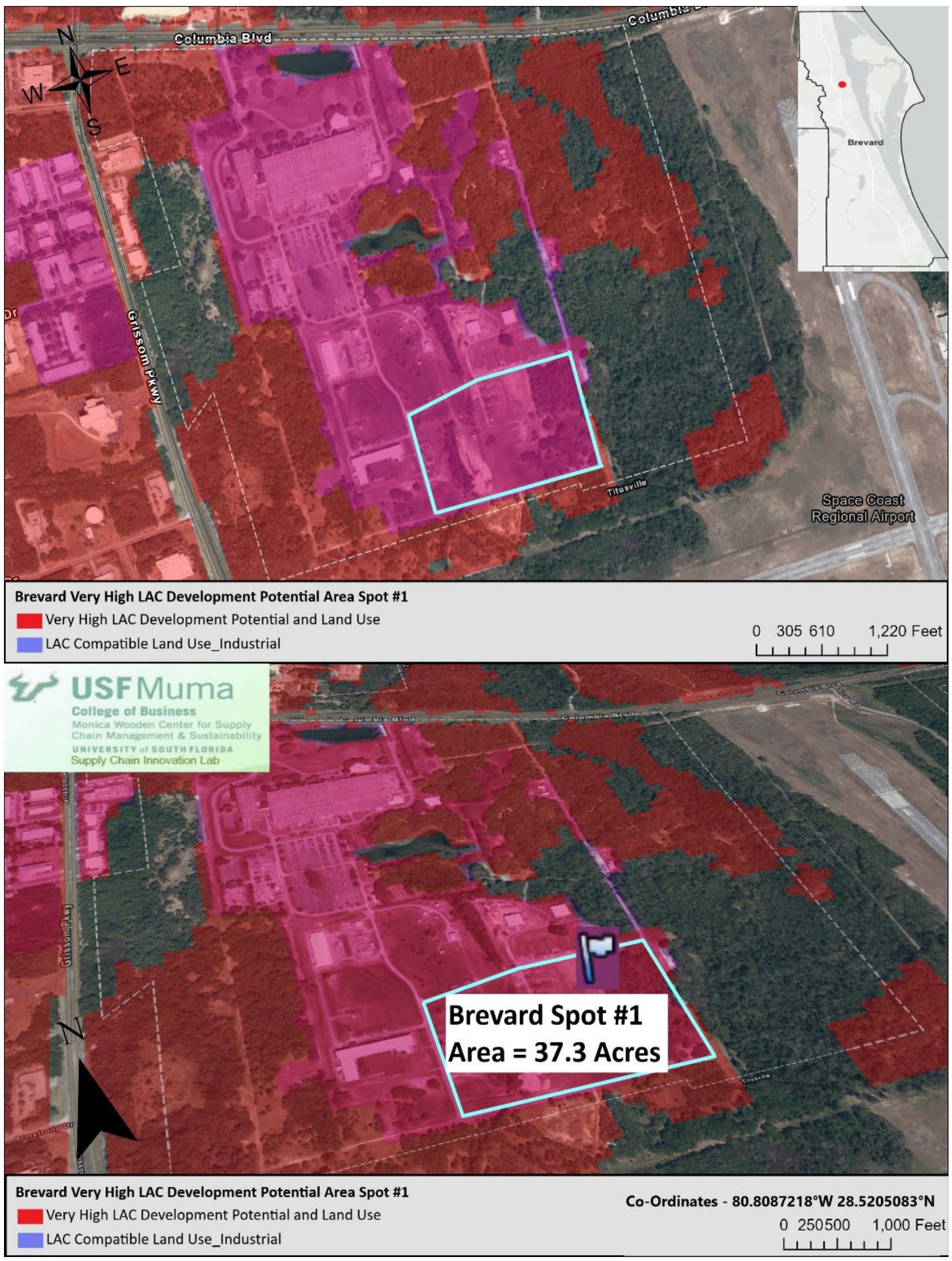

Figure A 5. Brevard County Spot 1

BROWARD COUNTY

As per the criteria developed in this study, the 8-acre land parcel in the below image (Figure A 6) located near the Fort Lauderdale-Hollywood International Airport has very high LAC development potential in the Broward County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access, and less than 2.5 miles from seaport facilities and less than 2.5 miles from air transport facilities which confirms the very high LAC development potential as per the criteria developed in this study.

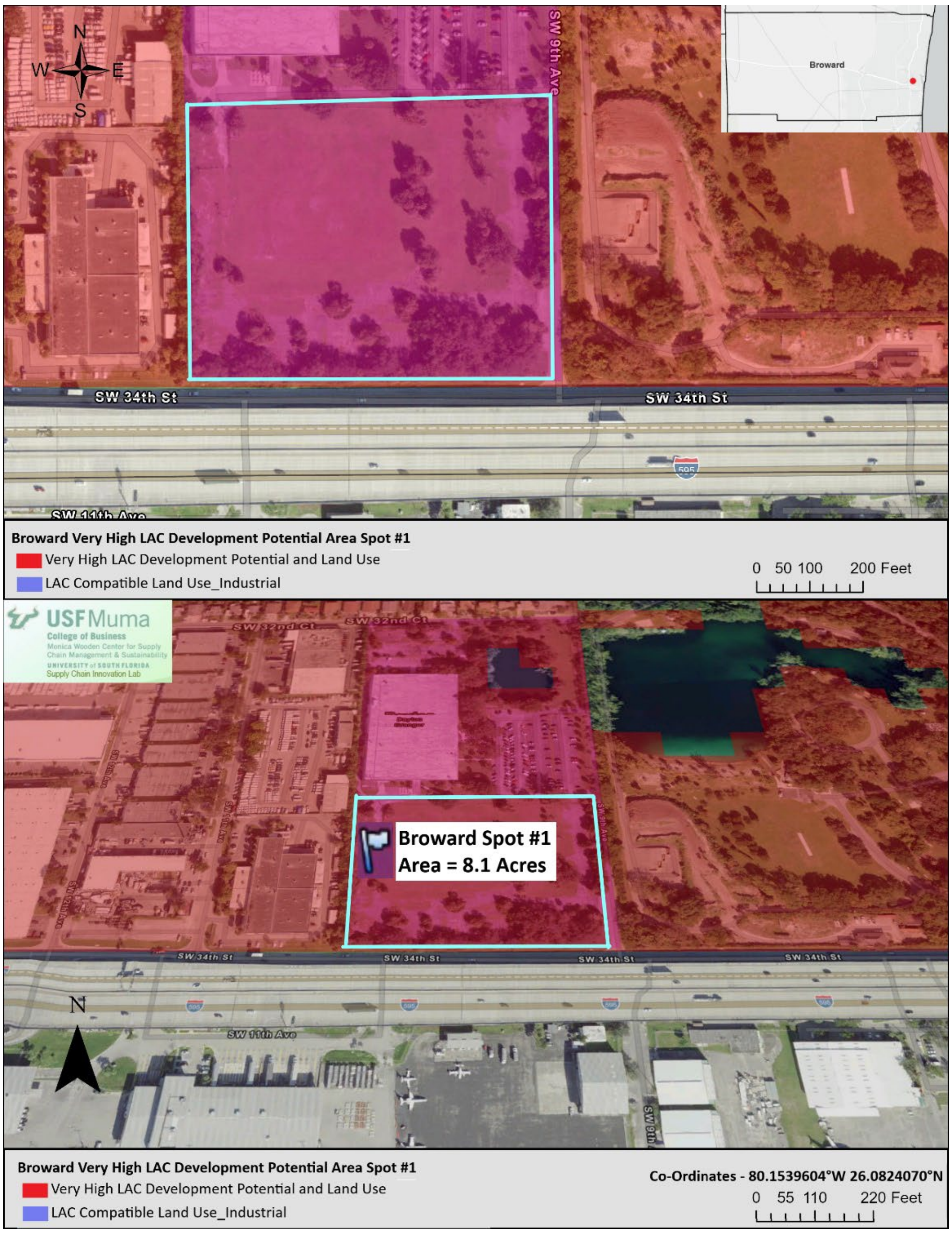

Figure A 6. Broward County Spot 1

CALHOUN COUNTY

As per the criteria developed in this study, this 15-acre land parcel in the below image (Figure A 7) located at the intersection of NE Hayes Subdivision Rd and Florida State Road 71 has moderate LAC development potential in the Calhoun County. It is less than 2.5 miles from State roads and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

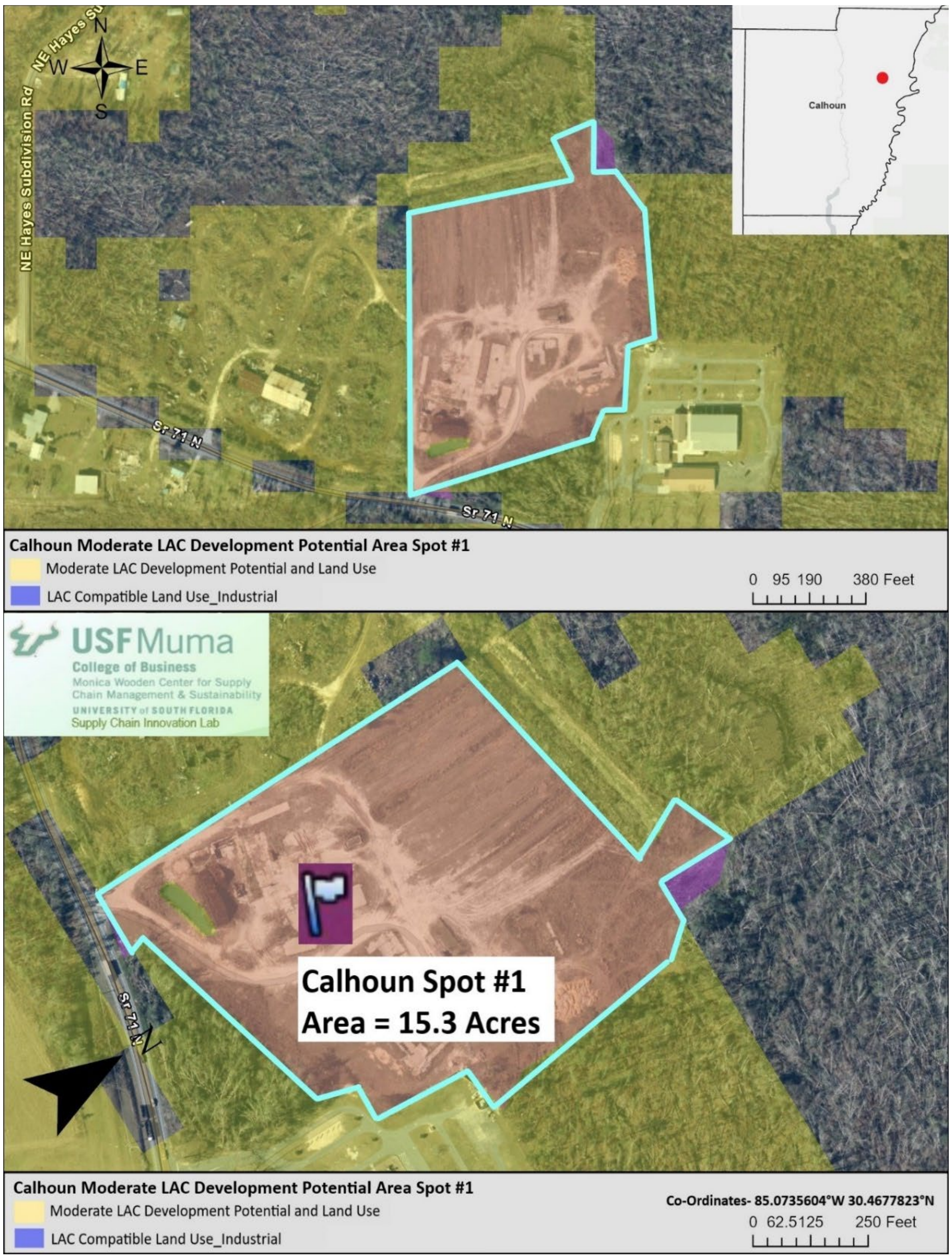

Figure A 7. Calhoun County Spot 1

CHARLOTTE COUNTY

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure A 8) located near the Punta Gorda Airport has very high LAC development potential in the Charlotte County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from Air Cargo facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

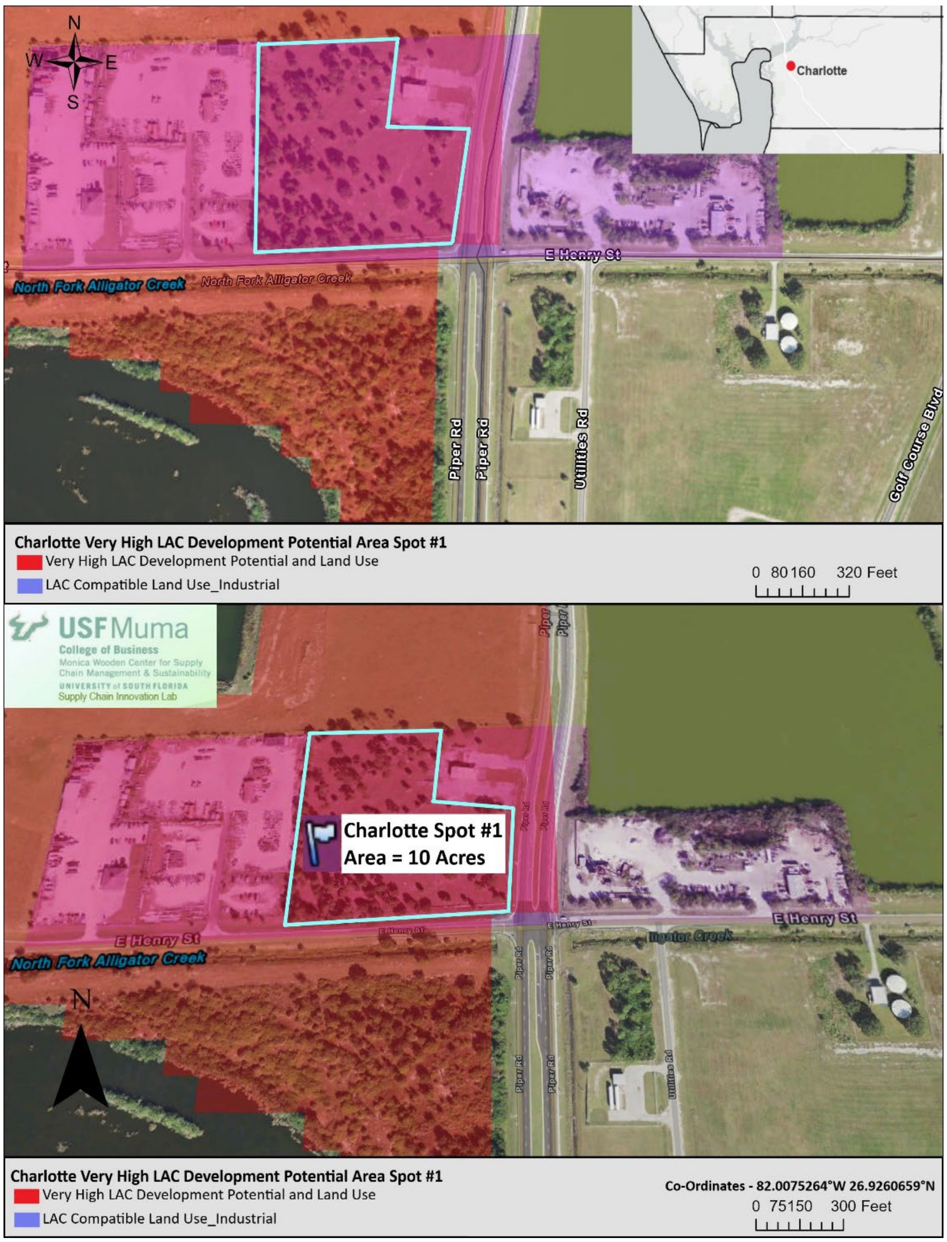

Figure A 8. Charlotte County Spot 1

CITRUS COUNTY

As per the criteria developed in this study, the 43-acre land parcel in the below image (Figure A 9) located near the Citrus County Combined Cycle Power Station has high LAC development potential in the Citrus County. It is less than less than 2.5 miles from State roads, less than 2.5 miles from rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

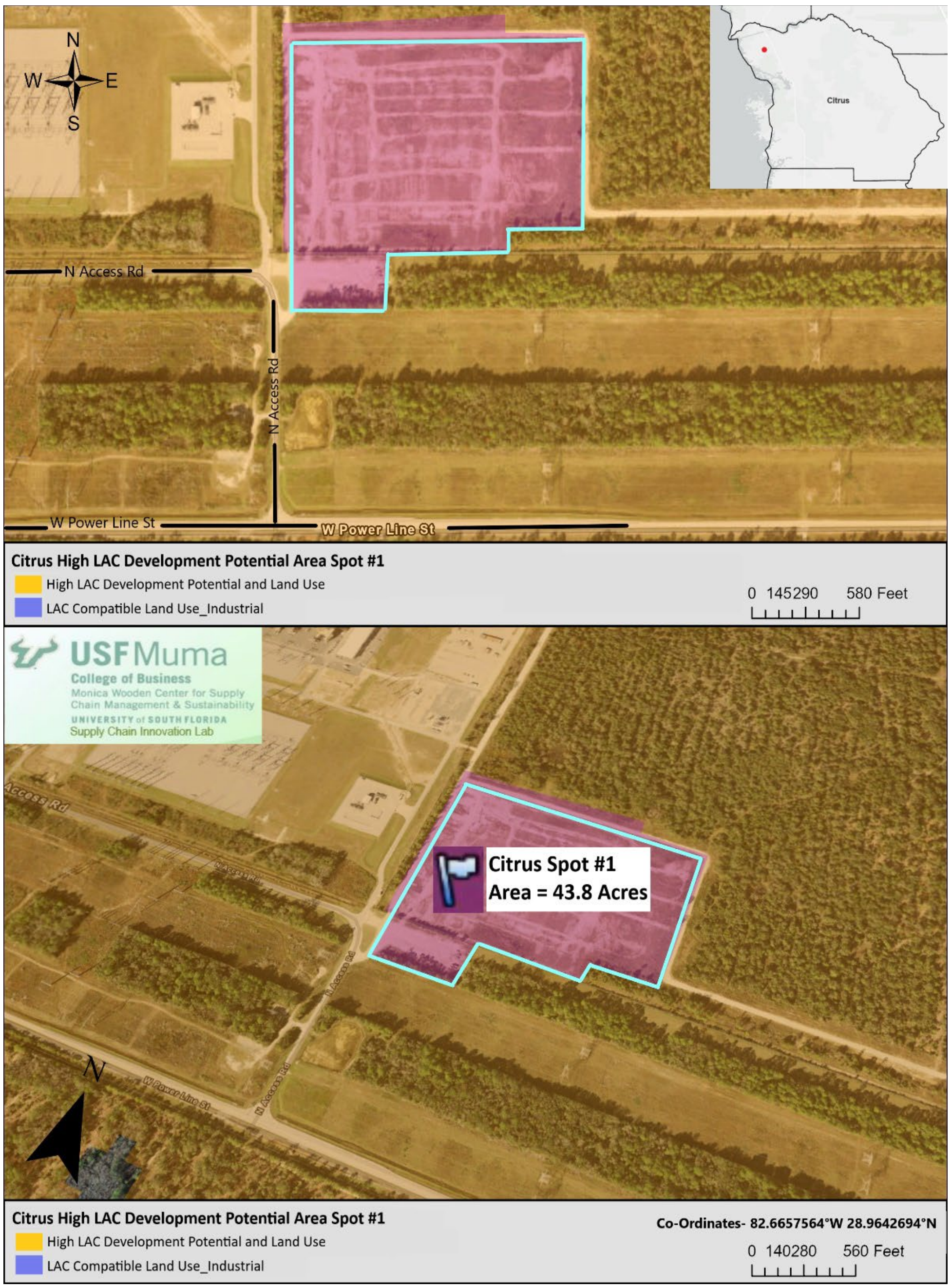

Figure A 9. Citrus County Spot 1

CLAY COUNTY

As per the criteria developed in this study, this 17-acre land parcel in the below image (Figure A 10) located near the Paul C Armstrong Park has very high LAC development potential in the Clay County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure A 10. Clay County Spot 1

COLLIER COUNTY

As per the criteria developed in this study, this huge 27-acre land parcel in the below image (Figure A 11) located near the Immokalee Regional Airport has high LAC development potential in the Collier County. It is less than 2.5 miles from State roads, less than 2.5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

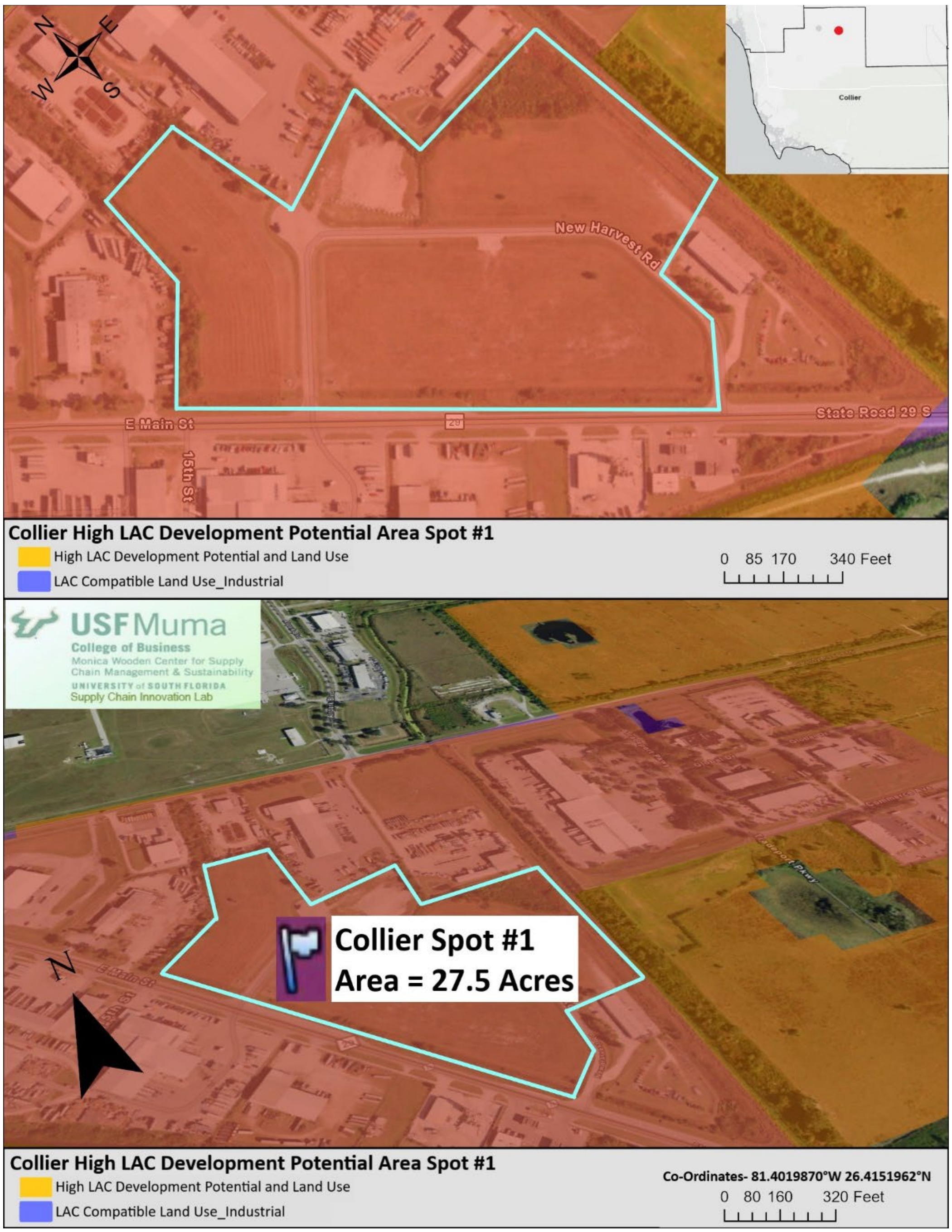

Figure A 11. Collier County Spot 1

COLUMBIA COUNTY

As per the criteria developed in this study, this 36-acre land parcel in the below image (Figure A 12) located near the intersection of Highway 100 and NW Guerdon St has very high LAC development potential in the Columbia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

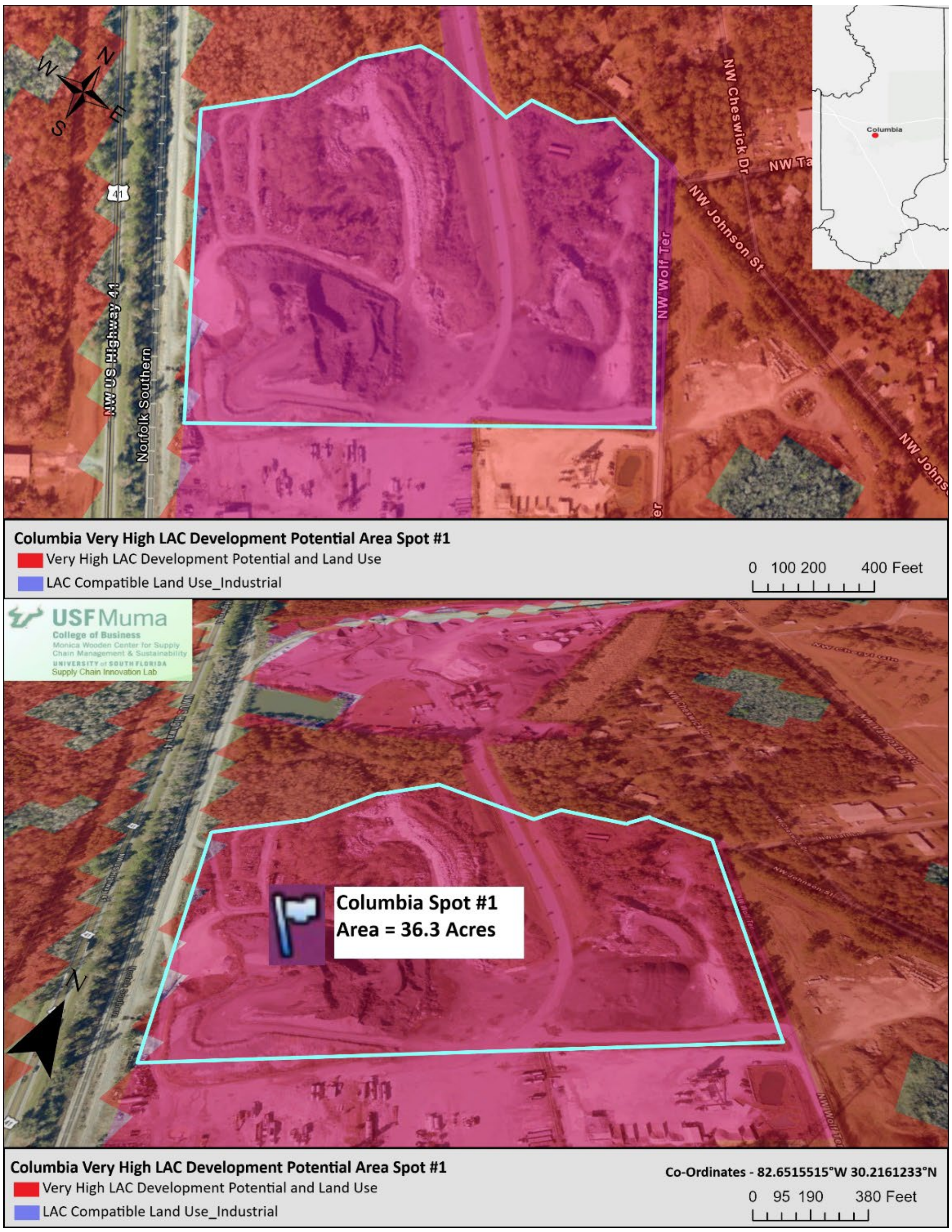

Figure A 12. Columbia County Spot 1

DeSoto County

As per the criteria developed in this study, this 7-acre land parcel in the below image (Figure A 13) located near the intersection of SW Hwy 17 and Robin Rd has high LAC development potential in the DeSoto County. It is less than less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

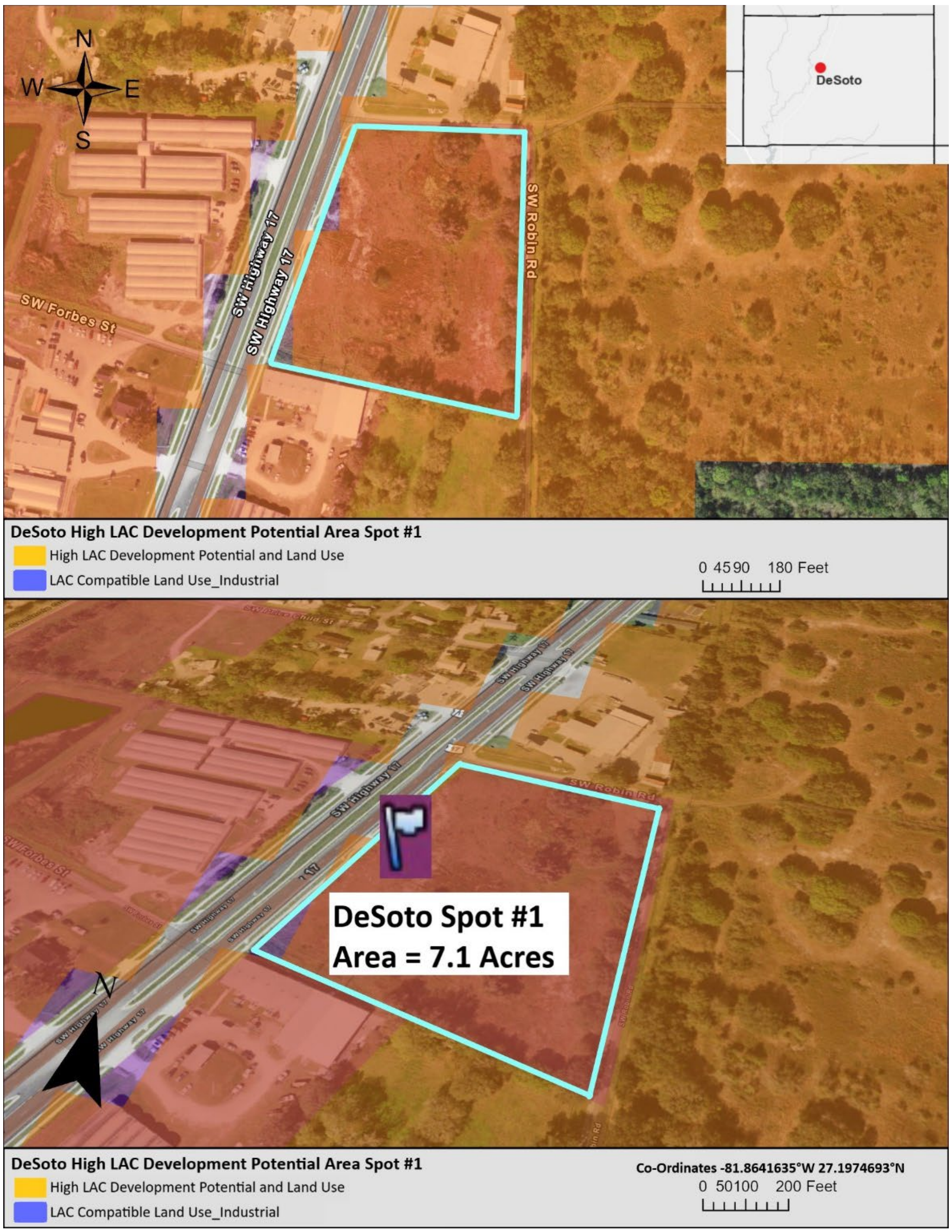

Figure A 13. DeSoto County Spot 1

DIXIE COUNTY

As per the criteria developed in this study, this 21-acre land parcel in the below image (Figure A 14) located near the Cross City Airport has high LAC development potential in the Dixie County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from air cargo facilities and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure A 14. Dixie County Spot 1

DUVAL COUNTY

As per the criteria developed in this study, this 7-acre land parcel in the below image (Figure A 15) located near the intersection of State highway 9 and E Beltway 295 has very high LAC development potential in the Duval County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and around 10 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

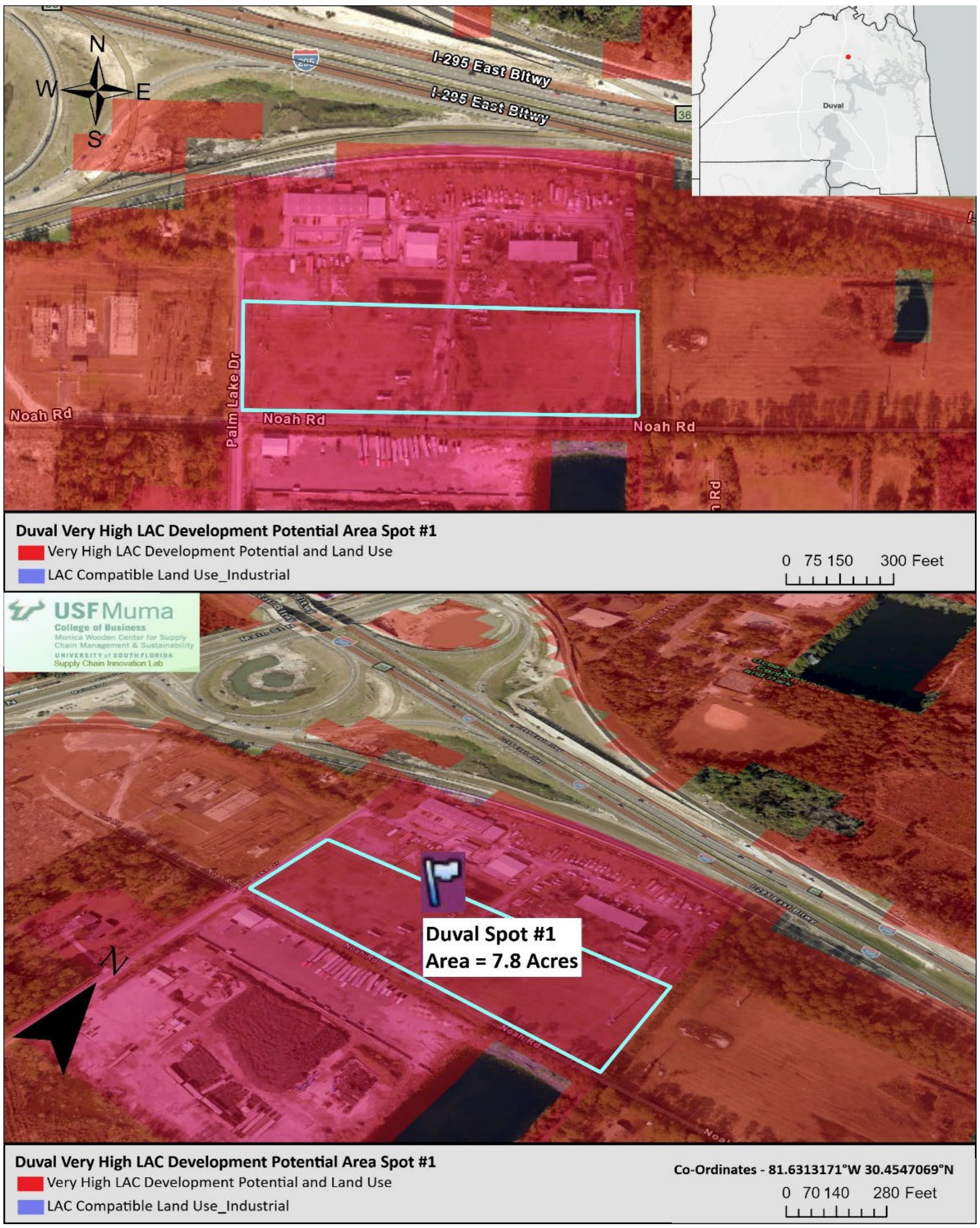

Figure A 15. Duval County Spot 1

ESCAMBIA COUNTY

As per the criteria developed in this study, this 16-acre land parcel in the below image (Figure A 16) located at the intersection of Airport Blvd and N Palafox St has very high LAC development potential in the Escambia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, around 10 miles from seaport facilities and less than 5 miles from air cargo facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

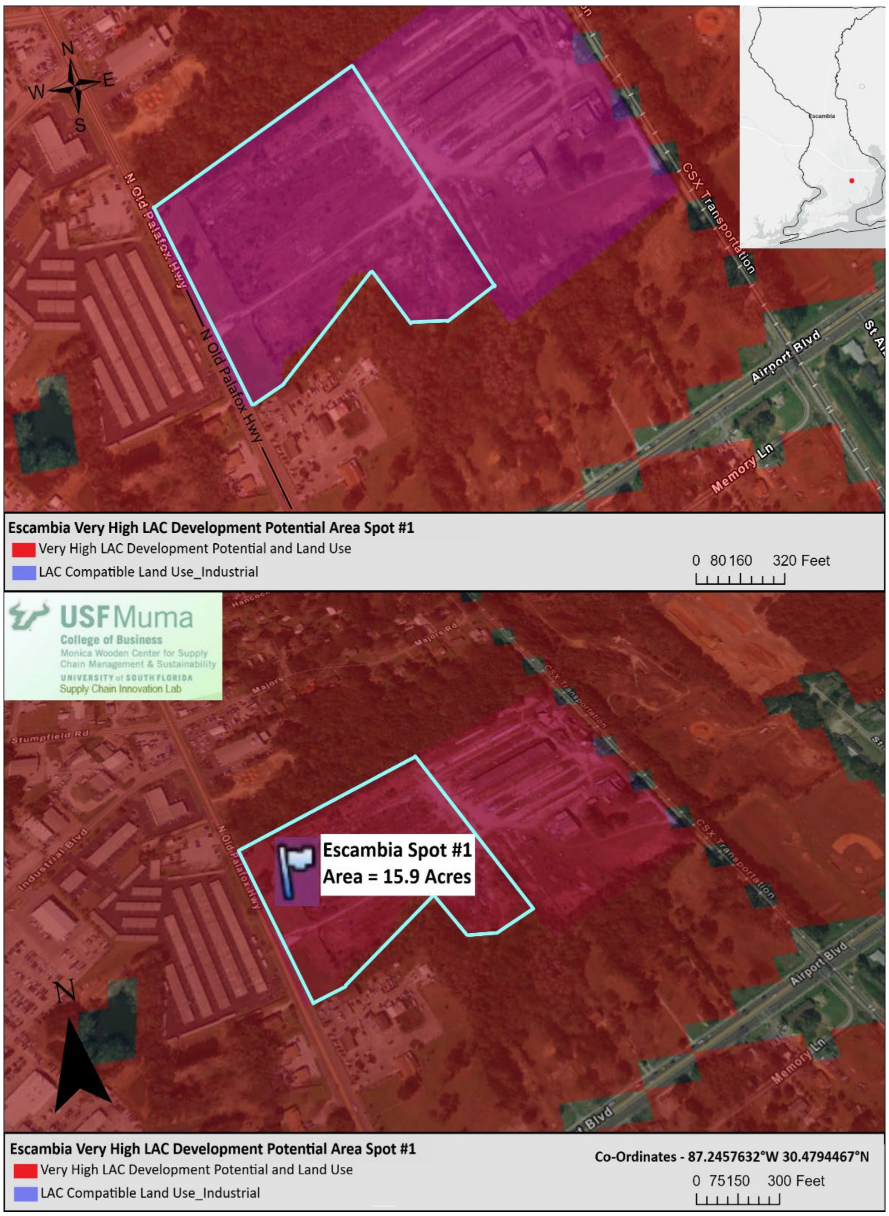

Figure A 16. Escambia County Spot 1

FLAGLER COUNTY

As per the criteria developed in this study, this 16-acre land parcel in the below image (Figure A 17) located near the intersection of Otis Stone Hunter Rd and Hargrove Grde has high LAC development potential in the Flagler County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

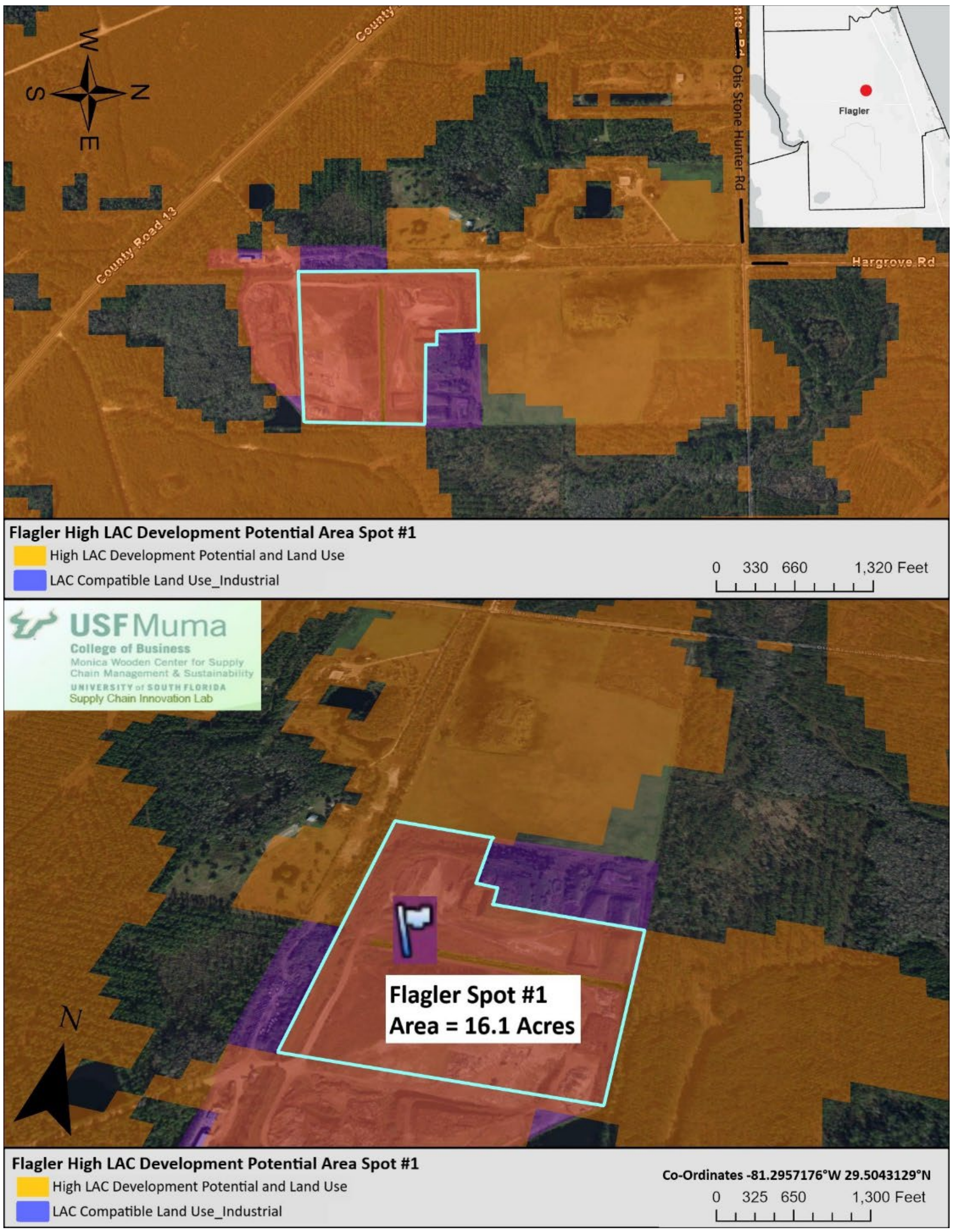

Figure A 17. Flagler County Spot 1

FRANKLIN COUNTY

As per the criteria developed in this study, this 19-acre land parcel in the below image (Figure A 18) located at the intersection of Skipper Rd and Crooked Creek Rd has moderate LAC development potential in the Franklin County. It is less than 2.5 miles from State roads and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure A 18. Franklin County Spot 1

GADSDEN COUNTY

As per the criteria developed in this study, this 5- acre land parcel in the below image (Figure A 19) located near the intersection of Dritches Hays Clary Ave and Barkley Dr has high LAC development potential in the Gadsden County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure A 19. Gadsden County Spot 1

GILCHRIST COUNTY

As per the criteria developed in this study, this huge 30-acre land parcel in the below image (Figure A 20) located near the intersection of US Highway 129 and SW 10th Ave has high LAC development potential in the Gilchrist County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

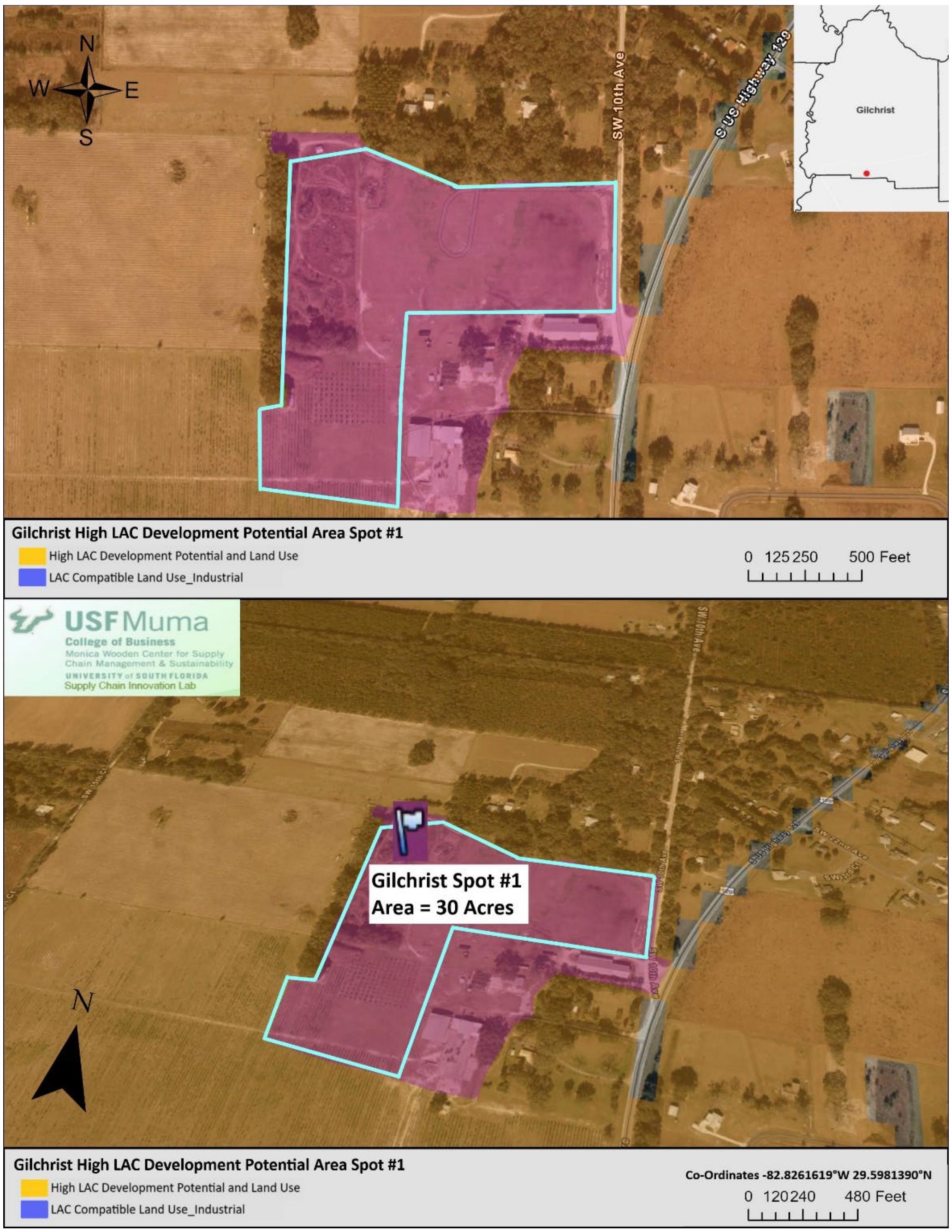

Figure A 20. Gilchrist County Spot 1

GLADES COUNTY

As per the criteria developed in this study, this 15-acre land parcel in the below image (Figure A 21) located near the intersection of US Highway 27 and W County Road 27 has high LAC development potential in the Glades County. It is less than 2.5 miles from freeways, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

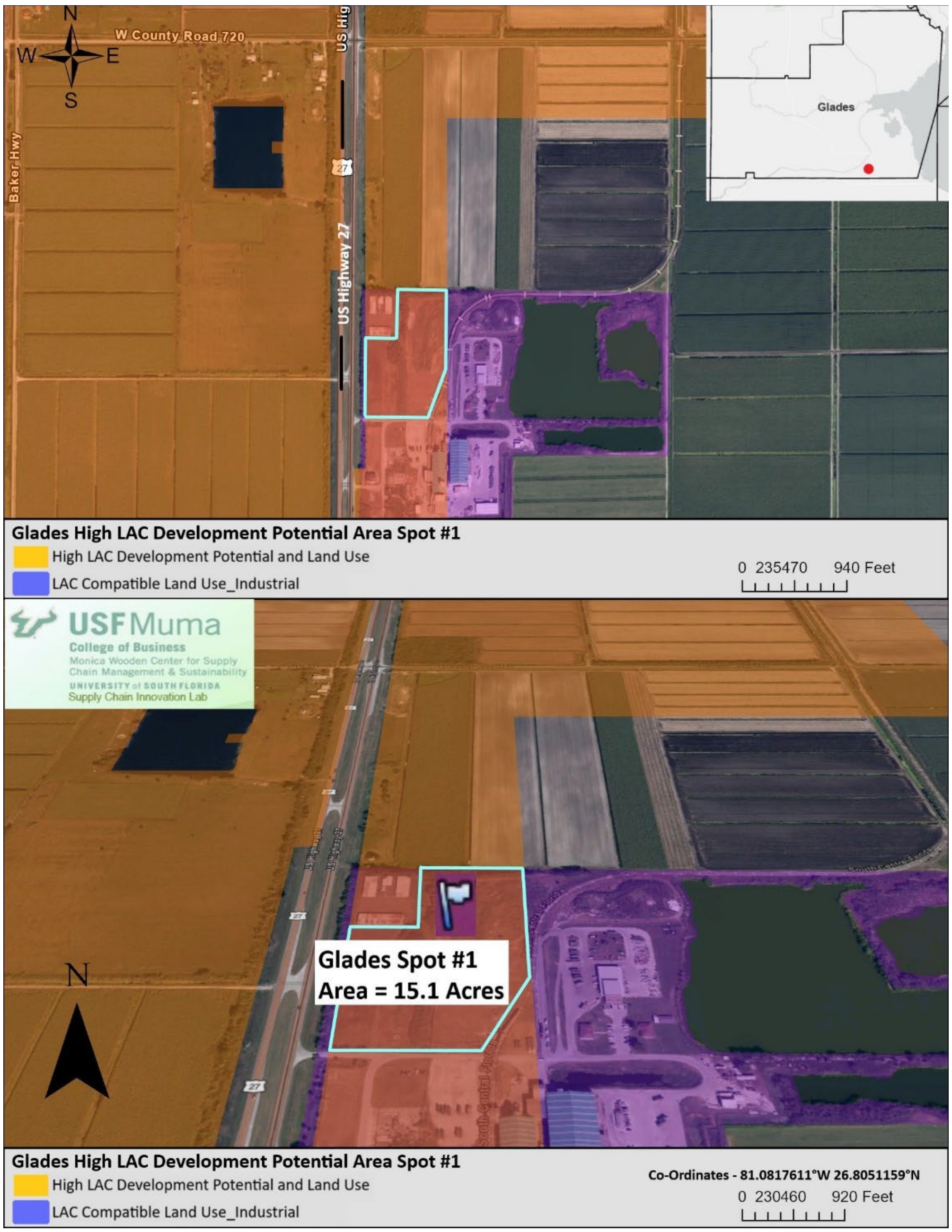

Figure A 21. Glades County Spot 1

GULF COUNTY

As per the criteria developed in this study, this huge 38-acre land parcel in the below image (Figure A 22) located near Port St Joe Port Authority has high LAC development potential in the Gulf County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from seaport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure A 22. Gulf County Spot 1

HAMILTON COUNTY

As per the criteria developed in this study, this 15-acre land parcel in the below image (Figure A 23) located at the intersection of 4th St SW and 15th Ave SW has high LAC development potential in the Hamilton County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

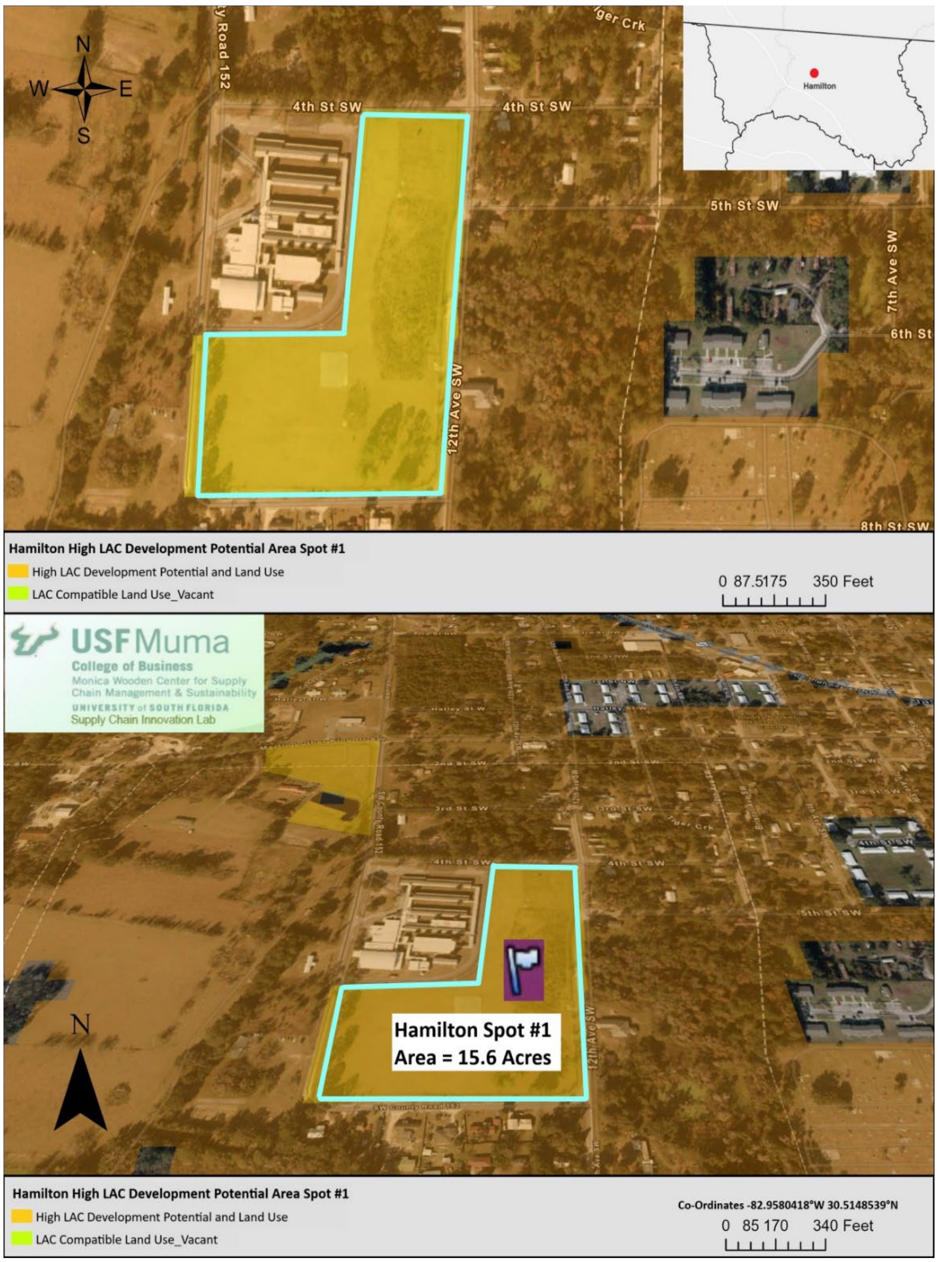

Figure A 23. Hamilton County Spot 1

HARDEE COUNTY

As per the criteria developed in this study, this 18-acre land parcel in the below image (Figure A 24) locate near the Hardee County Health Department has moderate LAC development potential in the Hardee County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, falls in the least AADT traffic range and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

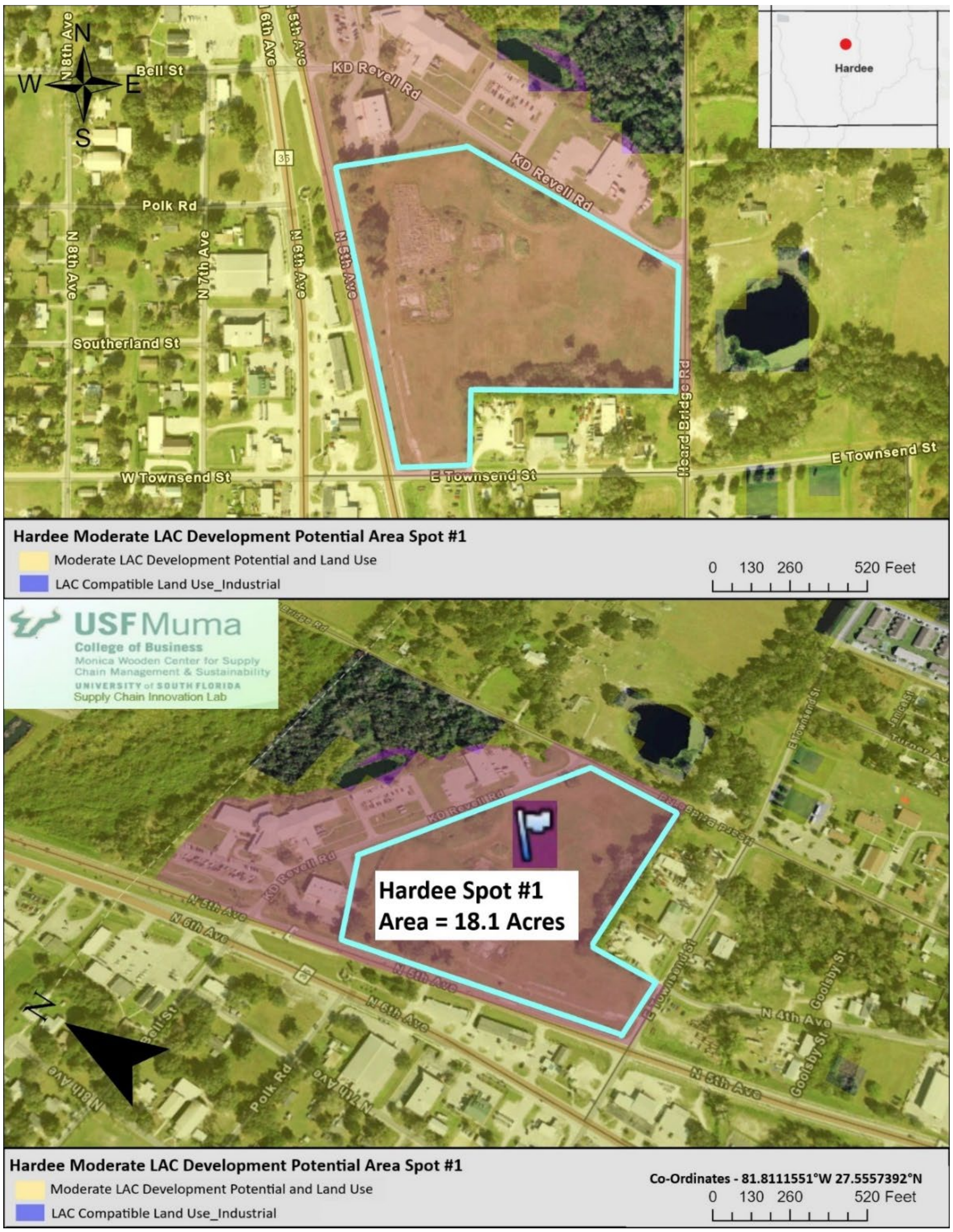

Figure A 24. Hardee County Spot 1

HENDRY COUNTY

As per the criteria developed in this study, this 9-acre land parcel in the below image (Figure A 25) located near Port LaBelle Utility System has moderate LAC development potential in the Hendry County. It is less than 2.5 miles from State roads, falls in the least AADT traffic range and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

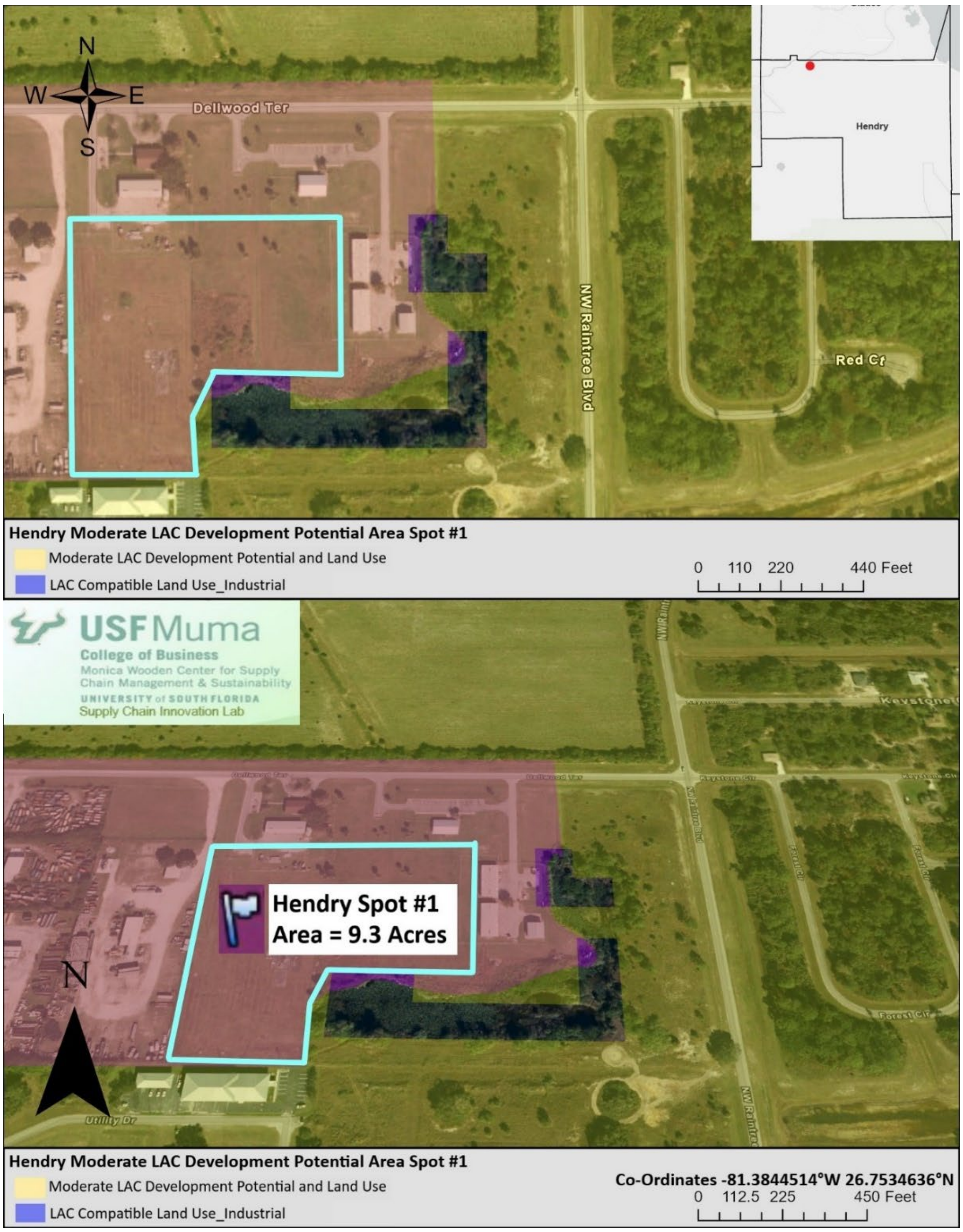

Figure A 25. Hendry County Spot 1

HERNANDO COUNTY

As per the criteria developed in this study, this 5-acre land parcel in the below image (Figure A 26) located near the West Florida Aggregates has very high LAC development potential in the Hernando County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

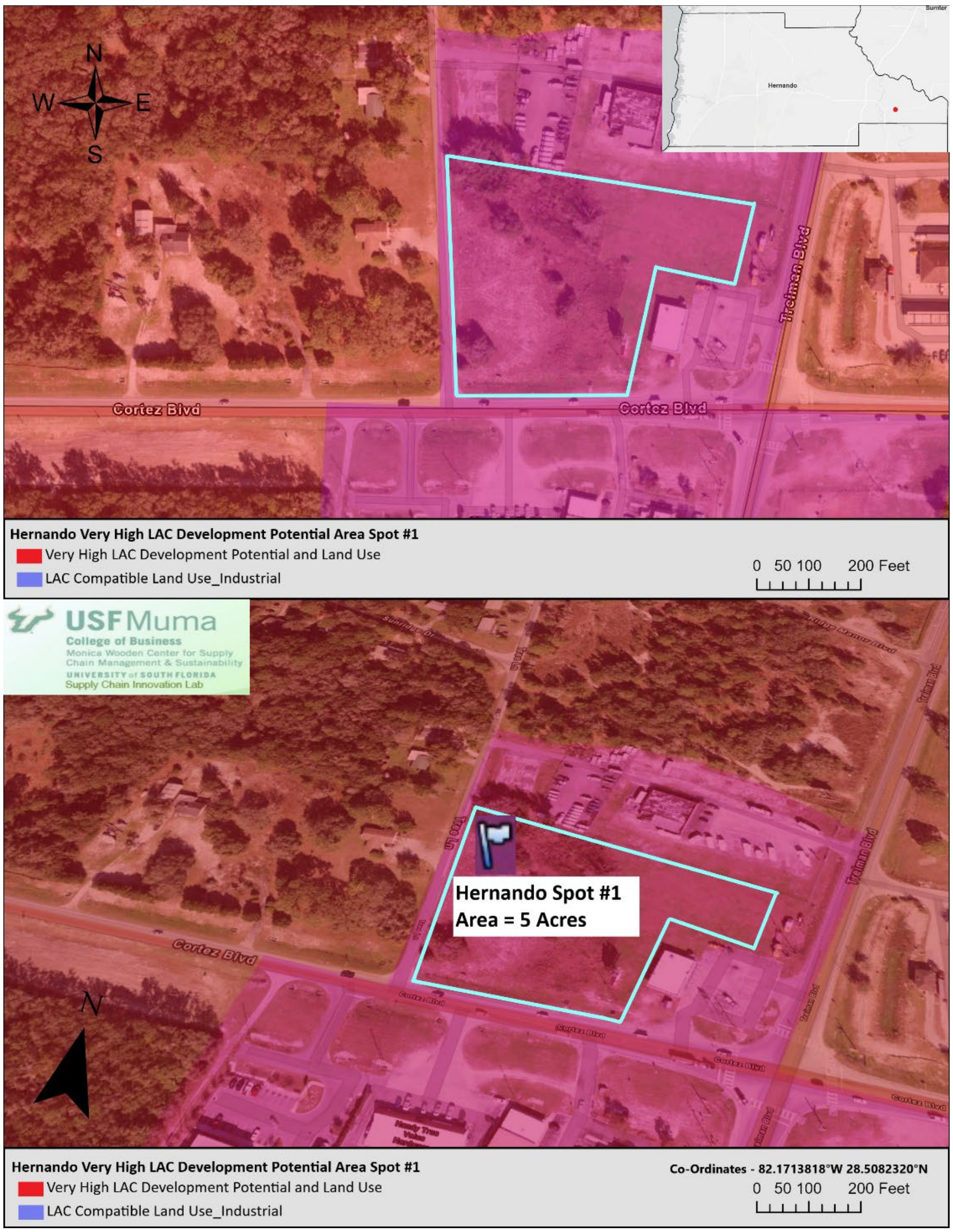

Figure A 26. Hernando County Spot 1

HIGHLANDS COUNTY

As per the criteria developed in this study, this 12-acre land parcel in the below image (Figure A 27) located near the Military Sea Services Museum has high LAC development potential in the Highlands County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

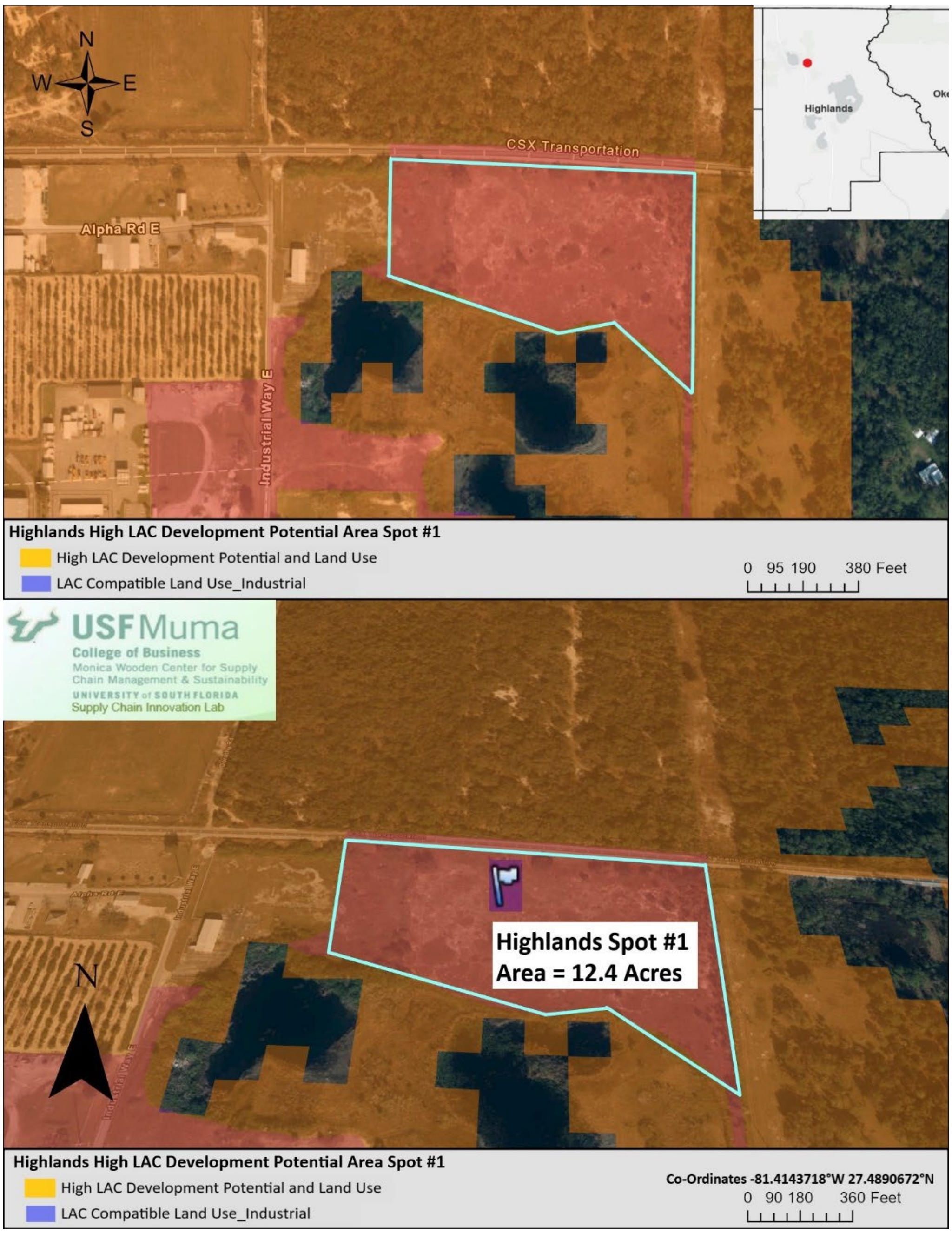

Figure A 27. Highlands County Spot 1

HILLSBOROUGH COUNTY

As per the criteria developed in this study, this huge 22-acre land parcel in the below image (Figure A 28) located near the Yeoman Rail Yard has very high LAC development potential in the Hillsborough County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and around 14 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

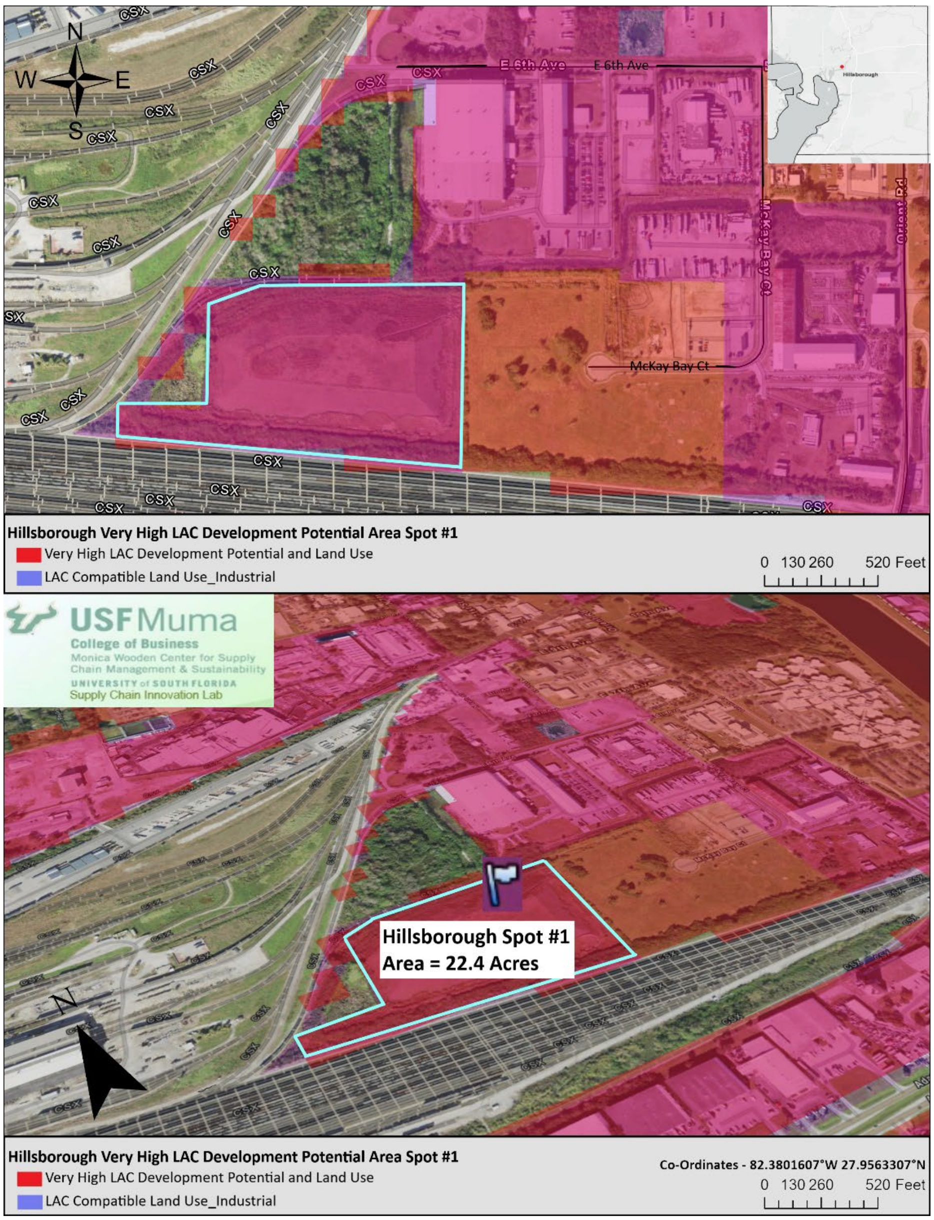

Figure A 28. Hillsborough County Spot 1

HOLMES COUNTY

As per the criteria developed in this study, this 18-acre land parcel in the below image (Figure A 29) located near the Bonifay Recreational Center has high LAC development potential in the Holmes County. It is less than 2.5 miles from State roads, less than 2.5 miles from rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

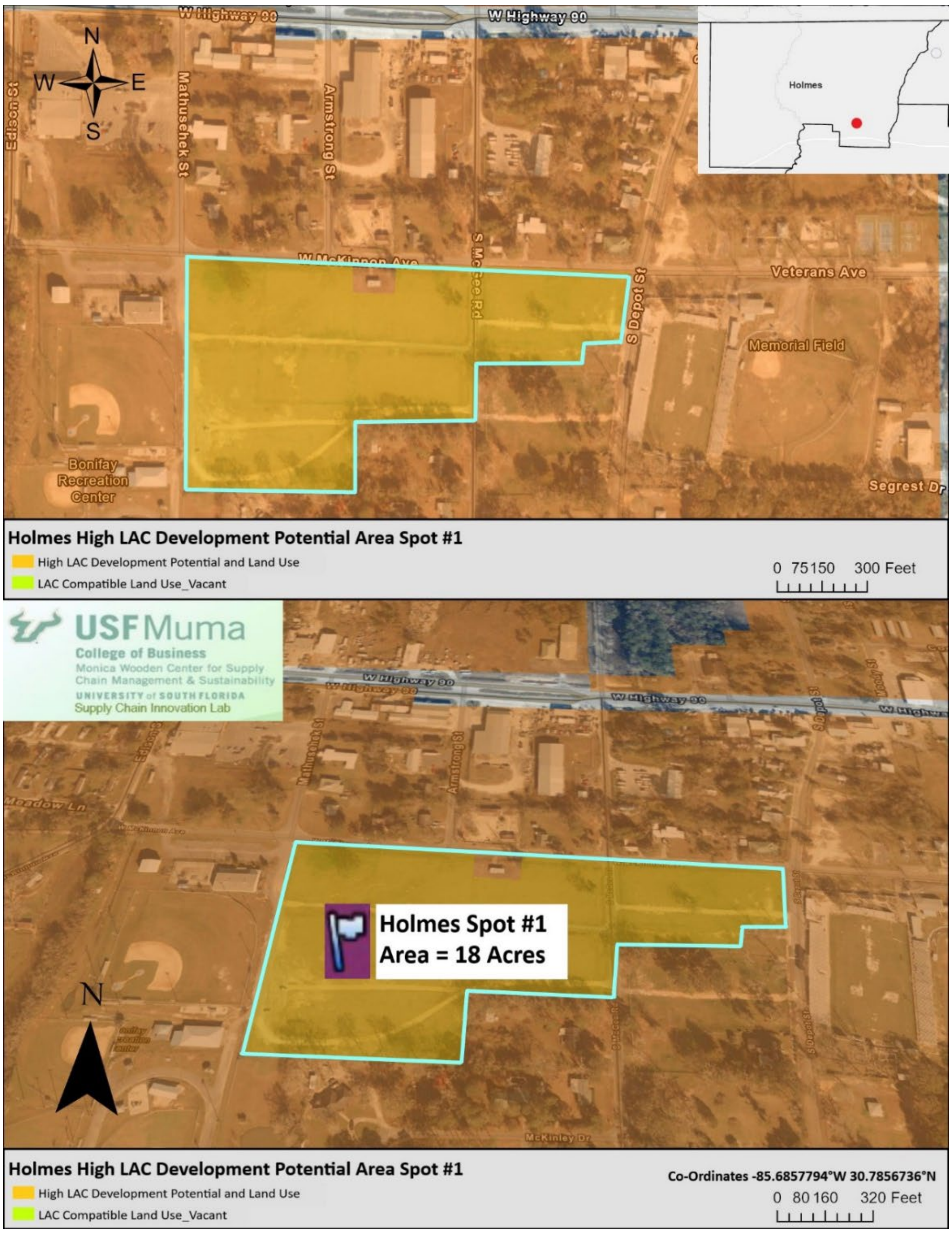

Figure A 29. Holmes County Spot 1

INDIAN RIVER COUNTY

As per the criteria developed in this study, this 9-acre land parcel in the below image (Figure A 30) located near the intersection of 87th St & 51st Terrace next to US Highway 1 has high LAC development potential in the Indian River County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

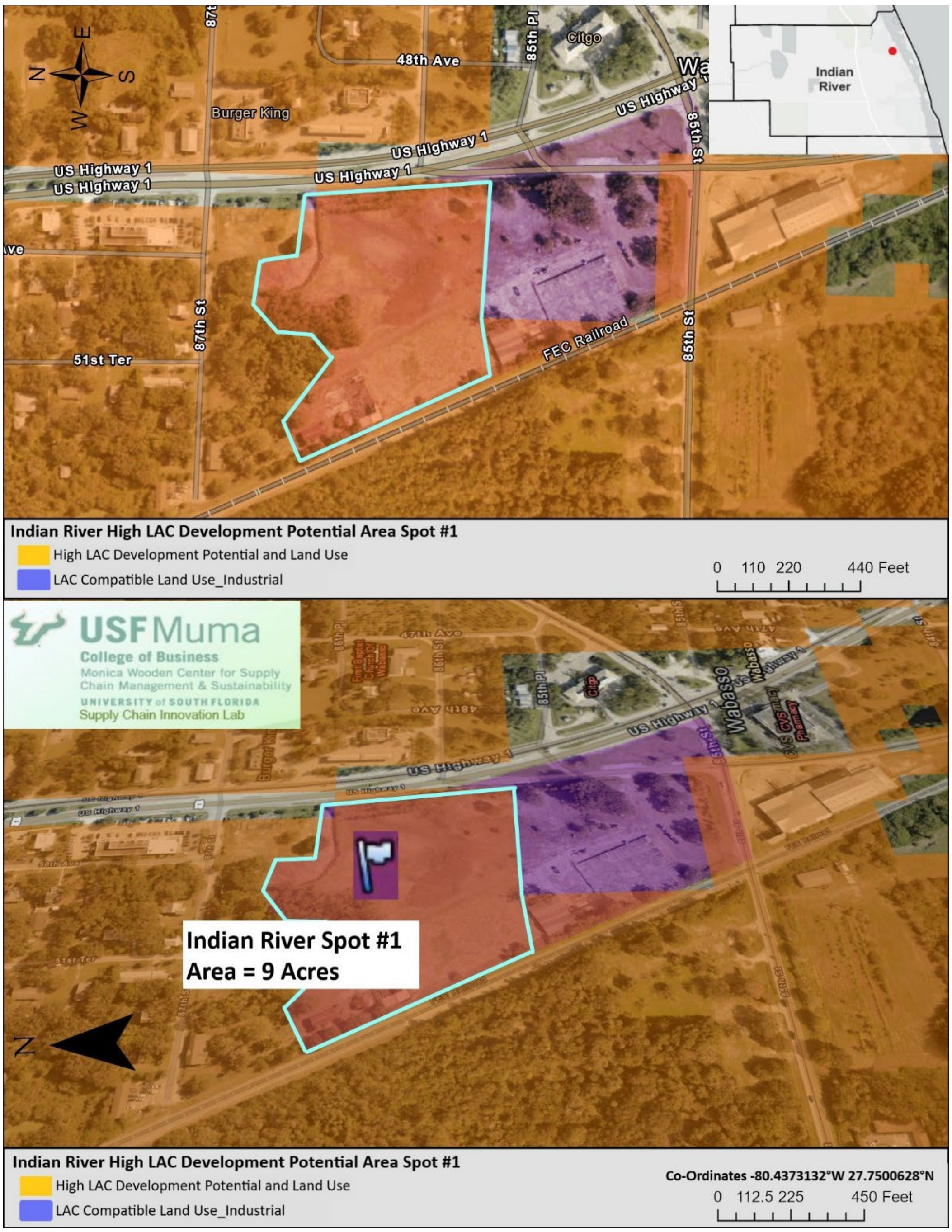

Figure A 30. Indian River County Spot 1

JACKSON COUNTY

As per the criteria developed in this study, this 19-acre land parcel in the below image (Figure A 31) located at the Intersection of Old US Rd and Highway 162 has moderate LAC development potential in the Jackson County. It is less than 3.75 miles from State roads, less than 10 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

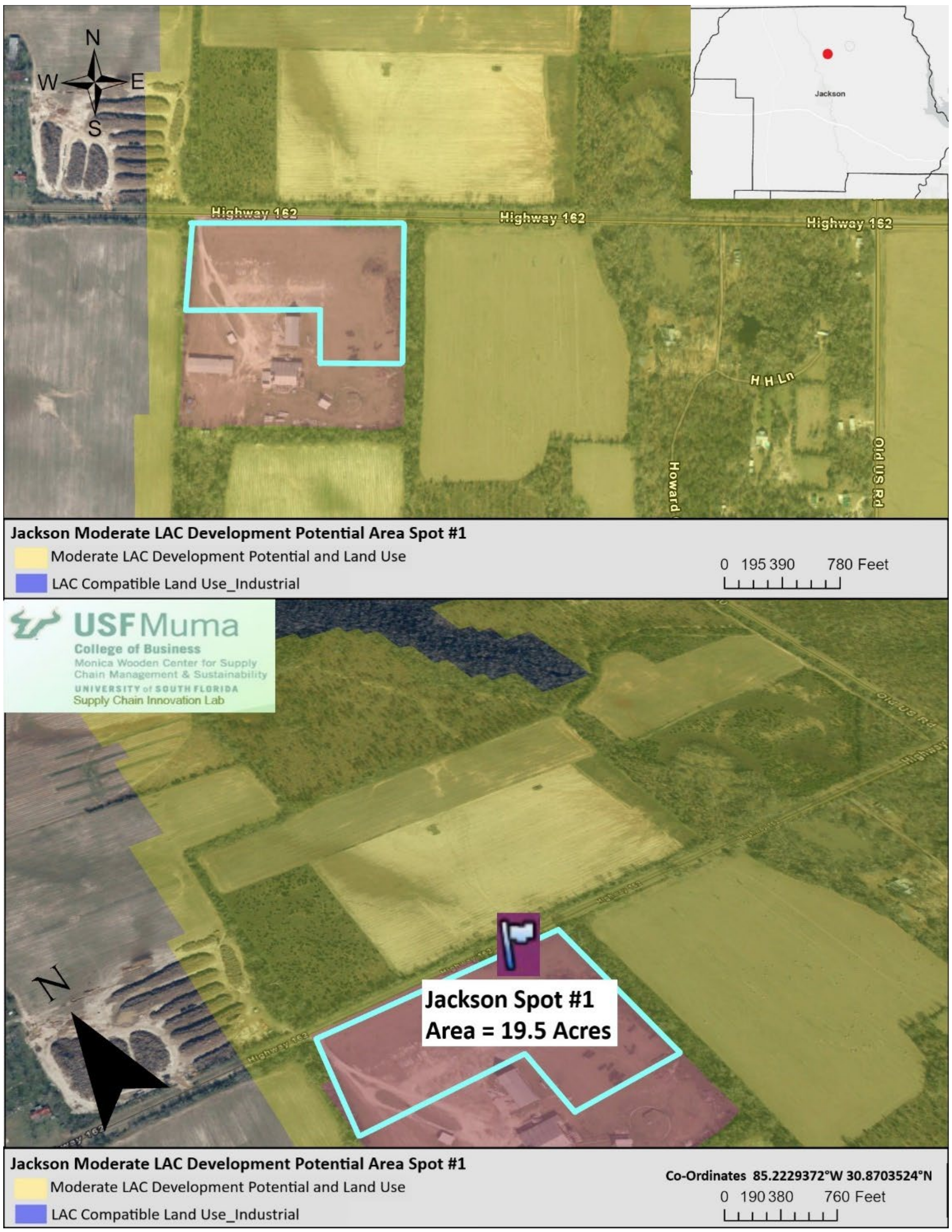

Figure A 31. Jackson County Spot 1

JEFFERSON COUNTY

As per the criteria developed in this study, this huge 57-acre land parcel in the below image (Figure A 32) located at the intersection of Casa Bianca Rd and Waukeenah Hwy has high LAC development potential in the Jefferson County. It is less than 2.5 miles from State roads, less than 2.5 miles from rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

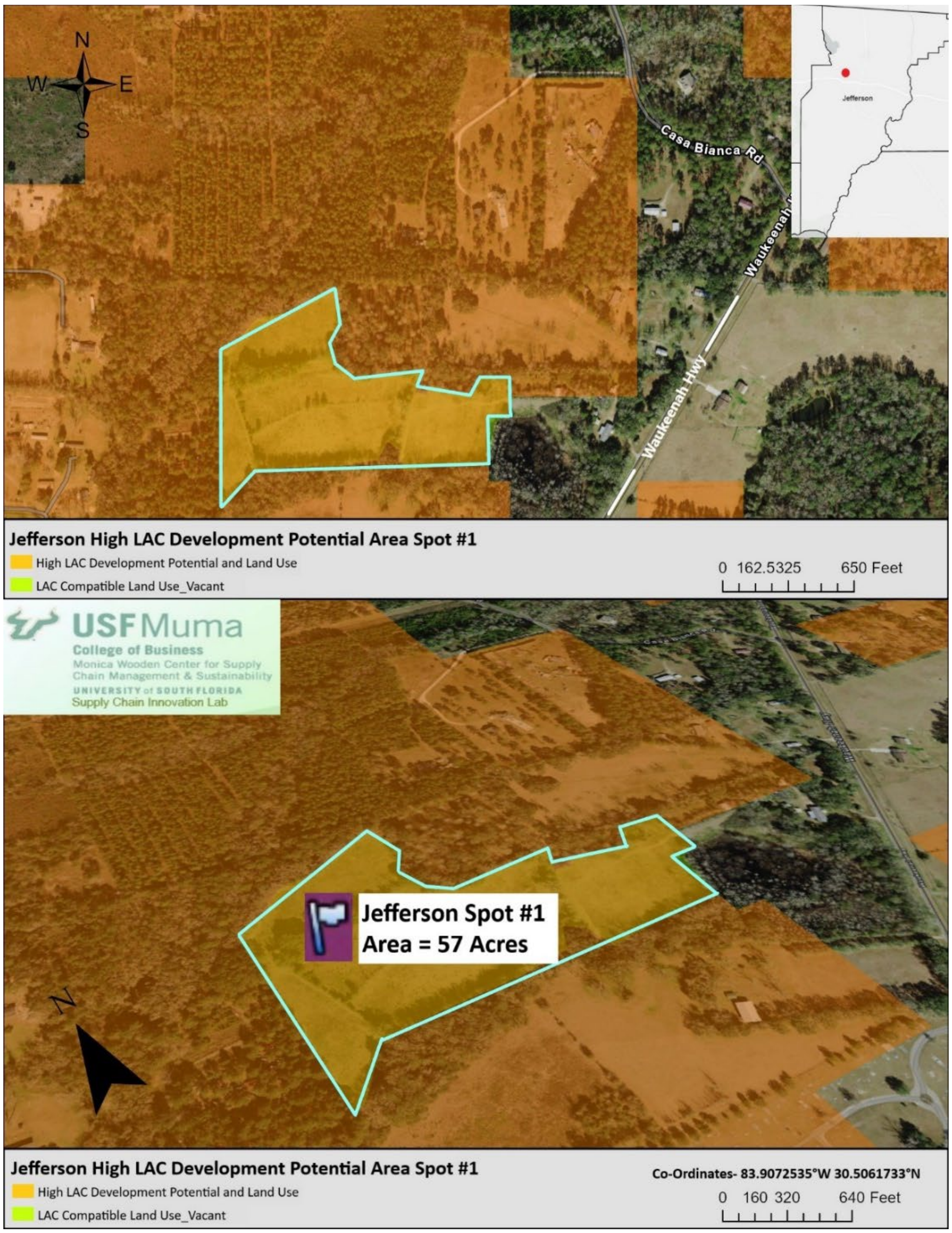

Figure A 32. Jefferson County Spot 1

LAFAYETTE COUNTY

As per the criteria developed in this study, this 7-acre land parcel in the below image (Figure A 33) located near Lafayette Elementary School has moderate LAC development potential in the Lafayette County. It is less than 2.5 miles from State roads and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

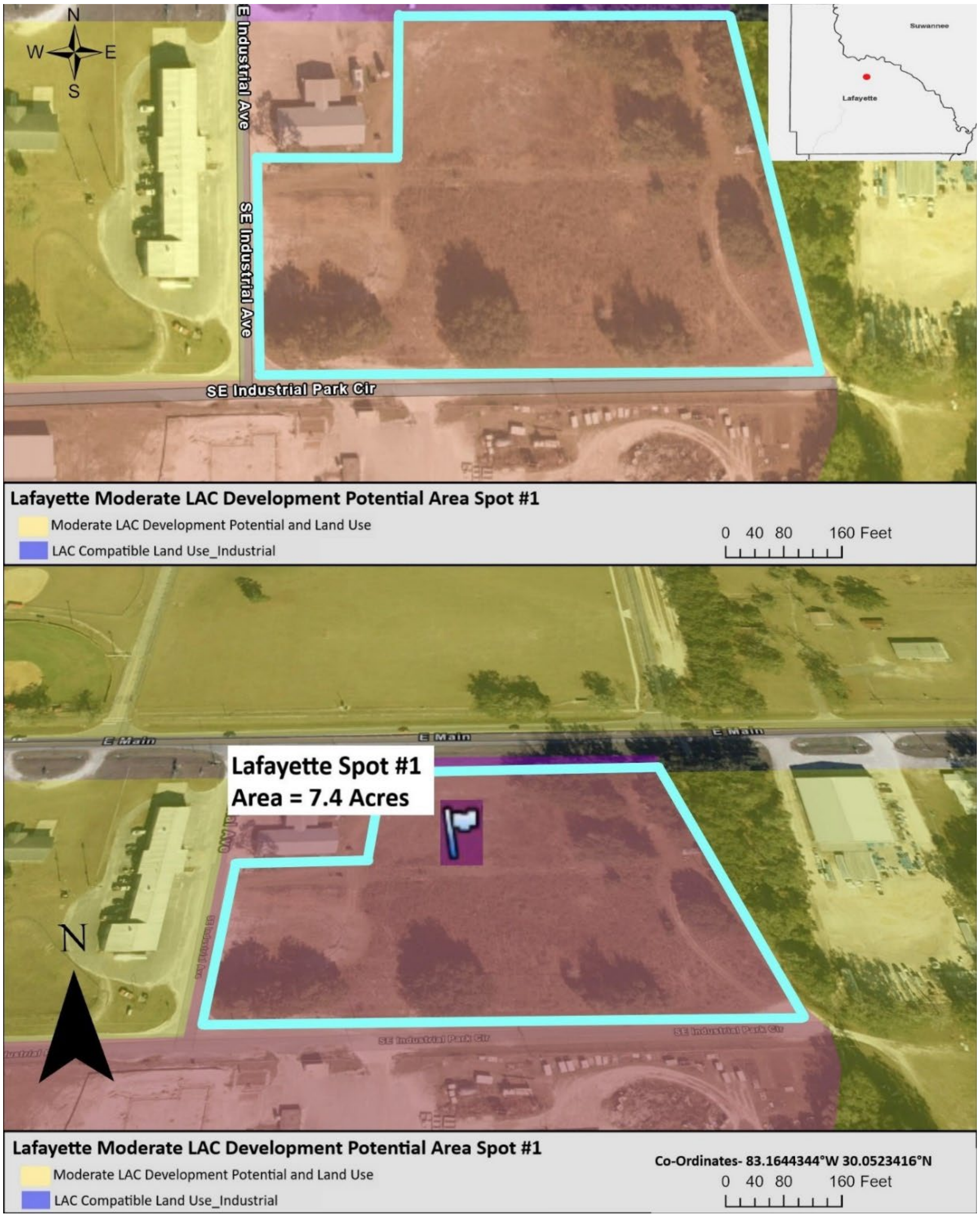

Figure A 33. Lafayette County Spot 1

LAKE COUNTY

As per the criteria developed in this study, this huge 62-acre land parcel in the below image (Figure A 34) located near Lake Apopka has very high LAC development potential in the Lake County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 10 miles from rail access and around 12 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

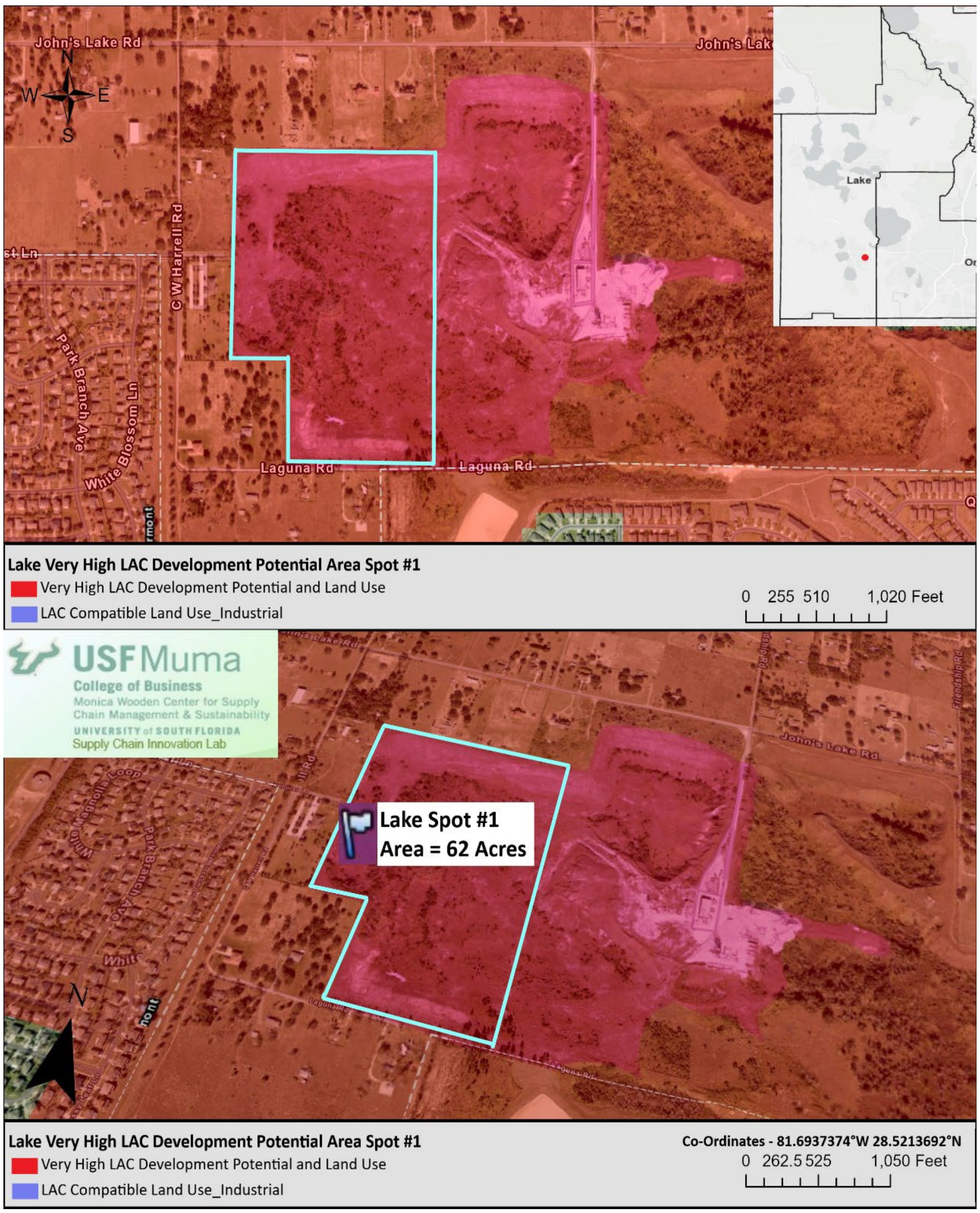

Figure A 34. Lake County Spot 1

LEE COUNTY

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure A 35) located near the Florida Power & Light Company has very high LAC development potential in the Lee County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access and less than 10 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

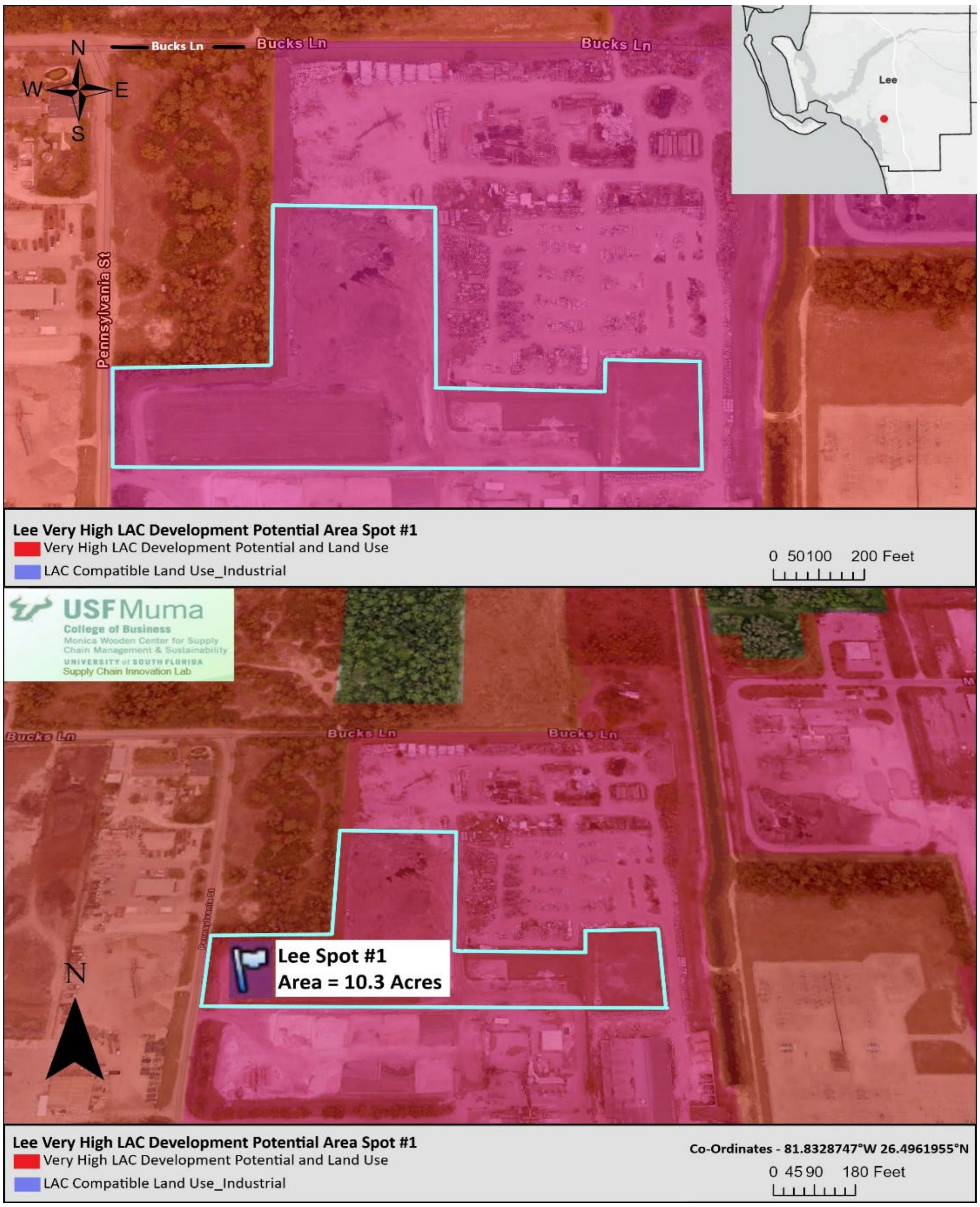

Figure A 35. Lee County Spot 1

LEON COUNTY

As per the criteria developed in this study, the 10-acre land parcel in the below image (Figure A 36) located near the Tallahassee Airport has very high LAC development potential in the Leon County. It is less than 2.5 miles from State roads, less than 6.25 miles from rail access, and less than 2.5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure A 36. Leon County Spot 1

LEVY COUNTY

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure A 37) located near the Levy County Courthouse has moderate LAC development potential in the Levy County. It is less than 2.5 miles from State roads and has one of the lowest AADT traffic congestion in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

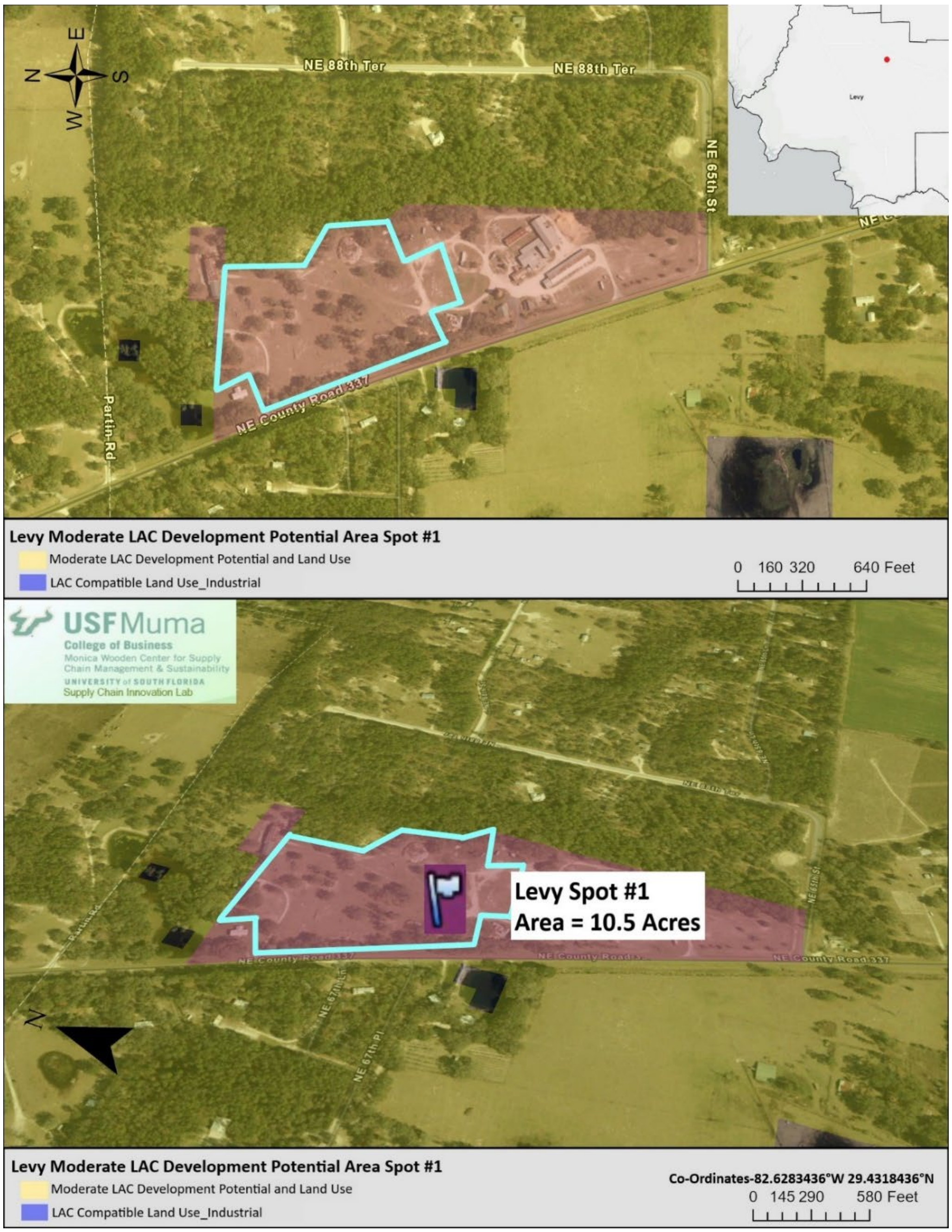

Figure A 37. Levy County Spot 1

LIBERTY COUNTY

As per the criteria developed in this study, this 22-acre land parcel in the below image (Figure A 38) located next to the NE Lowery Industrial Rd has moderate LAC development potential in the Liberty County. It is less than 2.5 miles from State roads, less than 6.25 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

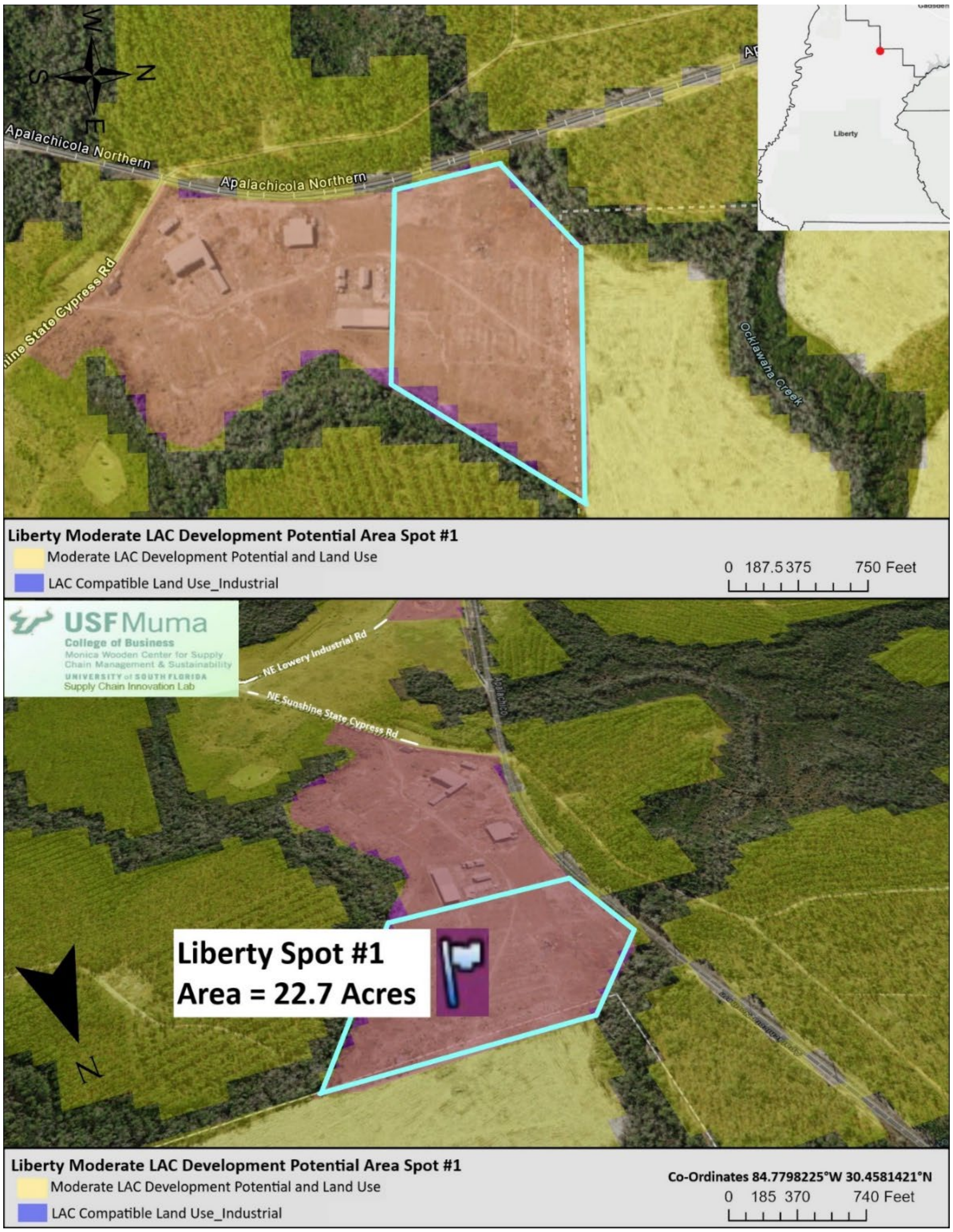

Figure A 38. Liberty County Spot 1

MADISON COUNTY

As per the criteria developed in this study, this huge 30-acre land parcel in the below image (Figure A 39) located at the intersection of County Road 360 and SW Gabriella Way has high LAC development potential in the Madison County. It is less than 2.5 miles from State roads, less than 2.5 miles from rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

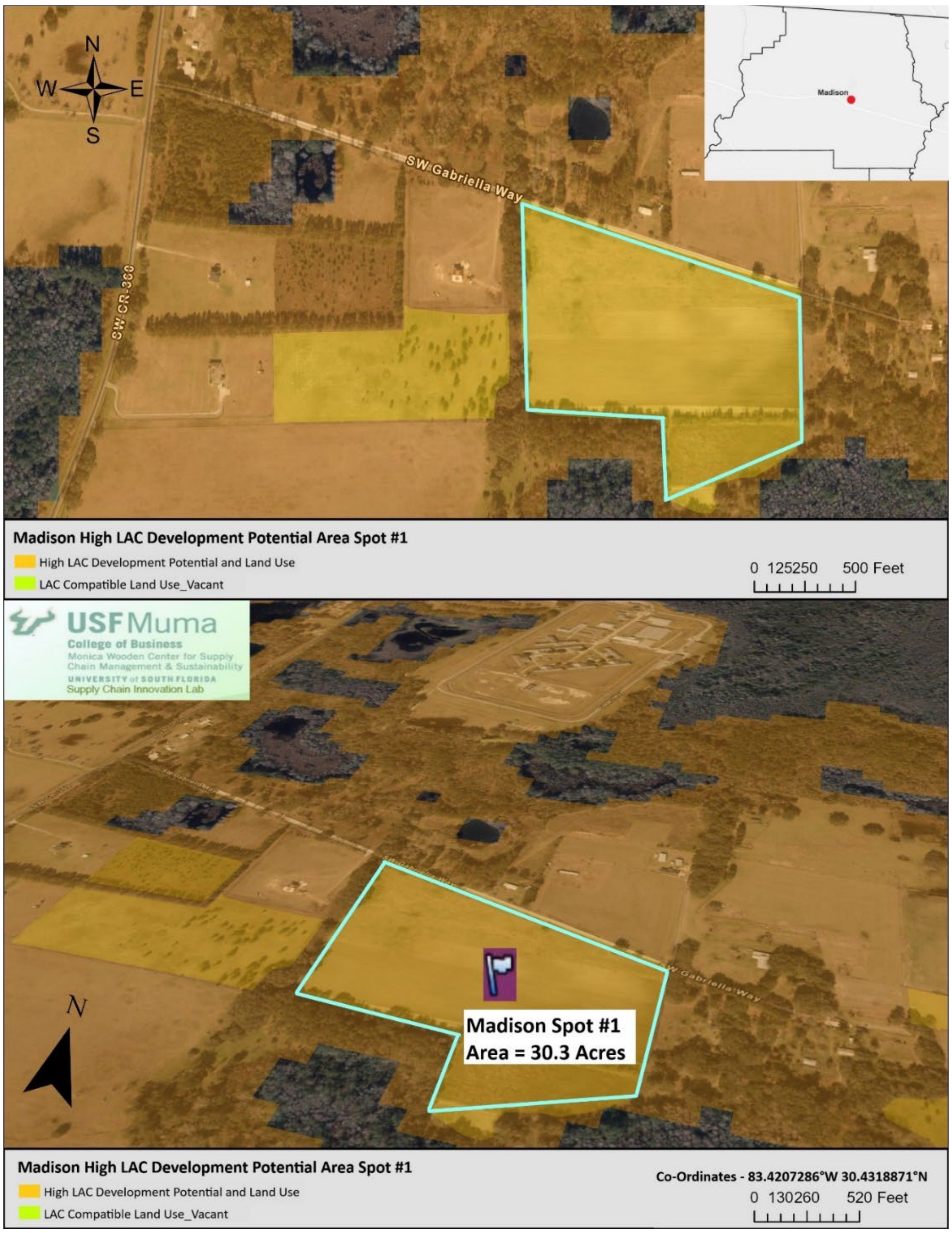

Figure A 39. Madison County Spot 1

MANATEE COUNTY

As per the criteria developed in this study, this 11-acre land parcel in the below image (Figure A 40) located near the Manatee County Transit Fleet Facility has very high LAC development potential in the Manatee County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access and less than 5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

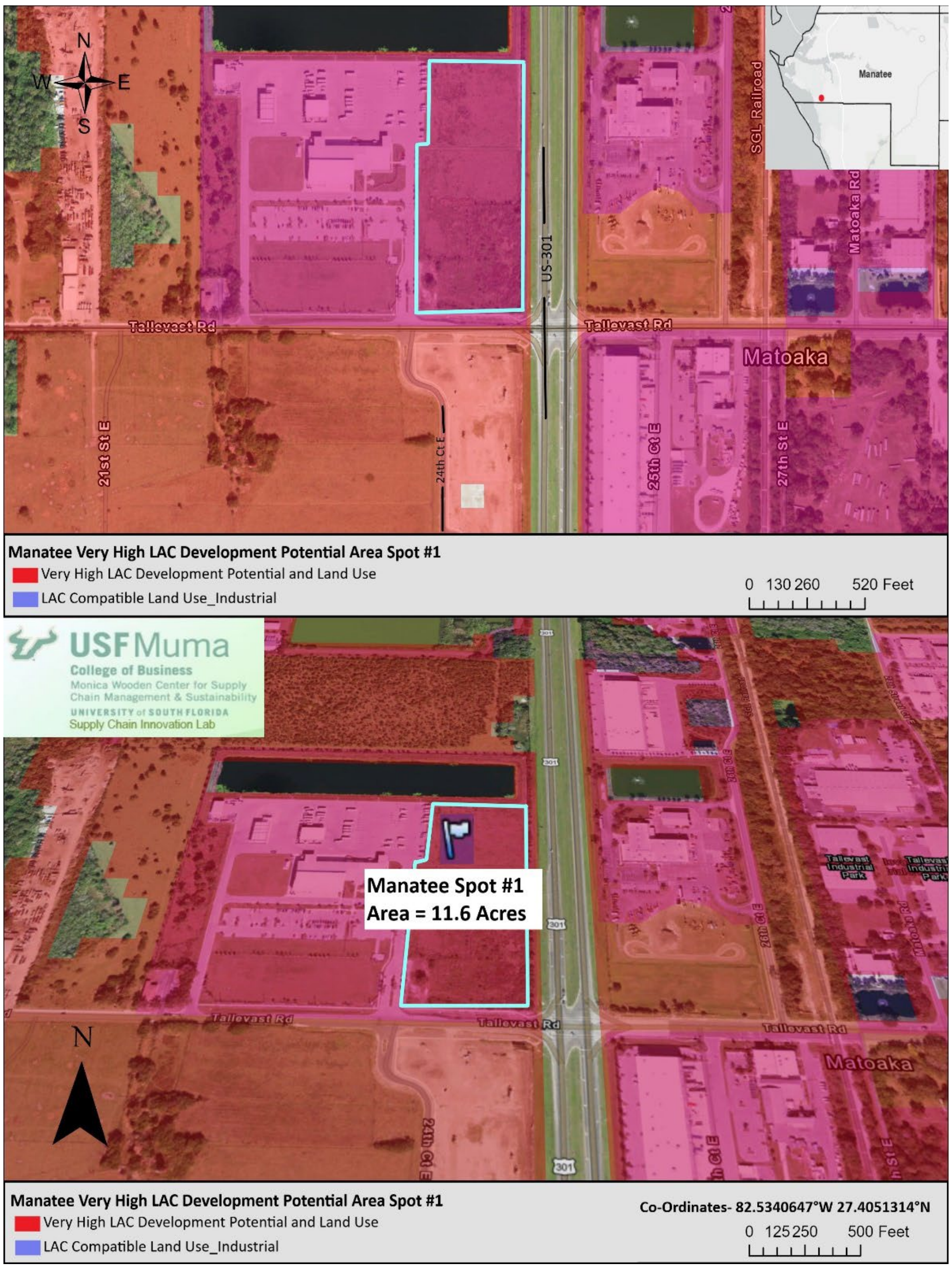

Figure A 40. Manatee County Spot 1

MARION COUNTY

As per the criteria developed in this study, this 19-acre land parcel in the below image (Figure A 41) located near the Lillian Bryant Park has very high LAC development potential in the Marion County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access and less than 10 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

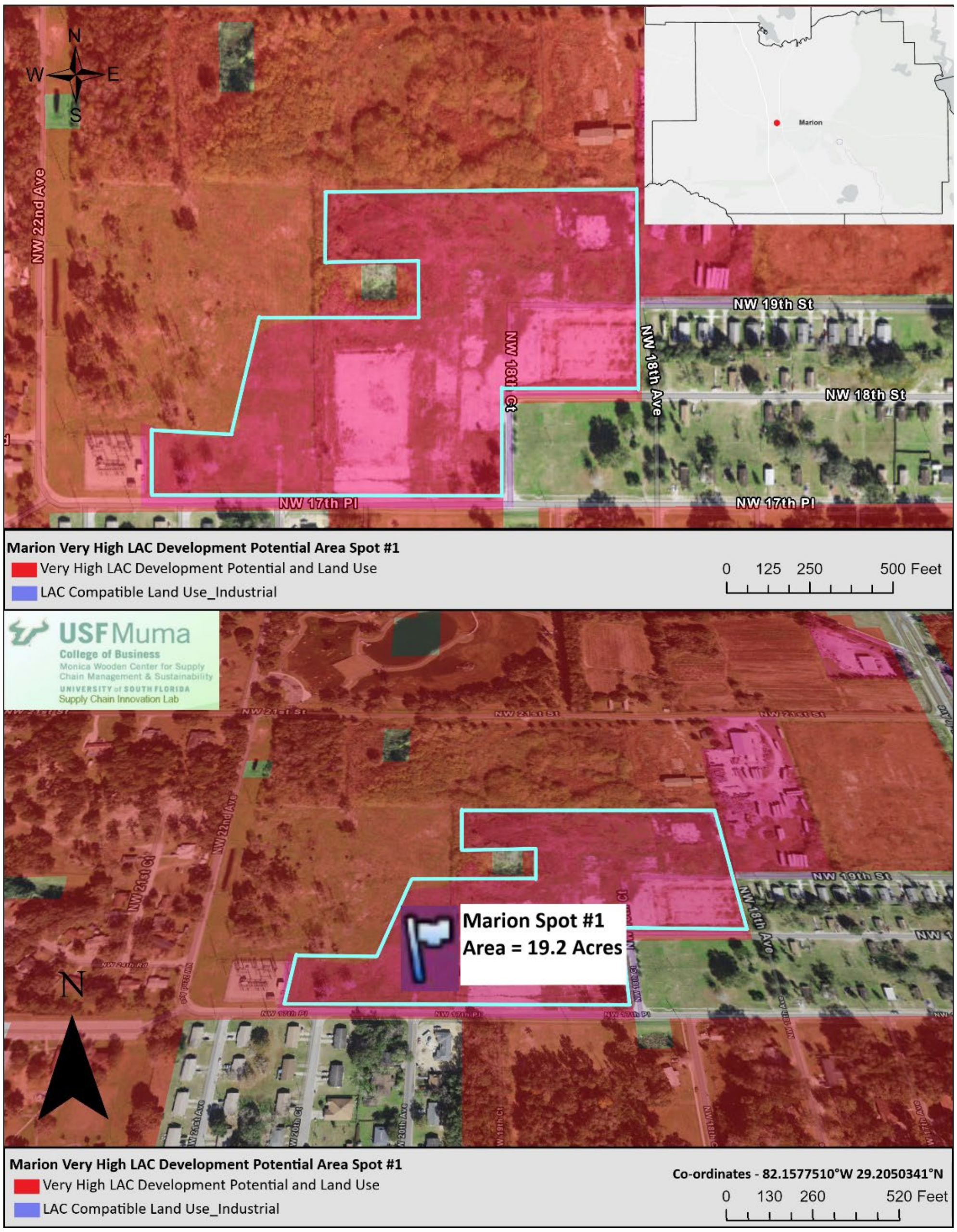

Figure A 41. Marion County Spot 1

MARTIN COUNTY

As per the criteria developed in this study, this 8-acre land parcel in the below image (Figure A 42) located near the intersection of SW Silver Fox Ln and SW Warfield Blvd has high LAC development potential in the Martin County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure A 42. Martin County Spot 1

MIAMI-DADE COUNTY

As per the criteria developed in this study, the huge 29-acre land parcel in the below image (Figure A 43) located near the Miami Executive Airport has very high LAC development potential in the Miami-Dade County. It is less than 2.5 miles from State roads, less than 6.25 miles from rail access, and less than 2.5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

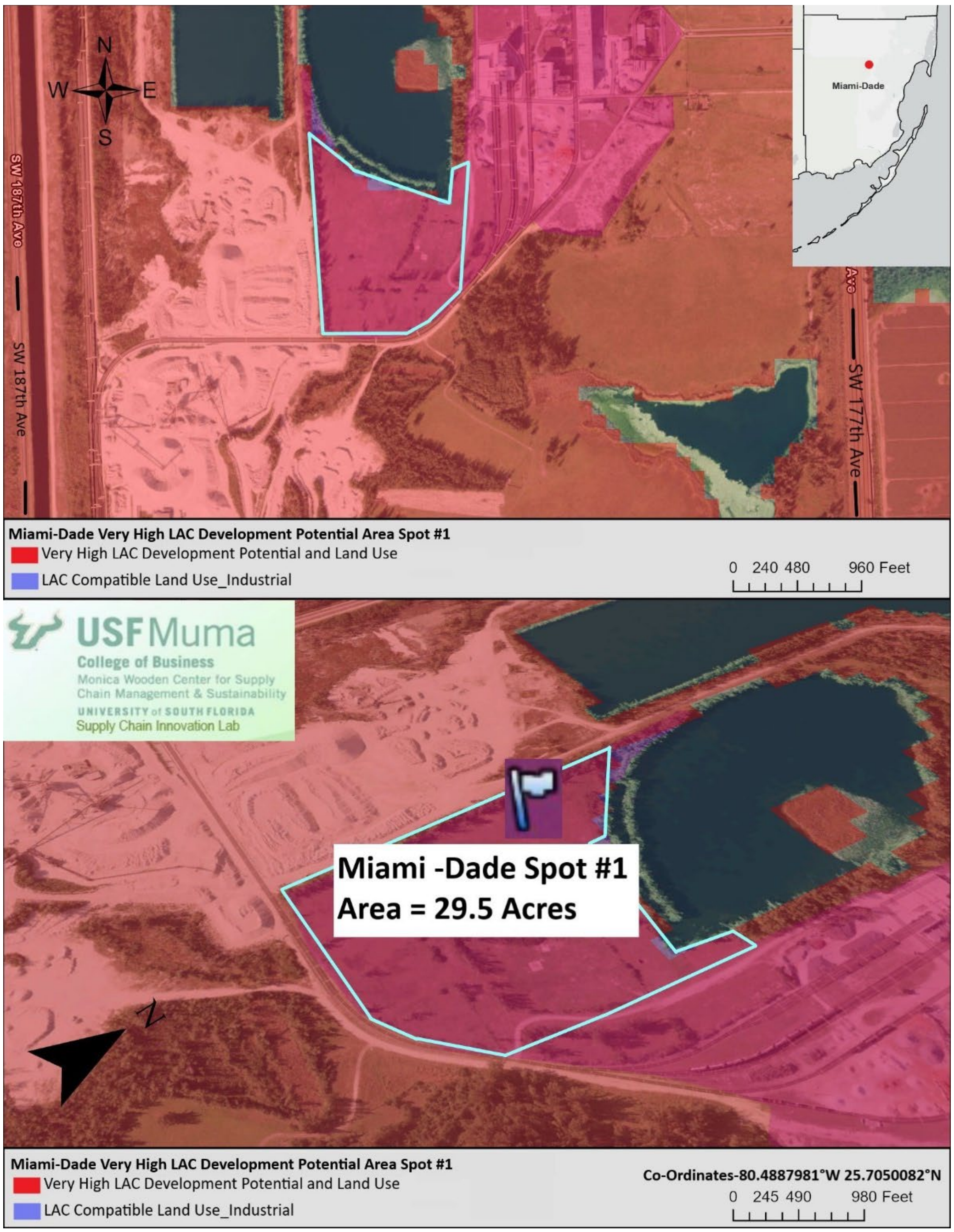

Figure A 43. Miami-Dade County Spot 1

MONROE COUNTY

As per the criteria developed in this study, this 11-acre land parcel in the below image (Figure A 44) located at the intersection of Acosta Trail and Crane Blvd has moderate LAC development potential in the Monroe County. It is less than 2.5 miles from State roads, one of the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

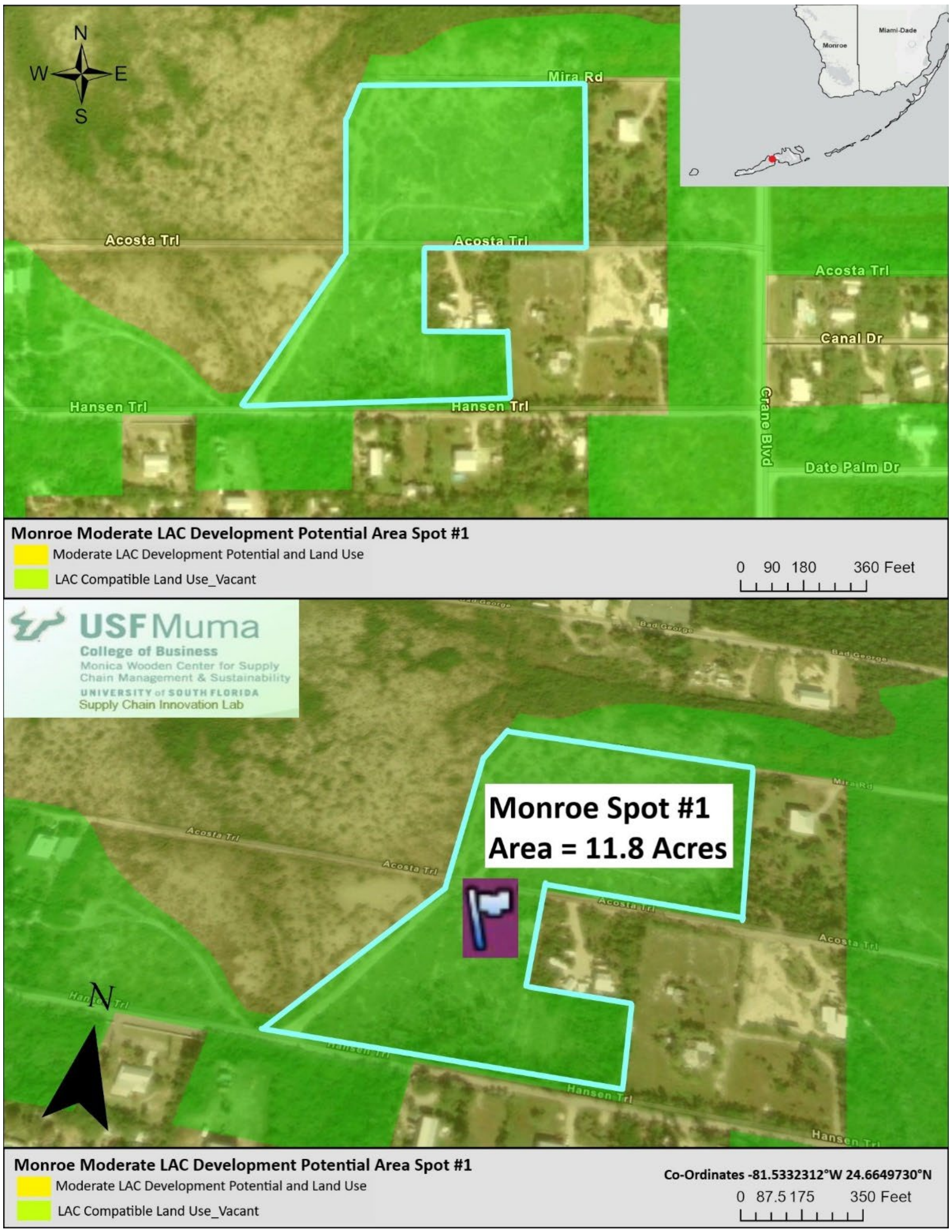

Figure A 44. Monroe County Spot 1

NASSAU COUNTY

As per the criteria developed in this study, this 17-acre land parcel in the below image (Figure A 45) located at the intersection of Broswell Rd and N 14th St has high LAC development potential in the Nassau County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from seaport facilities and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

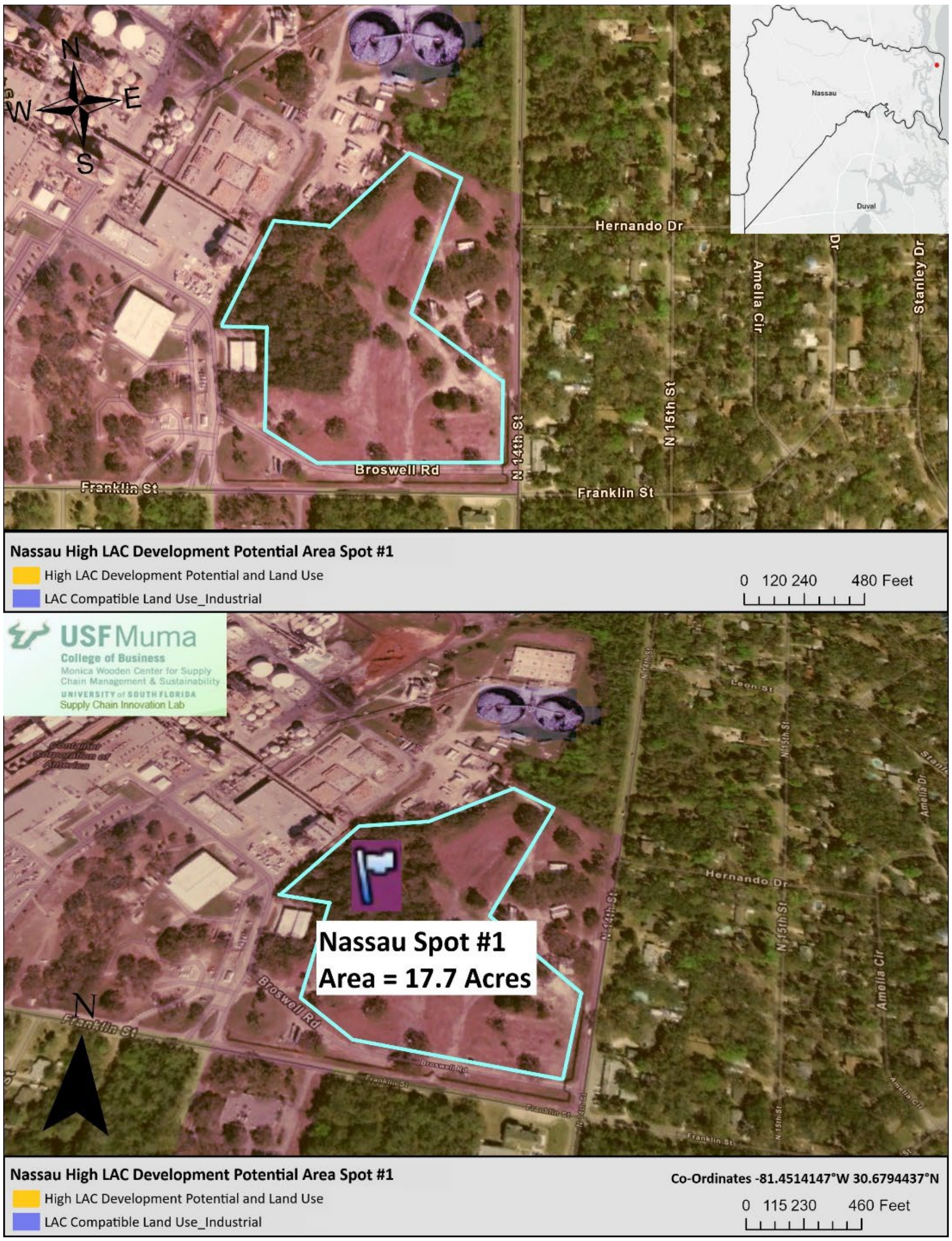

Figure A 45. Nassau County Spot 1

OKALOOSA COUNTY

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure A 46) located at the intersection of US Highway 90 and Ellis Rd has high LAC development potential in the Okaloosa County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

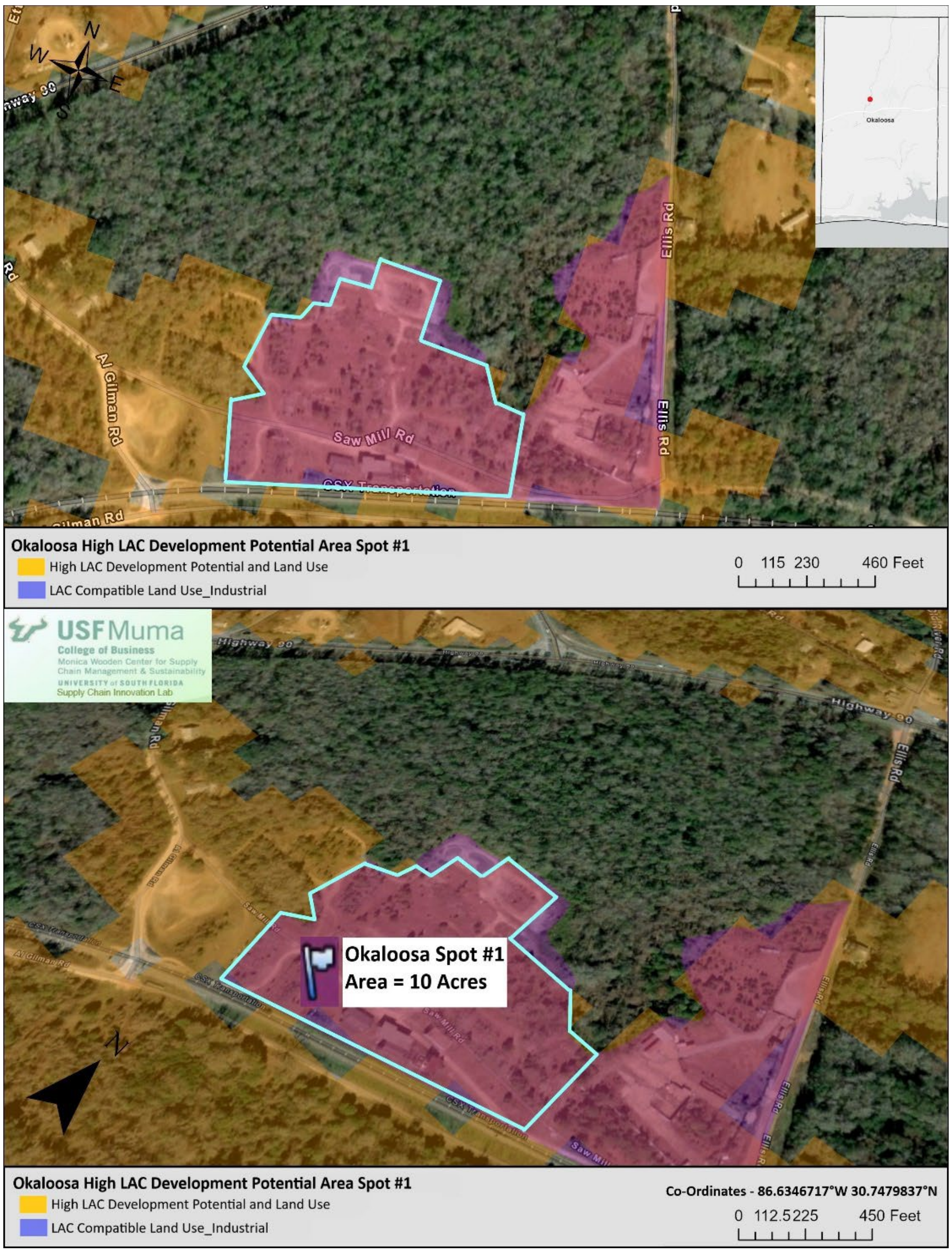

Figure A 46. Okaloosa County Spot 1

OKEECHOBEE COUNTY

As per the criteria developed in this study, this 11-acre land parcel in the below image (Figure A 47) located near the Okeechobee County Airport has high LAC development potential in the Okeechobee County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from air cargo facilities and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

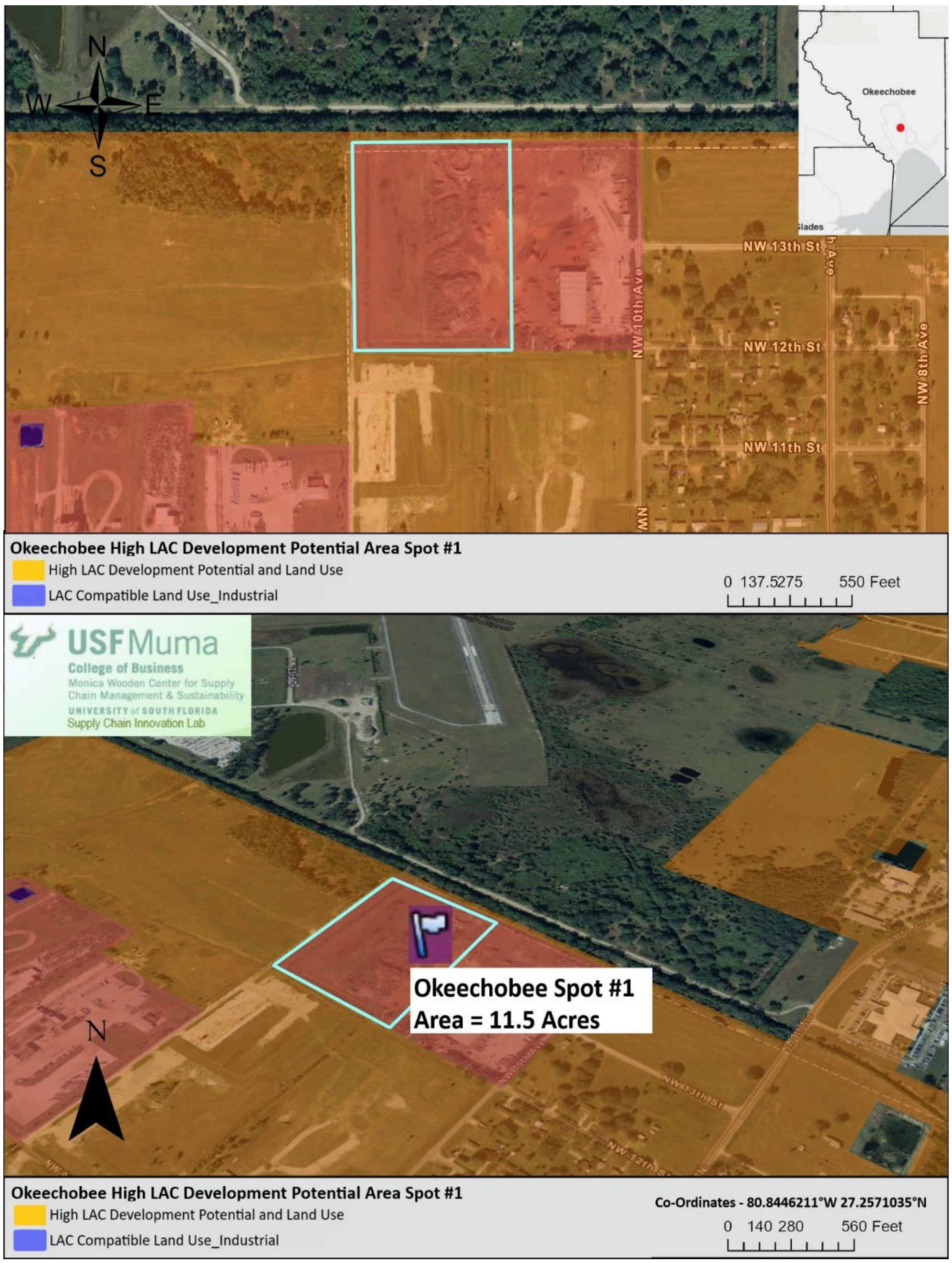

Figure A 47. Okeechobee County Spot 1

ORANGE COUNTY

As per the criteria developed in this study, the huge 7-acre land parcel in the below image (Figure A 48) located near the Orlando International Airport has very high LAC development potential in the Orange County. It is less than 2.5 miles from freeways, less than 2.5 miles from State roads, less than 2.5 miles from rail access, and less than 2.5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

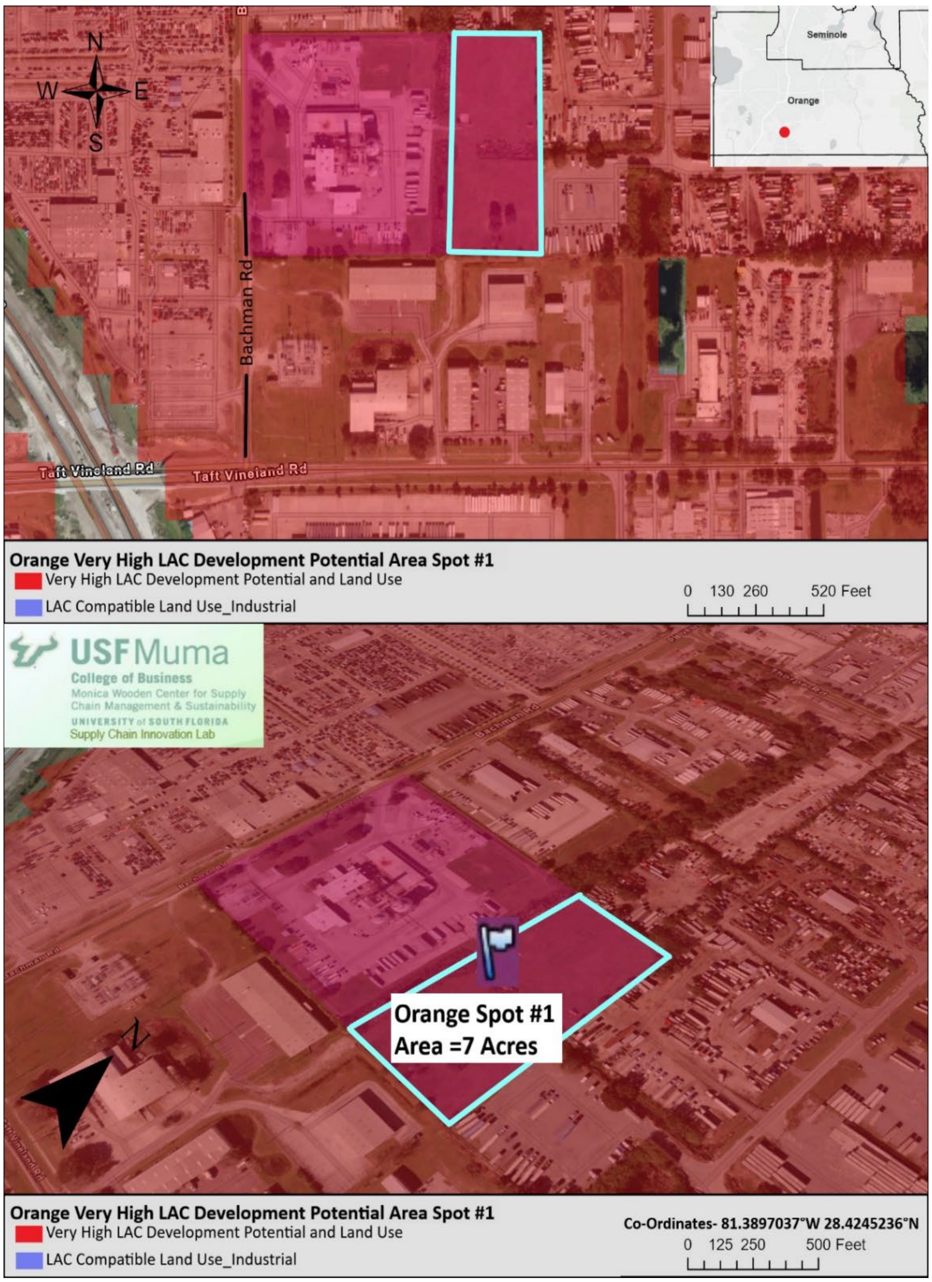

Figure A 48. Orange County Spot 1

OSCEOLA COUNTY

As per the criteria developed in this study, the 18-acre land parcel in the below image (Figure A 49) located near the Osceola County Fire Rescue Station 42 has very high LAC development potential in the Osceola County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

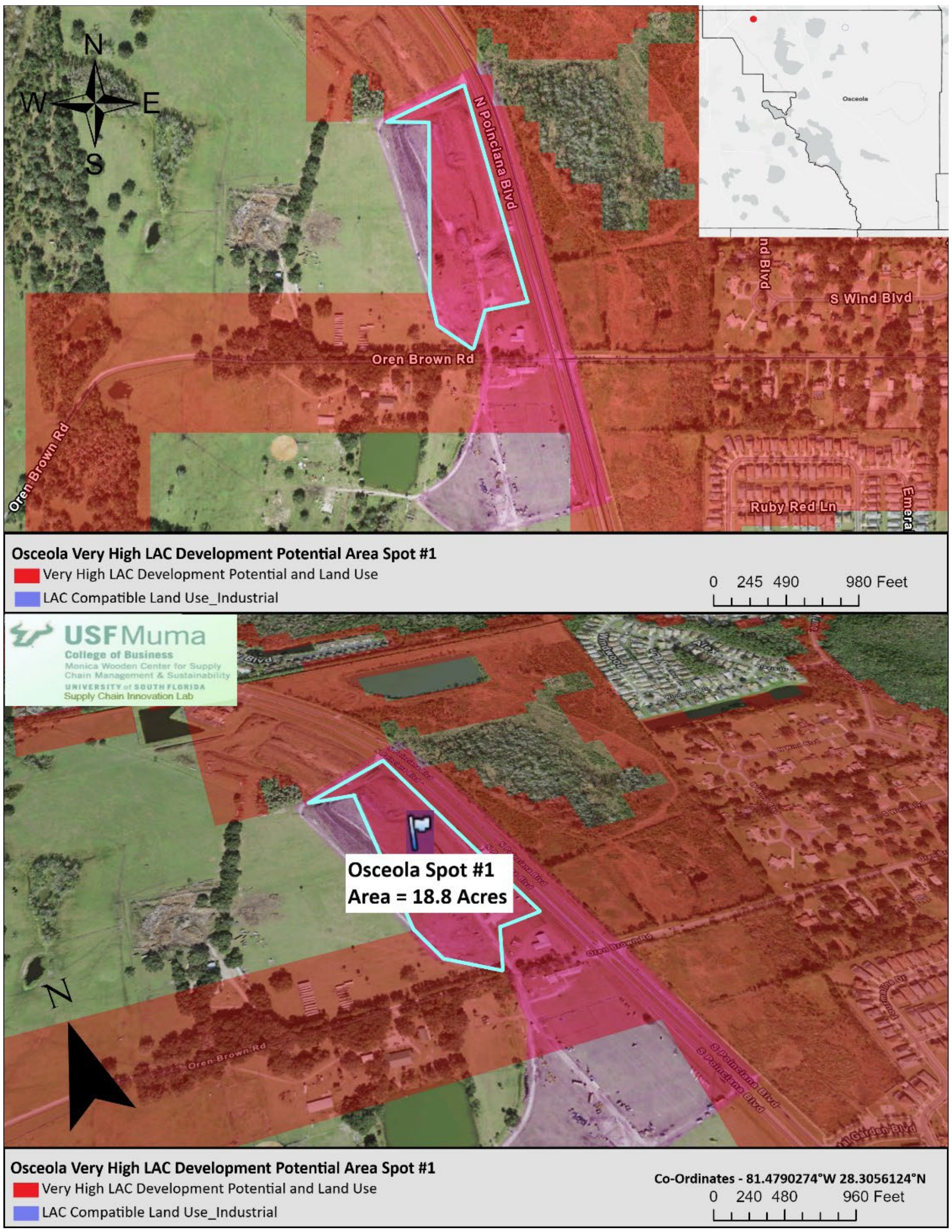

Figure A 49. Osceola County Spot 1

PALM BEACH COUNTY

As per the criteria developed in this study, the 11-acre land parcel in the below image (Figure A 50) located near the Port of Palm Beach has very high LAC development potential in the Palm Beach County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from rail access, and less than 2.5 miles from seaport facilities and less than 10 miles from air transport facilities which confirms the very high LAC development potential as per the criteria developed in this study.

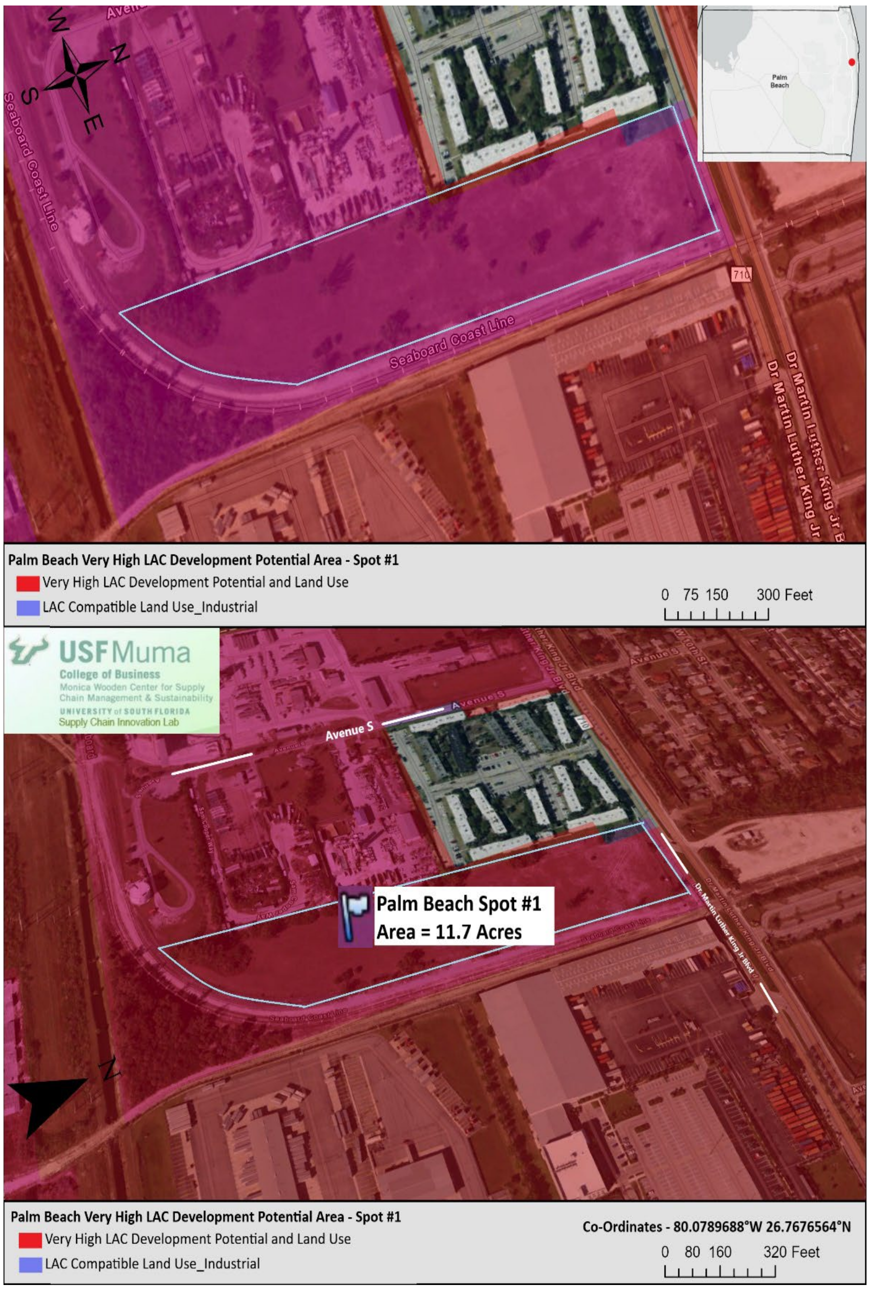

Figure A 50. Palm Beach County Spot 1

PASCO COUNTY

As per the criteria developed in this study, the 22-acre land parcel in the below image (Figure A 51) located at the intersection of US Highway 98 and US Highway 301 has very high LAC development potential in the Pasco County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

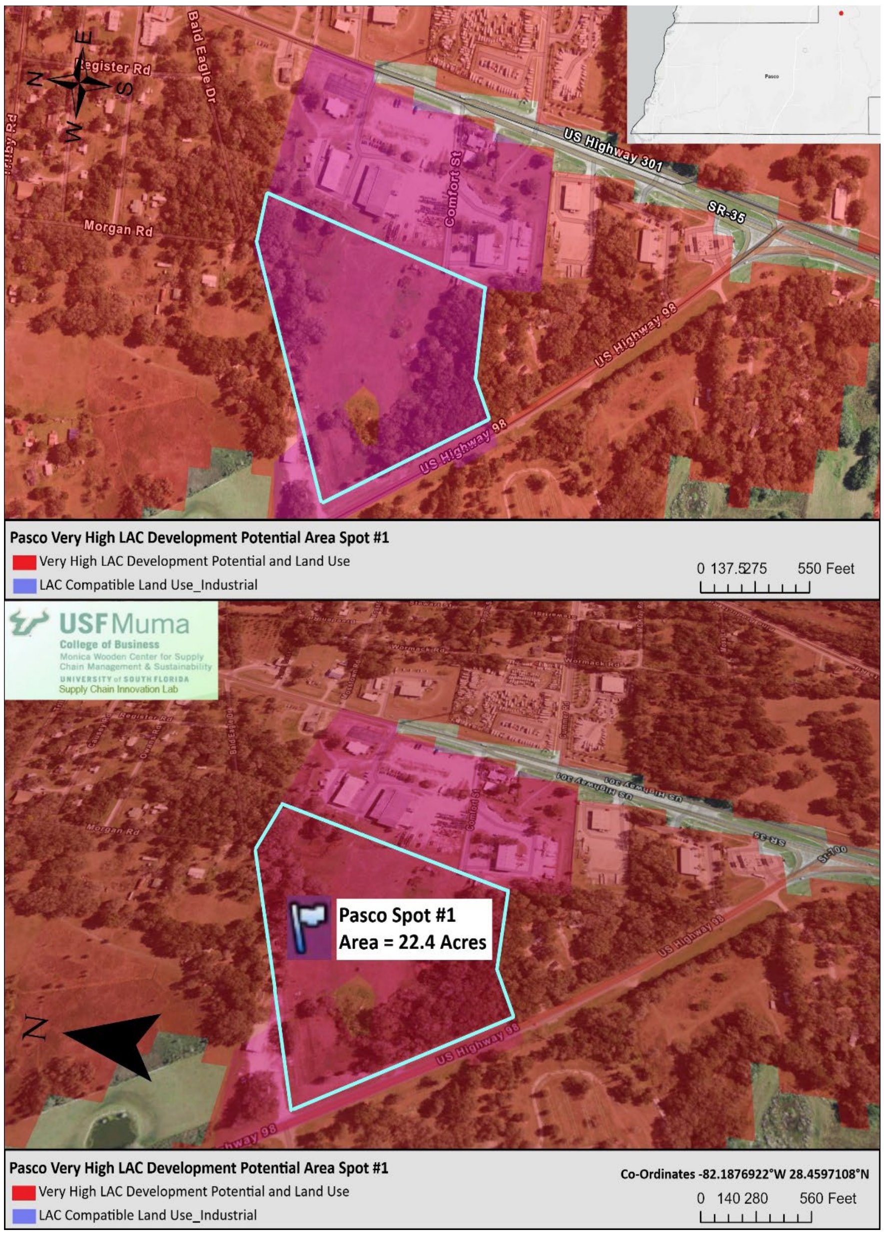

Figure A 51. Pasco County Spot 1

PINELLAS COUNTY

As per the criteria developed in this study, the 27-acre land parcel in the below image (Figure A 52) located near the St. Pete-Clearwater International Airport, has very high LAC development potential in the Pinellas County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from rail access, and less than 2.5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

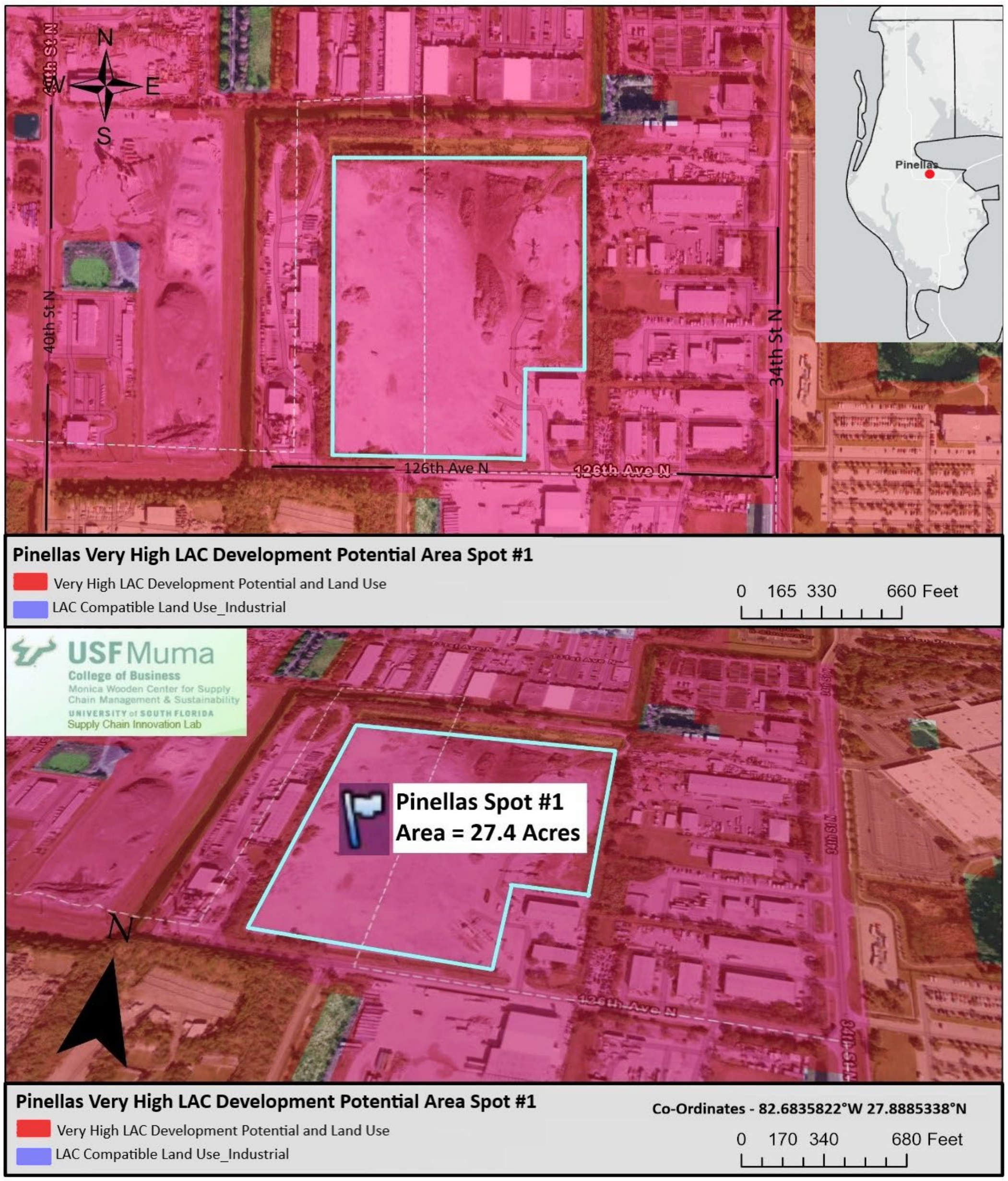

Figure A 52. Pinellas County Spot 1

POLK COUNTY

As per the criteria developed in this study, the 27-acre land parcel in the below image (Figure A 53) located near Lake Hamilton has very high LAC development potential in the Polk County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

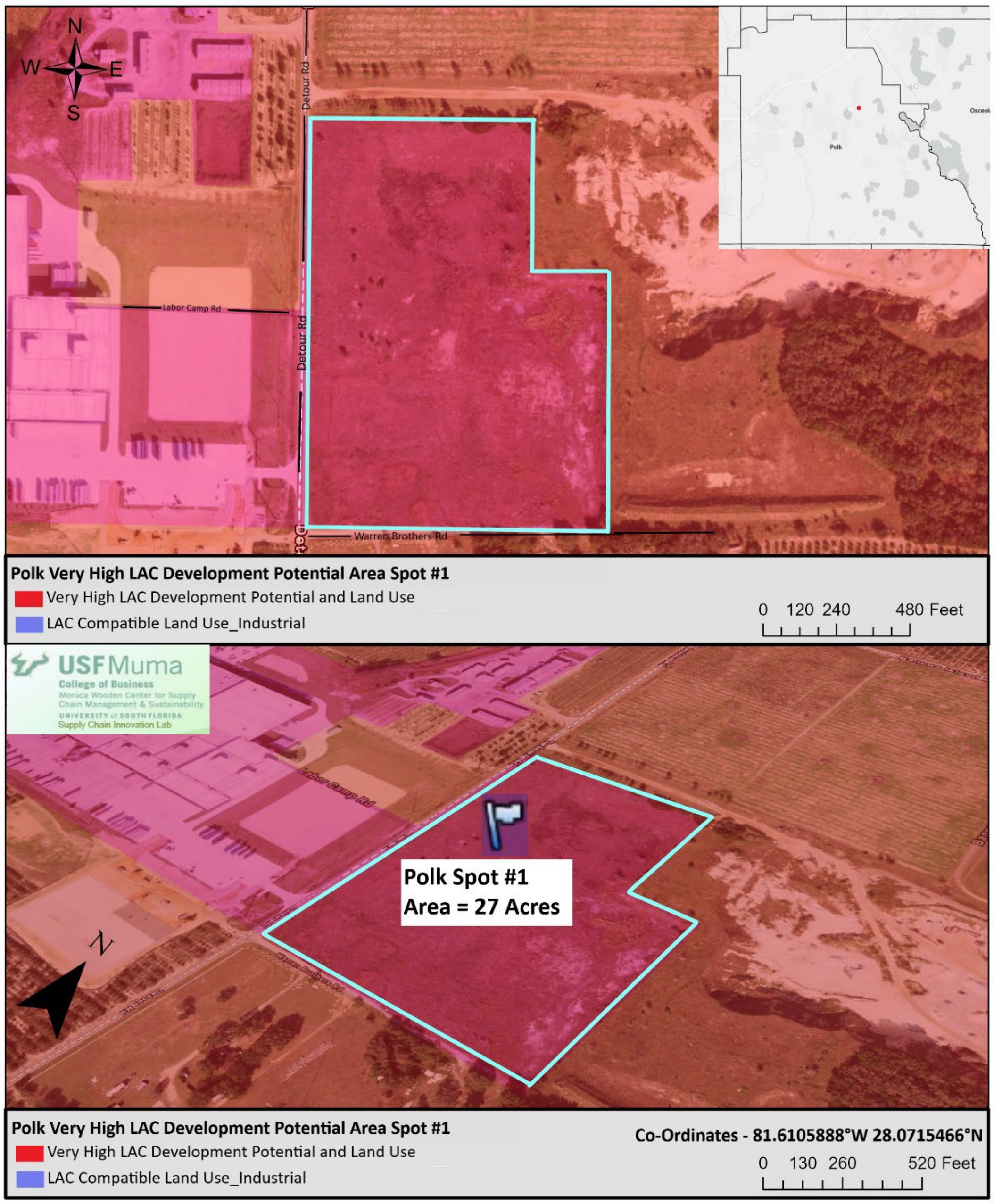

Figure A 53. Polk County Spot 1

PUTNAM COUNTY

As per the criteria developed in this study, this 36-acre land parcel in the below image (Figure A 54) located near the Palatka Municipal Airport has high LAC development potential in the Putnam County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

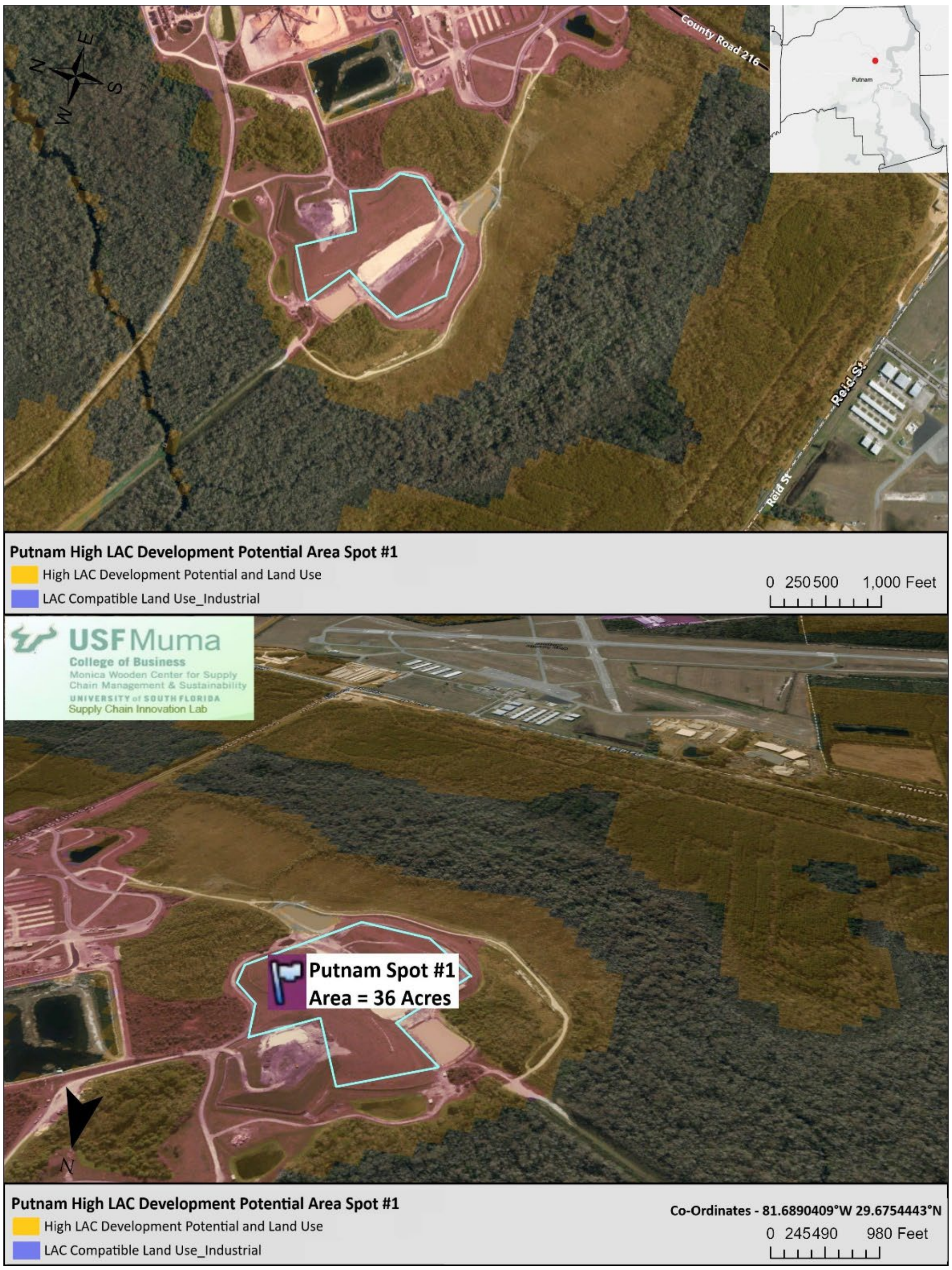

Figure A 54. Putnam County Spot 1

SANTA ROSA COUNTY

As per the criteria developed in this study, this 20-acre land parcel in the below image (Figure A 55) located near the Milton Airport has high LAC development potential in the Santa Rosa County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

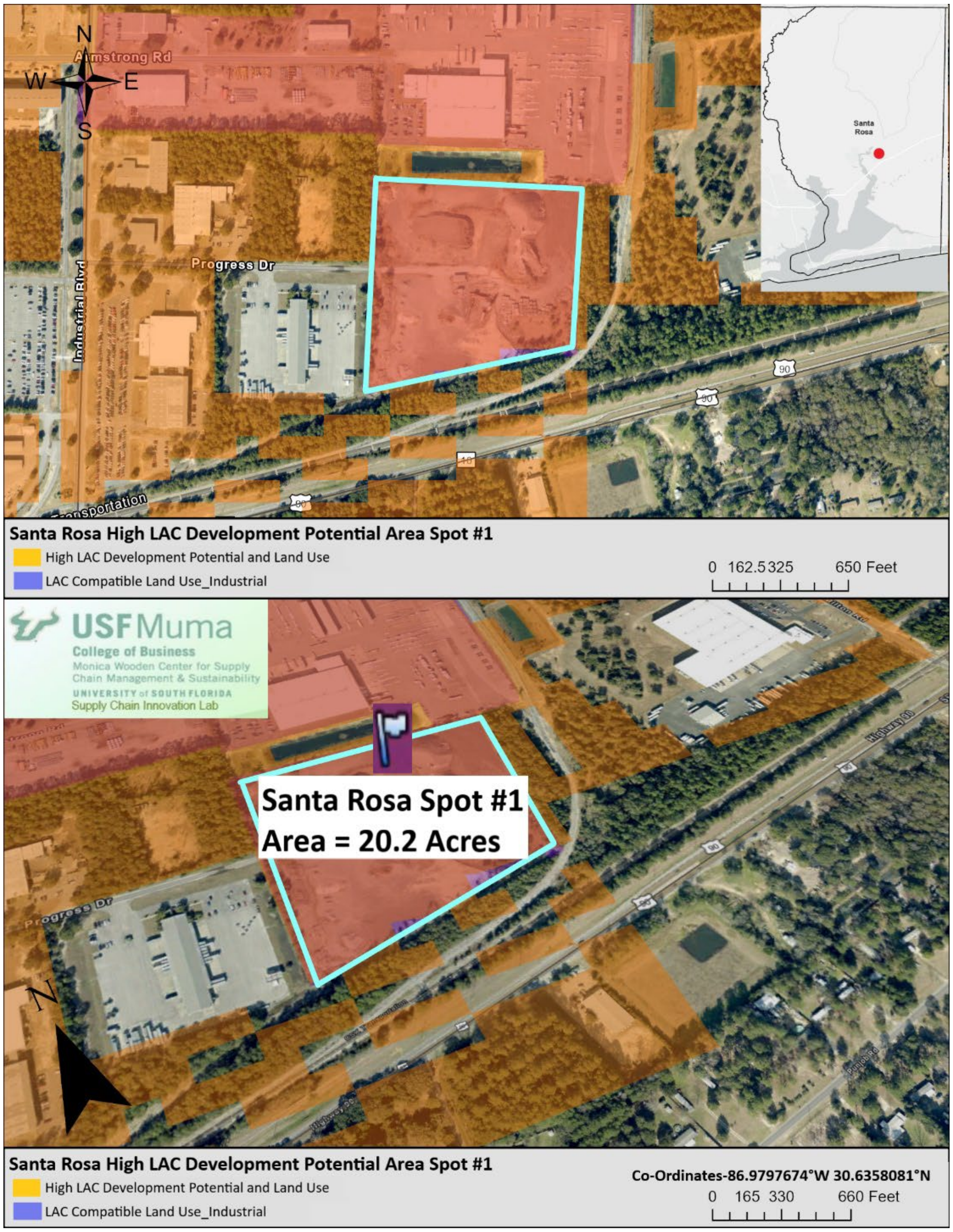

Figure A 55. Santa Rosa County Spot 1

SARASOTA COUNTY

As per the criteria developed in this study, this 8-acre land parcel in the below image (Figure A 56) located near Siesta Keys has very high LAC development potential in the Sarasota County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

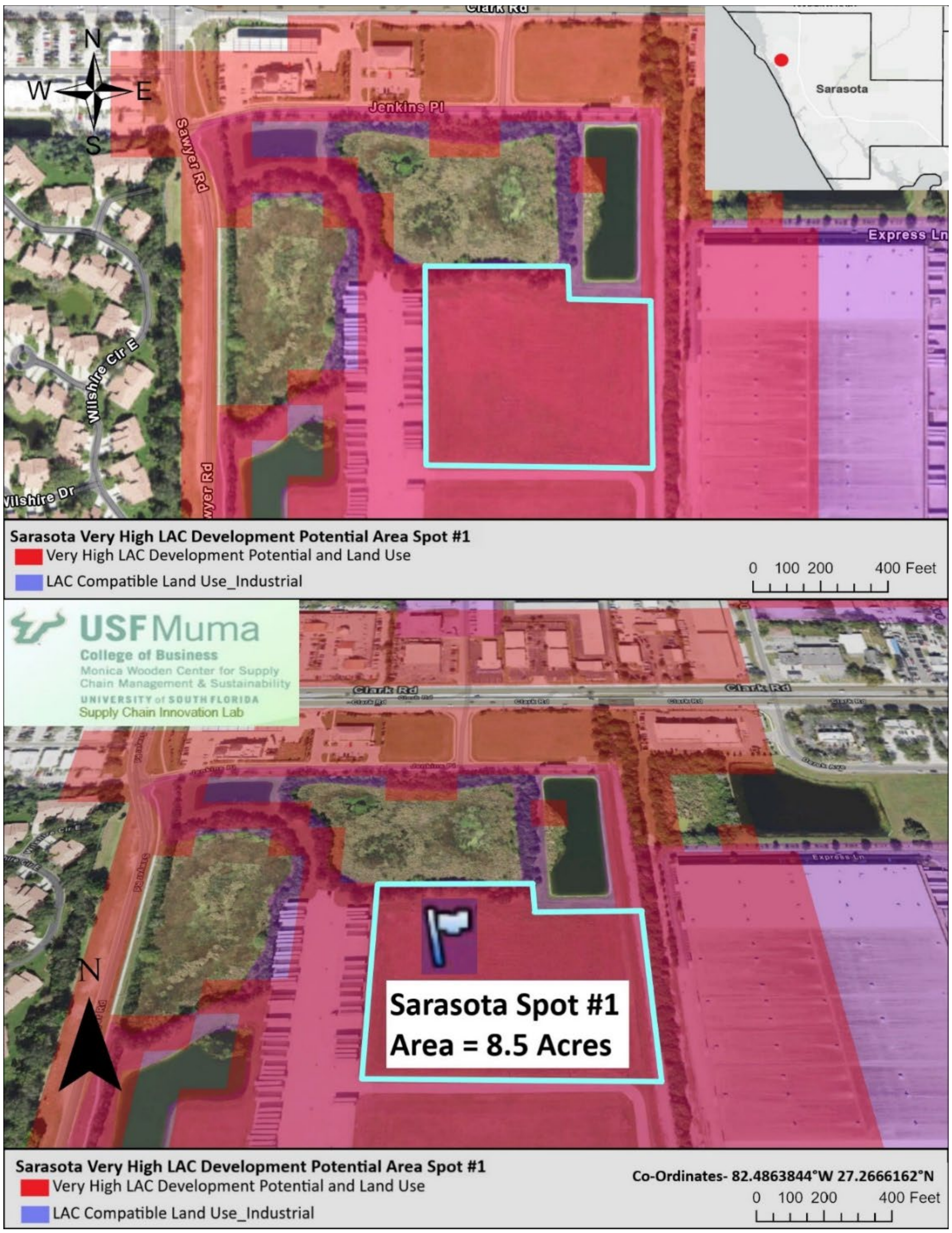

Figure A 56. Sarasota County Spot 1

SEMINOLE COUNTY

As per the criteria developed in this study, the 39-acre land parcel in the below image (Figure A 57) located near the Orlando Sanford International Airport has very high LAC development potential in the Seminole County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from air cargo facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

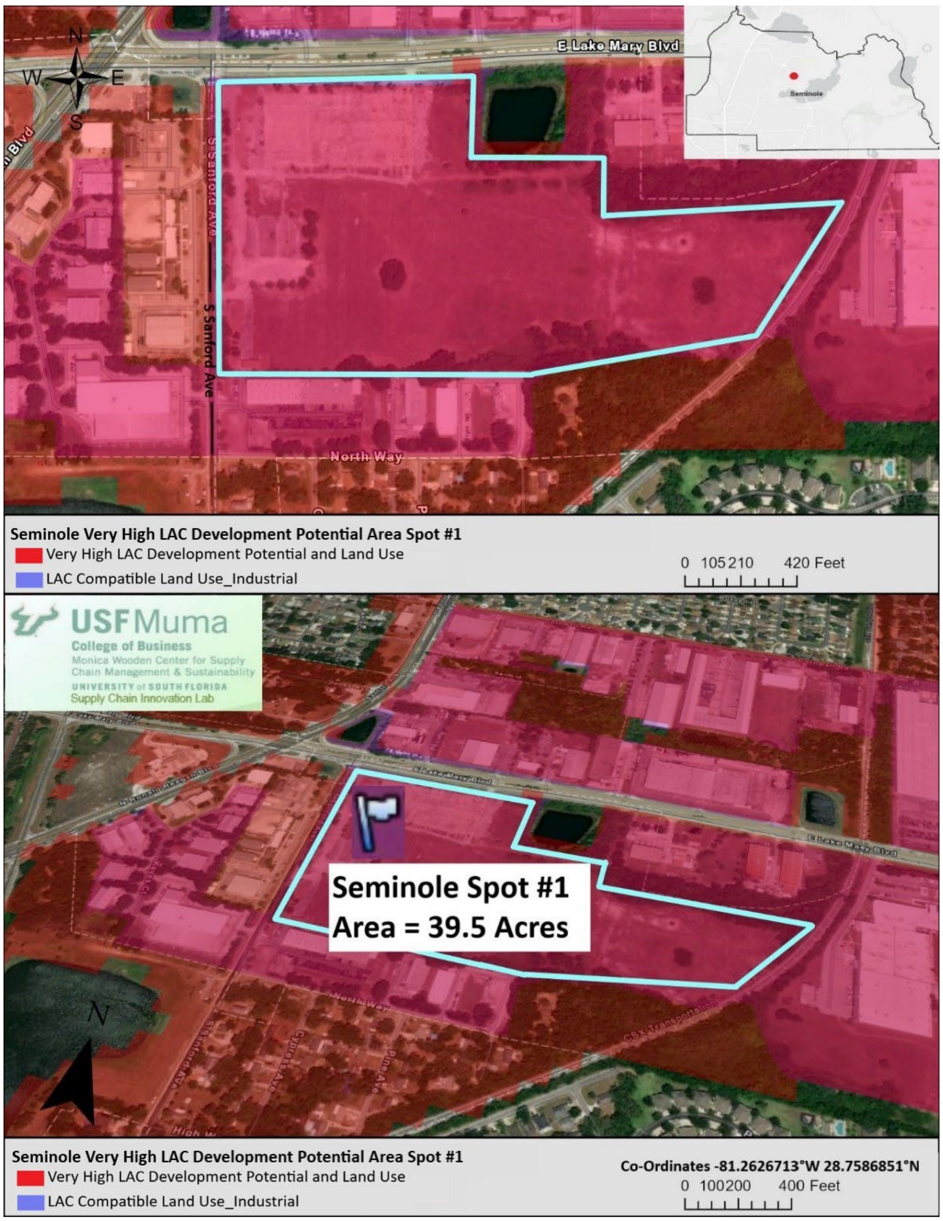

Figure A 57. Seminole County Spot 1

ST JOHNS COUNTY

As per the criteria developed in this study, this 9- acre land parcel in the below image (Figure A 58) located near the St Augustine Little League Complex has very high LAC development potential in the St Johns County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

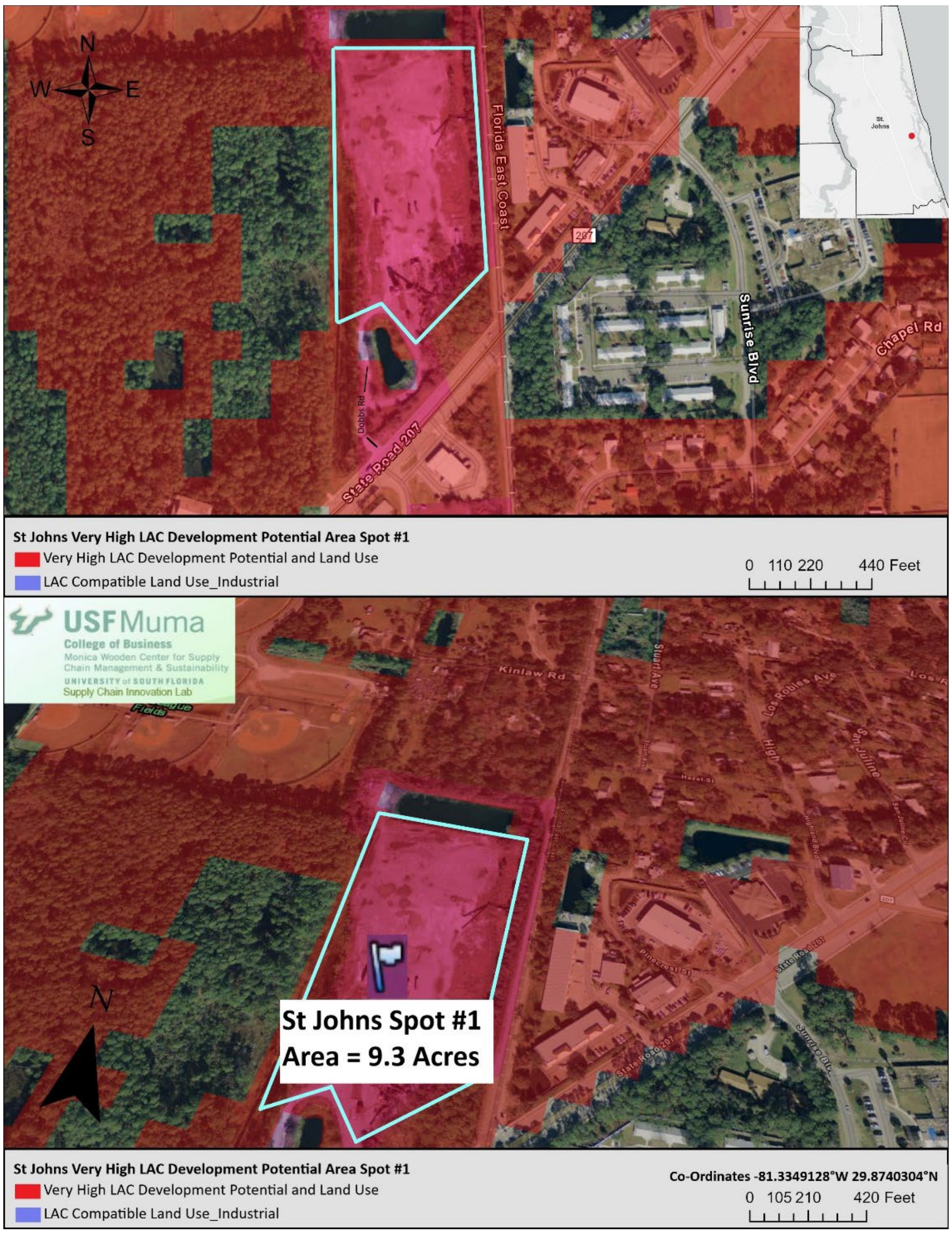

Figure A 58. St Johns County Spot 1

ST LUCIE COUNTY

As per the criteria developed in this study, this huge 108-acre land parcel in the below image (Figure A 59) located near the St Lucie County Fire District Headquarters has very high LAC development potential in the St Lucie County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from seaport access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

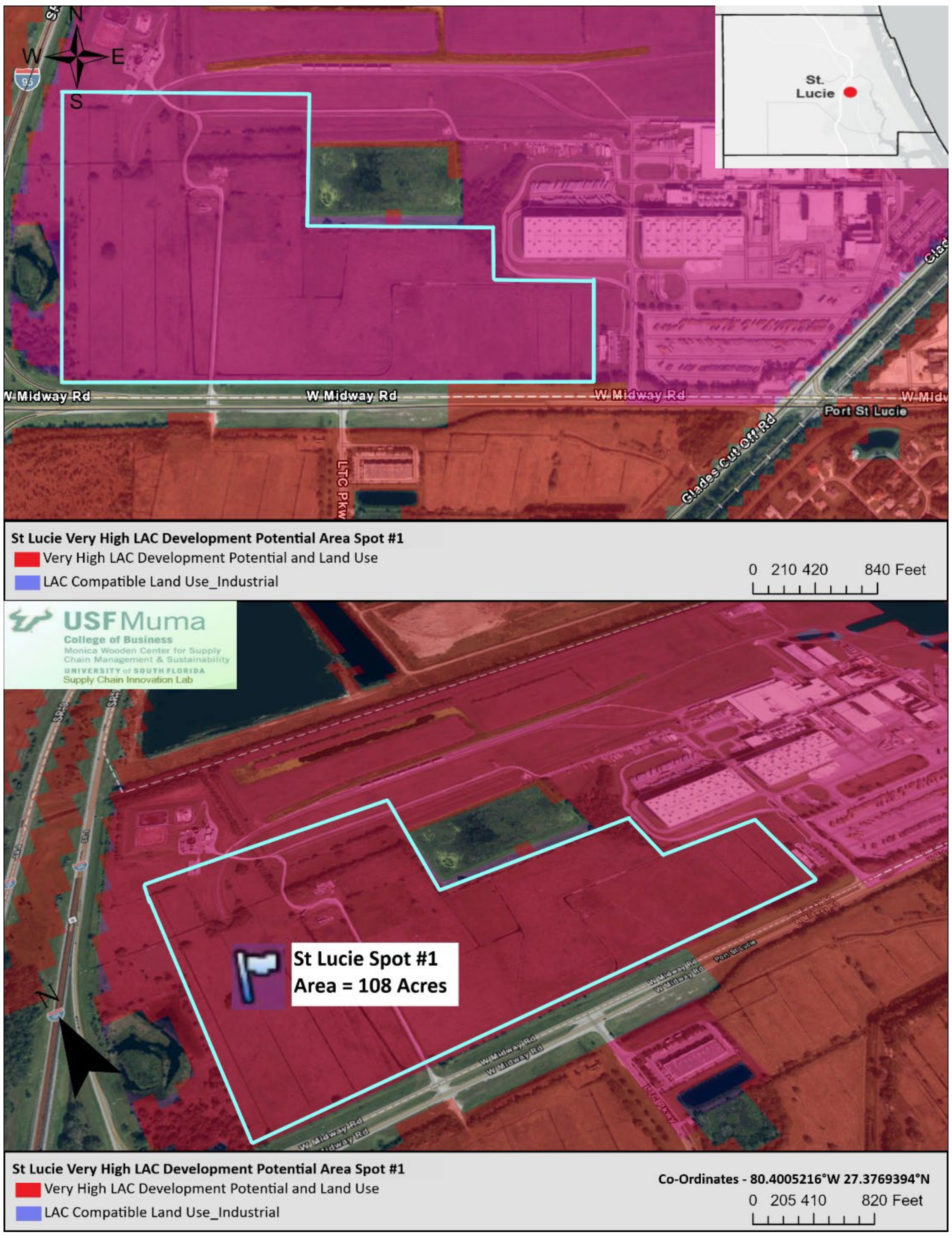

Figure A 59. St Lucie County Spot 1

SUMTER COUNTY

As per the criteria developed in this study, this 15-acre land parcel in the below image (Figure A 60) located at the intersection of Northeast 82nd Avenue and NE 44th Dr has high LAC development potential in the Sumter County. It is less than 7.5 miles from freeways, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

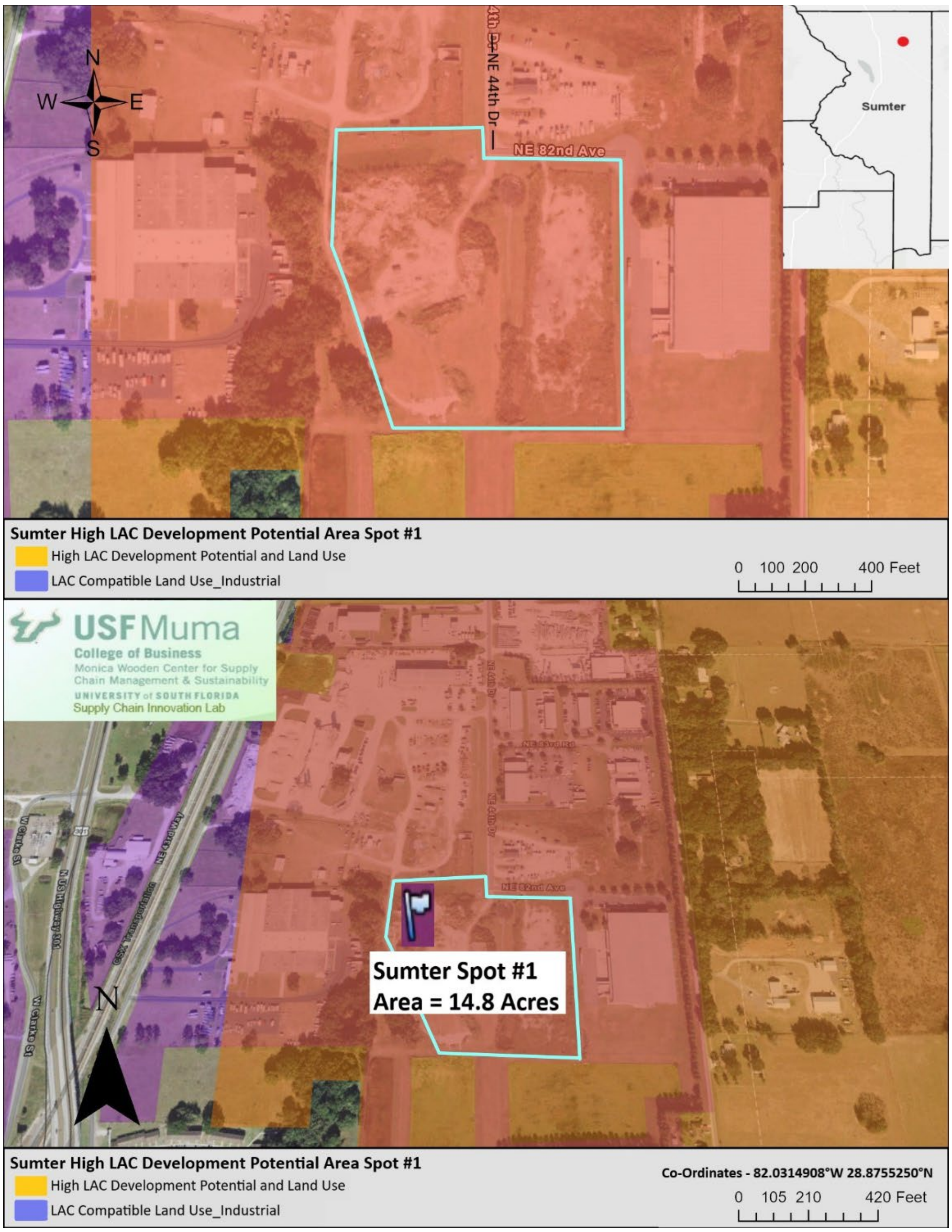

Figure A 60. Sumter County Spot 1

SUWANEE COUNTY

As per the criteria developed in this study, the 29-acre land parcel in the below image (Figure A 61) located near the Suwanee County High School has very high LAC development potential in the Suwanee County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

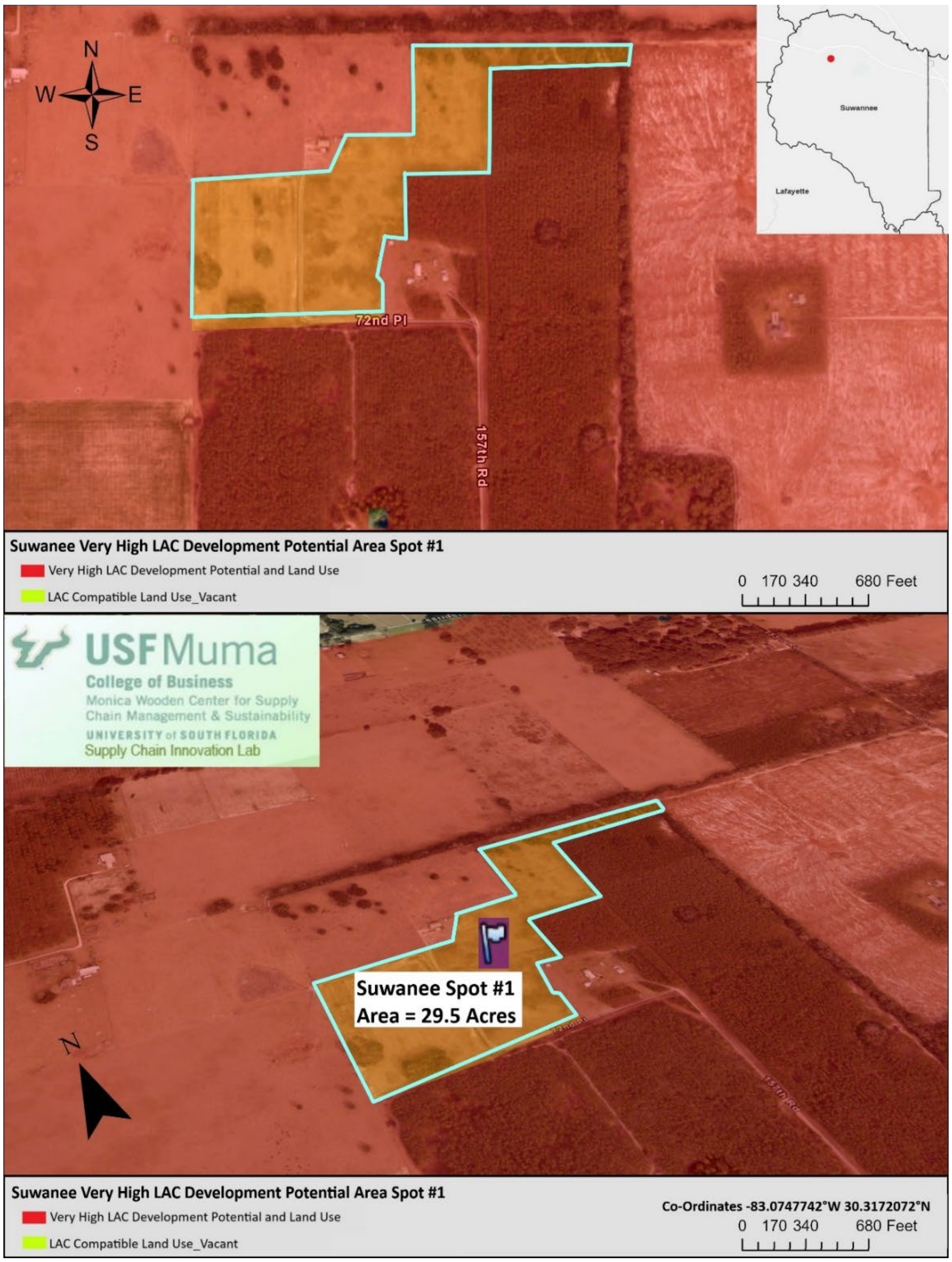

Figure A 61. Suwanee County Spot 1

TAYLOR COUNTY

As per the criteria developed in this study, this huge 78-acre land parcel in the below image (Figure A 62) located near the intersection of S Byron Butler Pkwy and W Main St has high LAC development potential in the Taylor County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

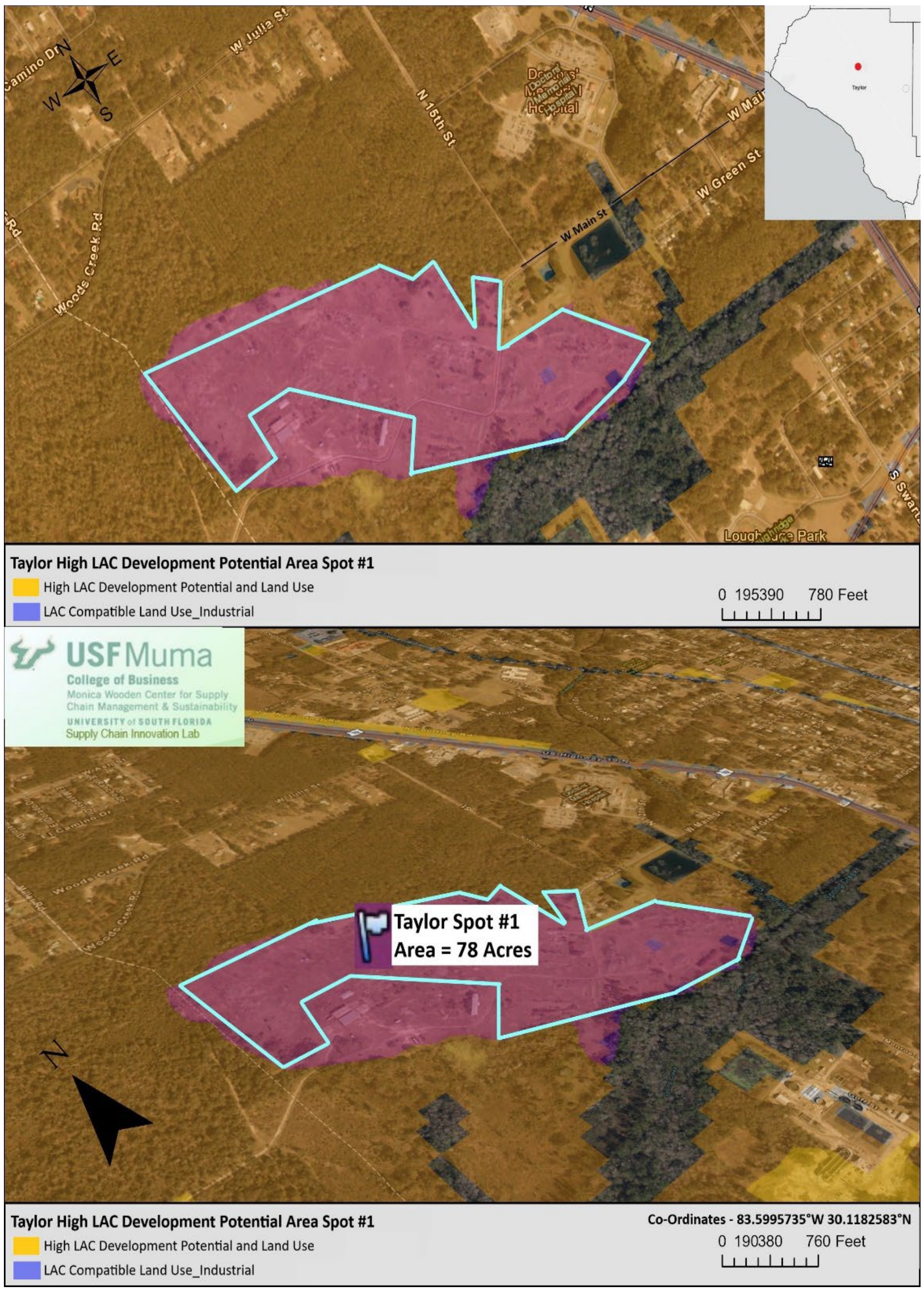

Figure A 62. Taylor County Spot 1

UNION COUNTY

As per the criteria developed in this study, this 6-acre land parcel in the below image (Figure A 63) located at the intersection of NE 256th Ave and NE 141st St has moderate LAC development potential in the Union County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, falls in the least AADT traffic range and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

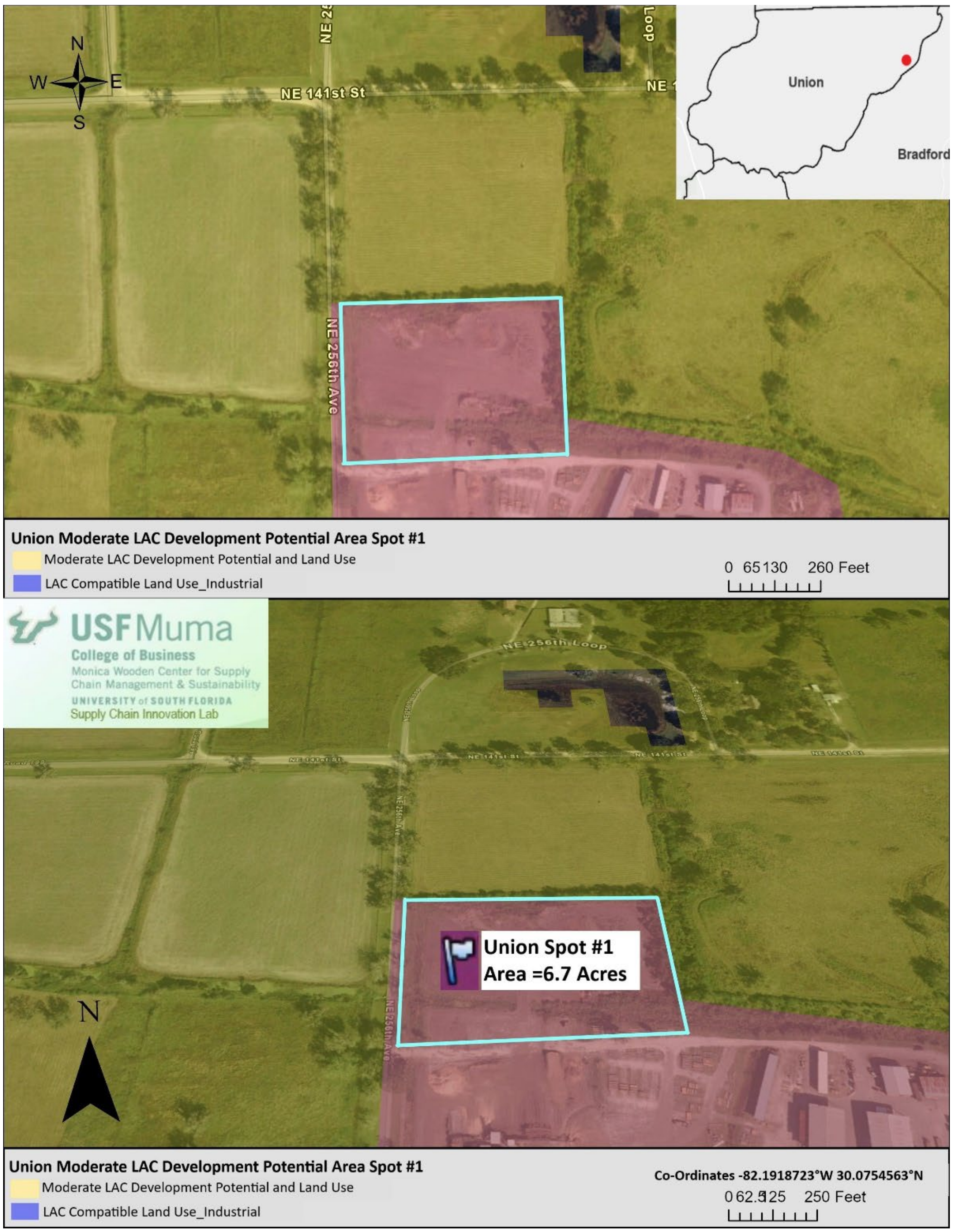

Figure A 63. Union County Spot 1

VOLUSIA COUNTY

As per the criteria developed in this study, this 12-acre land parcel in the below image (Figure A 64) located in the Industrial Park Avenue next to the New Smyrna Beach Municipal Airport has very high LAC development potential in the Volusia County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from air cargo facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

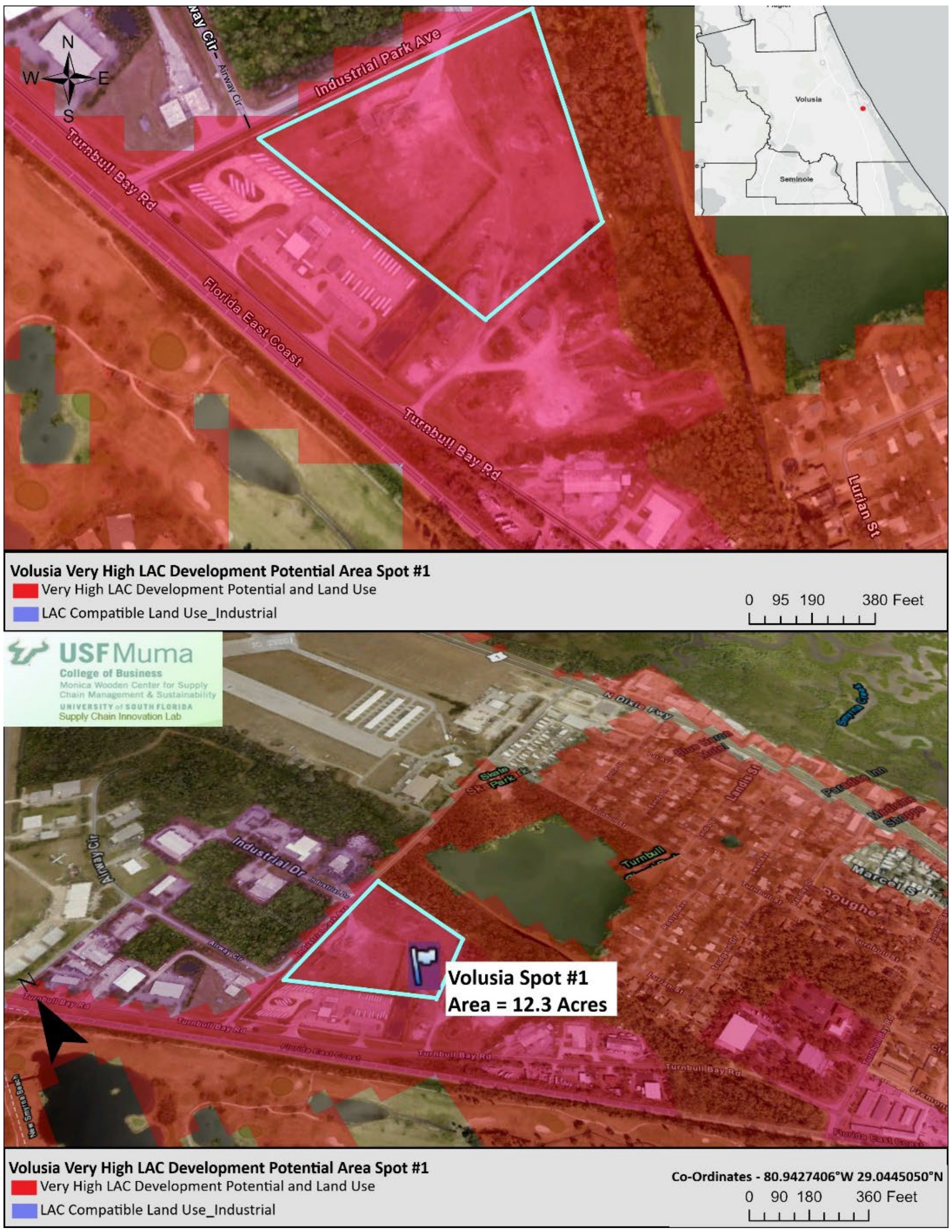

Figure A 64. Volusia County Spot 1

WAKULLA COUNTY

As per the criteria developed in this study, this huge 96-acre land parcel in the below image (Figure A 65) located at the intersection of 4th St SW and 15th Ave SW has moderate LAC development potential in the Wakulla County. It is less than 2.5 miles from State roads, one of the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

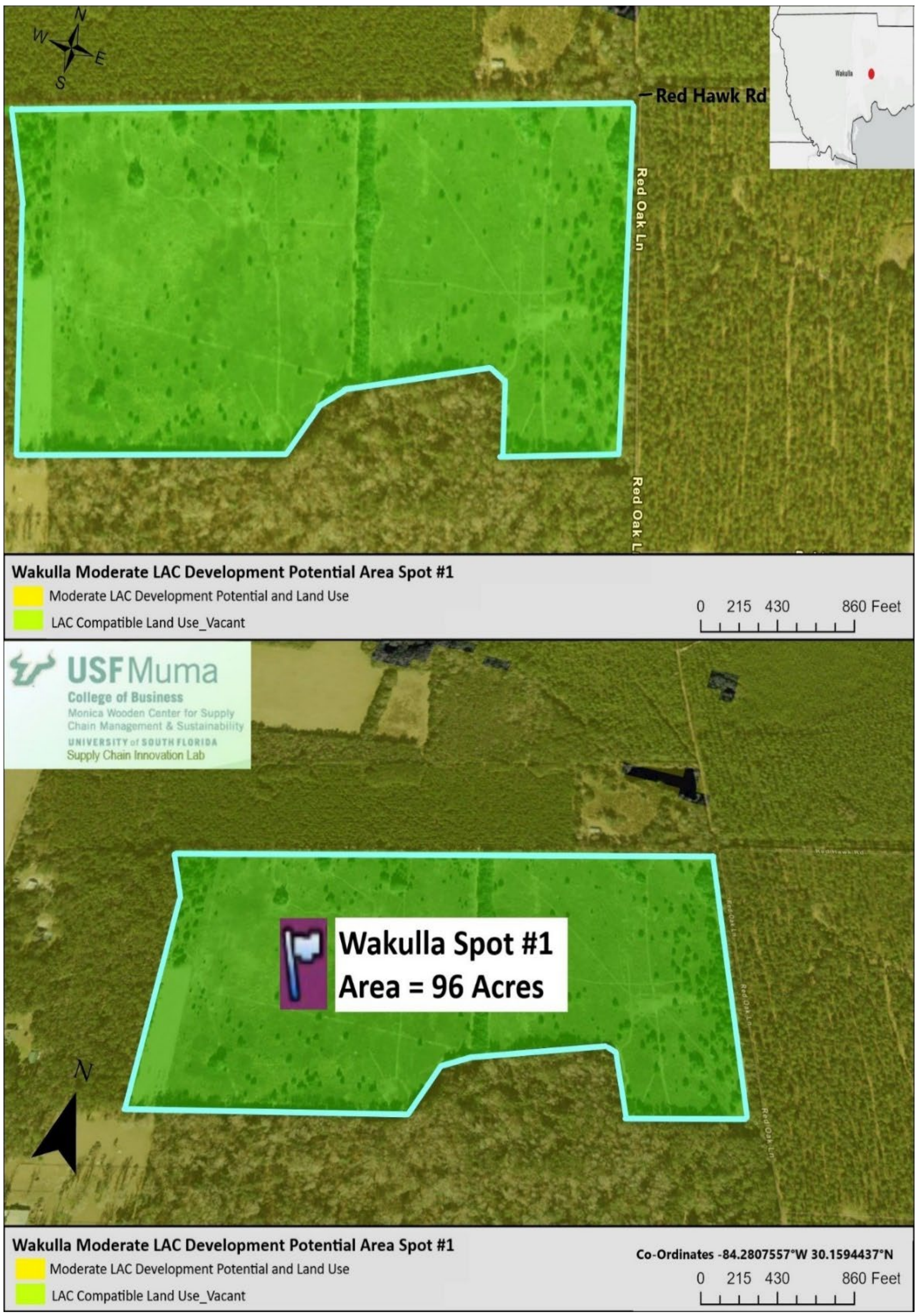

Figure A 65. Wakulla County Spot 1

WALTON COUNTY

As per the criteria developed in this study, this 21-acre land parcel in the below image (Figure A 66) located near the has moderate LAC development potential in the Walton County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure A 66. Walton County Spot 1

WASHINGTON COUNTY

As per the criteria developed in this study, this huge 27-acre land parcel in the below image (Figure A 67) located near the Washington County Court has high LAC development potential in the Washington County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

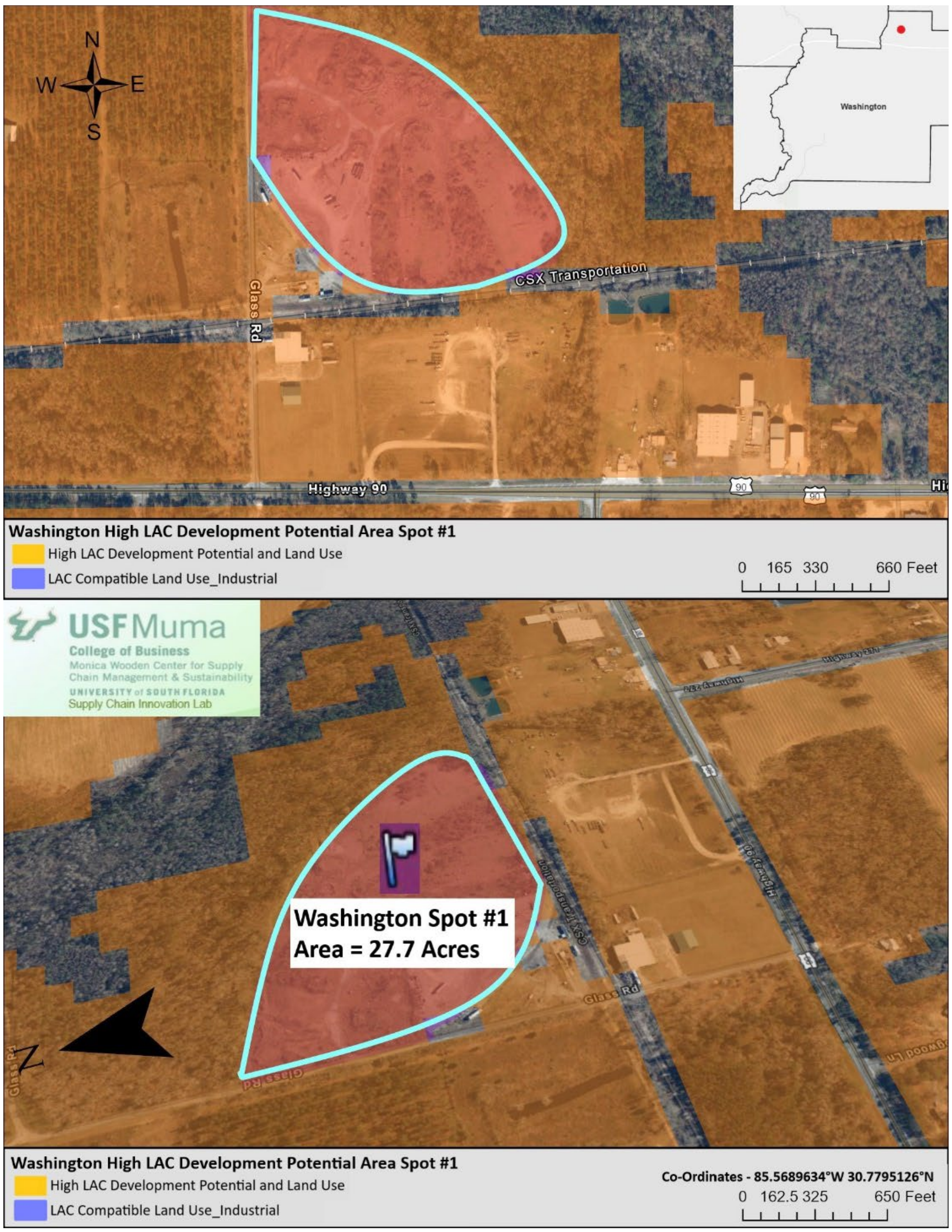

Figure A 67. Washington County Spot 1

Appendix B

Heat Maps – Suitable and Conflicting LAC

The suitable and conflicting maps (a total of 4 spots per county) are available below. This section of the report shows the 4 maps for each county "i.e.," 2 with suitable Land Use and 2 with conflicting land use which can be rezoned for all the 67 counties in Florida.

Some maps might have a slight color difference due to the nature of the underlying satellite imagery "i.e.," the color hue for plain barren land vs. plain grassy land vs. dense greenery will always have a small color difference for the same color coding of the chosen land use "i.e.," Industrial/Vacant/Agricultural/Commercial/ Recreational.

All the maps in this deliverable were double-checked and validated using ArcGIS Pro and Google Earth Satellite Hybrid Imagery to ensure that these are buildable lands and are currently available for development.

It should be noted that Appendix A was validation maps, named as "Spot 1" and this current Appendix, Appendix B, therefore starts with "Spot 2" and goes through "Spot 5" as there are a total of 5 maps for each county.

Alachua County

ALACHUA SPOT #2

As per the criteria developed in this study, this 15-acre land parcel in the below image (Figure B 1) located in Alachua, FL near the Florida Dept. of Revenue at the intersection of NW 129th Ter and NW 146th Pl has very high LAC development potential in the Alachua County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

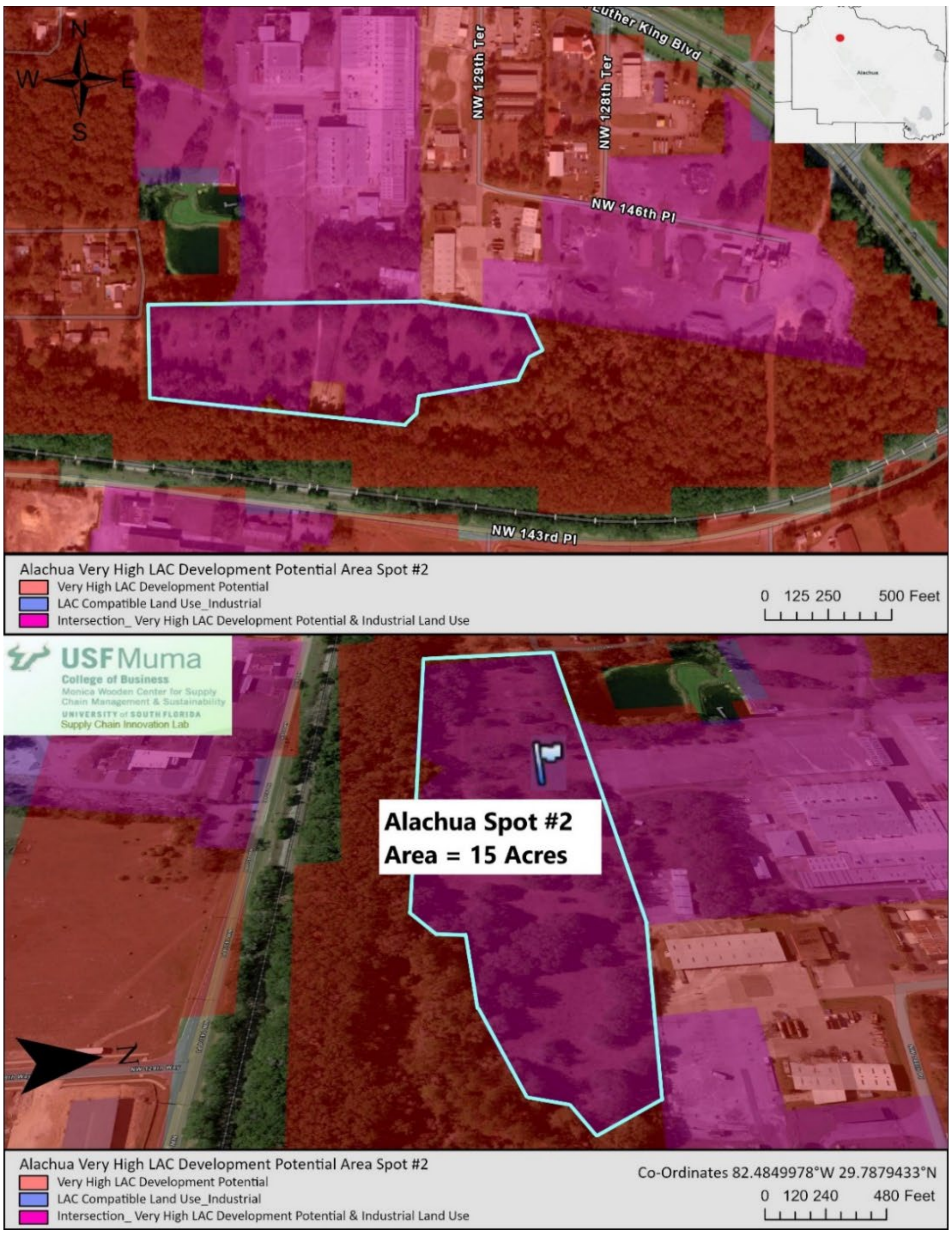

Figure B 1. Alachua County Spot 2

ALACHUA SPOT #3

As per the criteria developed in this study, this 32.8-acre land parcel in the below image (Figure B 2) located in Newberry, FL at the intersection of NW 8th Ln and NW 282nd St has high LAC development potential in the Alachua County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

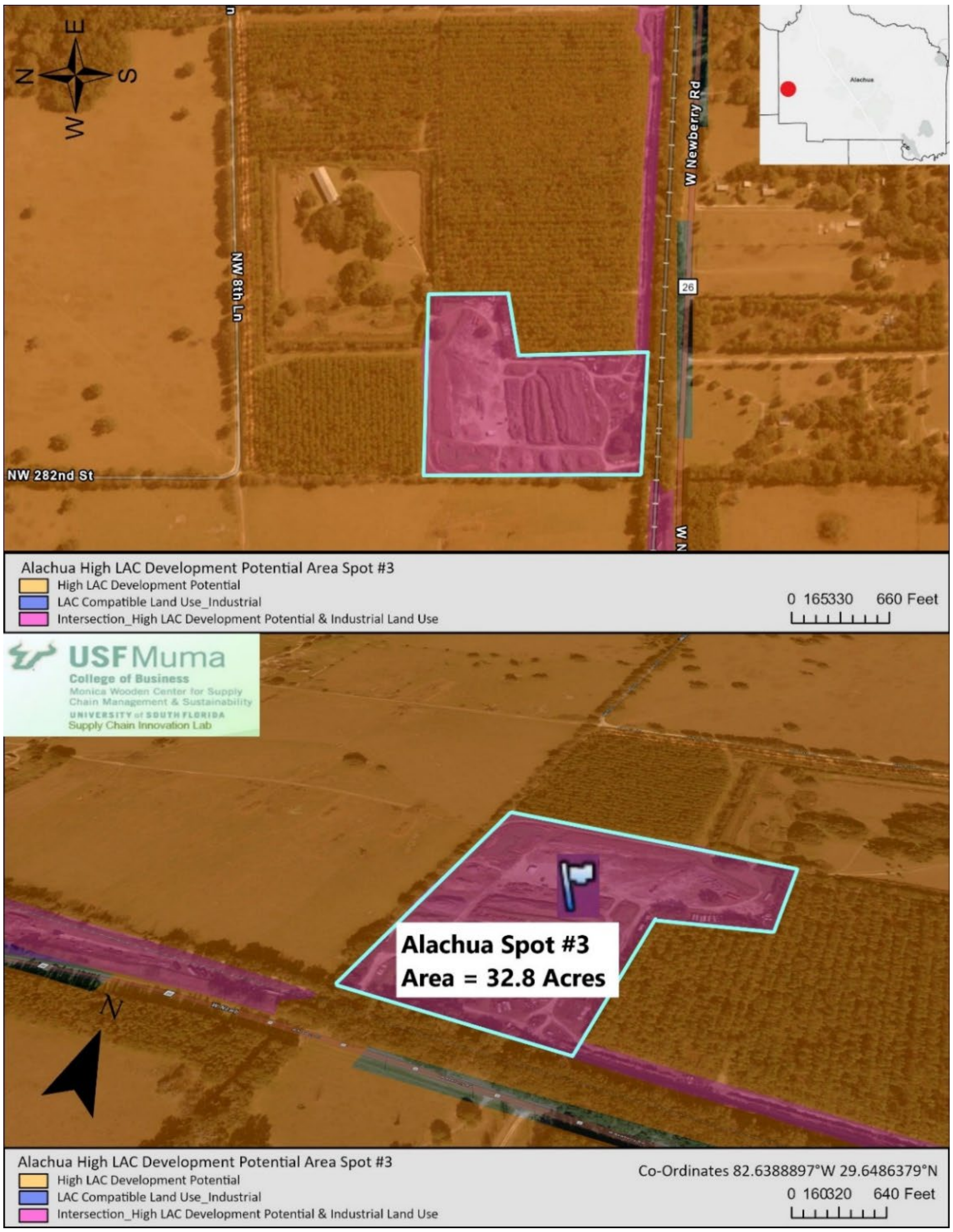

Figure B 2. Alachua County Spot 3

ALACHUA SPOT #4

As per the criteria developed in this study, this 37-acre land parcel in the below image (Figure B 3) located in Alachua, FL at the intersection of SR-93 and Peggy Rd has very high LAC development potential in the Alachua County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

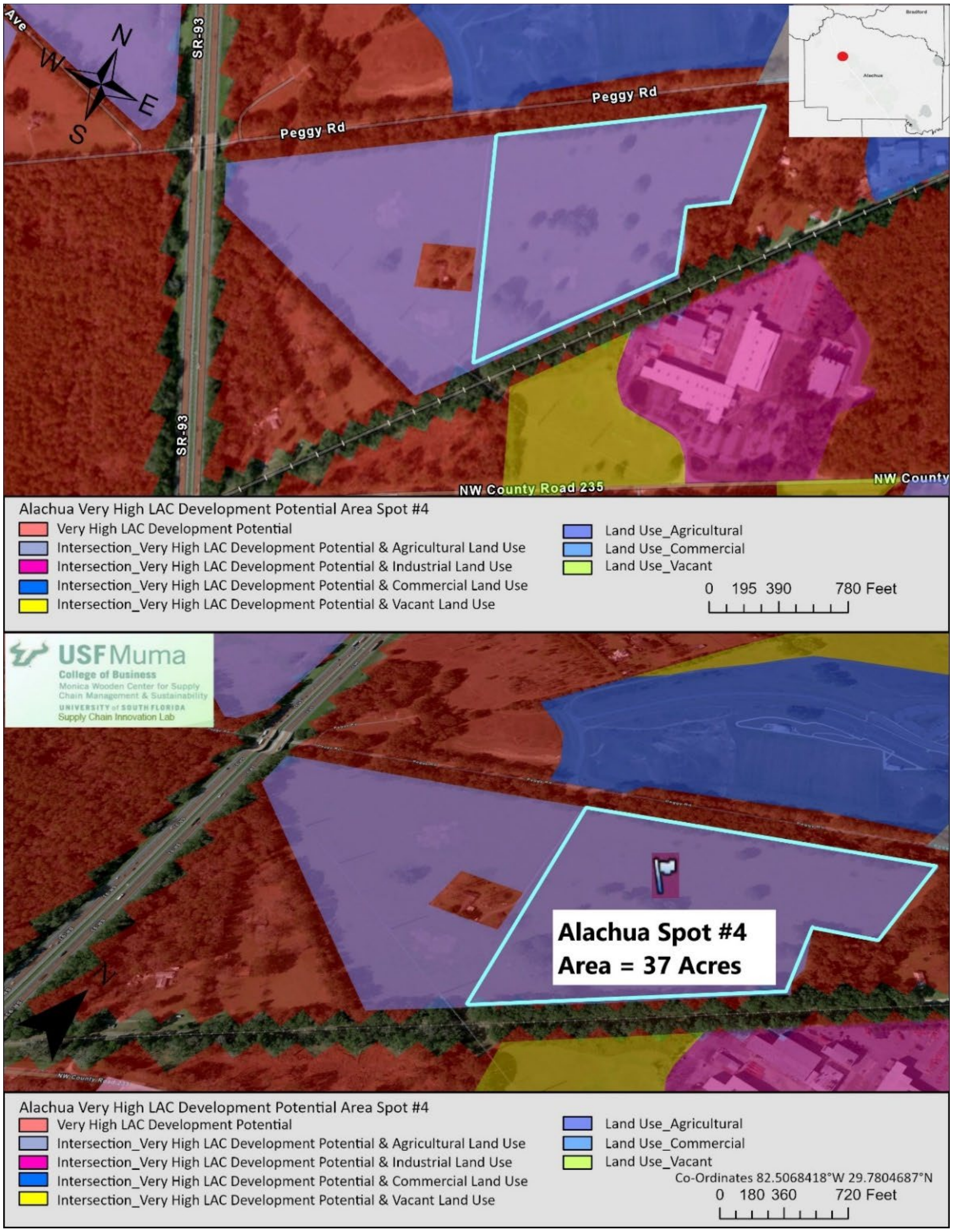

Figure B 3. Alachua County Spot 4

ALACHUA SPOT #5

As per the criteria developed in this study, this 62-acre land parcel in the below image (Figure B 4) located in Alachua, FL at the intersection of Martin Luther King Blvd and NW 104th Ter has very high LAC development potential in the Alachua County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

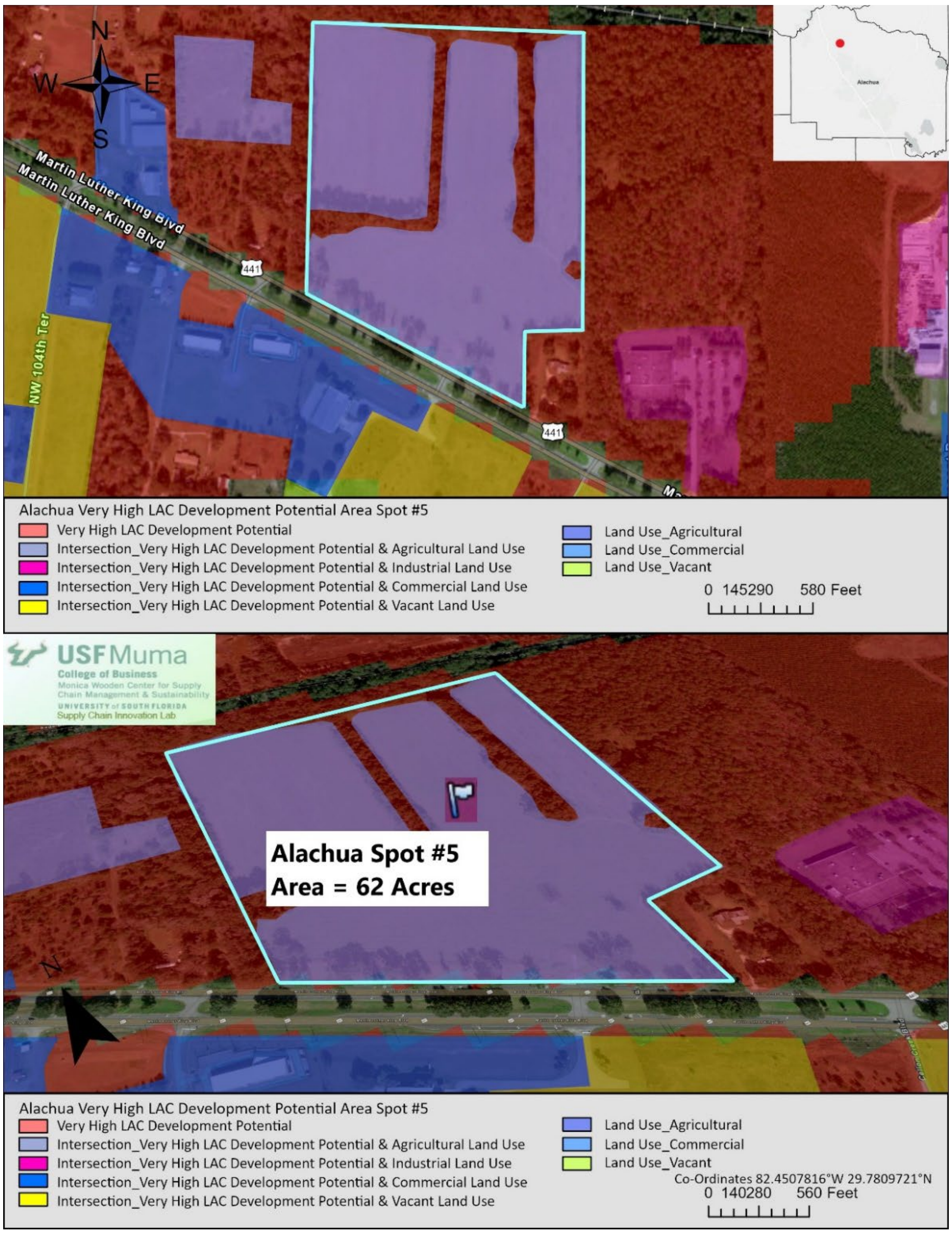

Figure B 4. Alachua County Spot 5

Baker County

BAKER SPOT #2

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 5) located in MacClenny, FL at the intersection of S State Road 228 and Barber Rd has very high LAC development potential in the Baker County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure B 5. Baker County Spot 2

BAKER SPOT #3

As per the criteria developed in this study, this 18.7-acre land parcel in the below image (Figure B 6) located in Sanderson, FL at the intersection of Palmetto Pl and Cow Pen Rd has high LAC development potential in the Baker County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

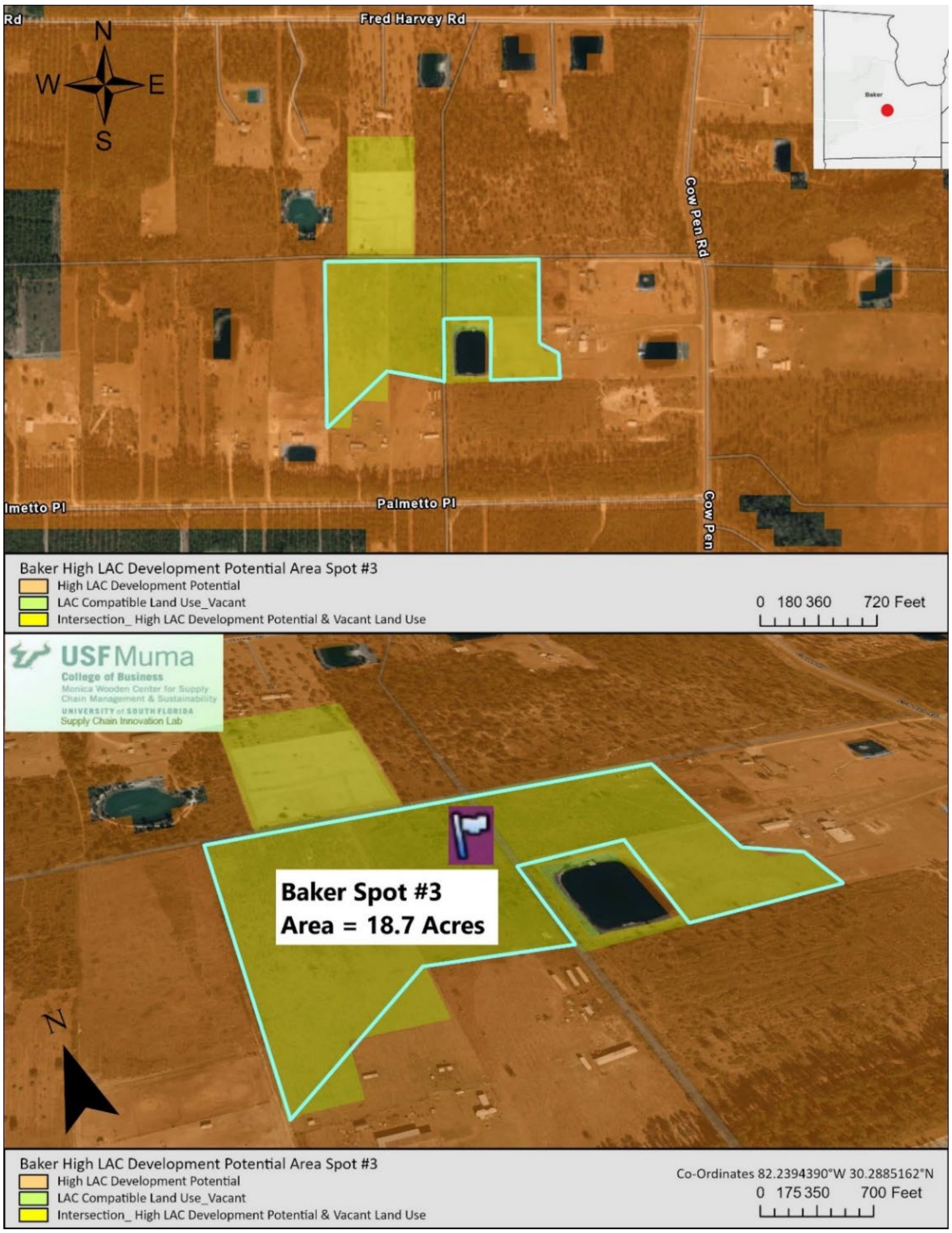

Figure B 6. Baker County Spot 3

BAKER SPOT #4

As per the criteria developed in this study, this 13.2-acre land parcel in the below image (Figure B 7) located in MacClenny, FL at the intersection of Toms Trl and George Hodges Rd has very high LAC development potential in the Baker County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

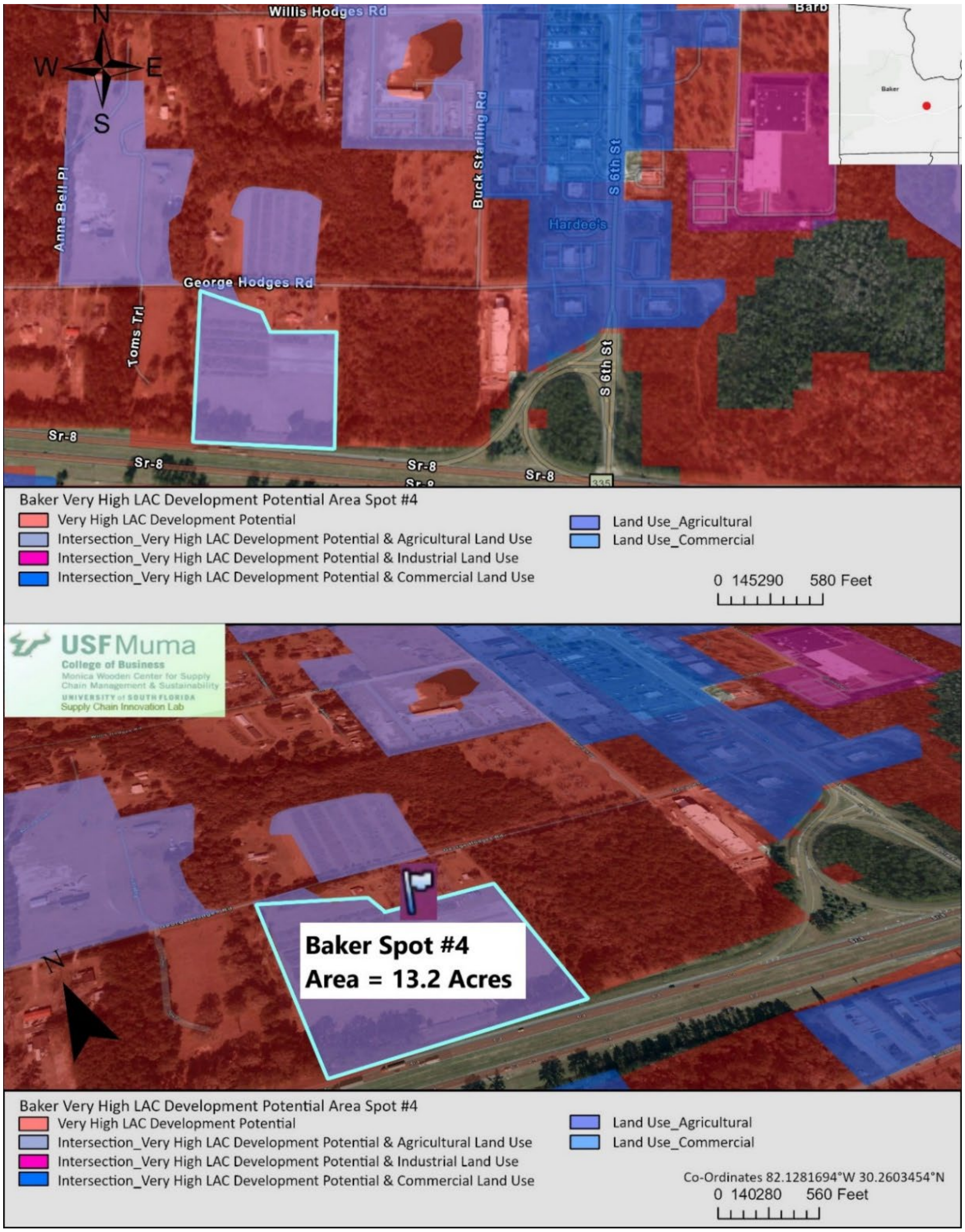

Figure B 7. Baker County Spot 4

BAKER SPOT #5

As per the criteria developed in this study, this 11.8-acre land parcel in the below image (Figure B 8) located in MacClenny, FL at the intersection of Rhoden Dr and Barber Rd has very high LAC development potential in the Baker County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

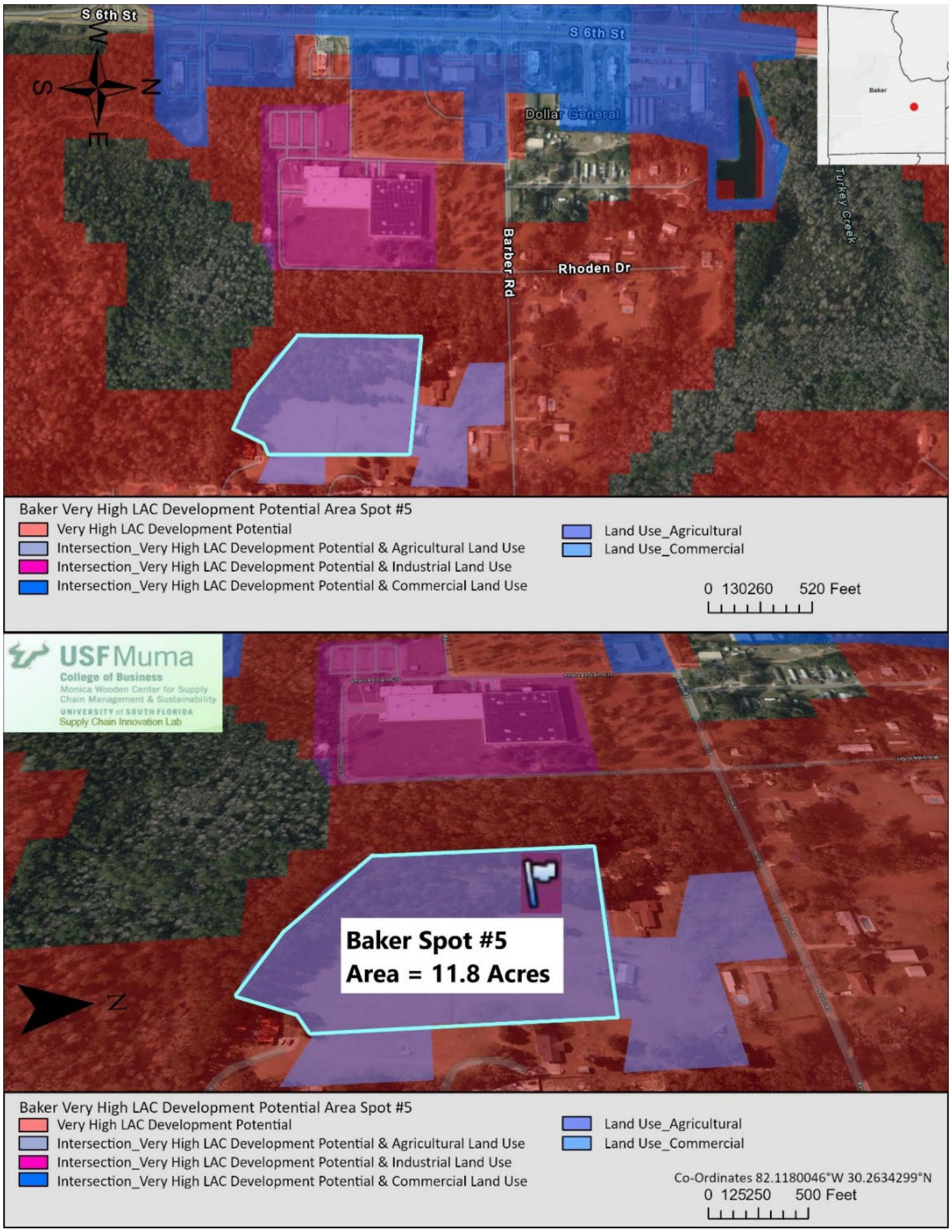

Figure B 8. Baker County Spot 5

Bay County

BAY SPOT #2

As per the criteria developed in this study, this 36.5-acre land parcel in the below image (Figure B 9) located next to the Bay County Fair Grounds at the intersection of Sherman Ave and E 12th St has very high LAC development potential in the Bay County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest seaport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

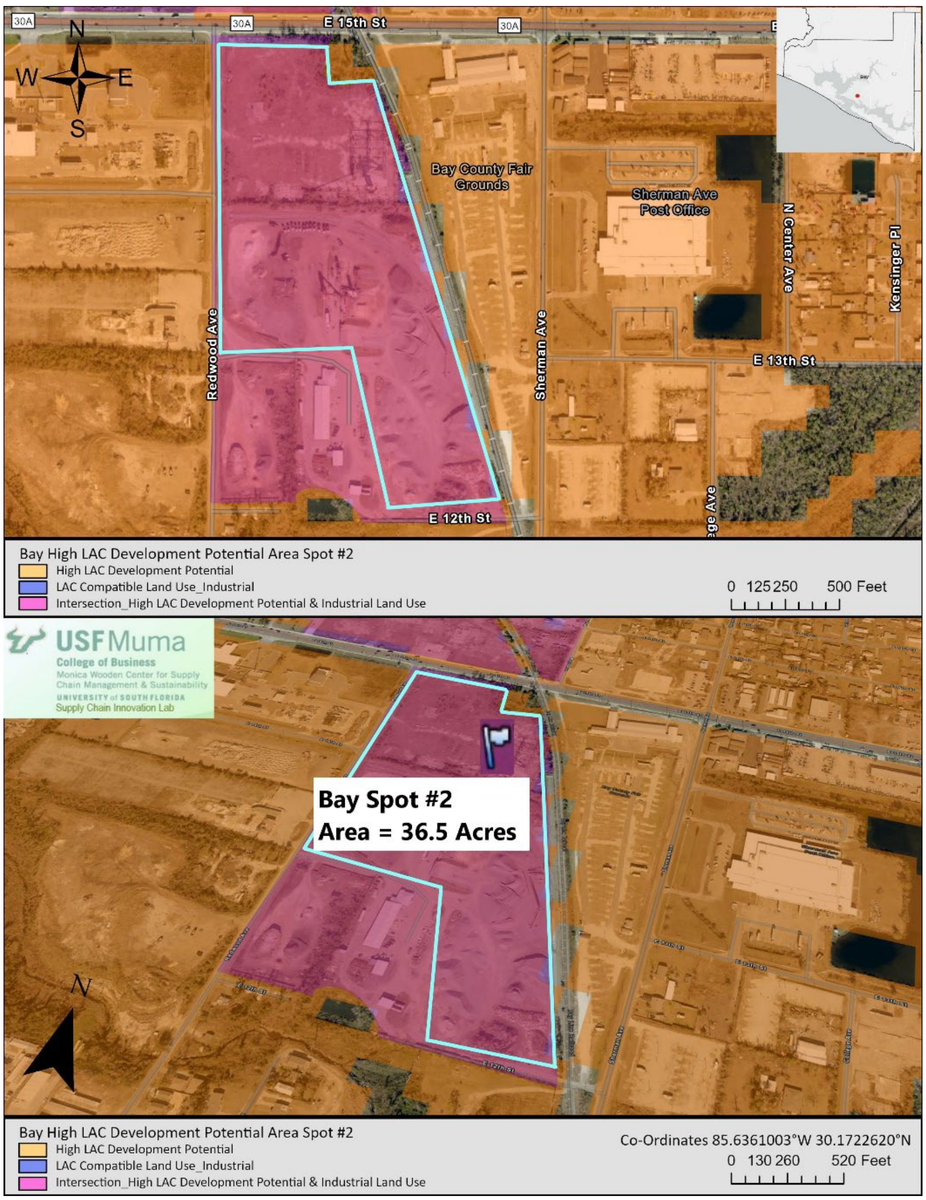

Figure B 9. Bay County Spot 2

BAY SPOT #3

As per the criteria developed in this study, this 26.3-acre land parcel in the below image (Figure B 10) located at the intersection of Maple Ave and E 17th Ct has very high LAC development potential in the Bay County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest seaport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

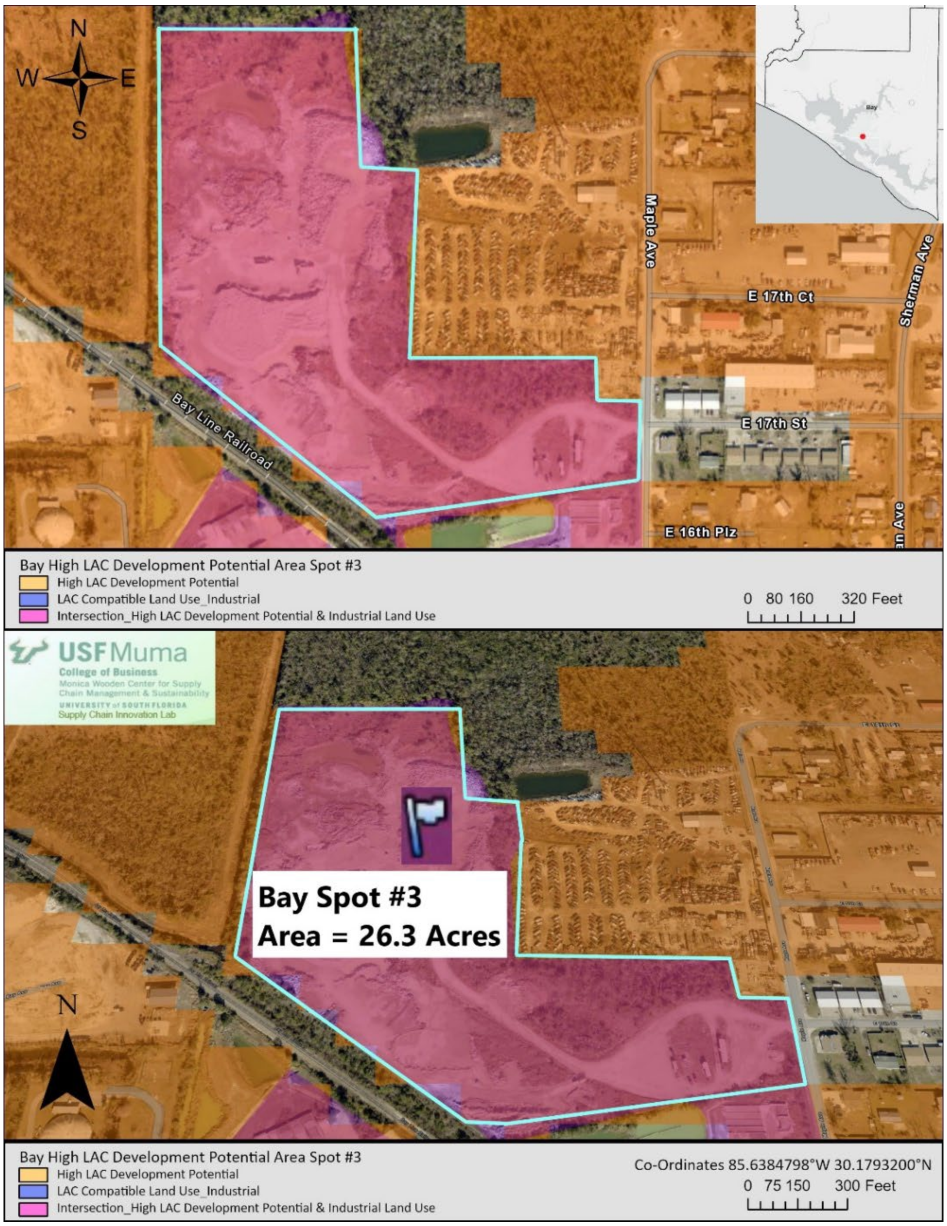

Figure B 10. Bay County Spot 3

BAY SPOT #4

As per the criteria developed in this study, this 13.6-acre land parcel in the below image (Figure B 11) located at the intersection of Bay Ave and E 15th St has high LAC development potential in the Bay County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

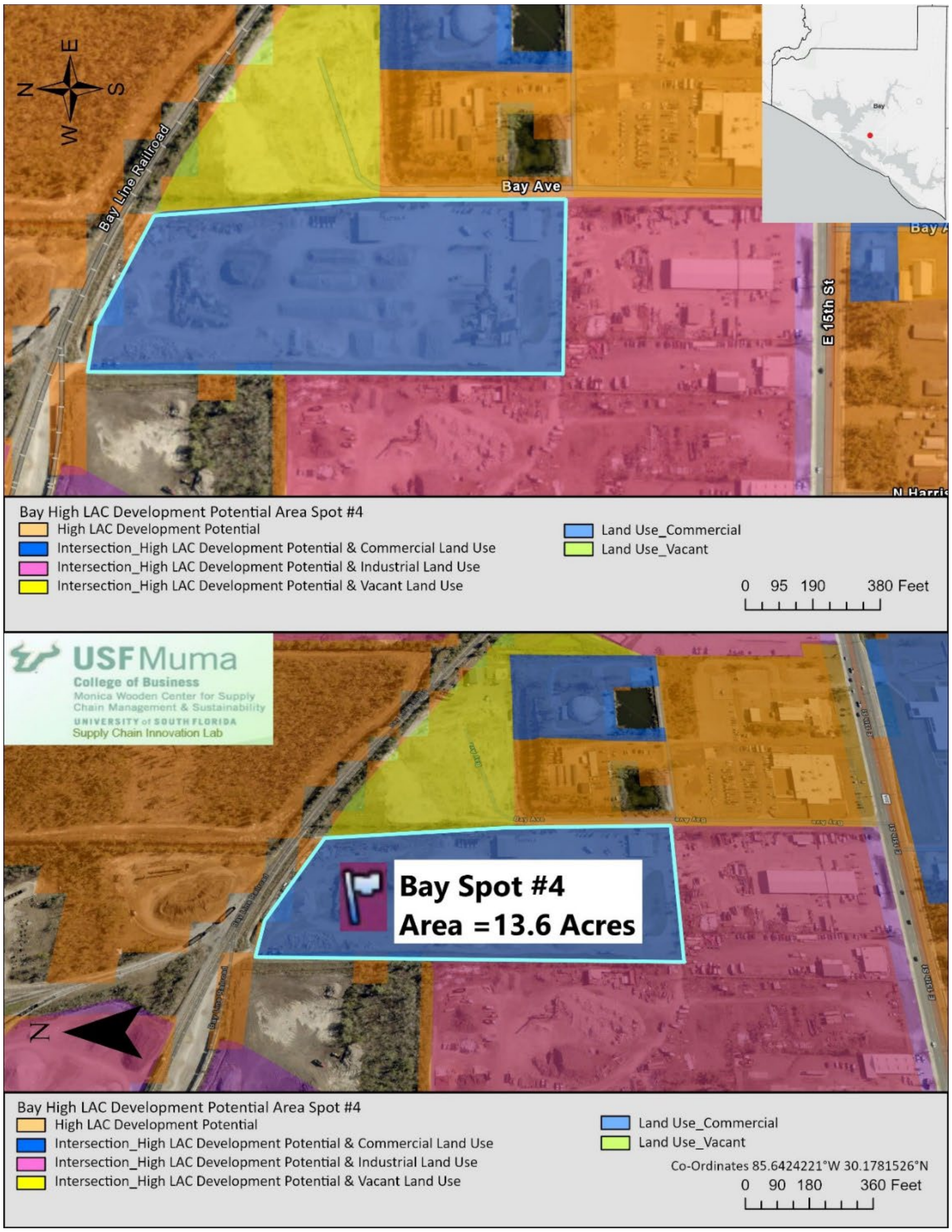

Figure B 11. Bay County Spot 4

BAY SPOT #5

As per the criteria developed in this study, this 22.2-acre land parcel in the below image (Figure B 12) located at the intersection of Redwood Ave and E 15th St has high LAC development potential in the Bay County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

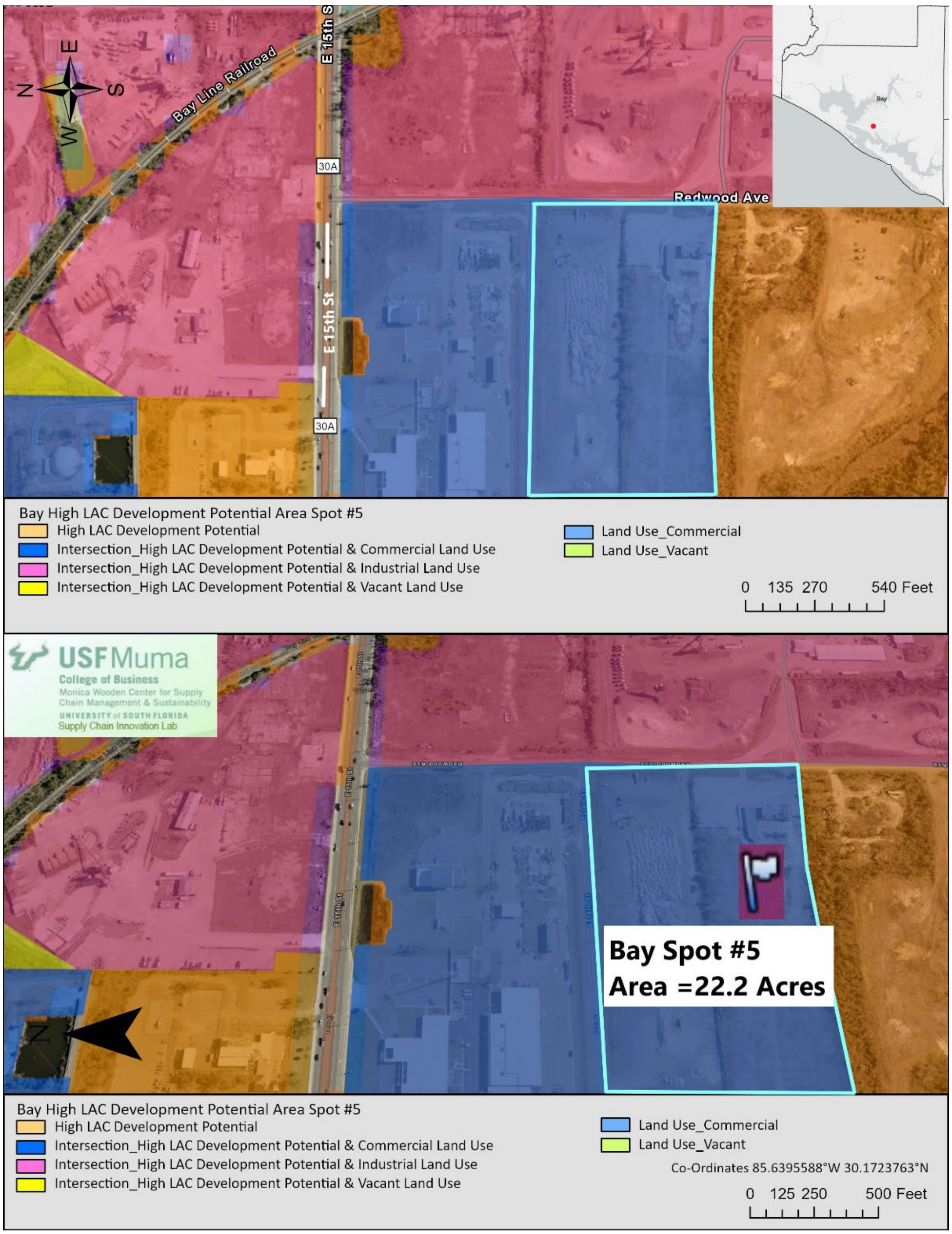

Figure B 12. Bay County Spot 5

Bradford County

BRADFORD SPOT #2

As per the criteria developed in this study, this 11-acre land parcel in the below image (Figure B 13) located in Lawtey, FL at the intersection of NE County Road 125 and NE 6th Ave has moderate LAC development potential in the Bradford County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

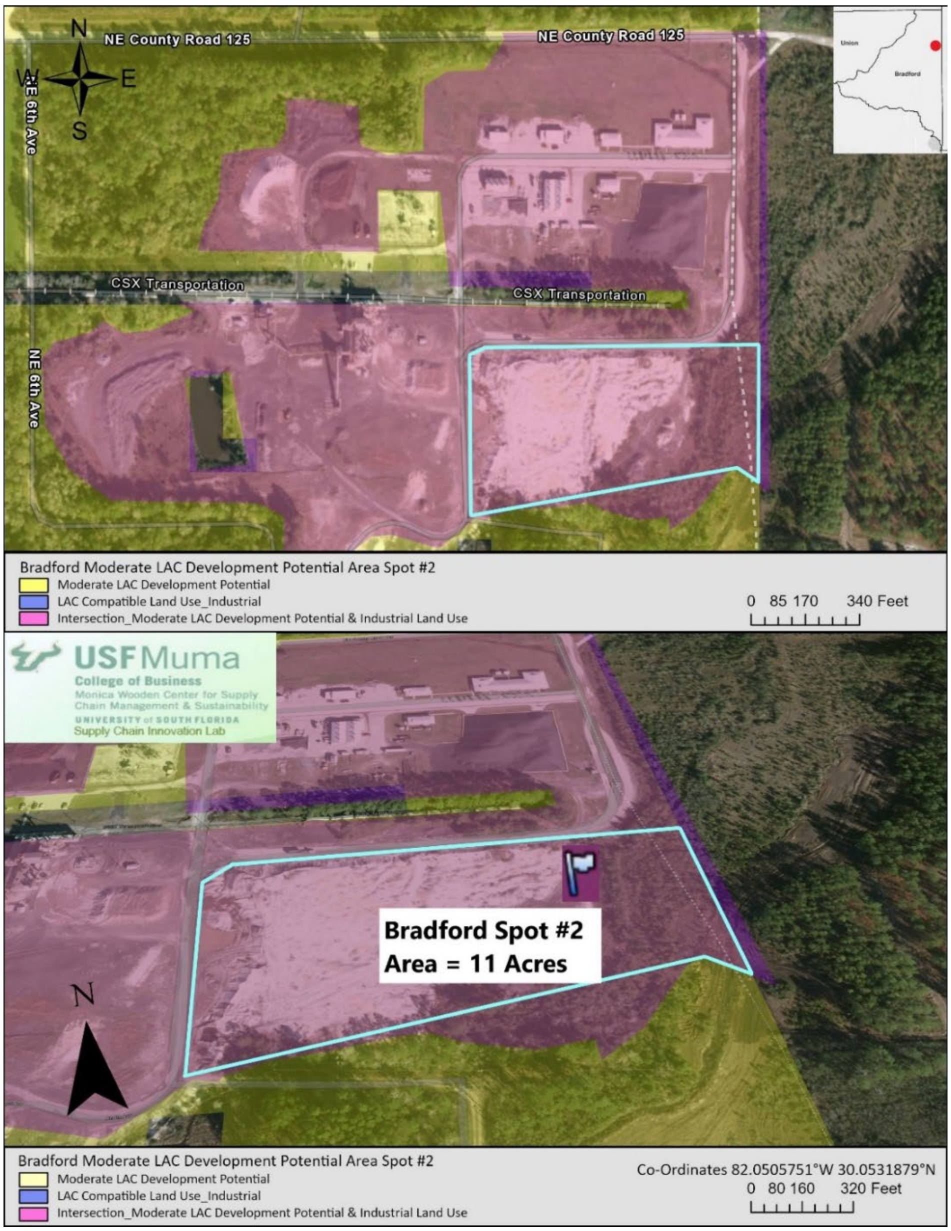

Figure B 13. Bradford County Spot 2

BRADFORD SPOT #3

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 14) located in Lake Butler, FL at the intersection of NW 77th Pl and NW County Rd 229 has high LAC development potential in the Bradford County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 14. Bradford County Spot 3

BRADFORD SPOT #4

As per the criteria developed in this study, this 15.5-acre land parcel in the below image (Figure B 15) located in Lawtey, FL at the intersection of NW 216th St and NW 26th Ave has high LAC development potential in the Bradford County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

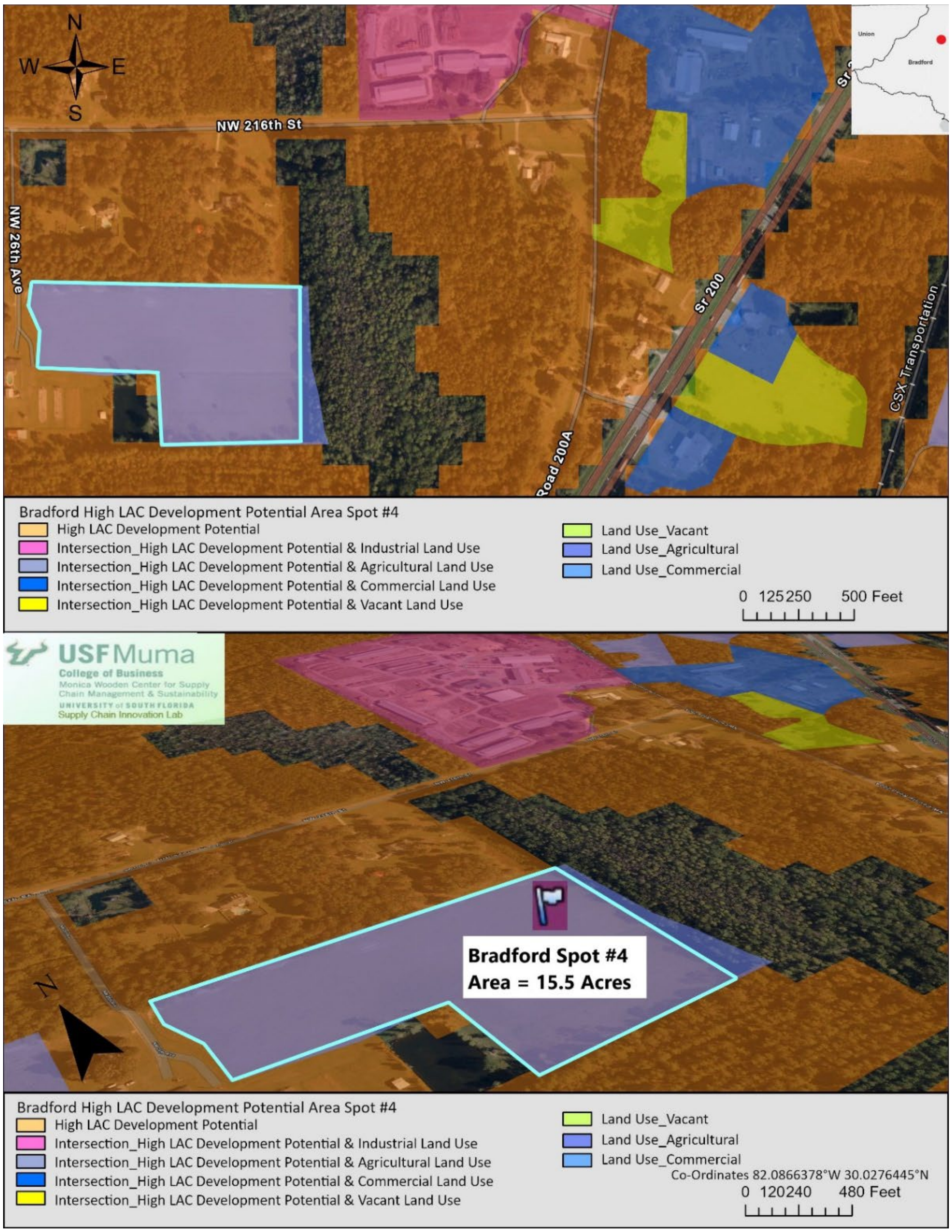

Figure B 15. Bradford County Spot 4

BRADFORD SPOT #5

As per the criteria developed in this study, this huge 119-acre land parcel in the below image (Figure B 16) located in Brooker, FL at the intersection of SW County Road 235 and SW 136th St has moderate LAC development potential in the Bradford County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

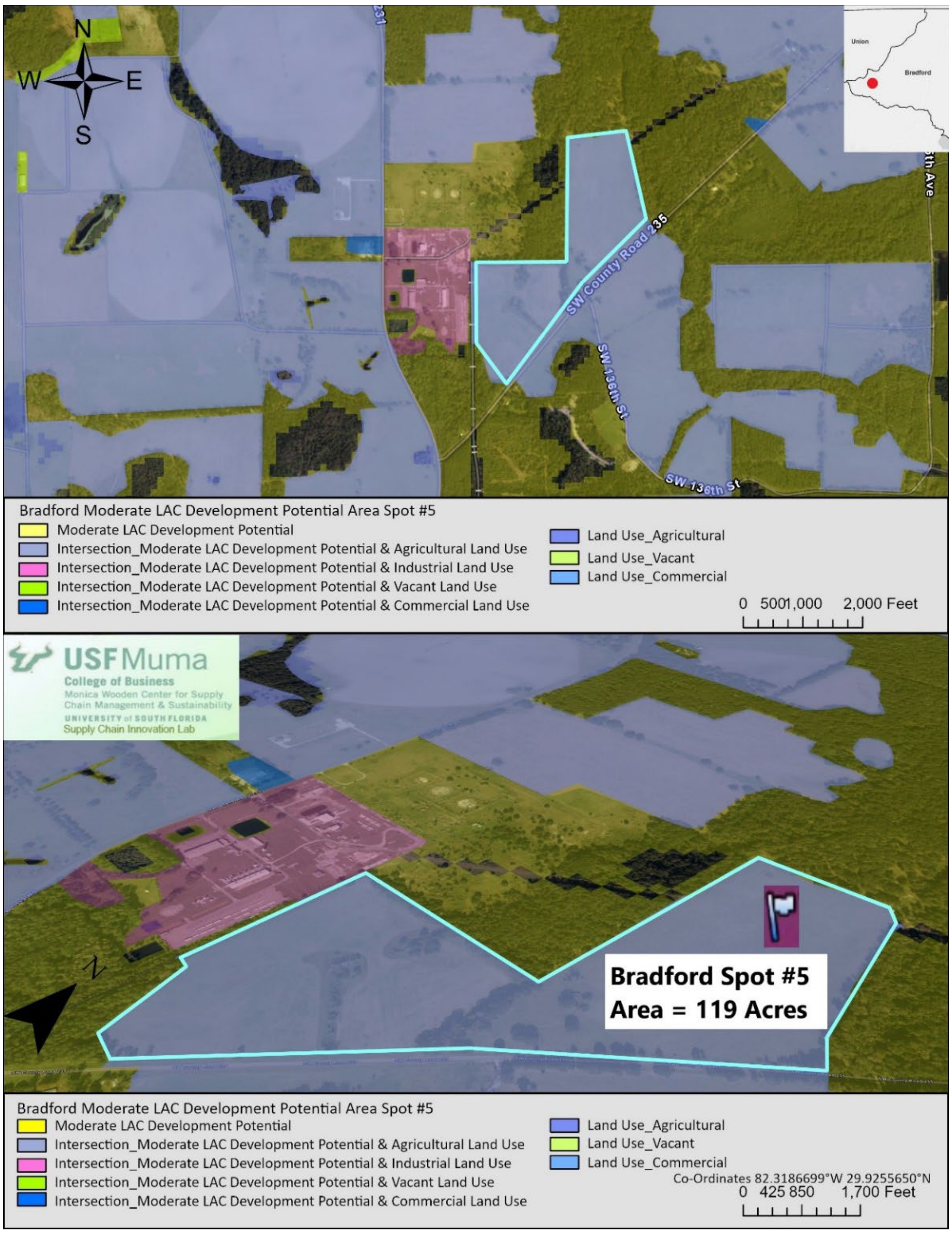

Figure B 16. Bradford County Spot 5

Brevard County

BREVARD SPOT #2

As per the criteria developed in this study, this 10.2-acre land parcel in the below image (Figure B 17) located in Cocoa, FL at the intersection of Right St and Cox Rd has very high LAC development potential in the Brevard County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

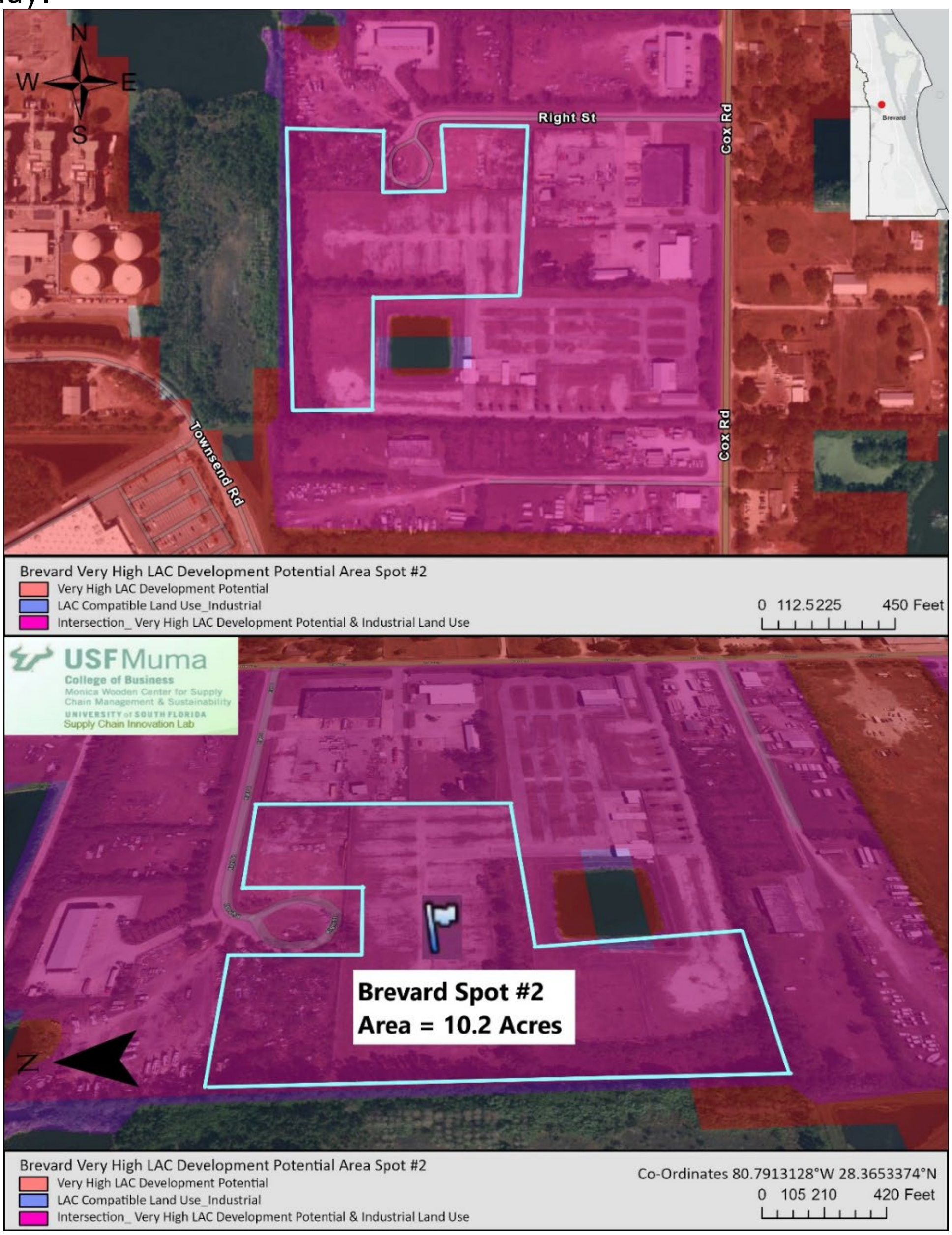

Figure B 17. Brevard County Spot 2

BREVARD SPOT #3

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 18) located near the Space Coast Regional Airport at the intersection of Columbia Blvd and Grisson Pkwy has very high LAC development potential in the Brevard County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

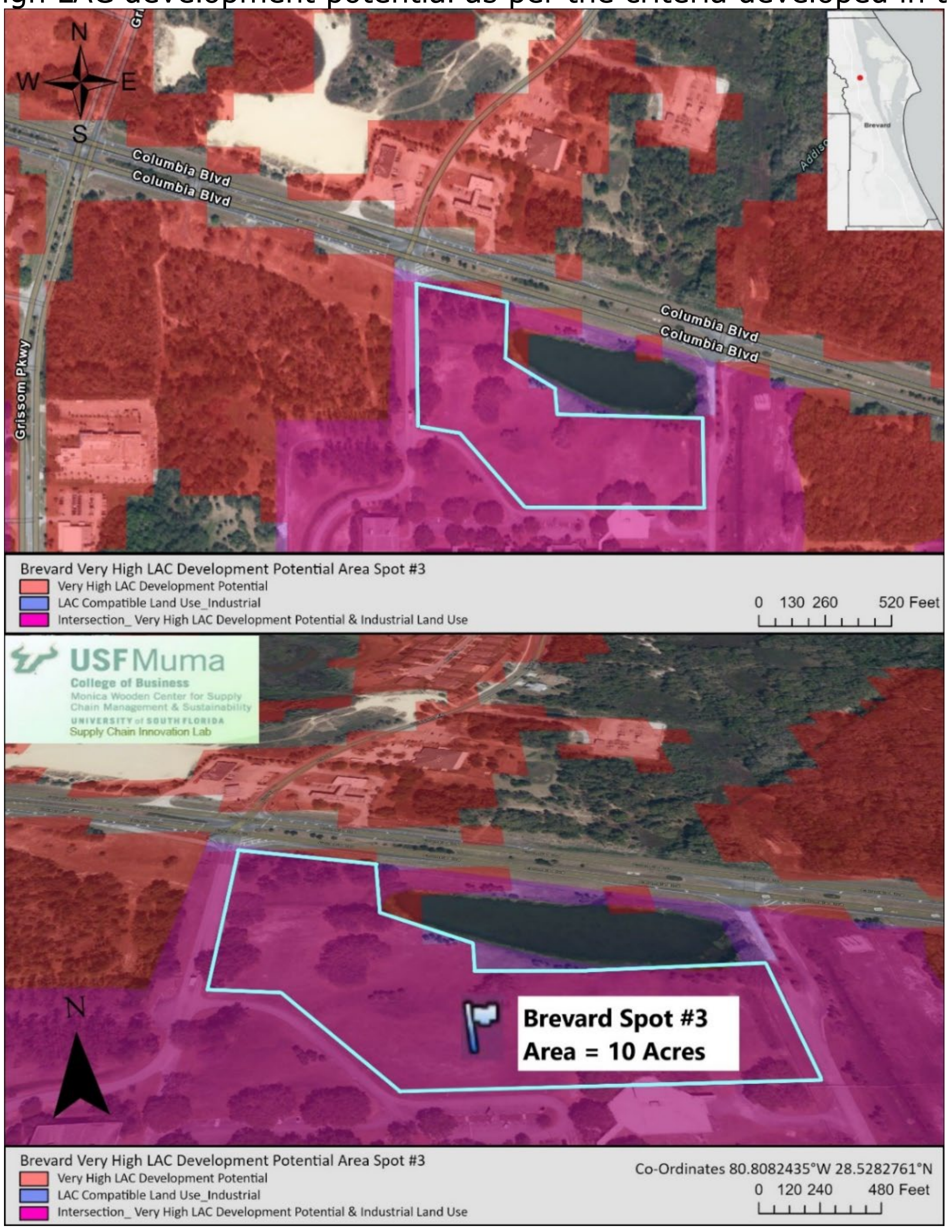

Figure B 18. Brevard County Spot 3

BREVARD SPOT #4

As per the criteria developed in this study, this 21.3-acre land parcel in the below image (Figure B 19) located next to the Melbourne International Airport at the intersection of W Nasa Blvd and Commerce Dr has very high LAC development potential in the Brevard County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

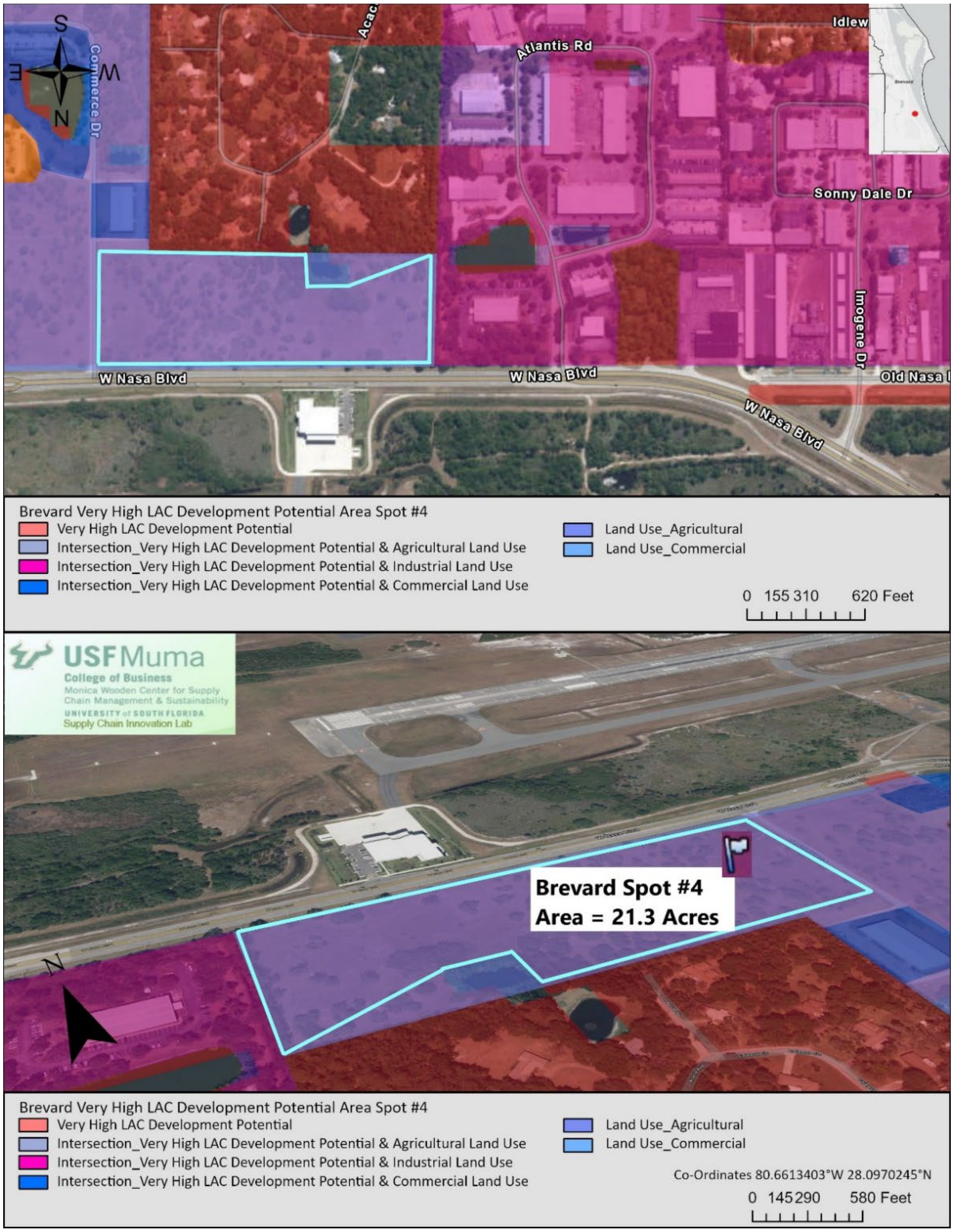

Figure B 19. Brevard County Spot 4

BREVARD SPOT #5

As per the criteria developed in this study, this 10.2-acre land parcel in the below image (Figure B 20) located in Mims, FL at the intersection of Dunn St and Carol Ave has very high LAC development potential in the Brevard County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

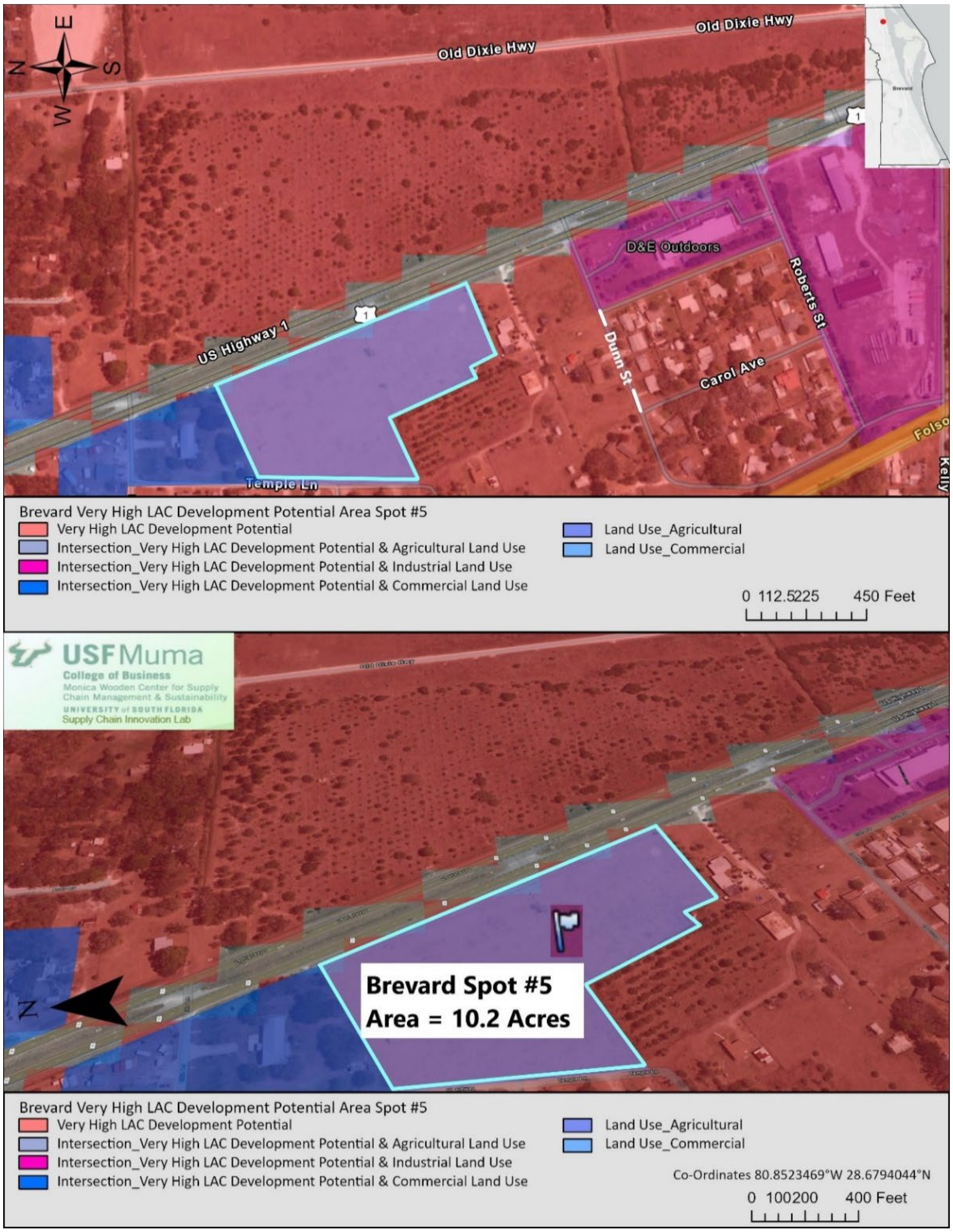

Figure B 20. Brevard County Spot 5

Broward County

BROWARD SPOT #2

As per the criteria developed in this study, this 22.2-acre land parcel in the below image (Figure B 21) located near the Pompano Beach Airpark at the intersection of NE 48th St and N Dixie Hwy has very high LAC development potential in the Broward County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, around 12 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

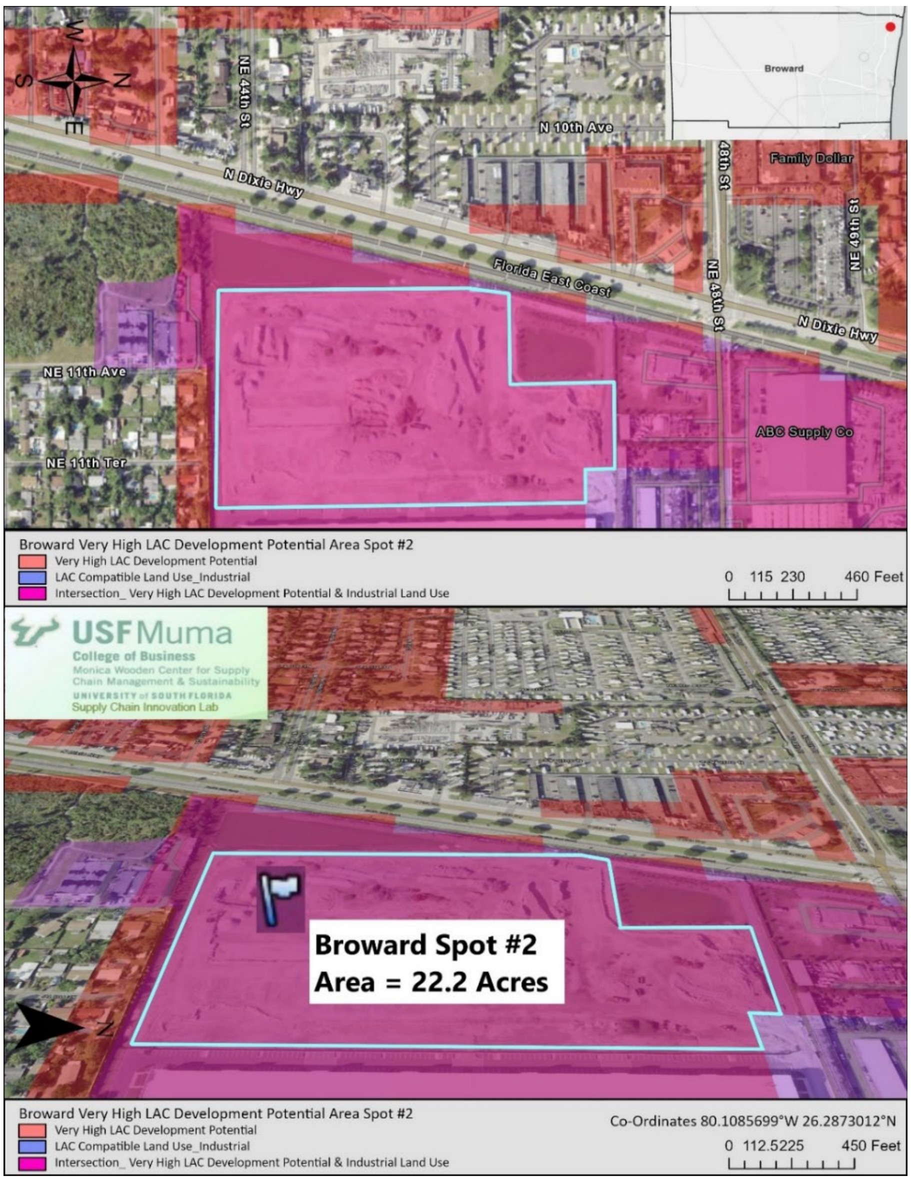

Figure B 21. Broward County Spot 2

BROWARD SPOT #3

As per the criteria developed in this study, this 7.5-acre land parcel in the below image (Figure B 22) located near the Pompano Beach Airpark at the intersection of NW 8th St and NW 12th Ave has very high LAC development potential in the Broward County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

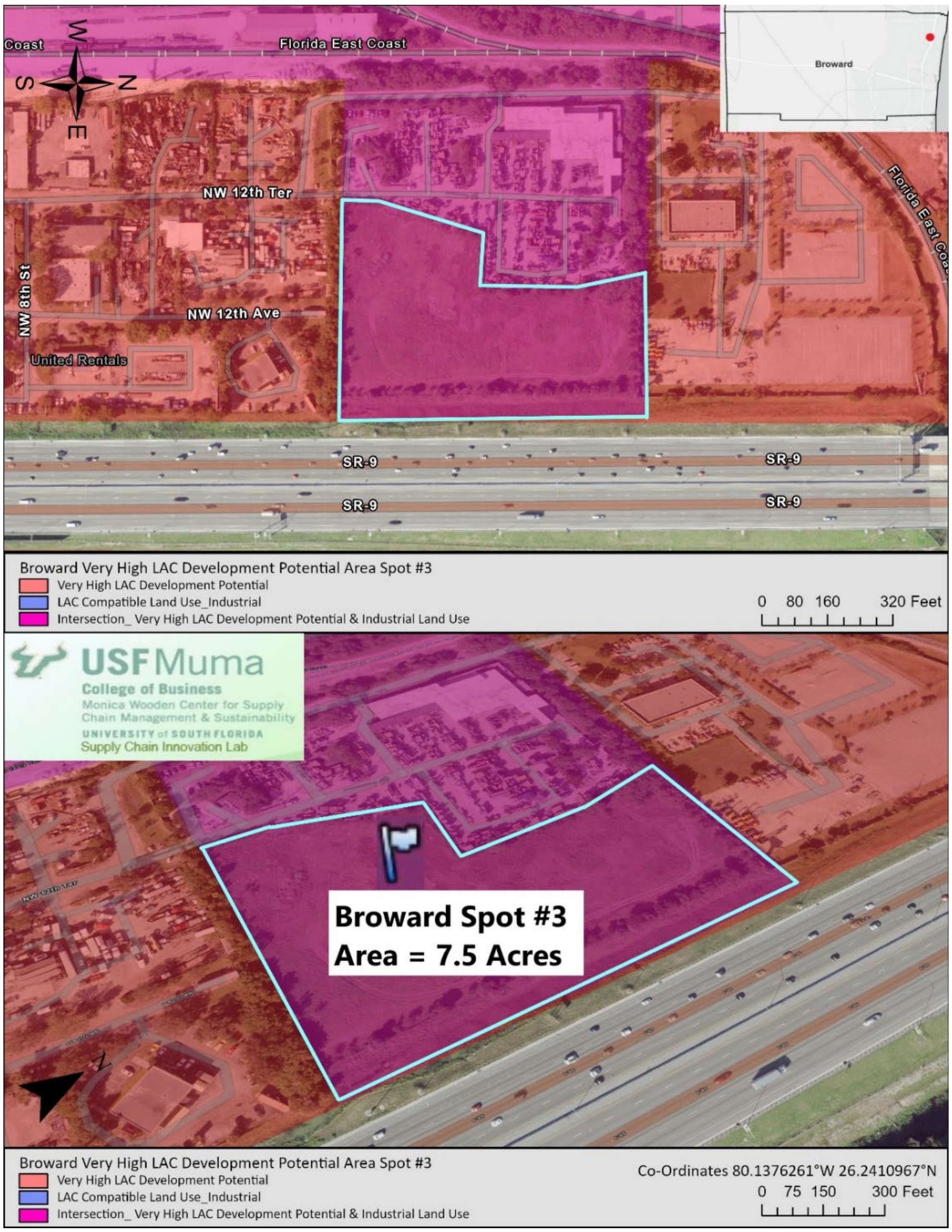

Figure B 22. Broward County Spot 3

BROWARD SPOT #4

As per the criteria developed in this study, this 13.5-acre land parcel in the below image (Figure B 23) located right next to the Fort Lauderdale-Hollywood Airport in the Broward County at the intersection of SR-9 and Griffin Rd has very high LAC development potential in the Broward County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

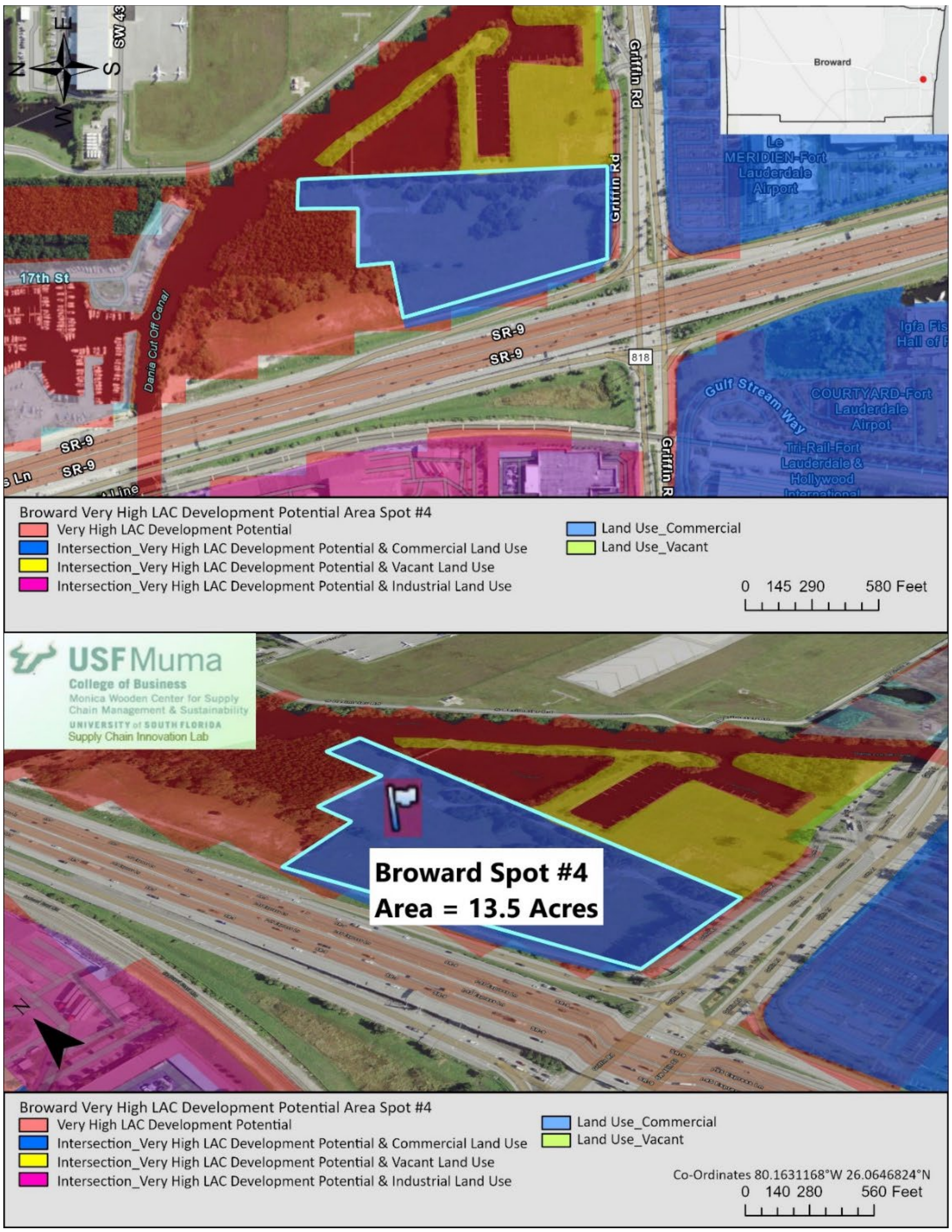

Figure B 23. Broward County Spot 4

BROWARD SPOT #5

As per the criteria developed in this study, this 20-acre land parcel in the below image (Figure B 24) located in Miramar city in the Broward County at the intersection of Red Rd and Miramar Pkwy has very high LAC development potential in the Broward County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 24. Broward County Spot 5

Calhoun County

CALHOUN SPOT #2

As per the criteria developed in this study, this 77.5-acre land parcel in the below image (Figure B 25) located in Altha, FL at the intersection of NE Country Road 274 and NE Harmony Blvd has moderate LAC development potential in the Calhoun County. It is less than 2.5 miles from State roads, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

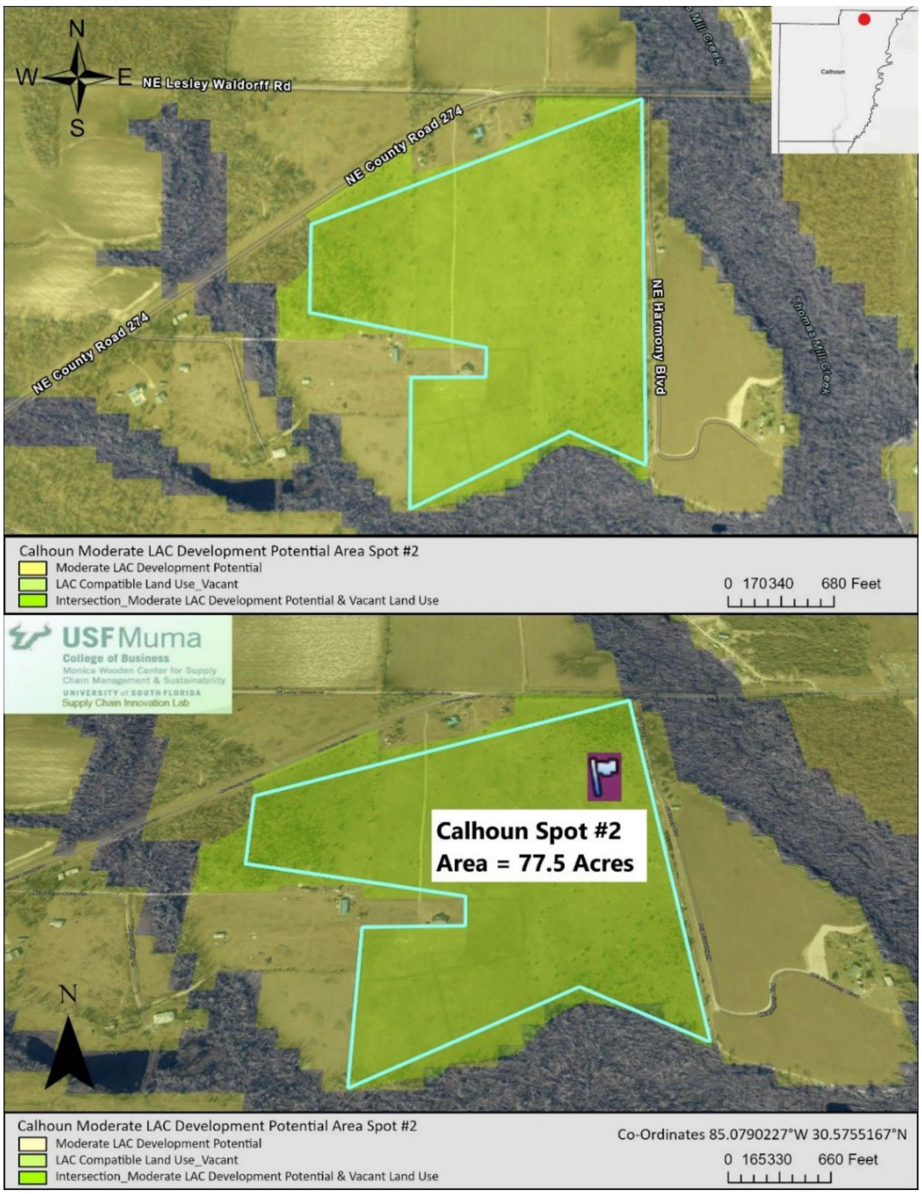

Figure B 25. Calhoun County Spot 2

CALHOUN SPOT #3

As per the criteria developed in this study, this 46.8-acre land parcel in the below image (Figure B 26) located in Blountstown, FL at the intersection of SW Matthew Wood Rd and Sr 20W has moderate LAC development potential in the Calhoun County. It is less than 2.5 miles from State roads, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

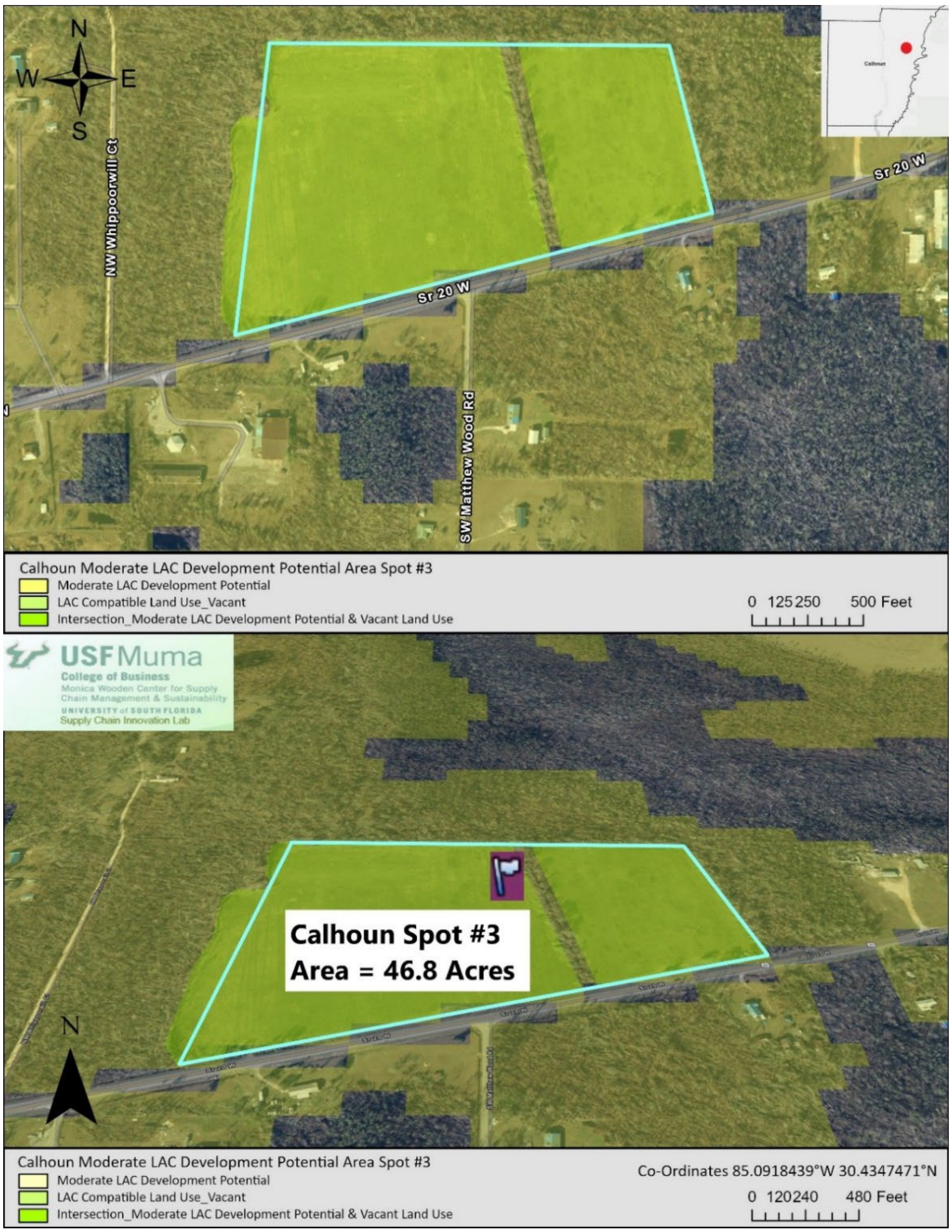

Figure B 26. Calhoun County Spot 3

CALHOUN SPOT #4

As per the criteria developed in this study, this huge 164-acre land parcel in the below image (Figure B 27) located in Altha, FL at the intersection of NE County Rd 274 and NE County Road 69A has moderate LAC development potential in the Calhoun County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

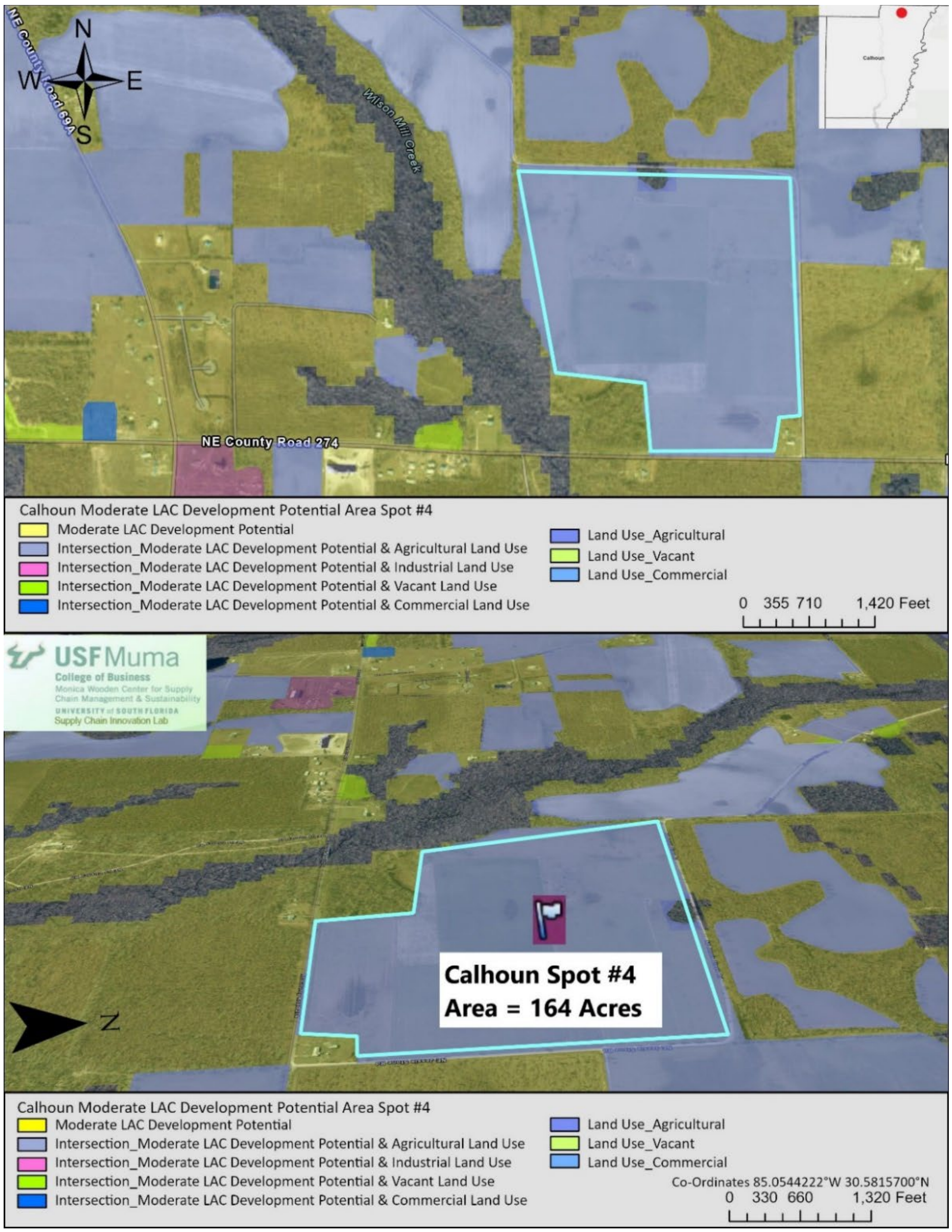

Figure B 27. Calhoun County Spot 4

CALHOUN SPOT #5

As per the criteria developed in this study, this huge 218-acre land parcel in the below image (Figure B 28) located in Altha, FL at the intersection of NE B E Barfield Rd and NE Shorty Segers Rd has moderate LAC development potential in the Calhoun County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

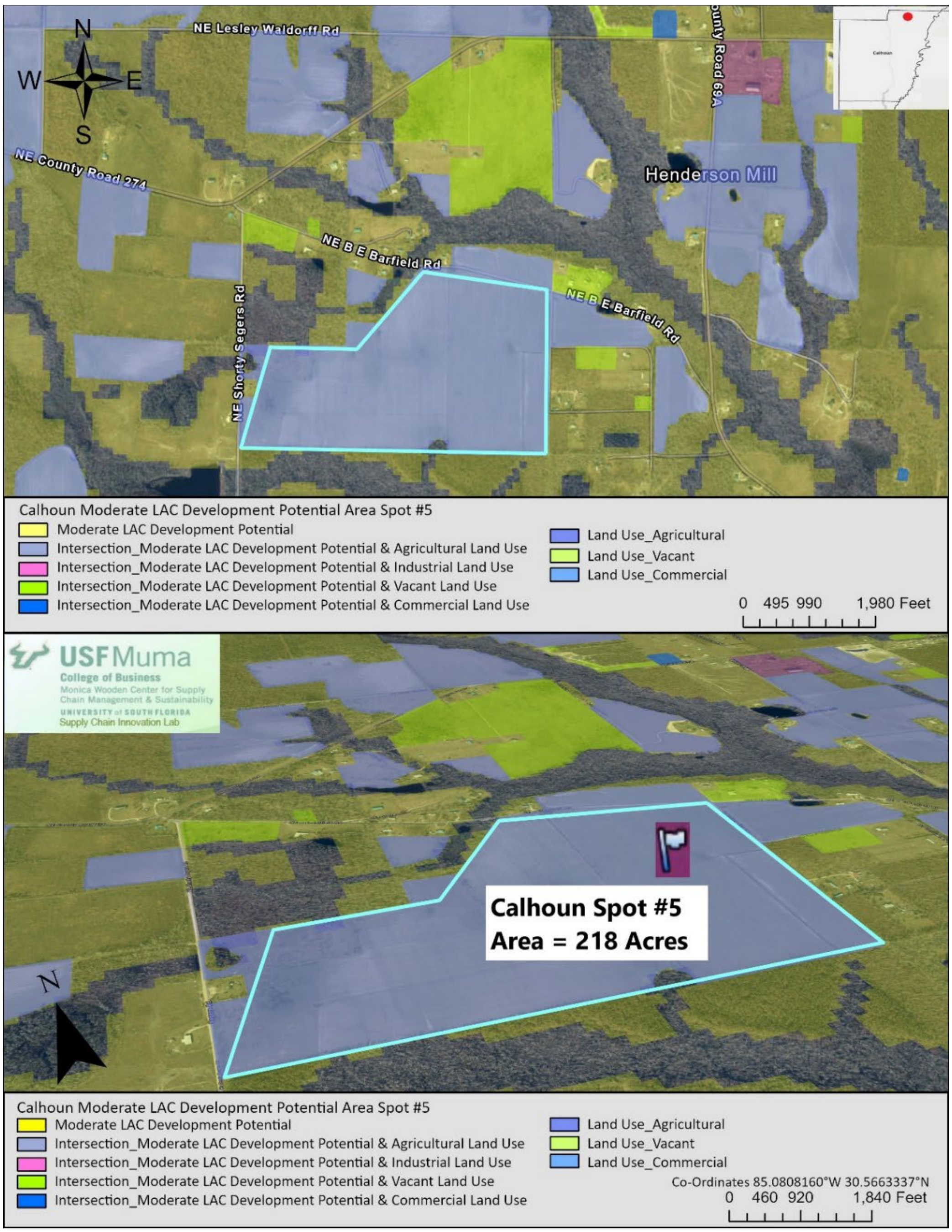

Figure B 28. Calhoun County Spot 5

Charlotte County

CHARLOTTE SPOT #2

As per the criteria developed in this study, this 8.5-acre land parcel in the below image (Figure B 29) located at the intersection of Pablo Dr and Woodland Dr near the Punta Gorda Airport has high LAC development potential in the Charlotte County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

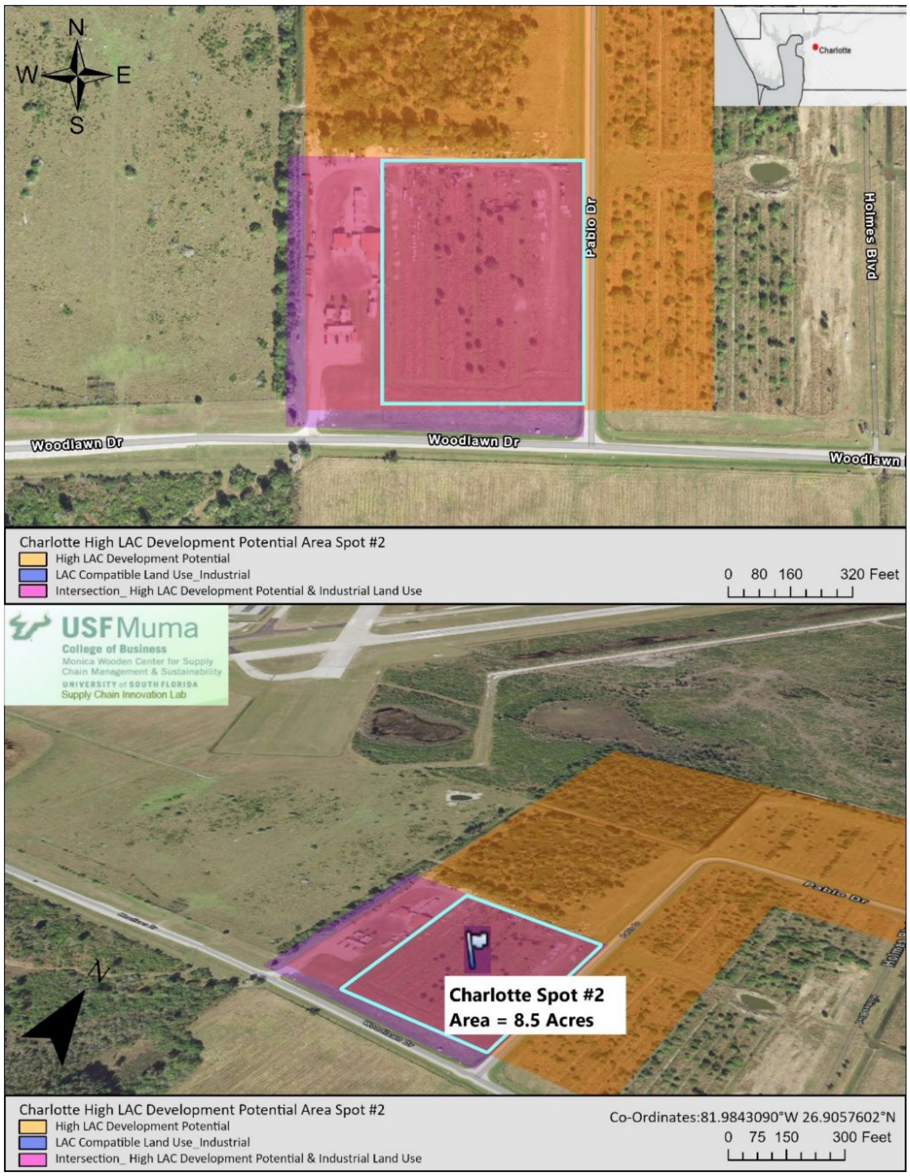

Figure B 29. Charlotte County Spot 2

CHARLOTTE SPOT #3

As per the criteria developed in this study, this 9.6-acre land parcel in the below image (Figure B 30) located at the intersection of Worth Ave and Winchester Blvd has high LAC development potential in the Charlotte County. It is less than 2.5 miles from State roads, less than 6.25 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

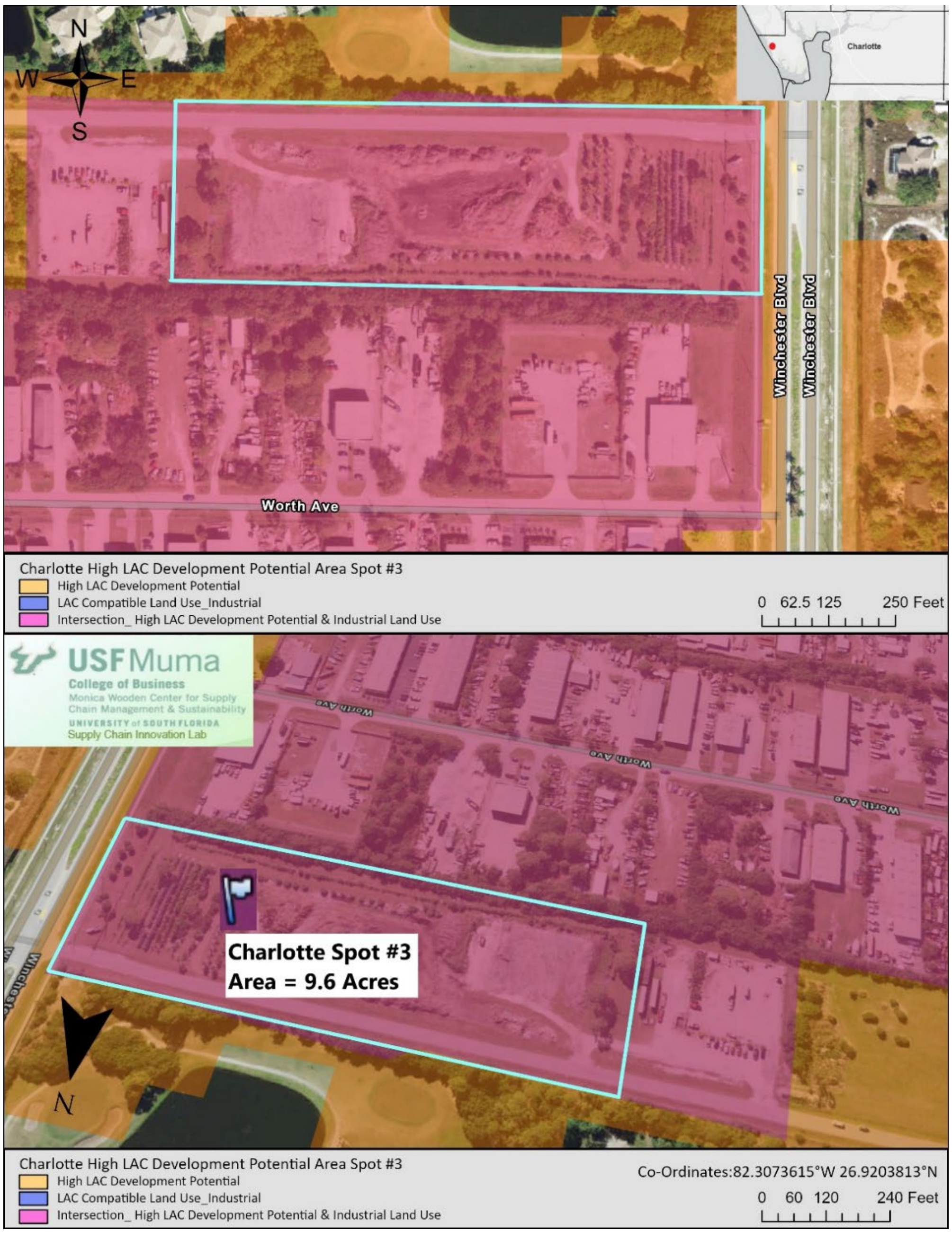

Figure B 30. Charlotte County Spot 3

CHARLOTTE SPOT #4

As per the criteria developed in this study, this 178-acre land parcel in the below image (Figure B 31) located near the Punta Gorda Airport at the intersection of Piper Rd and Cheney Rd near the Punta Gorda Airport has very high LAC development potential in the Charlotte County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

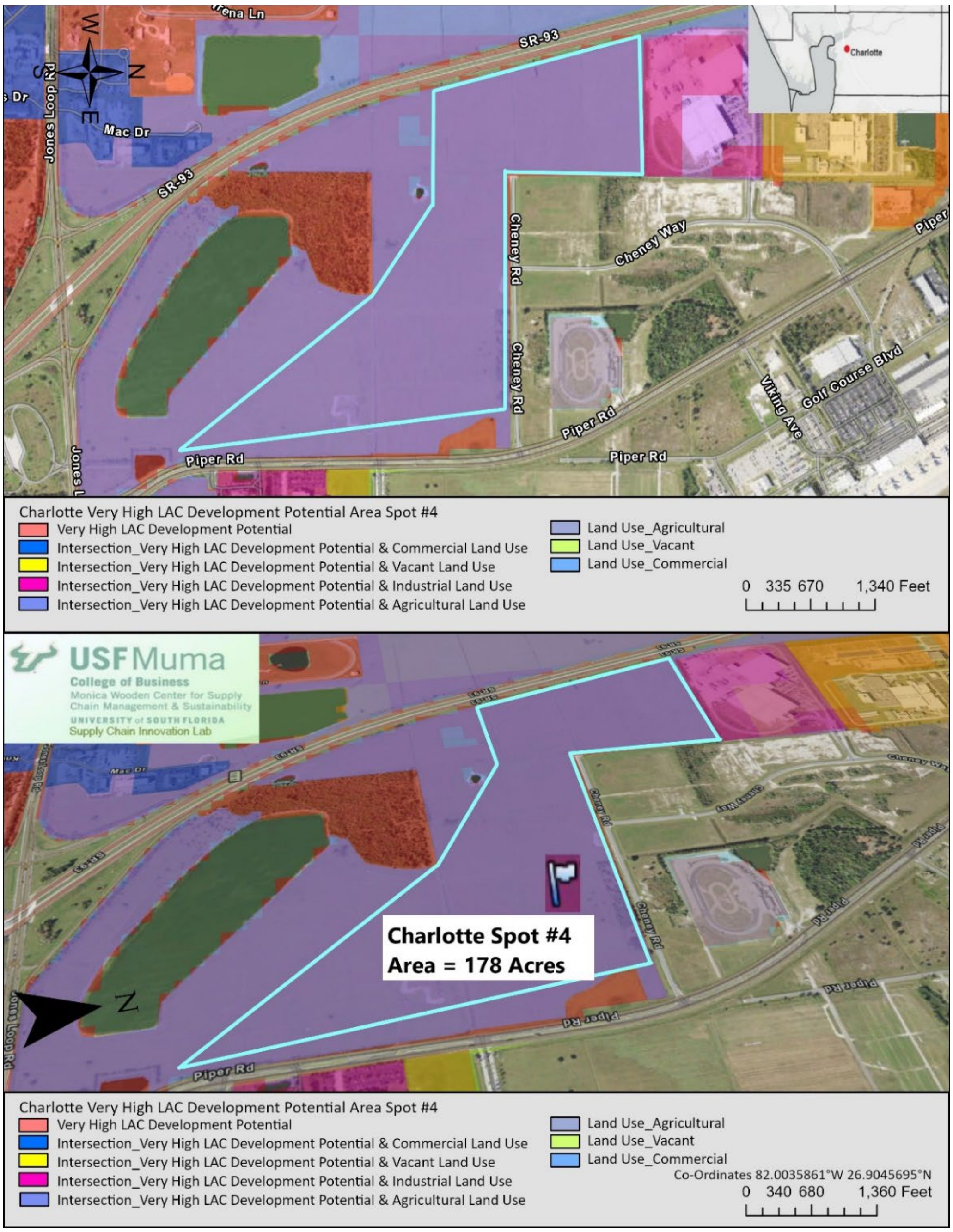

Figure B 31. Charlotte County Spot 4

CHARLOTTE SPOT #5

As per the criteria developed in this study, this 44-acre land parcel in the below image (Figure B 32) located at the intersection of Piper Rd and E Henry St near the Punta Gorda Airport has very high LAC development potential in the Charlotte County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

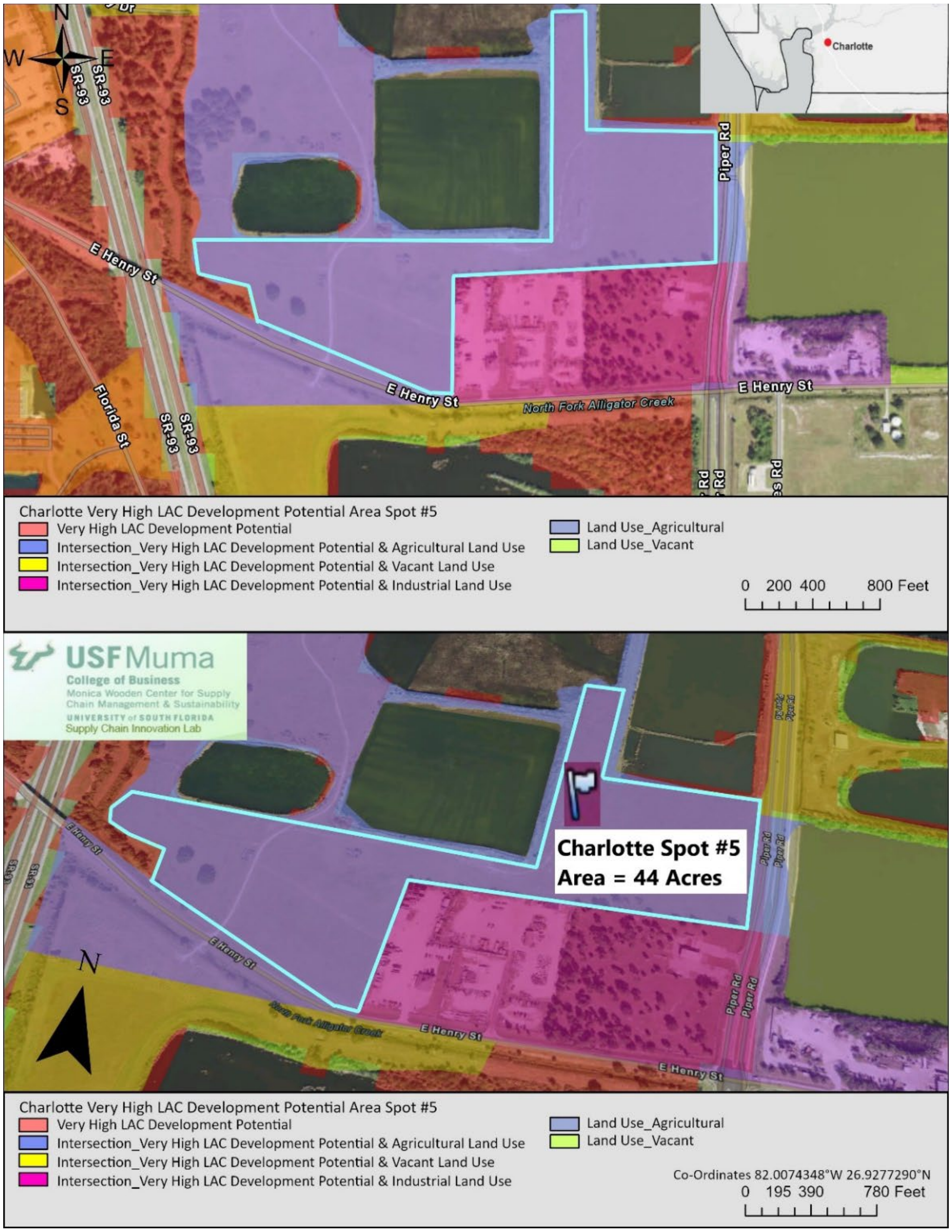

Figure B 32. Charlotte County Spot 5

Citrus County

CITRUS SPOT #2

As per the criteria developed in this study, this 11-acre land parcel in the below image (Figure B 33) located in Crystal River, FL at the intersection of N Tallahassee Rd and W Power Line St has high LAC development potential in the Citrus County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 33. Citrus County Spot 2

CITRUS SPOT #3

As per the criteria developed in this study, this 36.7-acre land parcel in the below image (Figure B 34) located in Hernando, FL at the intersection of N Croft Ave and E Norvell Bryant Hwy has high LAC development potential in the Citrus County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 34. Citrus County Spot 3

CITRUS SPOT #4

As per the criteria developed in this study, this 292-acre land parcel in the below image (Figure B 35) located in Hernando, FL at the intersection of E Stockton St and N Florida Ave has high LAC development potential in the Citrus County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

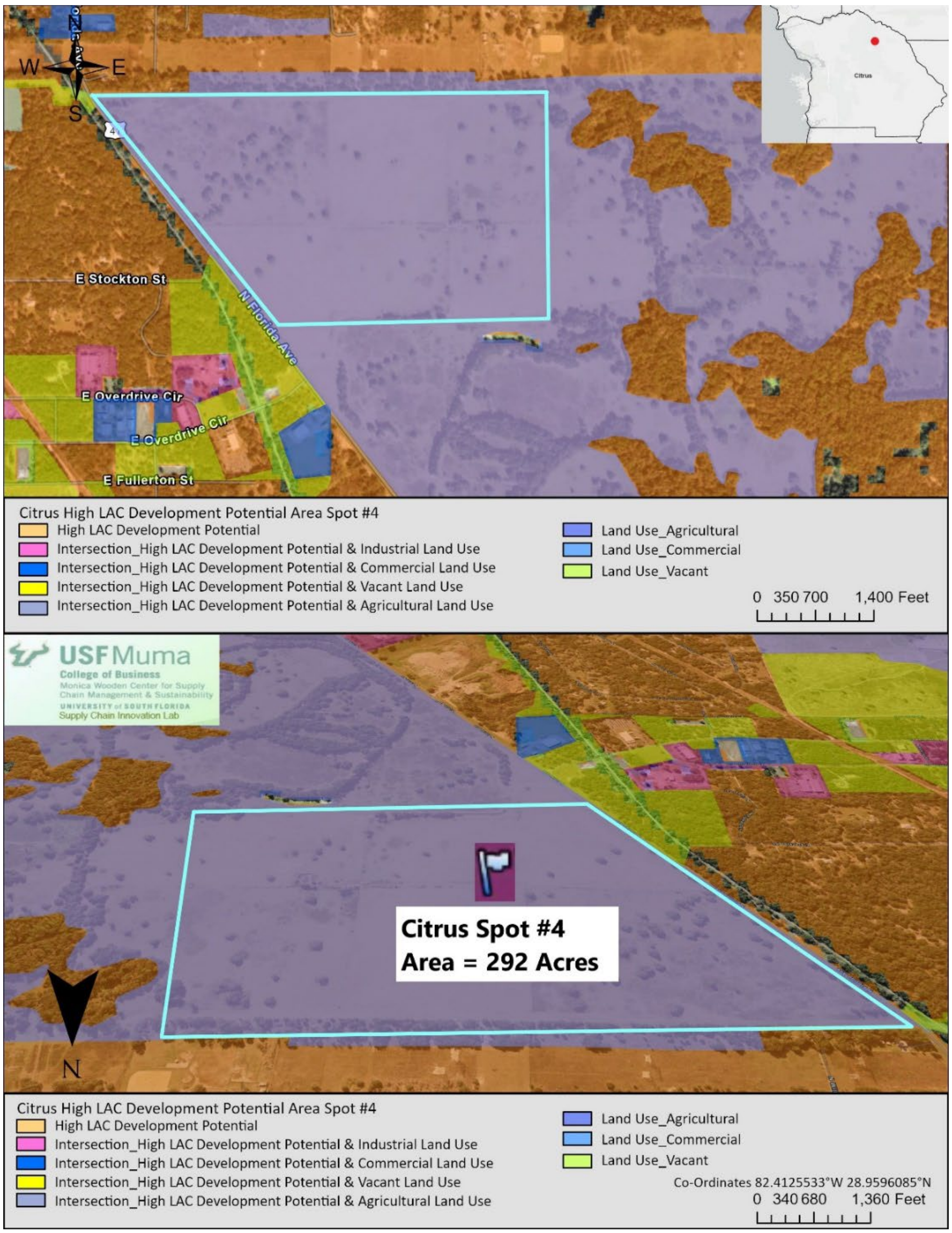

Figure B 35. Citrus County Spot 4

CITRUS SPOT #5

As per the criteria developed in this study, this 47.6-acre land parcel in the below image (Figure B 36) located in Dunnellon, FL at the intersection of W Dunnellon Rd and N River Garden Dr has high LAC development potential in the Citrus County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

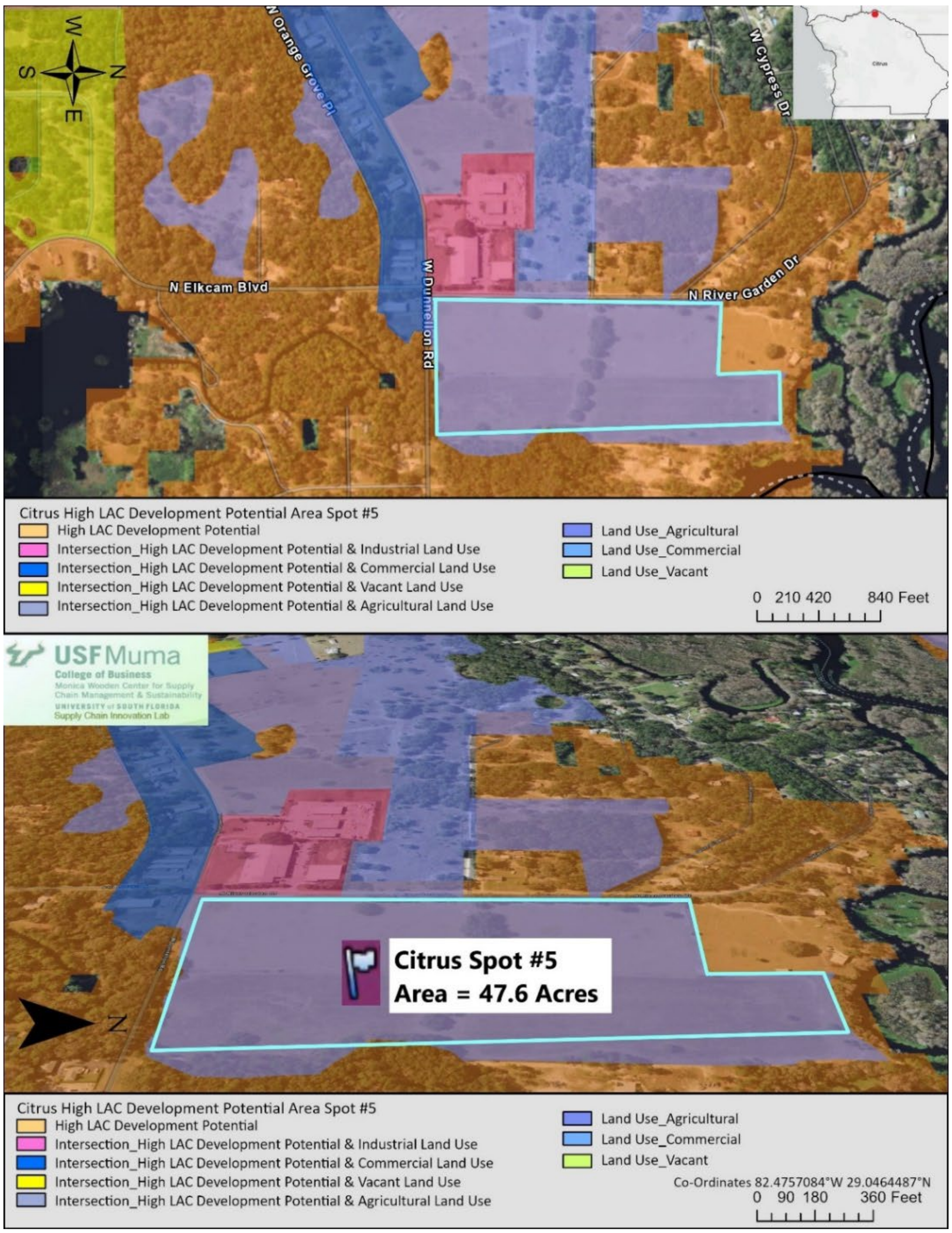

Figure B 36. Citrus County Spot 5

Clay County

CLAY SPOT #2

As per the criteria developed in this study, this 23.8-acre land parcel in the below image (Figure B 37) located in Middleburg, FL at the intersection of Tynes Blvd and Long Bay Rd has very high LAC development potential in the Clay County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 10 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure B 37. Clay County Spot 2

CLAY SPOT #3

As per the criteria developed in this study, this 50-acre land parcel in the below image (Figure B 38) located in Green Cove Springs, FL next to the Reynolds Airpark at the intersection of Energy Cove Ct and Highway 17 S has high LAC development potential in the Clay County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 38. Clay County Spot 3

CLAY SPOT #4

As per the criteria developed in this study, this 40.5-acre land parcel in the below image (Figure B 39) located in Maxville, FL at the intersection of County Rd 218 and US Highway 301 S has high LAC development potential in the Clay County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

Figure B 39. Clay County Spot 4

CLAY SPOT #5

As per the criteria developed in this study, this 17.5-acre land parcel in the below image (Figure B 40) located in Maxville, FL at the intersection of County Rd 218 and Chip Mill Rd has high LAC development potential in the Clay County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

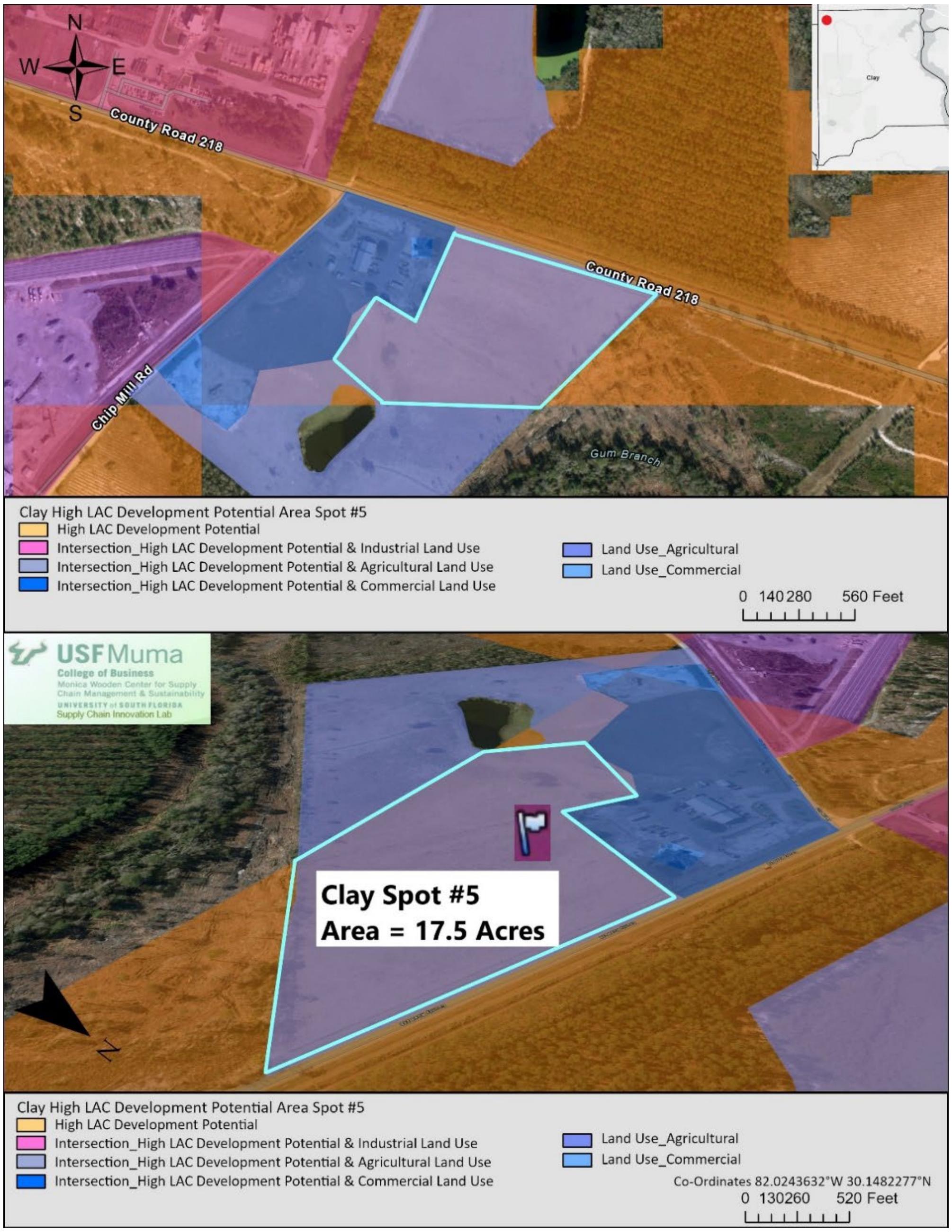

Figure B 40. Clay County Spot 5

Collier County

COLLIER SPOT #2

As per the criteria developed in this study, this 6-acre land parcel in the below image (Figure B 41) located at next to the Immokalee Regional Airport at the intersection of Global Dr and Tradeport Pkwy has high LAC development potential in the Collier County. It is less than 2.5 miles from State roads, is less than 2.5 miles from the nearest Airport, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

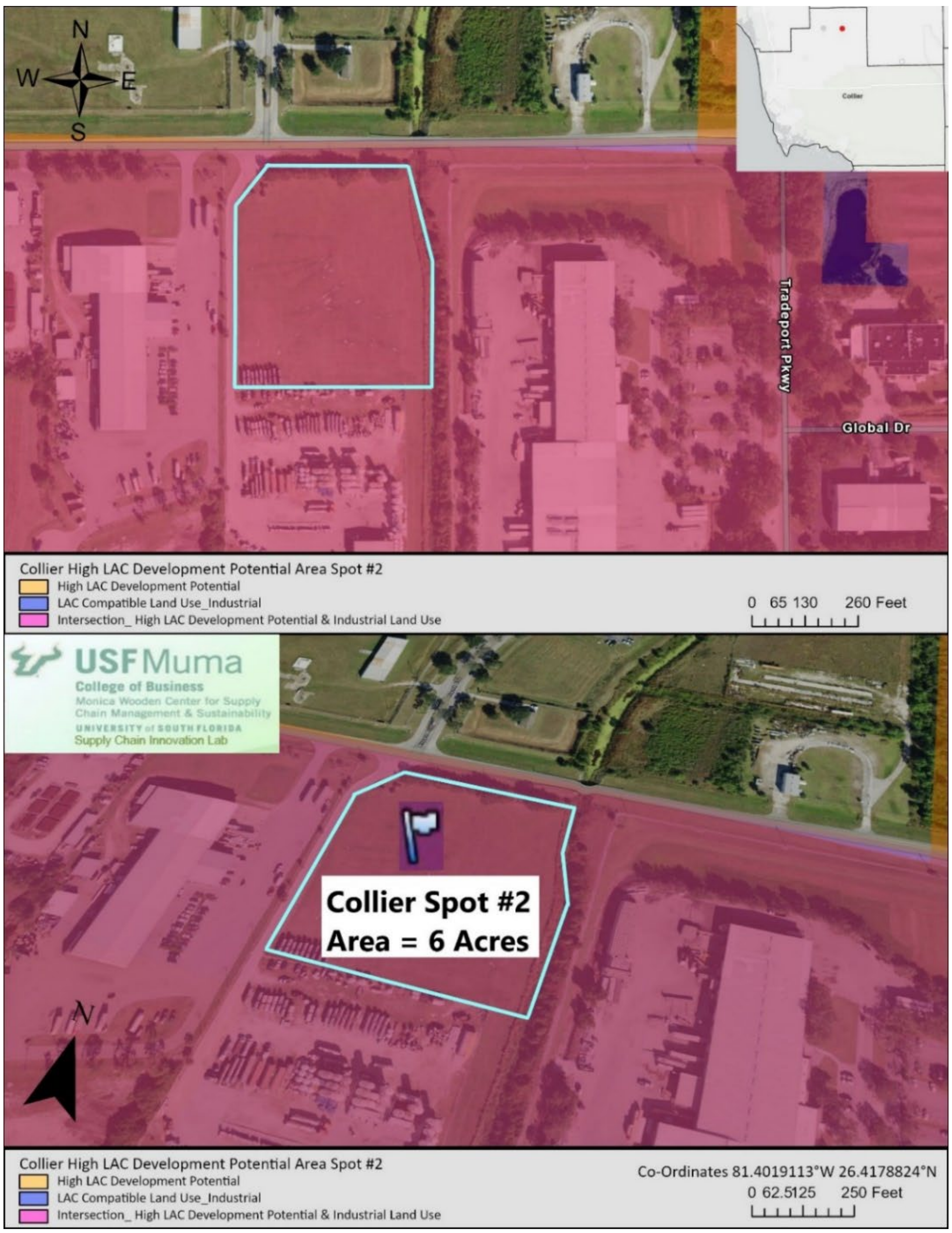

Figure B 41. Collier County Spot 2

COLLIER SPOT #3

As per the criteria developed in this study, this 7.5-acre land parcel in the below image (Figure B 42) located at the intersection of Shady Oaks Ln and Oakes Blvd has very high LAC development potential in the Collier County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

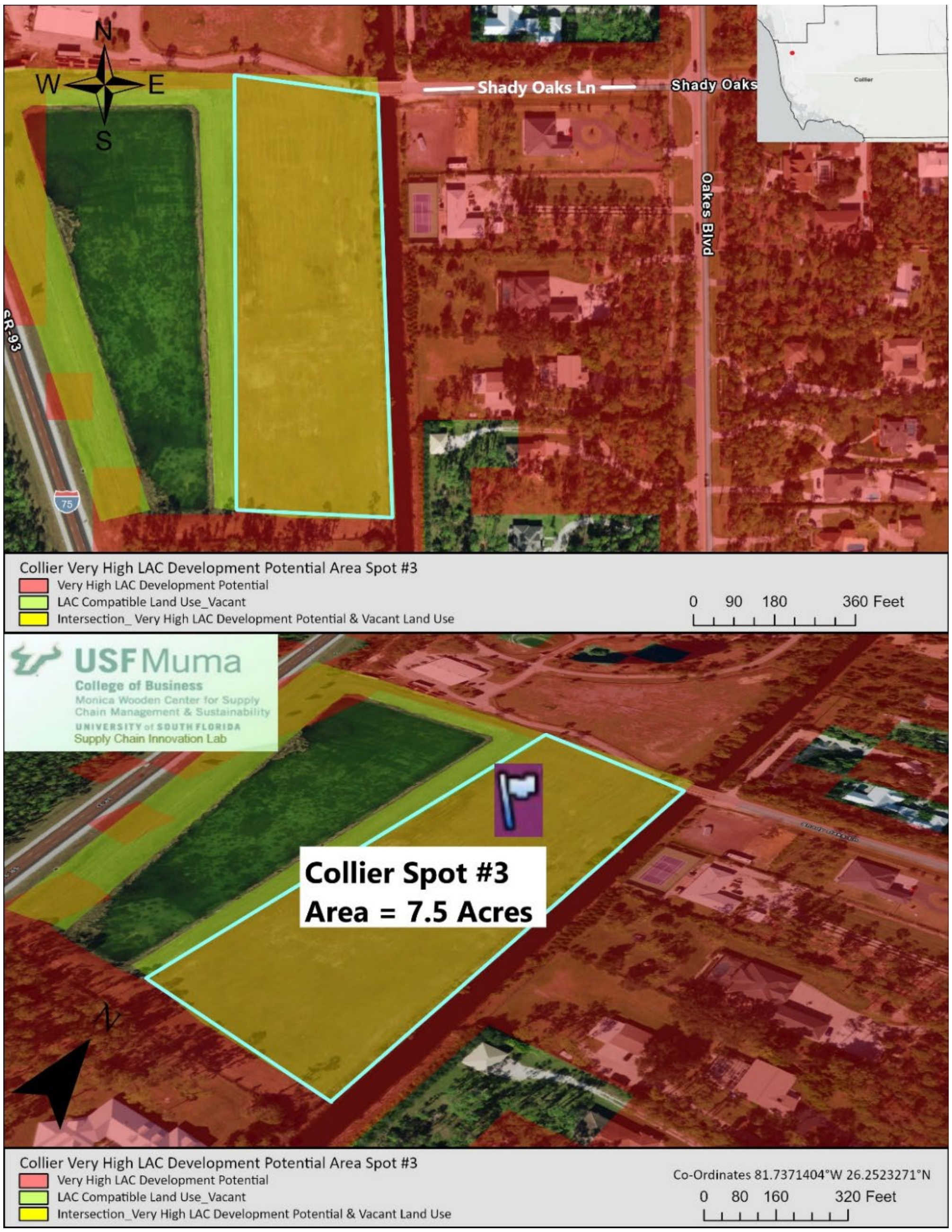

Figure B 42. Collier County Spot 3

COLLIER SPOT #4

As per the criteria developed in this study, this massive 150.5-acre land parcel in the below image (Figure B 43) located at the intersection of Airpark Blvd and County Road 846 near the Immokalee Regional Airport has high LAC development potential in the Collier County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

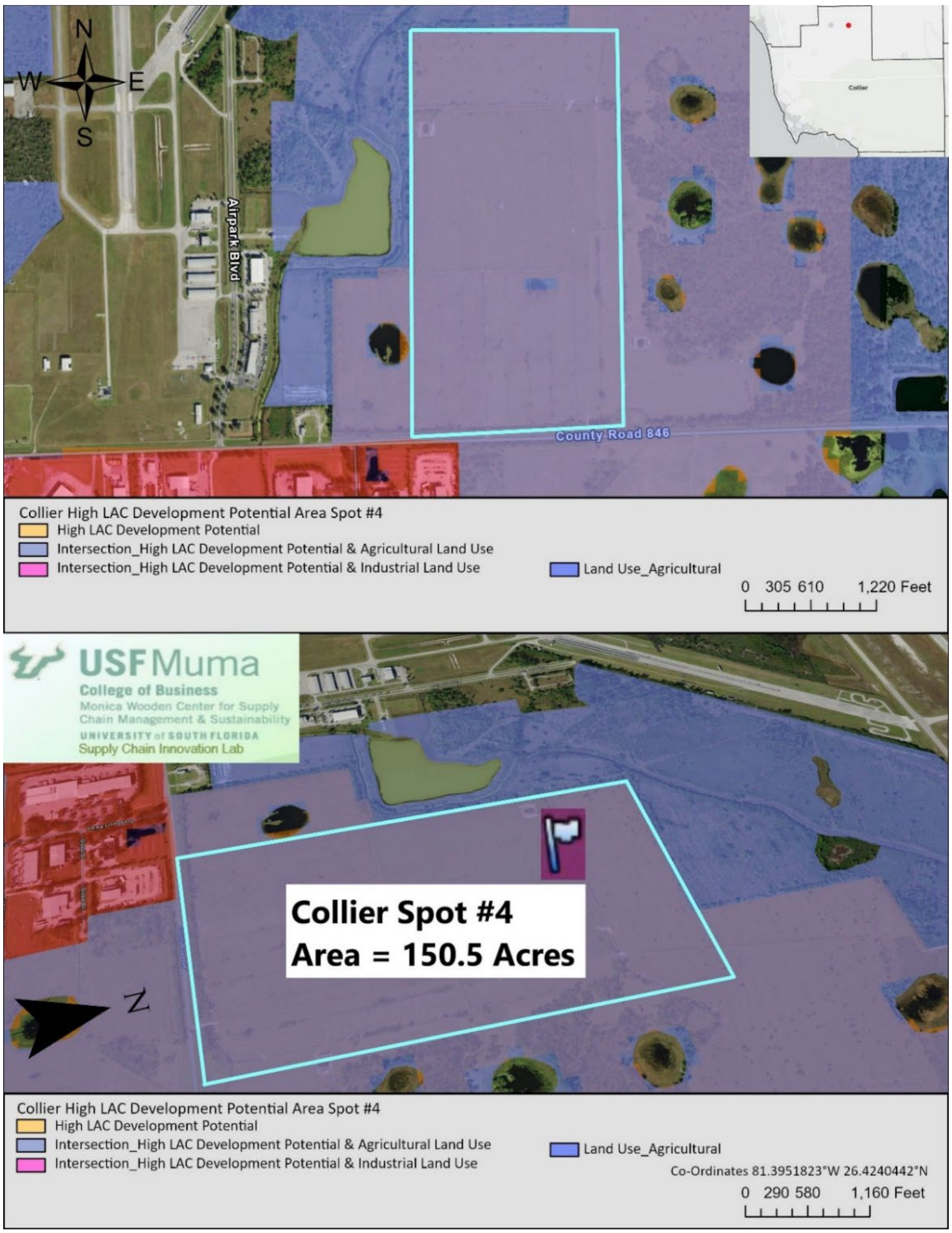

Figure B 43. Collier County Spot 4

COLLIER SPOT #5

As per the criteria developed in this study, this 46-acre land parcel in the below image (Figure B 44) located at the intersection of State Rd 29 S and New Harvest Rd near the Immokalee Regional Airport has high LAC development potential in the Collier County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

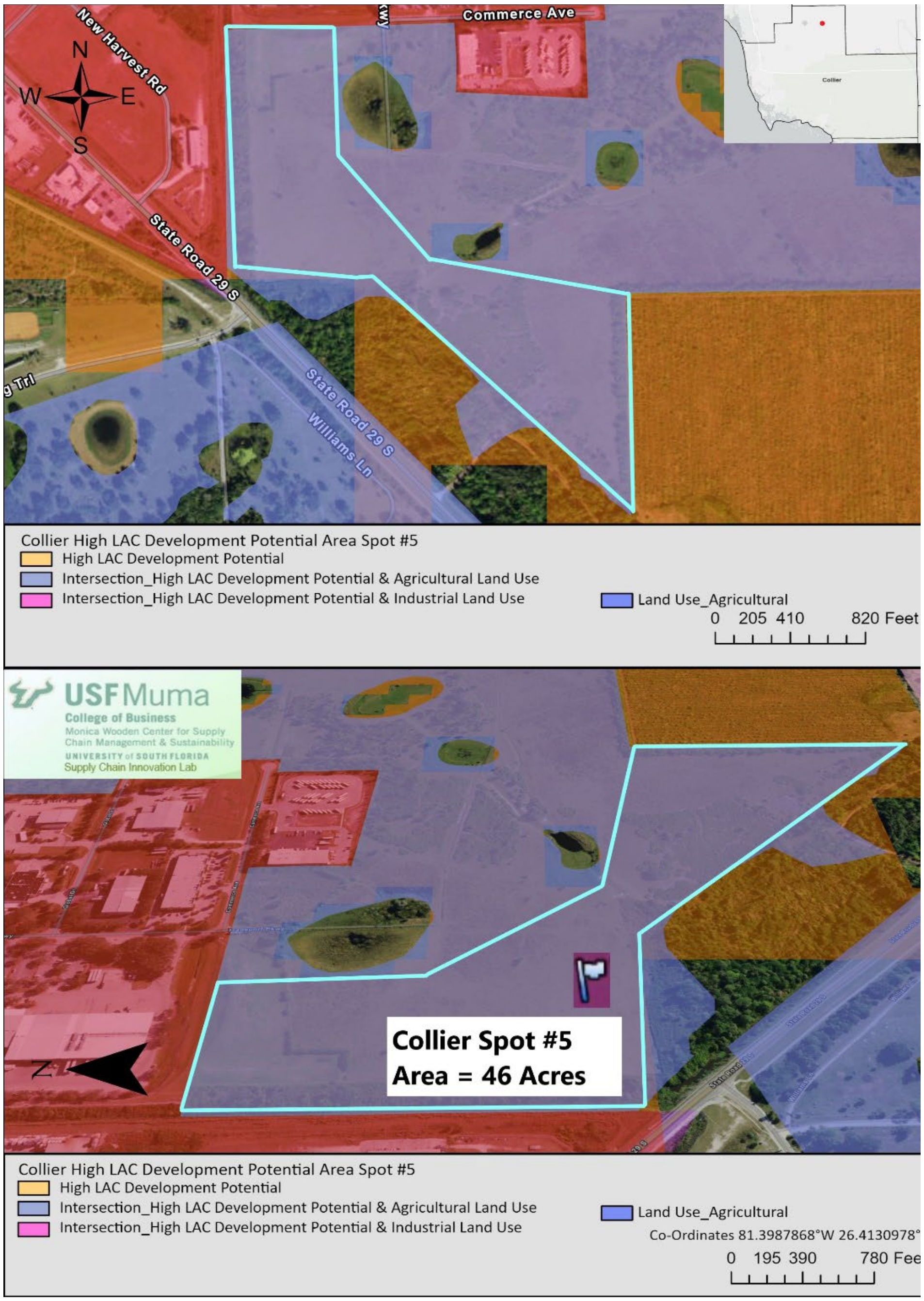

Figure B 44. Collier County Spot 5

Columbia County

COLUMBIA SPOT #2

As per the criteria developed in this study, this 34.5-acre land parcel in the below image (Figure B 45) located in Lake City, FL at the intersection of NW Juliet Ct and NW Tweedale Ln has very high LAC development potential in the Columbia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

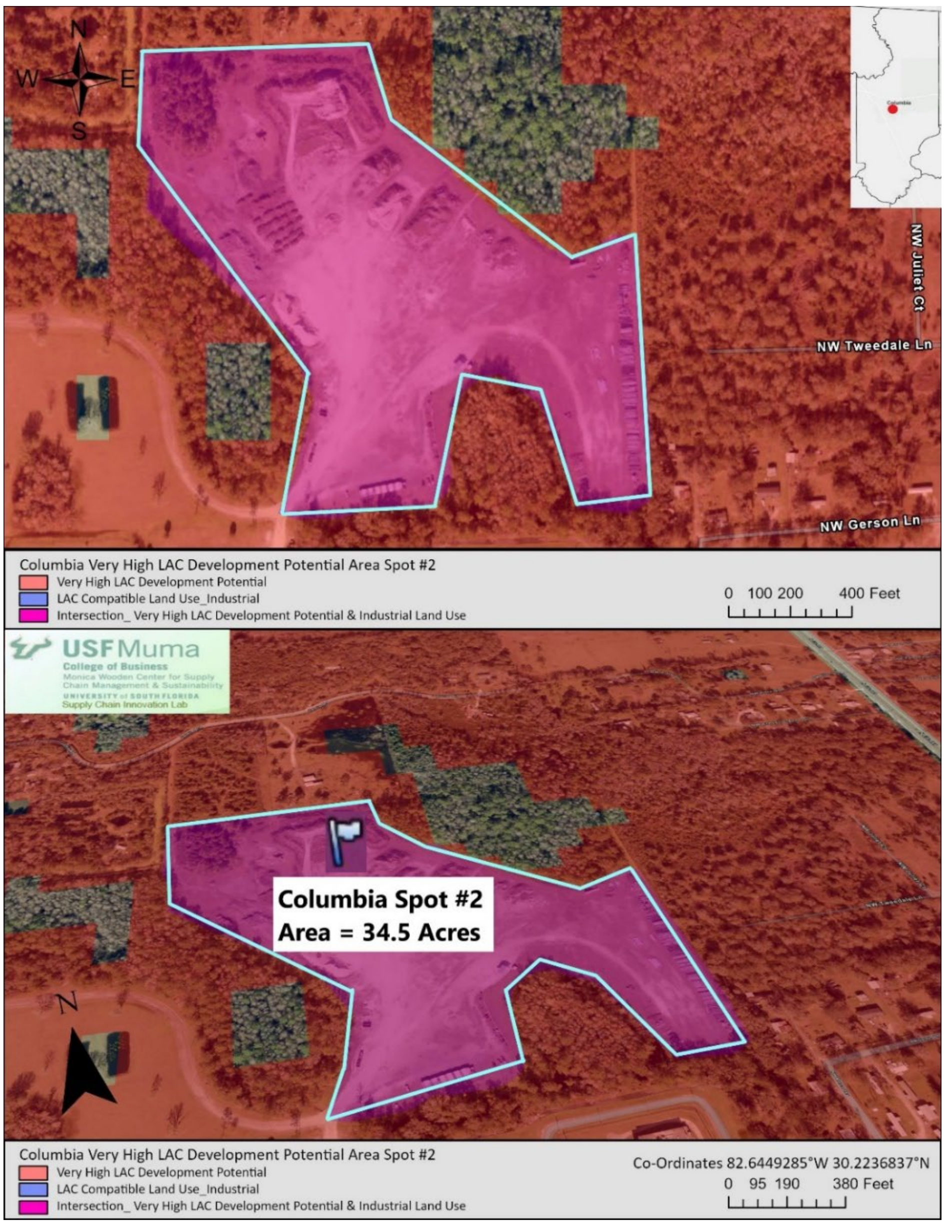

Figure B 45. Columbia County Spot 2

COLUMBIA SPOT #3

As per the criteria developed in this study, this 11.2-acre land parcel in the below image (Figure B 46) located in Lake City, FL at the intersection of NW Keen Gln and N US-441 has very high LAC development potential in the Columbia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

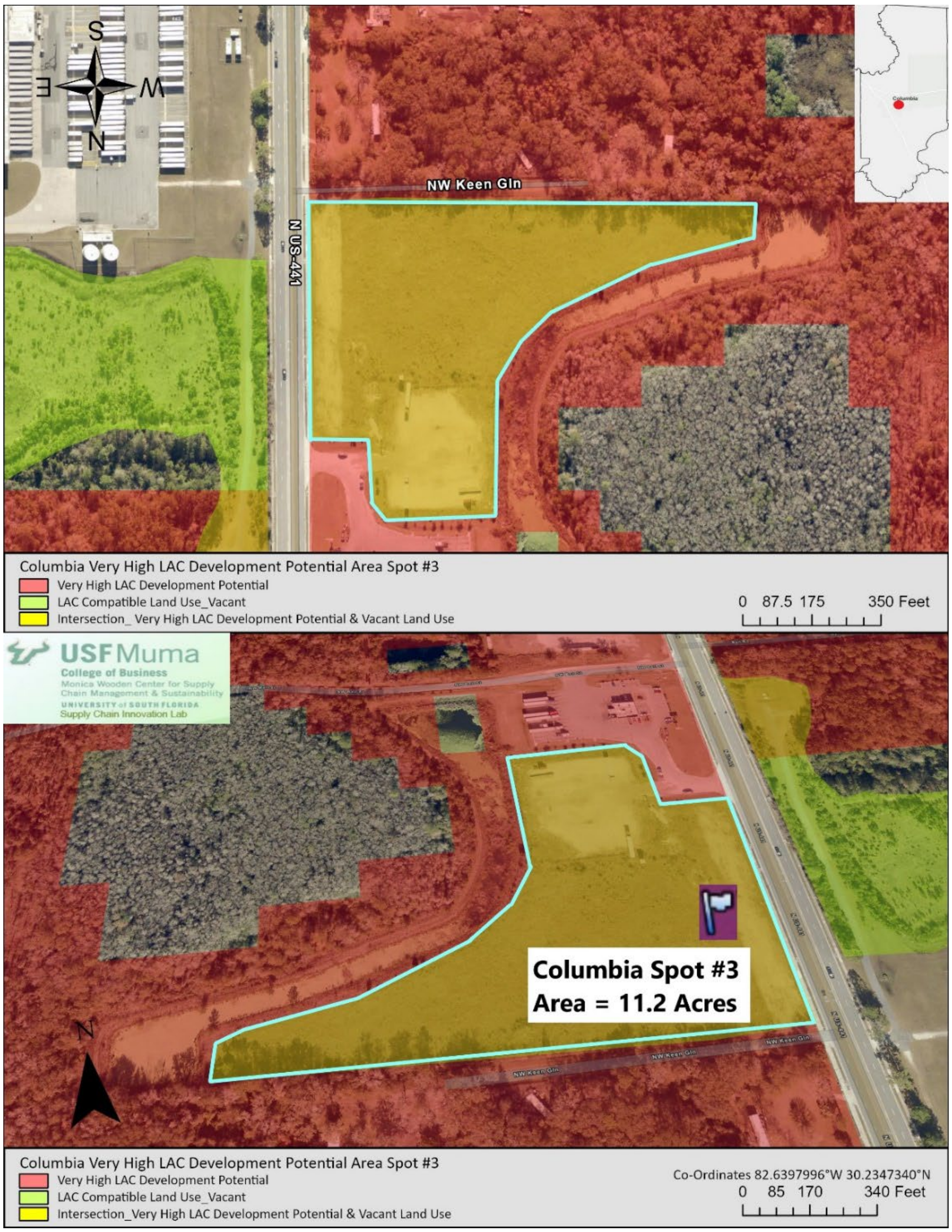

Figure B 46. Columbia County Spot 3

COLUMBIA SPOT #4

As per the criteria developed in this study, this 21.7-acre land parcel in the below image (Figure B 47) located in Lake City, FL industrial area at the intersection of NW Osteen Ct and Vaughn Rd has very high LAC development potential in the Columbia County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

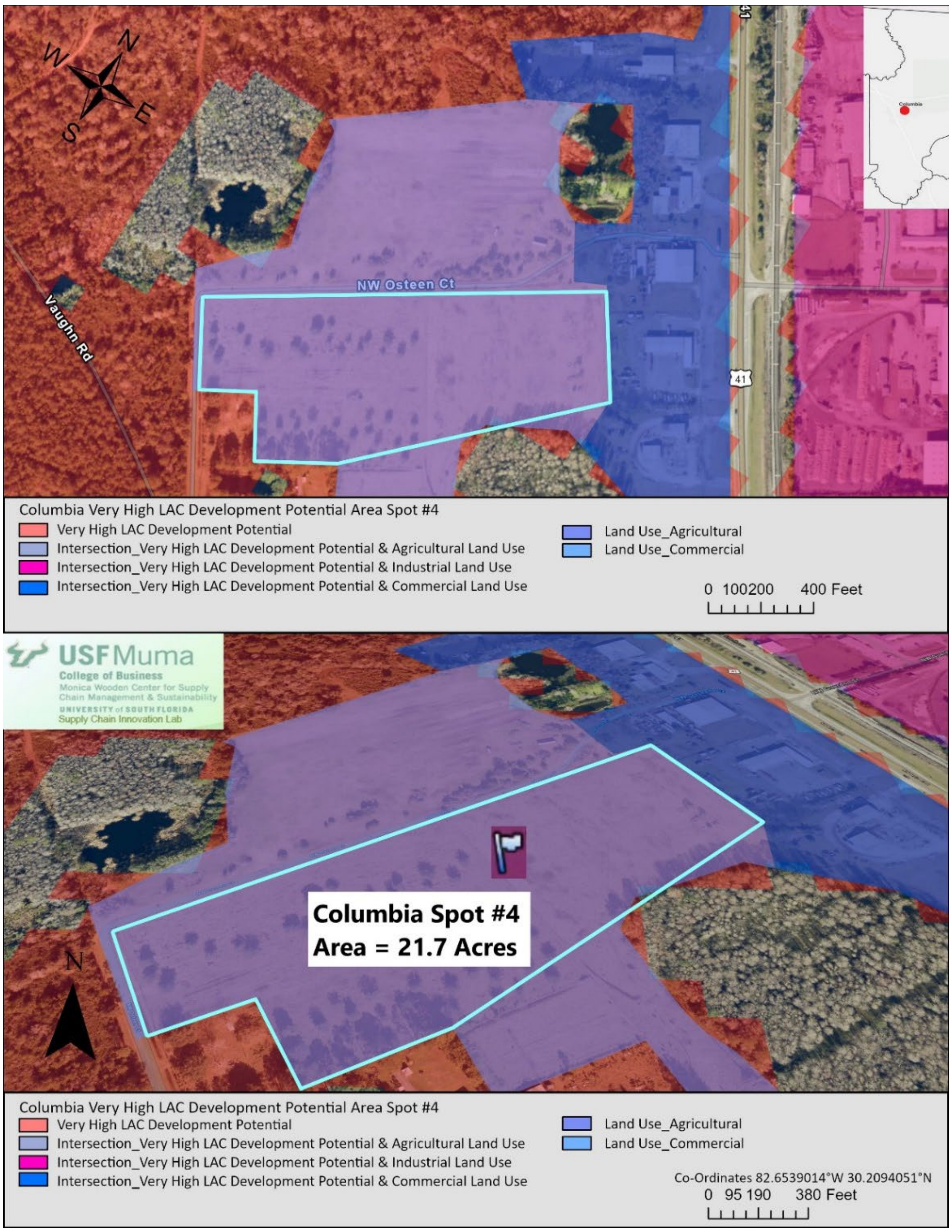

Figure B 47. Columbia County Spot 4

COLUMBIA SPOT #5

As per the criteria developed in this study, this 175-acre land parcel in the below image (Figure B 48) located near the Lake City Airport at the intersection of SE Price Creek Dr and Press-Ruth Rd has high LAC development potential in the Columbia County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

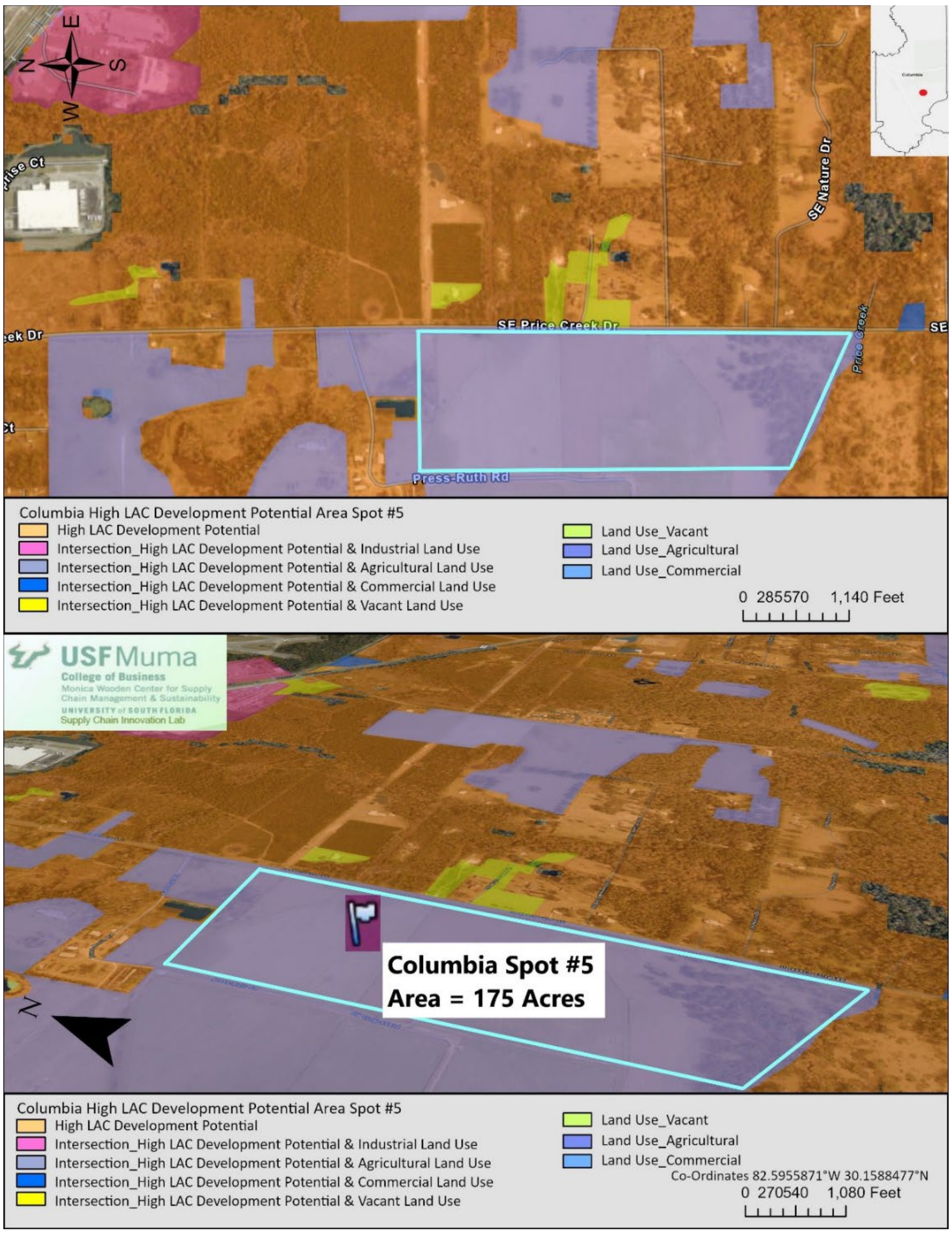

Figure B 48. Columbia County Spot 5

DeSoto County

DESOTO SPOT #2

As per the criteria developed in this study, this 13.3-acre land parcel in the below image (Figure B 49) located in Nocatee, FL at the intersection of SW Beard St and SW Sable Ave has moderate LAC development potential in the DeSoto County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

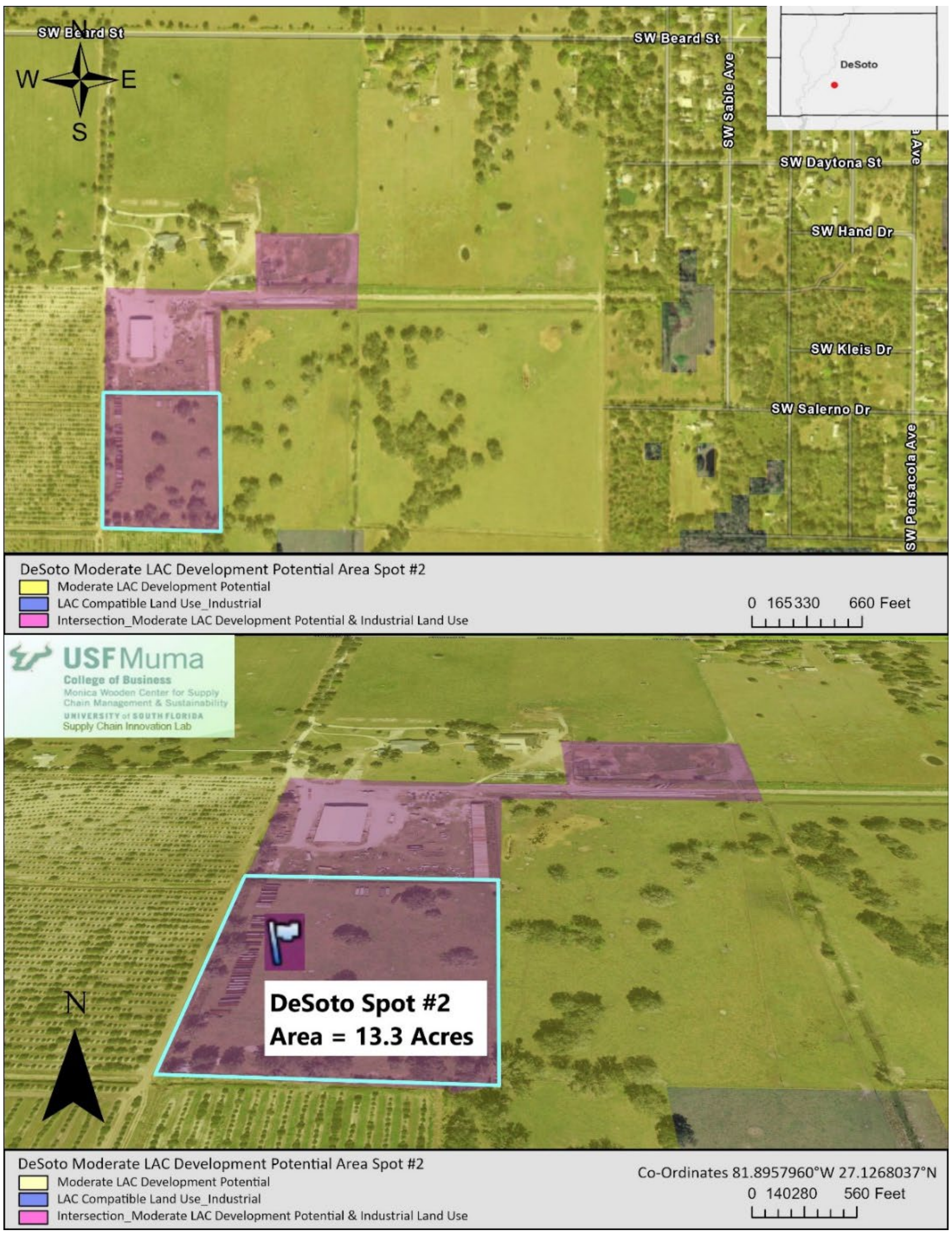

Figure B 49. DeSoto County Spot 2

DESOTO SPOT #3

As per the criteria developed in this study, this 48.8-acre land parcel in the below image (Figure B 50) located in near the Arcadia Municipal Airport at the intersection of NE Cody St and N 17th Ave has high LAC development potential in the DeSoto County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

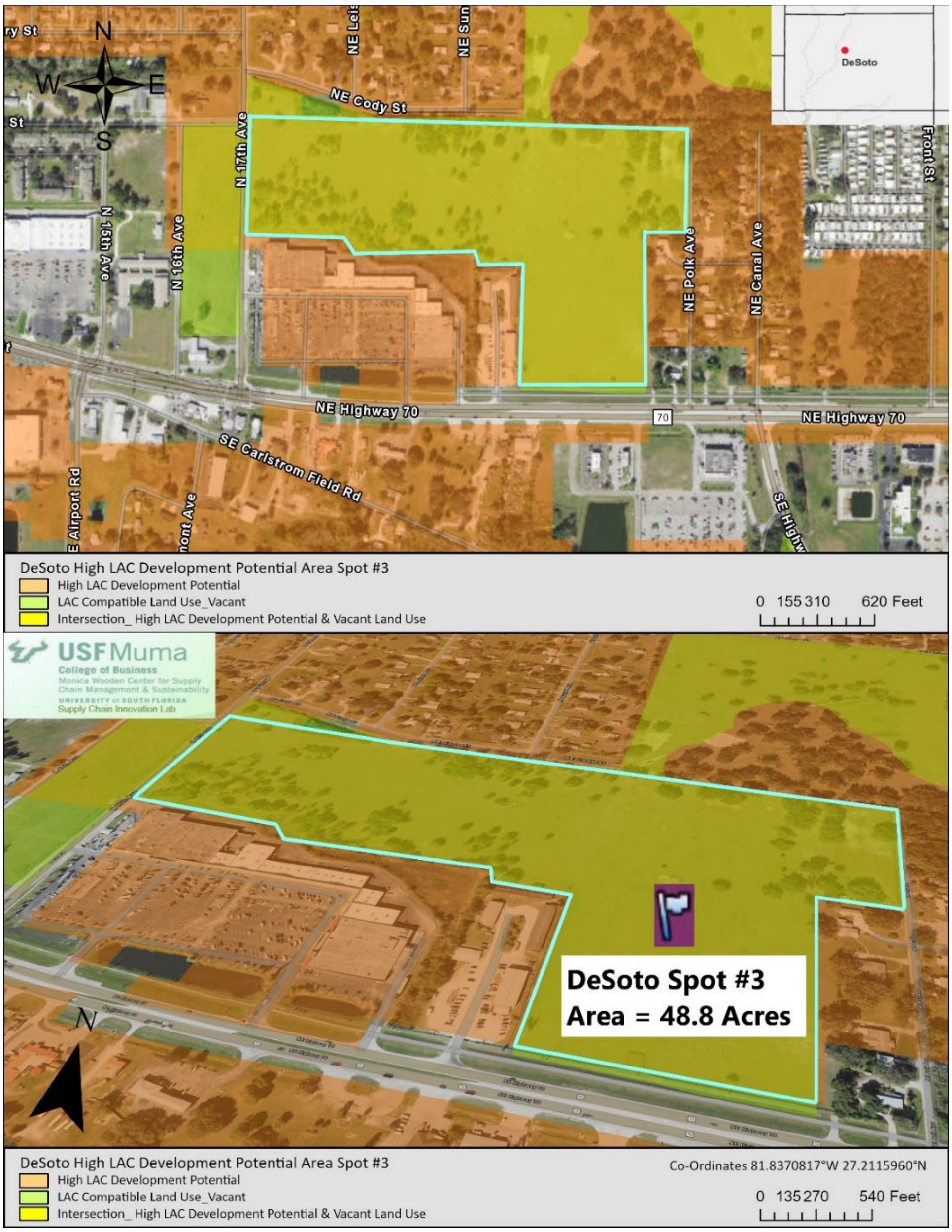

Figure B 50. DeSoto County Spot 3

DESOTO SPOT #4

As per the criteria developed in this study, this huge 72.5-acre land parcel in the below image (Figure B 51) located in Arcadia, FL at the intersection of NW Goathill St and NW North Rd has high LAC development potential in the DeSoto County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

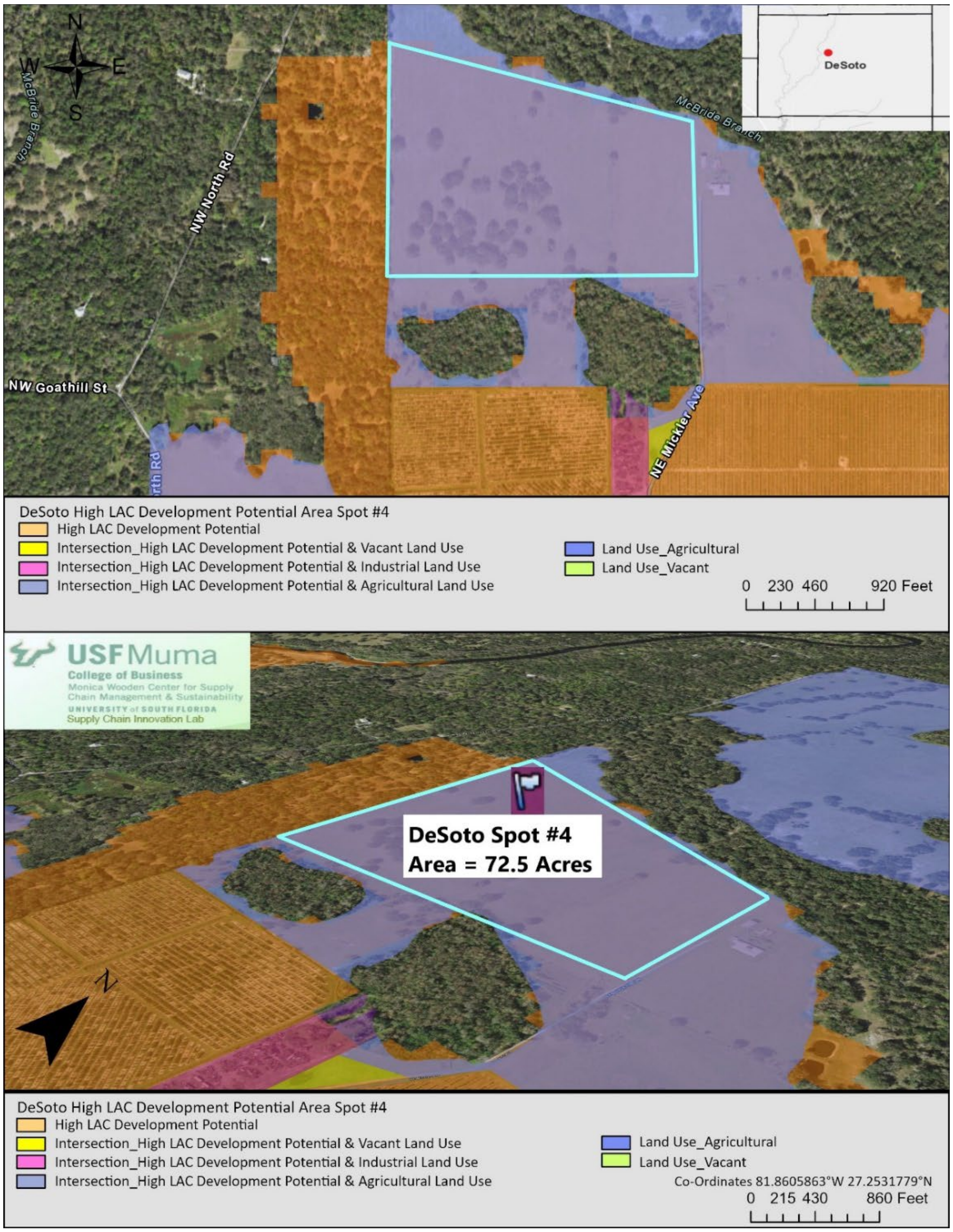

Figure B 51. DeSoto County Spot 4

DESOTO SPOT #5

As per the criteria developed in this study, this 34.3-acre land parcel in the below image (Figure B 52) located in Arcadia, FL at the intersection of NW County Road 661 and NW Pearce St has high LAC development potential in the DeSoto County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

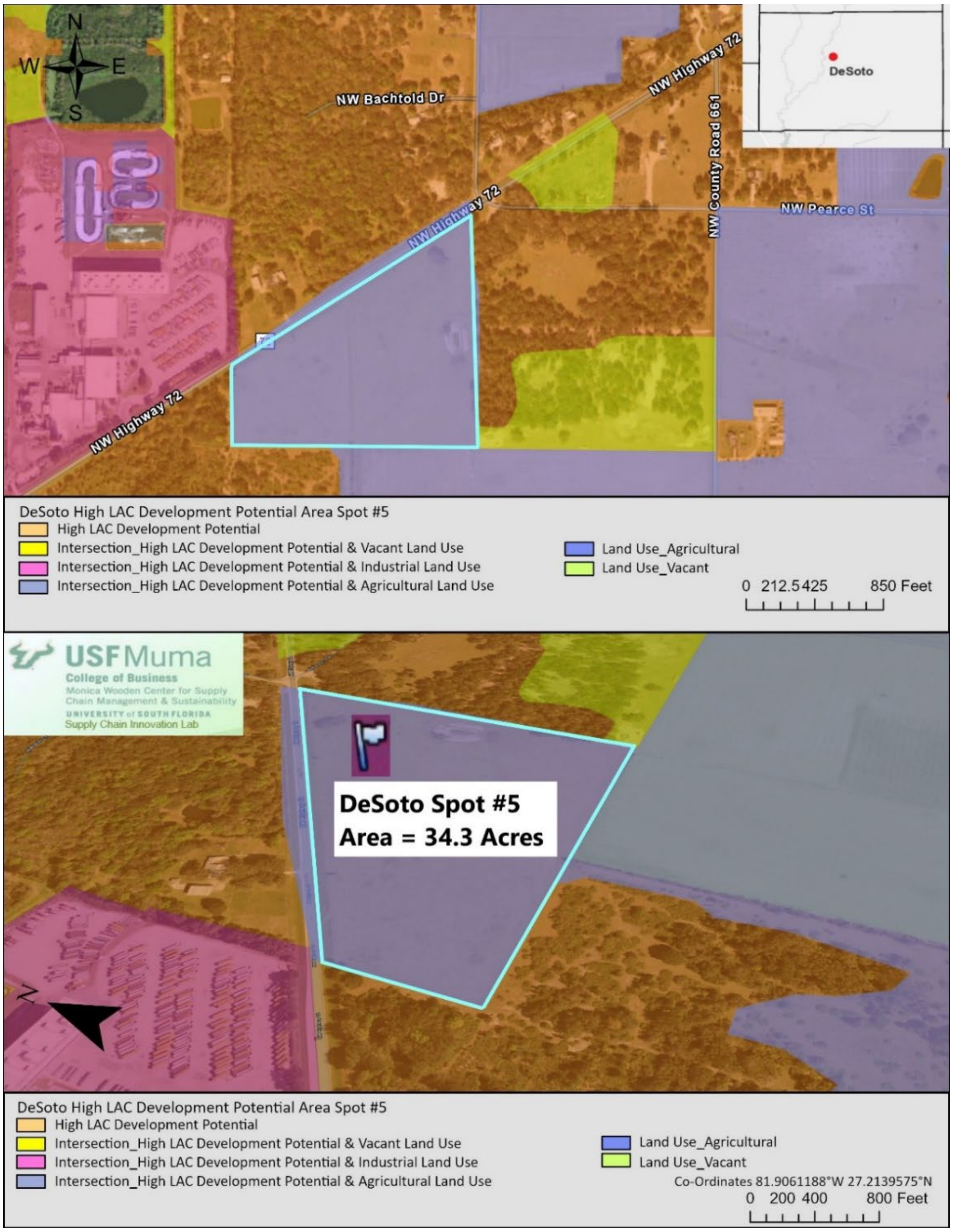

Figure B 52. DeSoto County Spot 5

Dixie County

DIXIE SPOT #2

As per the criteria developed in this study, this 17.2-acre land parcel in the below image (Figure B 53) located in Cross City, FL near the Cross City Airport at the intersection of NE 264th St and NE 178th Ave has high LAC development potential in the Dixie County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest airport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

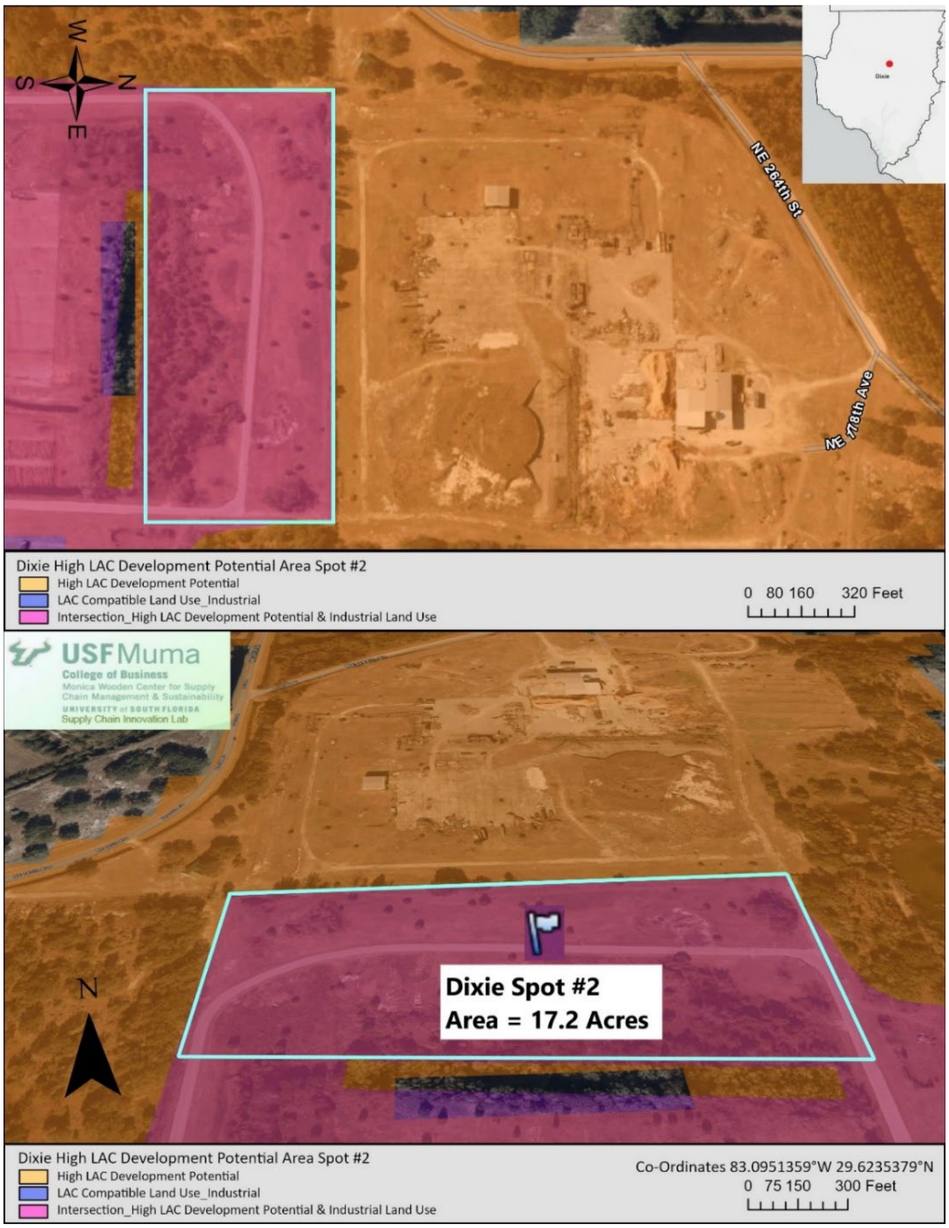

Figure B 53. Dixie County Spot 2

DIXIE SPOT #3

As per the criteria developed in this study, this 51.8-acre land parcel in the below image (Figure B 54) located in Old Town, FL at the intersection of SE Highway 19 and SE 697th St has high LAC development potential in the Dixie County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 54. Dixie County Spot 3

DIXIE SPOT #4

As per the criteria developed in this study, this 44.8-acre land parcel in the below image (Figure B 55) located in Cross City, FL at the intersection of NW Highway 19 and SW 50th Ln has high LAC development potential in the Dixie County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

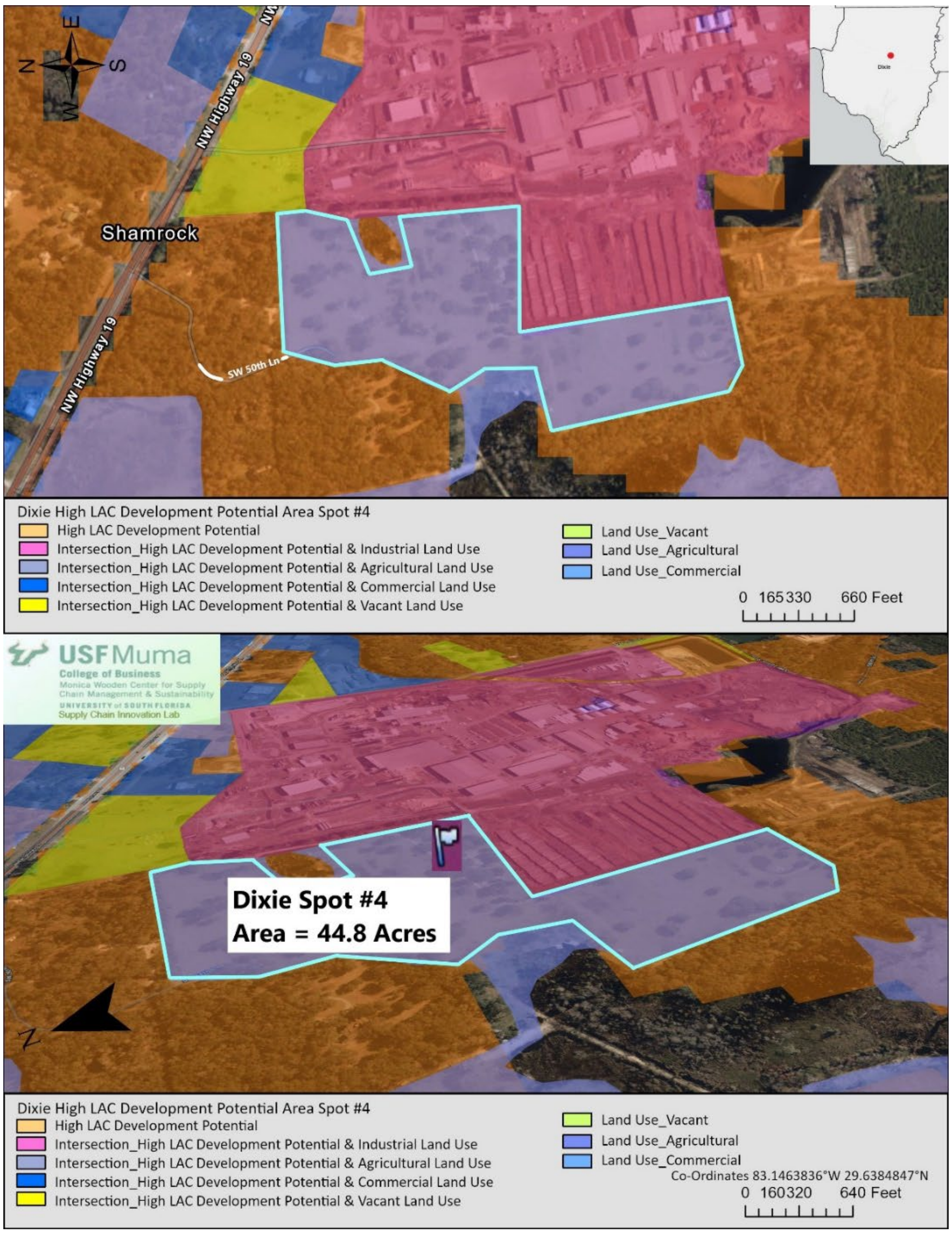

Figure B 55. Dixie County Spot 4

DIXIE SPOT #5

As per the criteria developed in this study, this 18.5-acre land parcel in the below image (Figure B 56) located in Cross City, FL near the Cross City Airport at the intersection of NE 178th Ave and NE 264th St has high LAC development potential in the Dixie County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

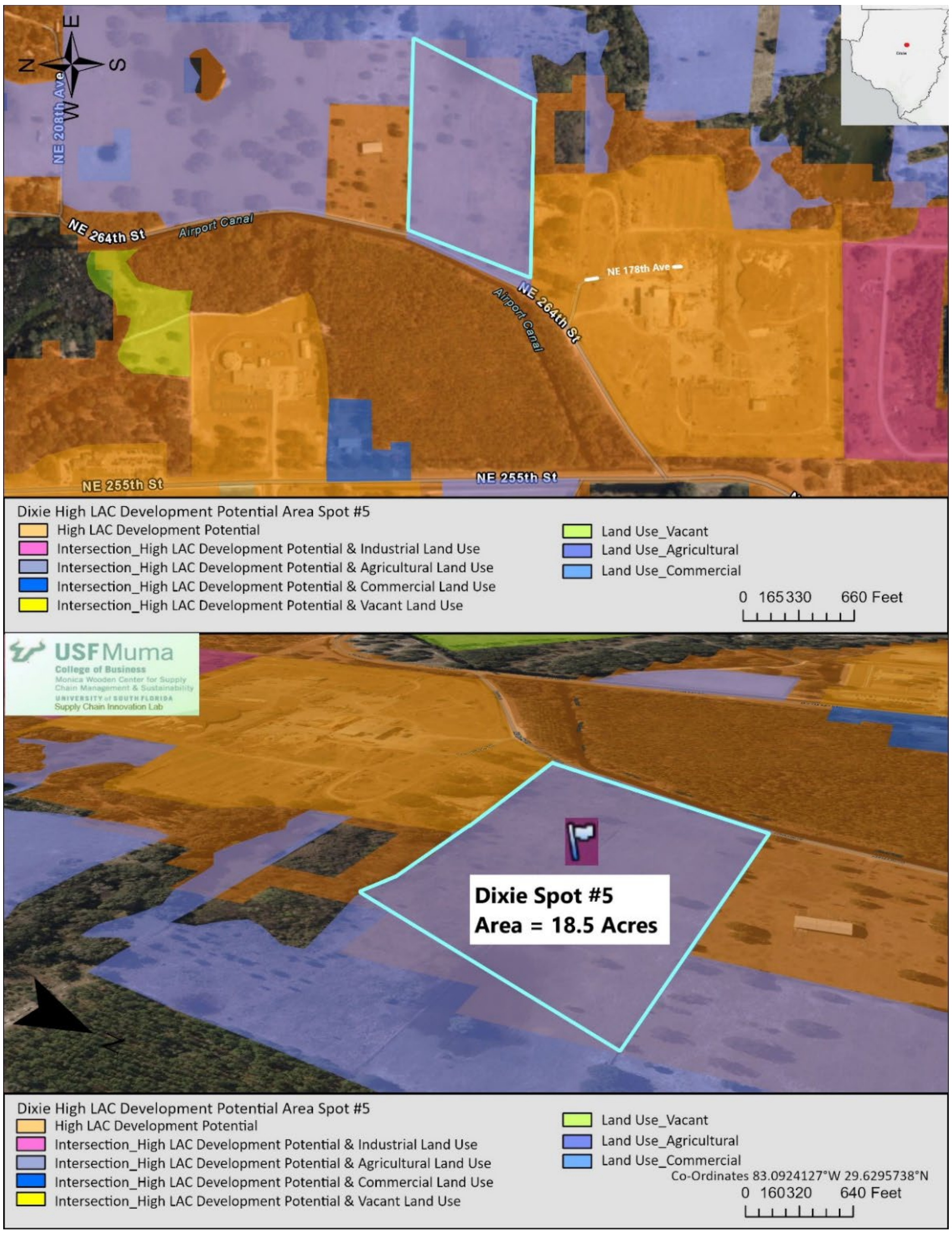

Figure B 56. Dixie County Spot 5

Duval County

DUVAL SPOT #2

As per the criteria developed in this study, this 10.3-acre land parcel in the below image (Figure B 57) located in Jacksonville, FL at the intersection of Cypress Plaza Dr and Baymeadows Way industrial area has very high LAC development potential in the Duval County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from nearest Intermodal Logistics Center, less than 2.5 miles from direct rail access, less than 10 miles from the nearest seaport, has a workforce availability of 450,000+ and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

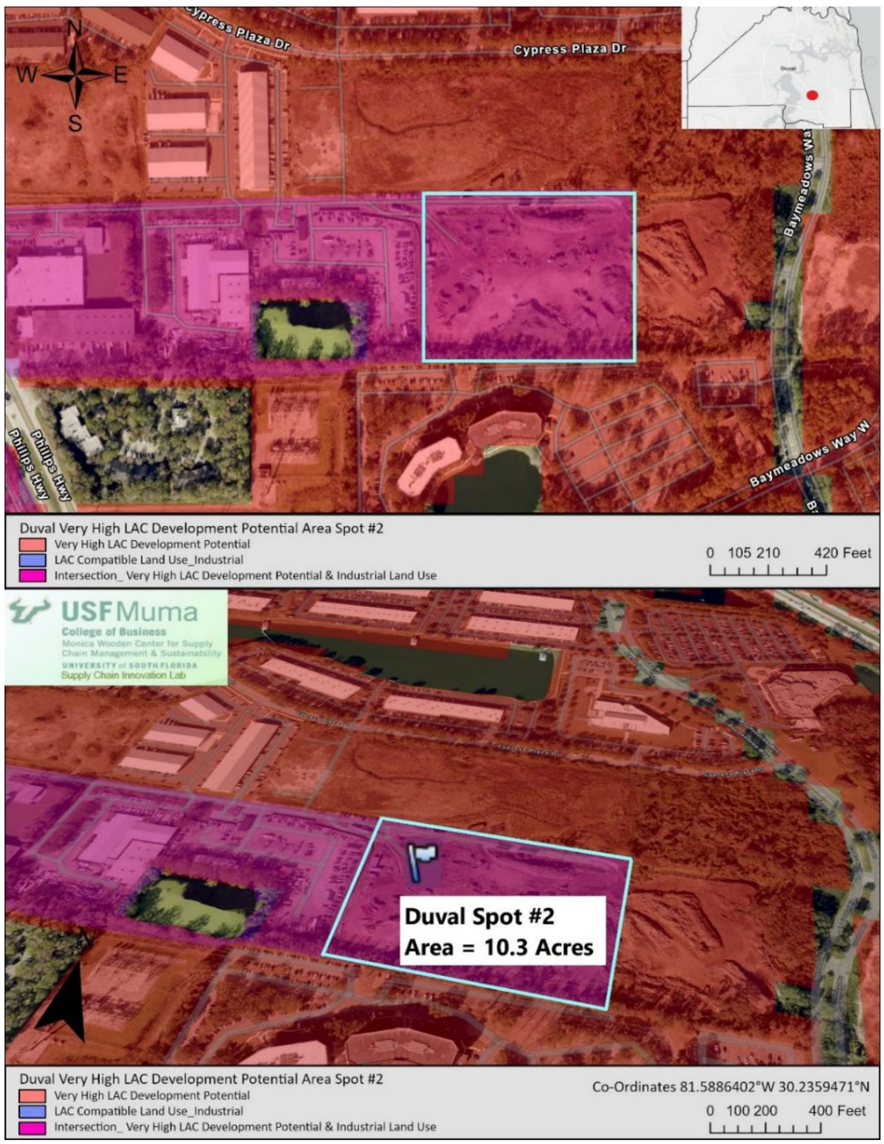

Figure B 57. Duval County Spot 2

DUVAL SPOT #3

As per the criteria developed in this study, this 10.5-acre land parcel in the below image (Figure B 58) located in Jacksonville, FL at the intersection of Florida Mining Blvd E and Mining Dr Rd has very high LAC development potential in the Duval County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from nearest Intermodal Logistics Center, less than 2.5 miles from direct rail access, has a workforce availability of 450,000+ and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

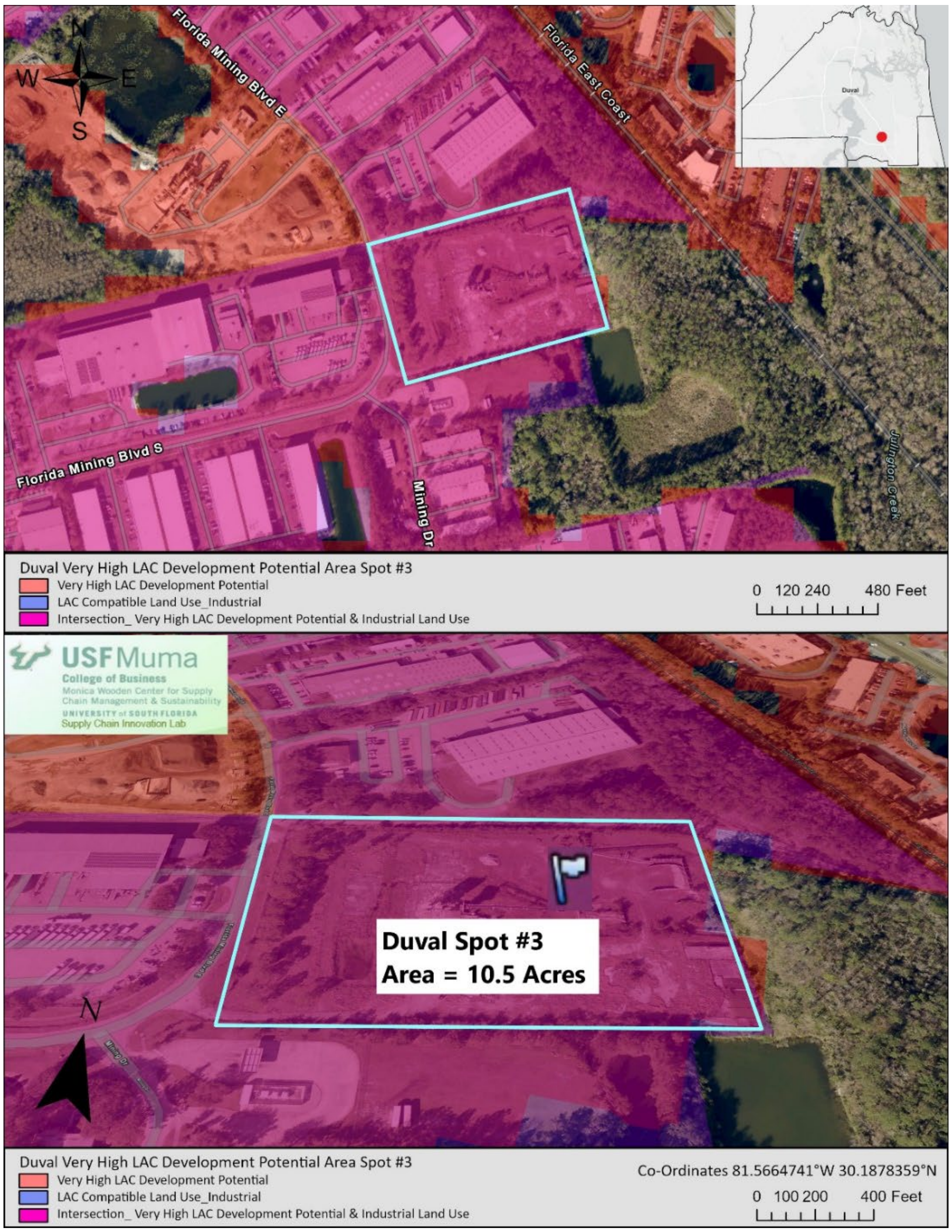

Figure B 58. Duval County Spot 3

DUVAL SPOT #4

As per the criteria developed in this study, this 100-acre land parcel in the below image (Figure B 59) located in Jacksonville, FL at the intersection of Forshee Dr and Bulls Bay Hwy industrial area has very high LAC development potential in the Duval County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

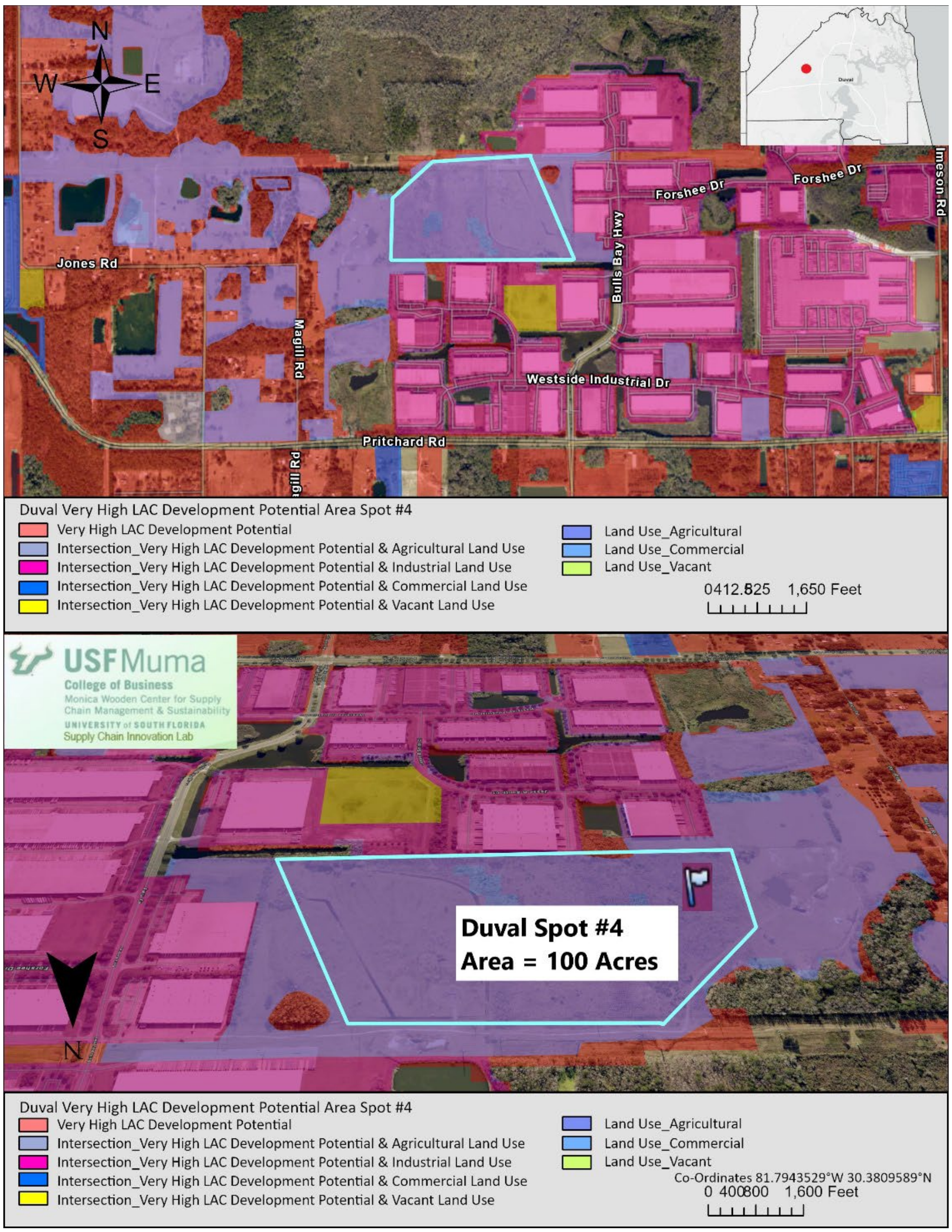

Figure B 59. Duval County Spot 4

DUVAL SPOT #5

As per the criteria developed in this study, this 19.5-acre land parcel in the below image (Figure B 60) located in Jacksonville, FL at the intersection of Greenland Industrial Blvd and Columbia Park Dr E industrial area has very high LAC development potential in the Duval County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

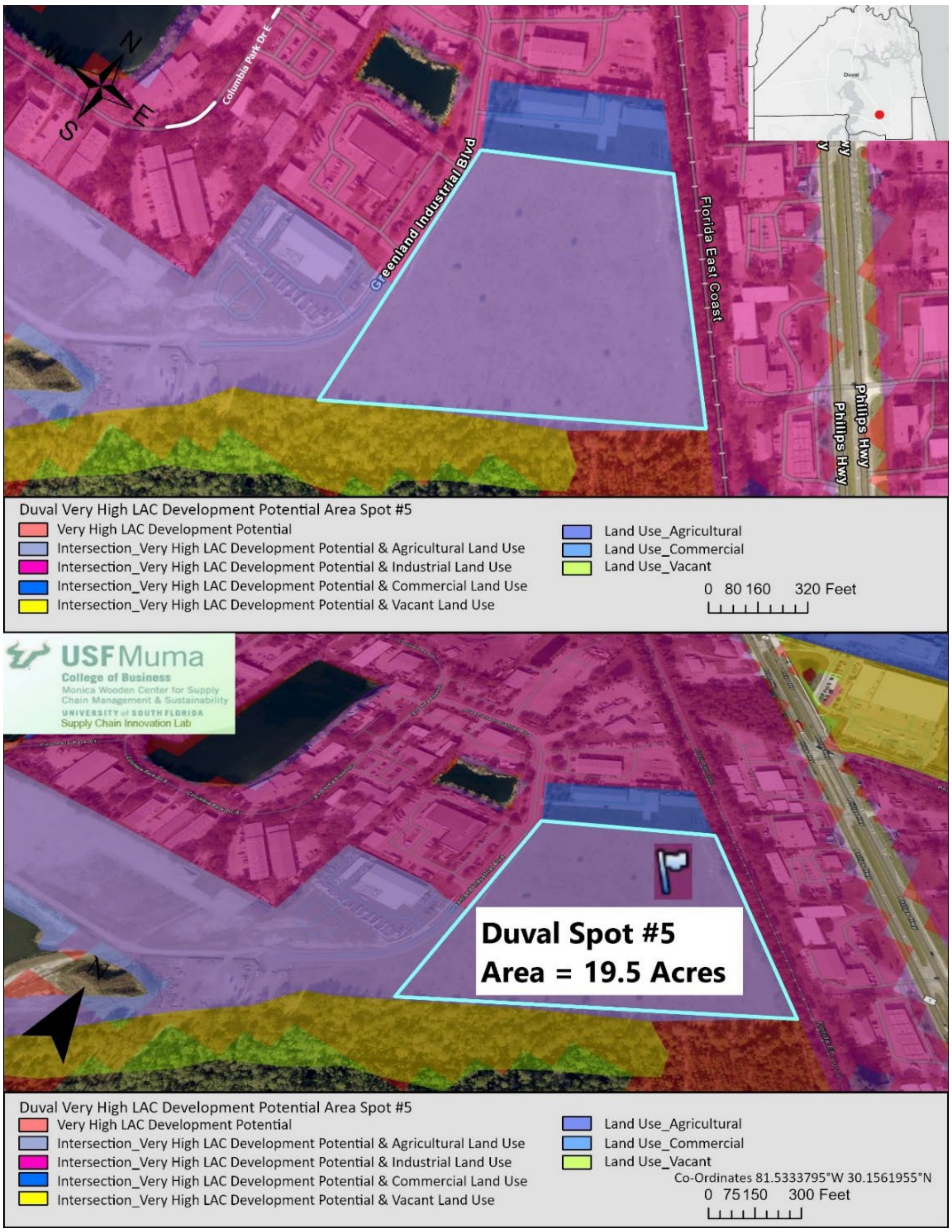

Figure B 60. Duval County Spot 5

Escambia County

ESCAMBIA SPOT #2

As per the criteria developed in this study, this 8-acre land parcel in the below image (Figure B 61) located in Pensacola, FL near the intersection of Addison Dr and Sturdevant St has very high LAC development potential in the Escambia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, less than 10 miles from seaports and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

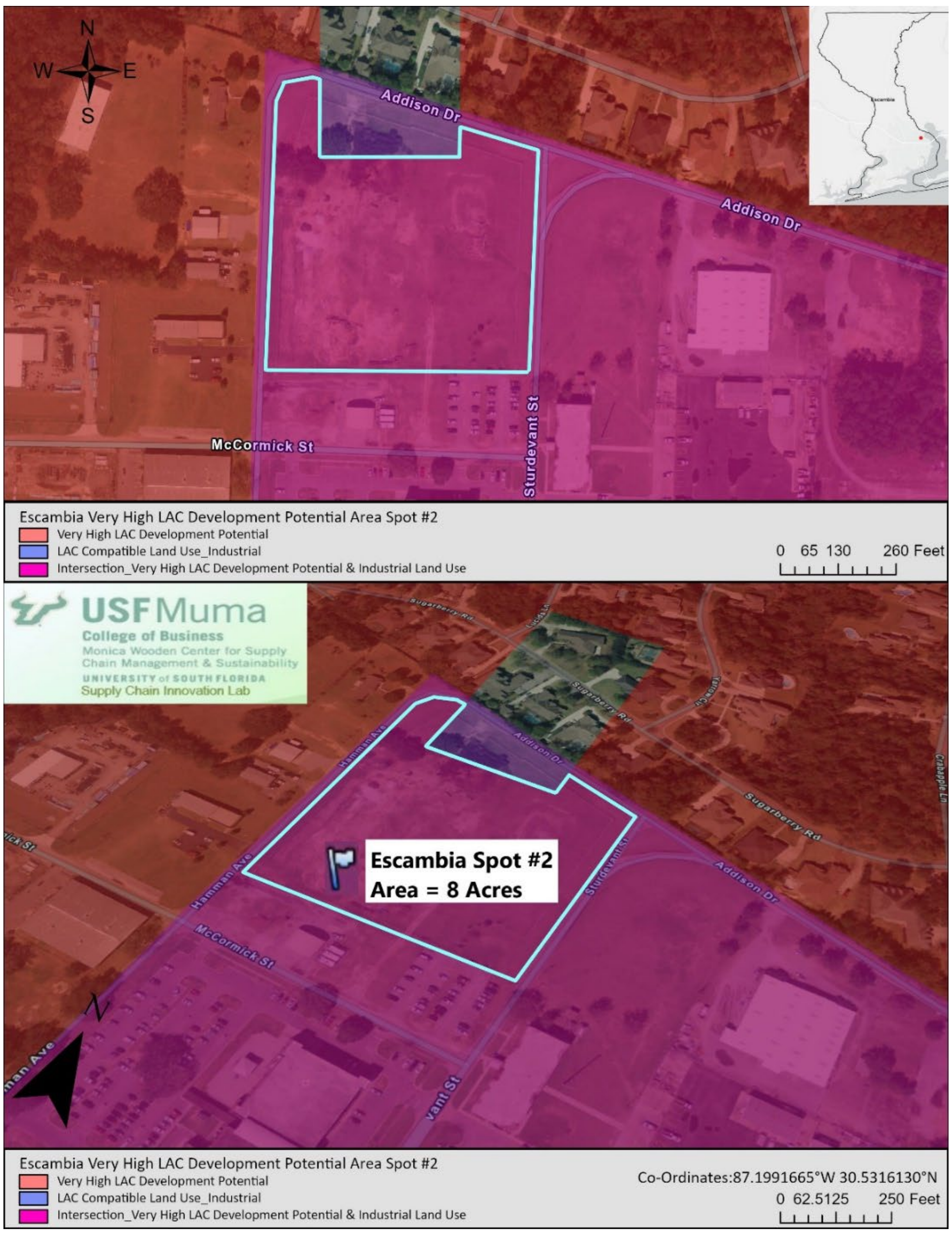

Figure B 61. Escambia County Spot 2

ESCAMBIA SPOT #3

As per the criteria developed in this study, this 7.3-acre land parcel in the below image (Figure B 62) located near the intersection of Copter Rd and Grow Dr has very high LAC development potential in the Escambia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access and less than 10 miles from seaports which confirms the very high LAC development potential as per the criteria developed in this study.

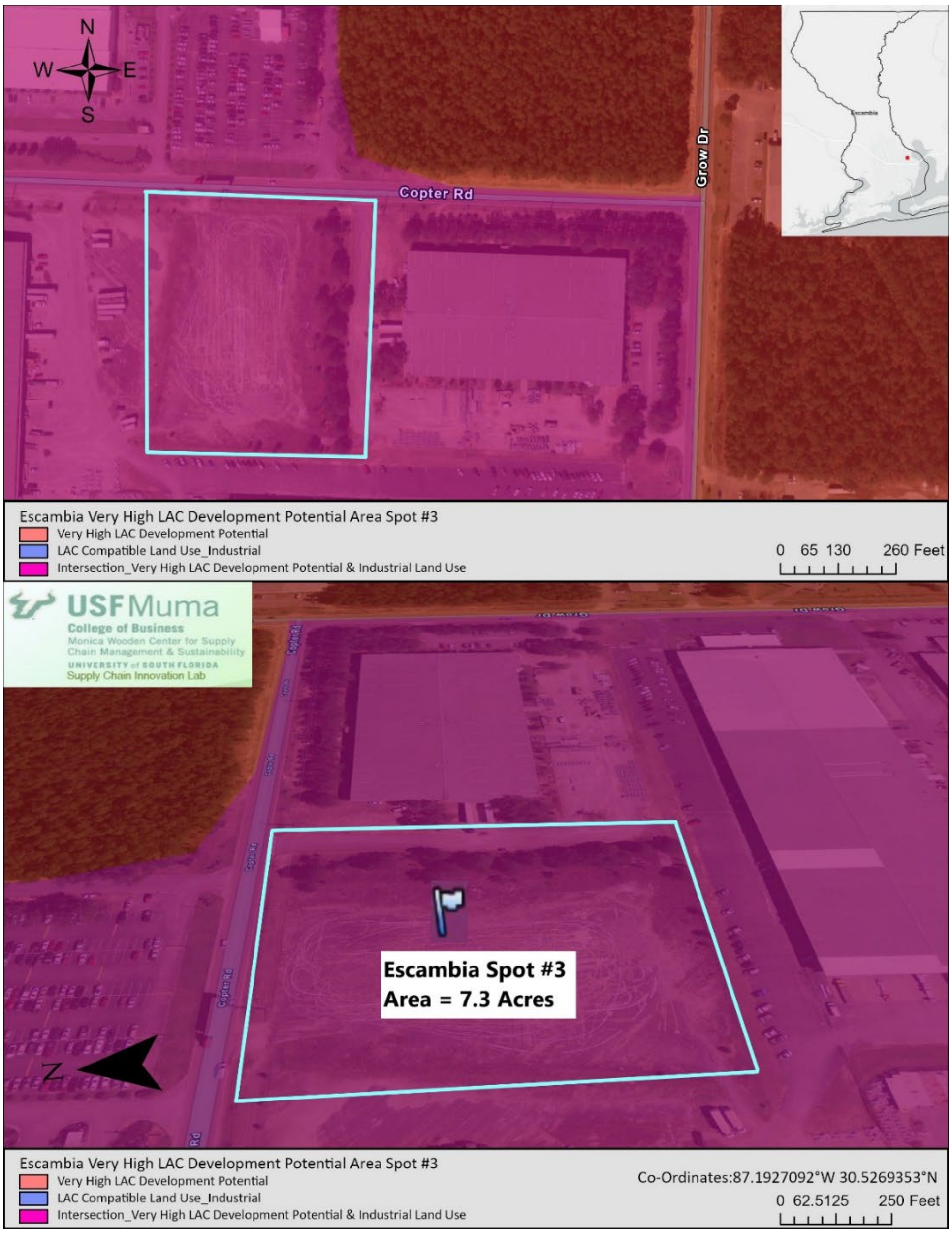

Figure B 62. Escambia County Spot 3

ESCAMBIA SPOT #4

As per the criteria developed in this study, this 7.1-acre land parcel in the below image (Figure B 63) located at the intersection of Hyatt St and McCoy Dr has very high LAC development potential in the Escambia County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial lands around it which makes it suitable for re-zoning.

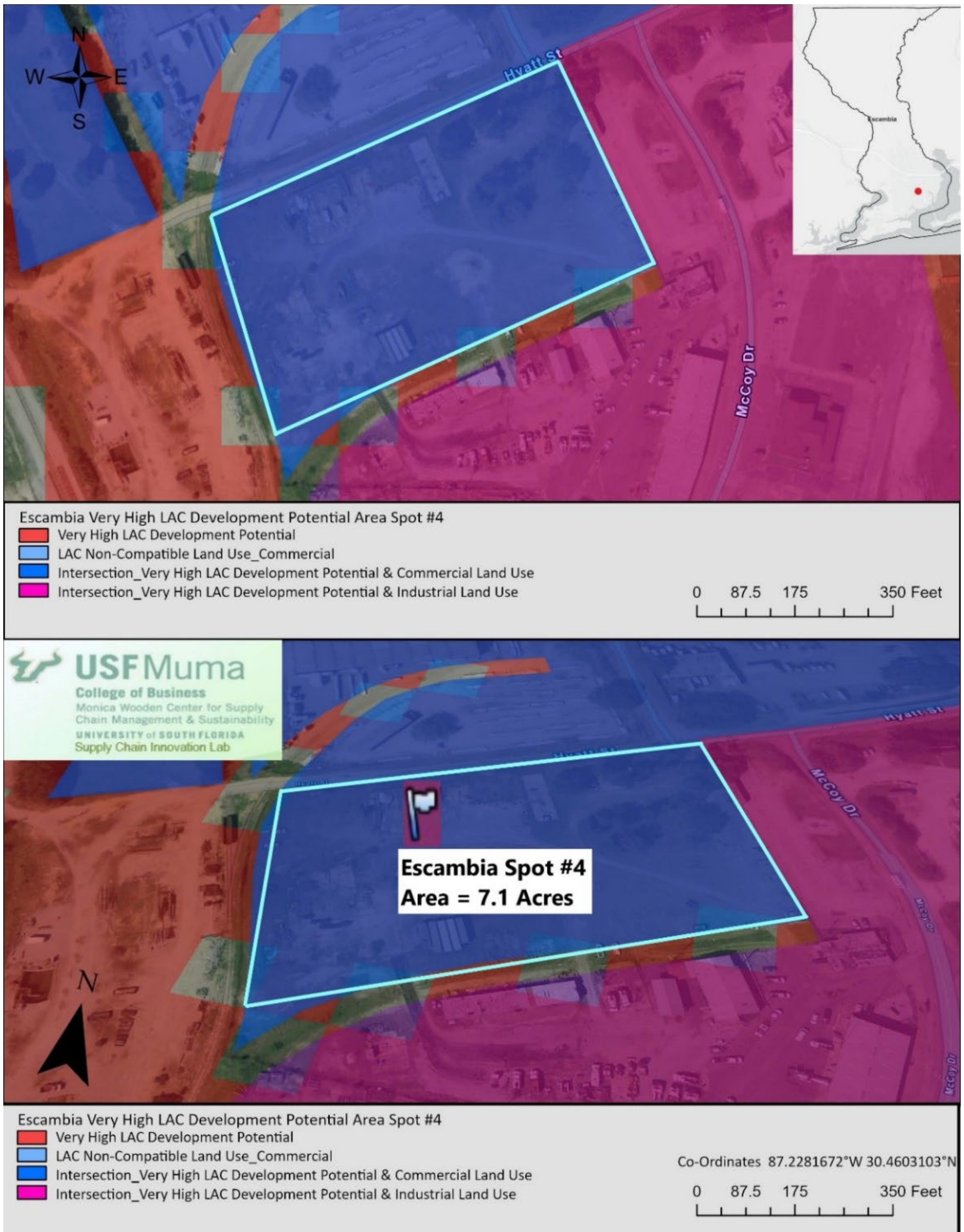

Figure B 63. Escambia County Spot 4

ESCAMBIA SPOT #5

As per the criteria developed in this study, this 5-acre land parcel in the below image (Figure B 64) located at the intersection of Potter Ave and Hamman Ave has very high LAC development potential in the Escambia County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial lands around it which makes it suitable for re-zoning.

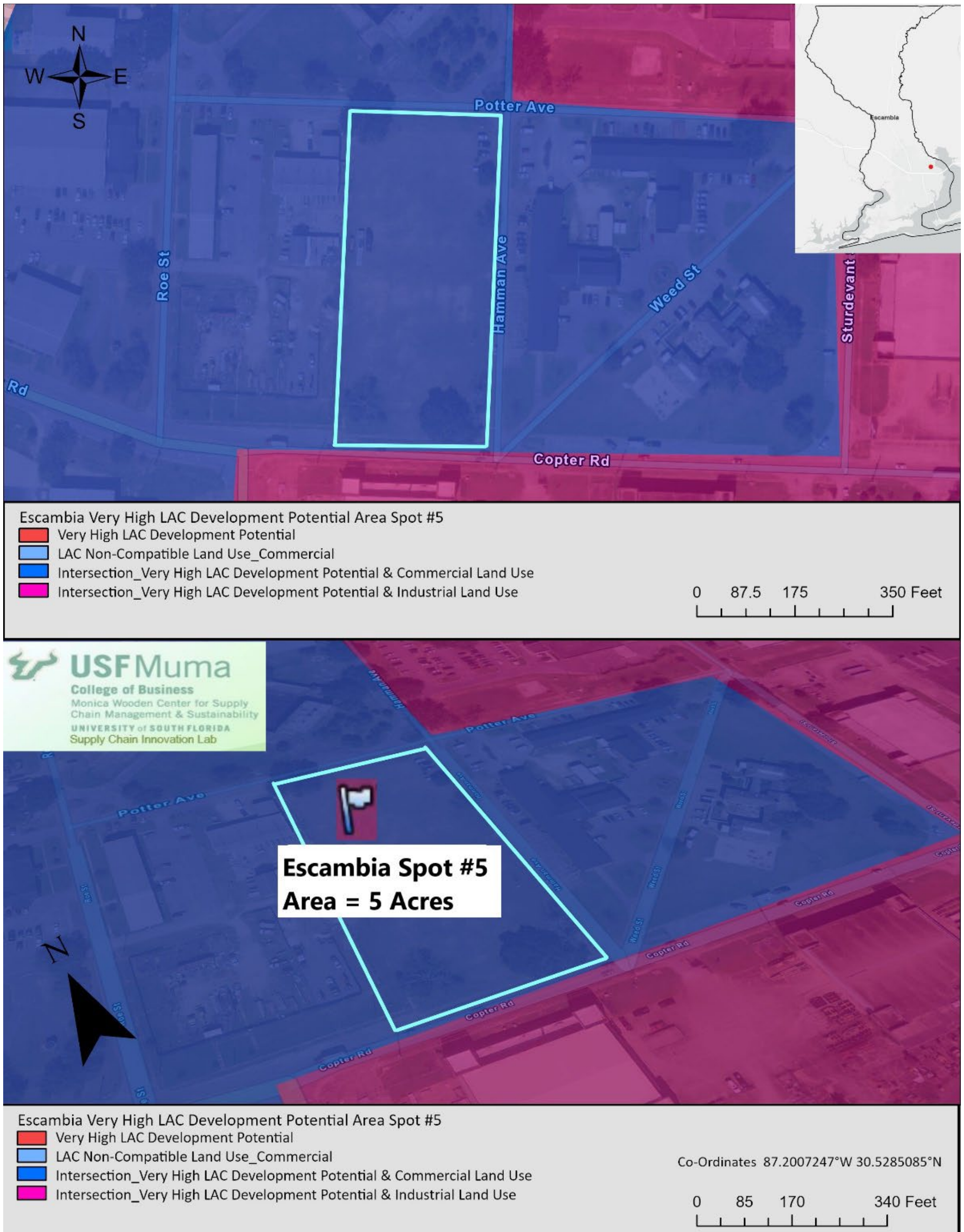

Figure B 64. Escambia County Spot 5

Flagler County

FLAGLER SPOT #2

As per the criteria developed in this study, this 8.5-acre land parcel in the below image (Figure B 65) located in Palm Coast, FL industrial area at the intersection of Marketplace Ct and Hargrove Grade has high LAC development potential in the Flagler County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

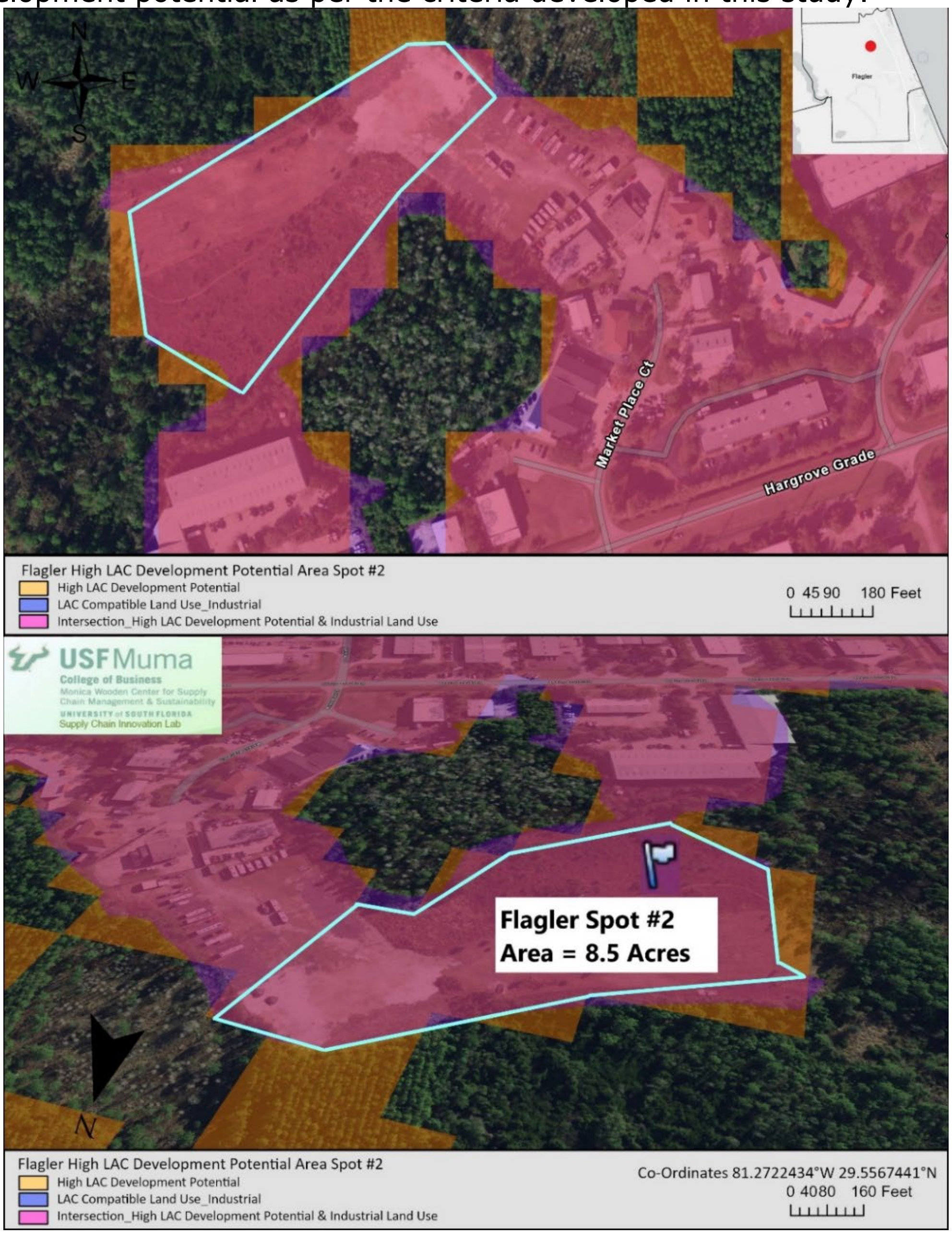

Figure B 65. Flagler County Spot 2

FLAGLER SPOT #3

As per the criteria developed in this study, this 17.2-acre land parcel in the below image (Figure B 66) located in Bunnell, FL at the intersection of N State St and County Road 13 has high LAC development potential in the Flagler County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

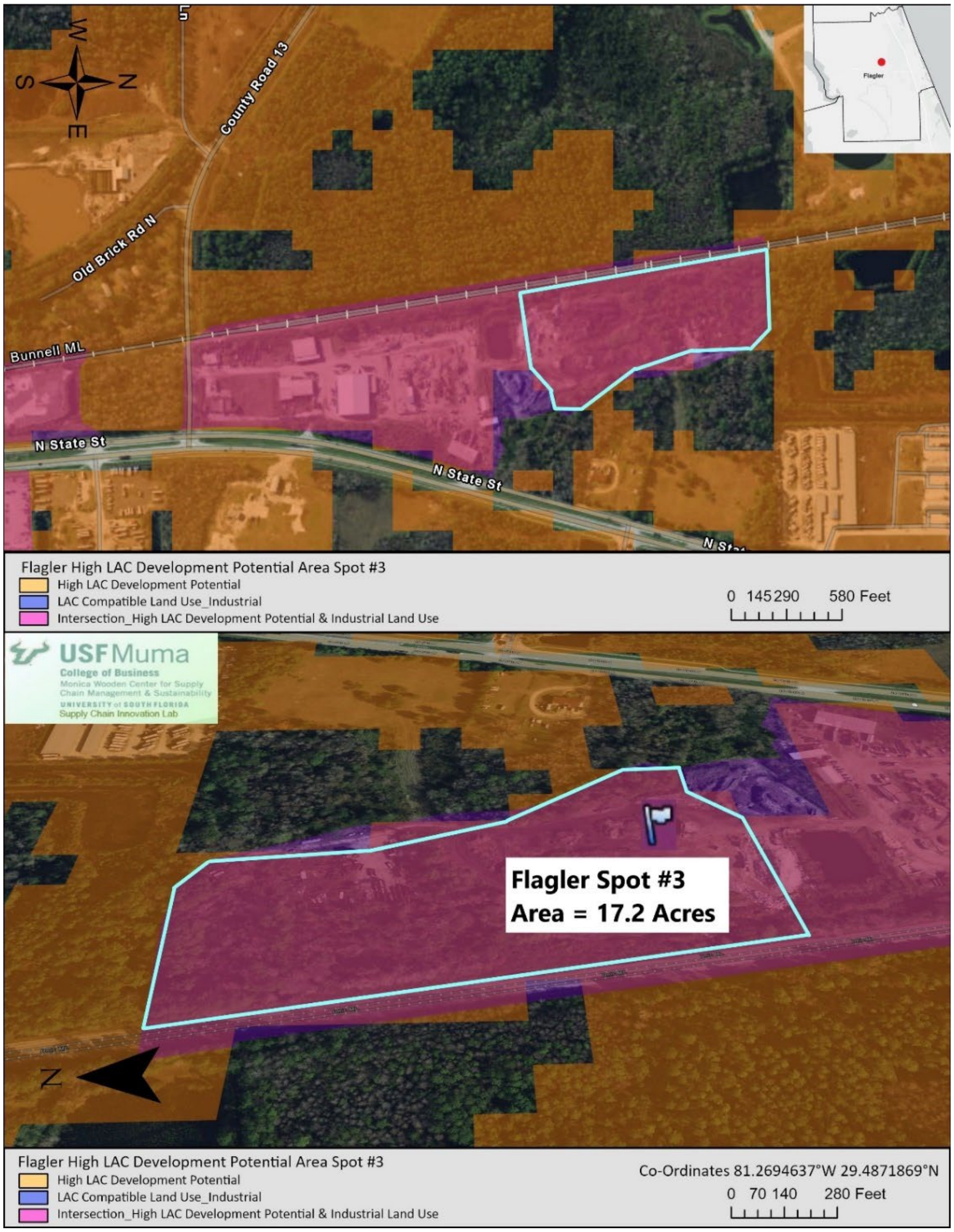

Figure B 66. Flagler County Spot 3

FLAGLER SPOT #4

As per the criteria developed in this study, this 53.8-acre land parcel in the below image (Figure B 67) located in Bunnell, FL at the intersection of Hargrove Rd and Otis Stone Hunter Rd has high LAC development potential in the Flagler County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

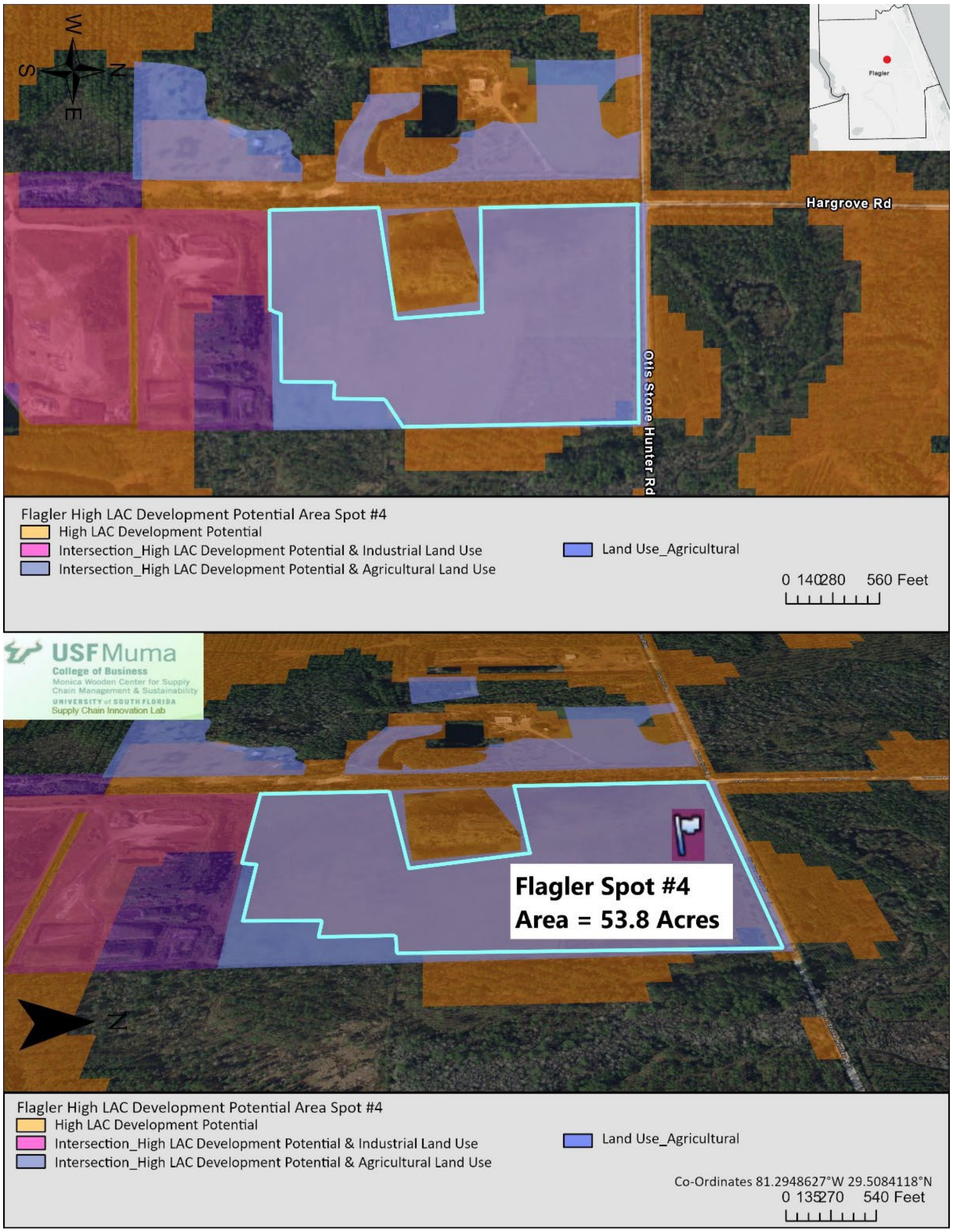

Figure B 67. Flagler County Spot 4

FLAGLER SPOT #5

As per the criteria developed in this study, this 29-acre land parcel in the below image (Figure B 68) located in Palm Coast, FL at the intersection of Roberts Rd and Colbert Ln has high LAC development potential in the Flagler County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

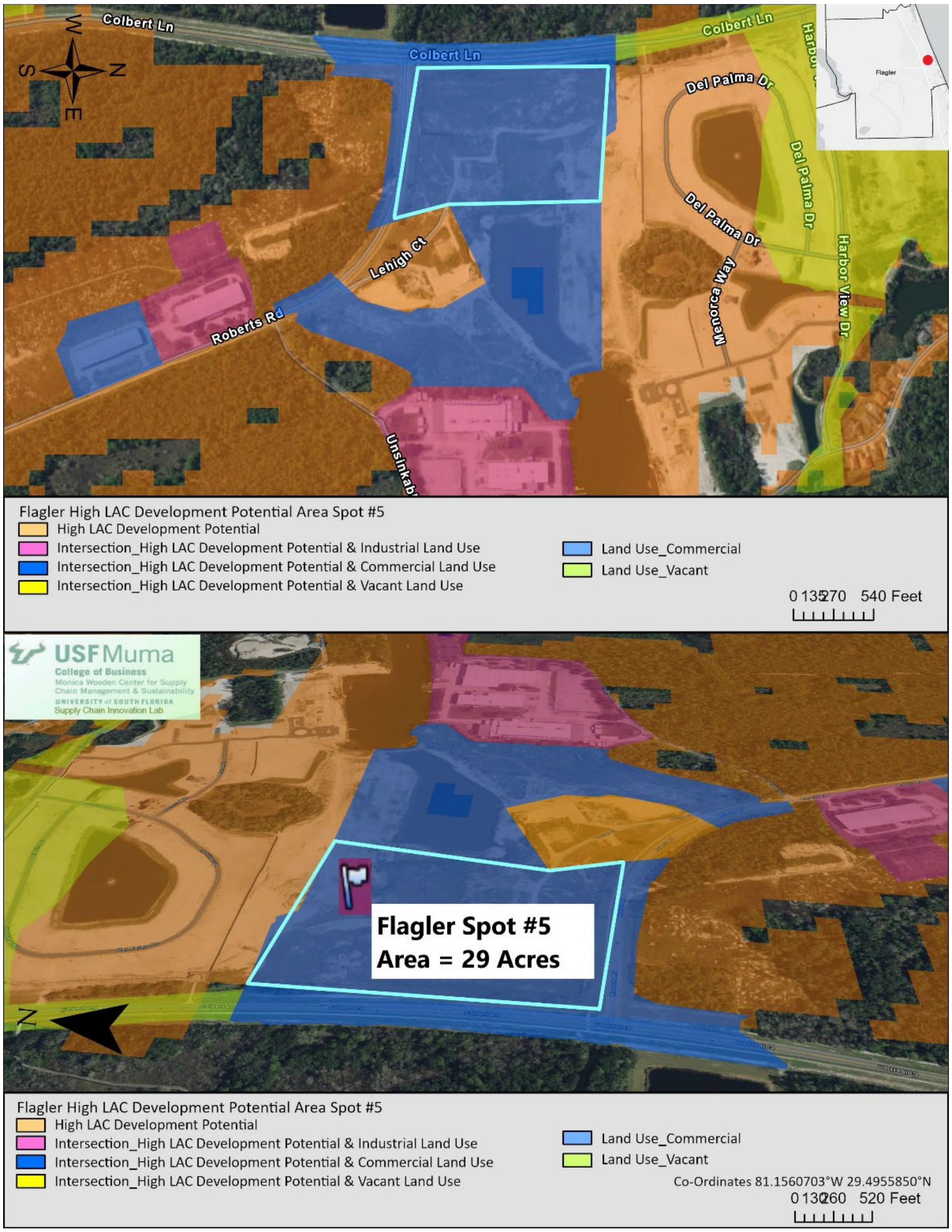

Figure B 68. Flagler County Spot 5

Franklin County

FRANKLIN SPOT #2

As per the criteria developed in this study, this 15.3-acre land parcel in the below image (Figure B 69) located in Apalachicola, FL at the intersection of Airport Rd and Brownsville Rd has high LAC development potential in the Franklin County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 69. Franklin County Spot 2

FRANKLIN SPOT #3

As per the criteria developed in this study, this 12.7-acre land parcel in the below image (Figure B 70) located in Eastpoint, FL at the intersection of Begonia St and US Highway 98 has moderate LAC development potential in the Franklin County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

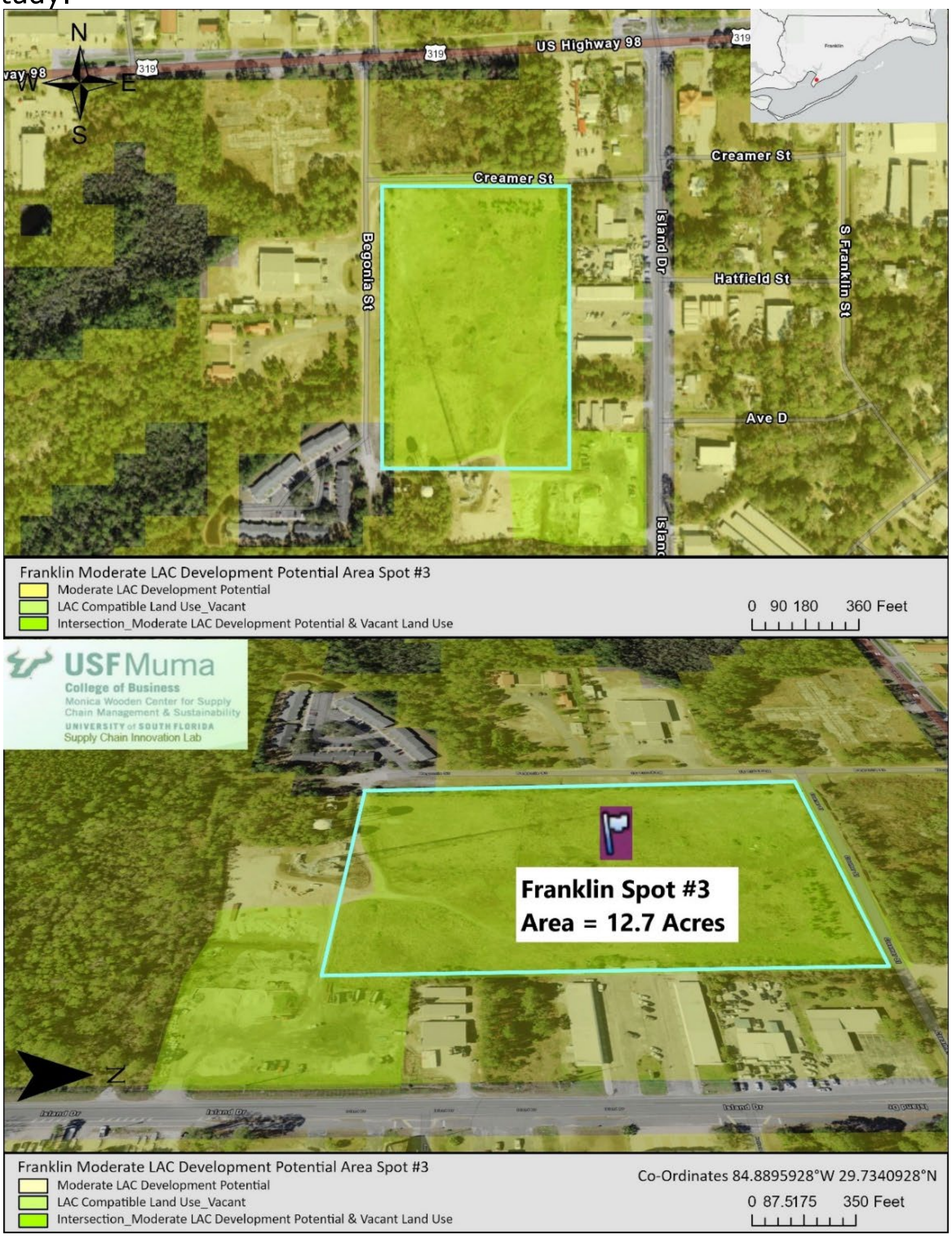

Figure B 70. Franklin County Spot 3

FRANKLIN SPOT #4

As per the criteria developed in this study, this 13.5-acre land parcel in the below image (Figure B 71) located in Eastpoint, FL at the intersection of St George's Ct and US Highway 98 has moderate LAC development potential in the Franklin County. It is less than 2.5 miles from State roads, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

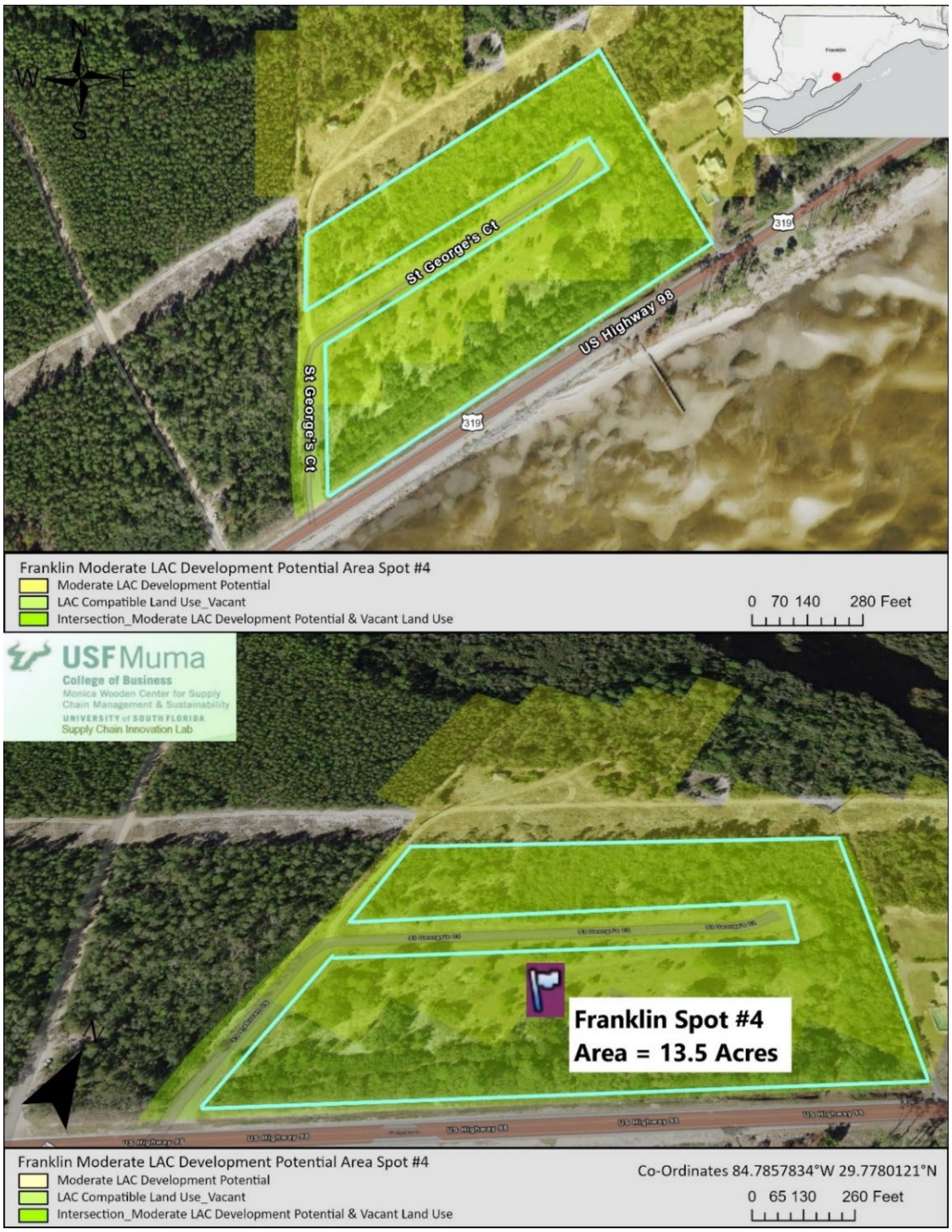

Figure B 71. Franklin County Spot 4

FRANKLIN SPOT #5

As per the criteria developed in this study, this 10.1-acre land parcel in the below image (Figure B 72) located in Eastpoint, FL at the intersection of Avenue A and 6th St has moderate LAC development potential in the Franklin County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial lands around it which makes it suitable for re-zoning.

Figure B 72. Franklin County Spot 5

Gadsden County

GADSDEN SPOT #2

As per the criteria developed in this study, this 27.5-acre land parcel in the below image (Figure B 73) located in Midway, FL at the intersection of Fortune Blvd and Commerce Blvd has high LAC development potential in the Gadsden County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

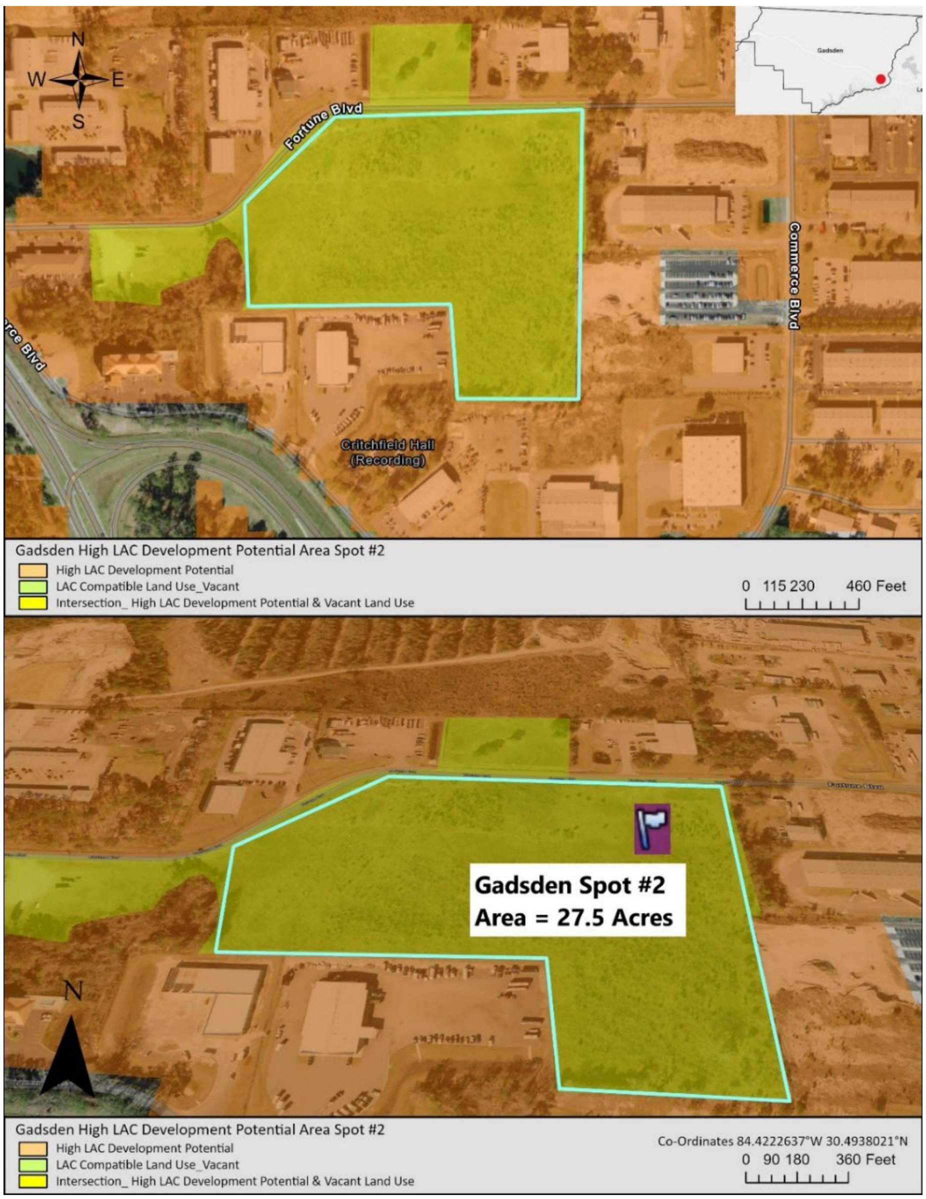

Figure B 73. Gadsden County Spot 2

GADSDEN SPOT #3

As per the criteria developed in this study, this 58.7-acre land parcel in the below image (Figure B 74) located in Quincy, FL at the intersection of Harbin Rd and Ben Bostick Rd has high LAC development potential in the Gadsden County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

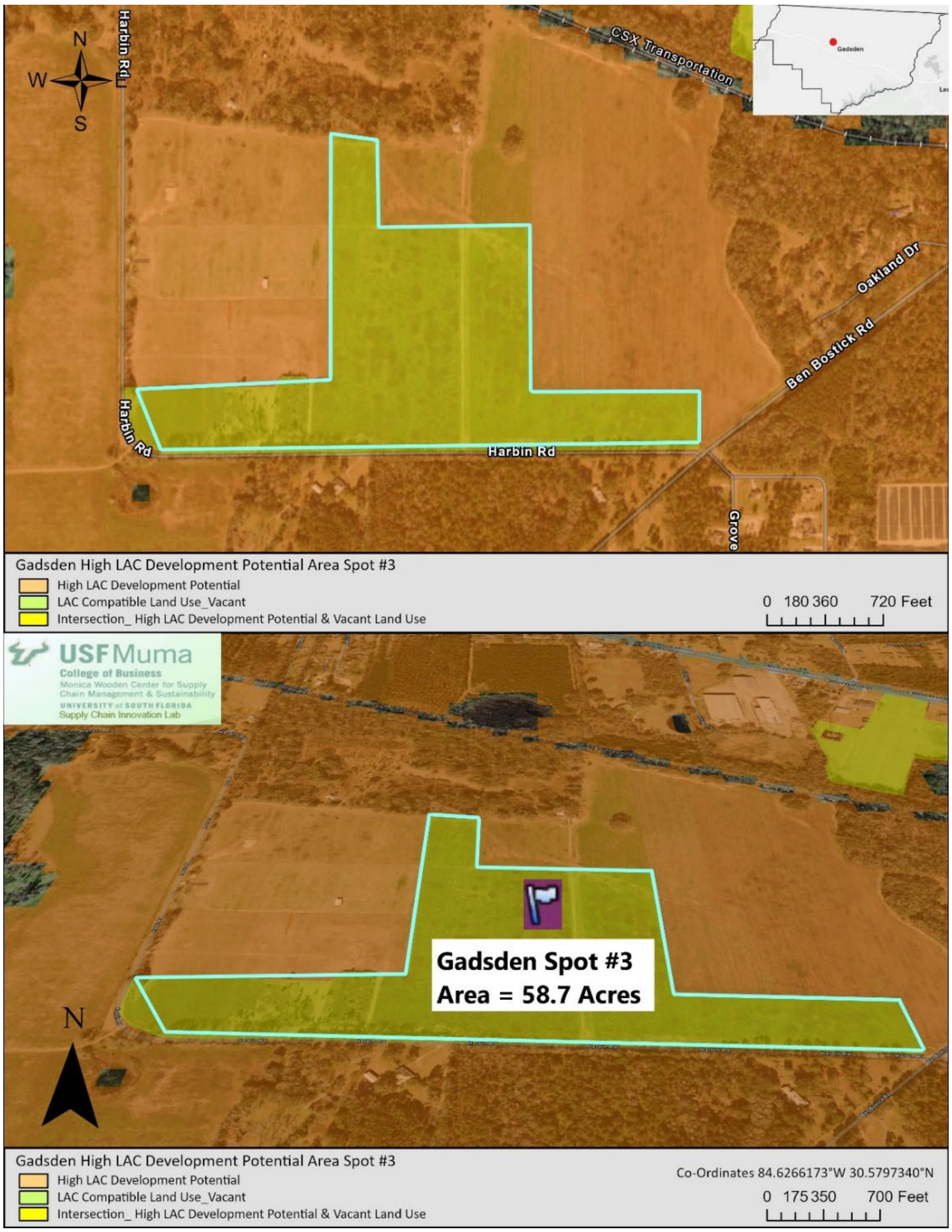

Figure B 74. Gadsden County Spot 3

GADSDEN SPOT #4

As per the criteria developed in this study, this 14.2-acre land parcel in the below image (Figure B 75) located in Midway, FL at the intersection of Hayward Dupont St and Blue Star Hwy near the industrial belt has high LAC development potential in the Gadsden County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

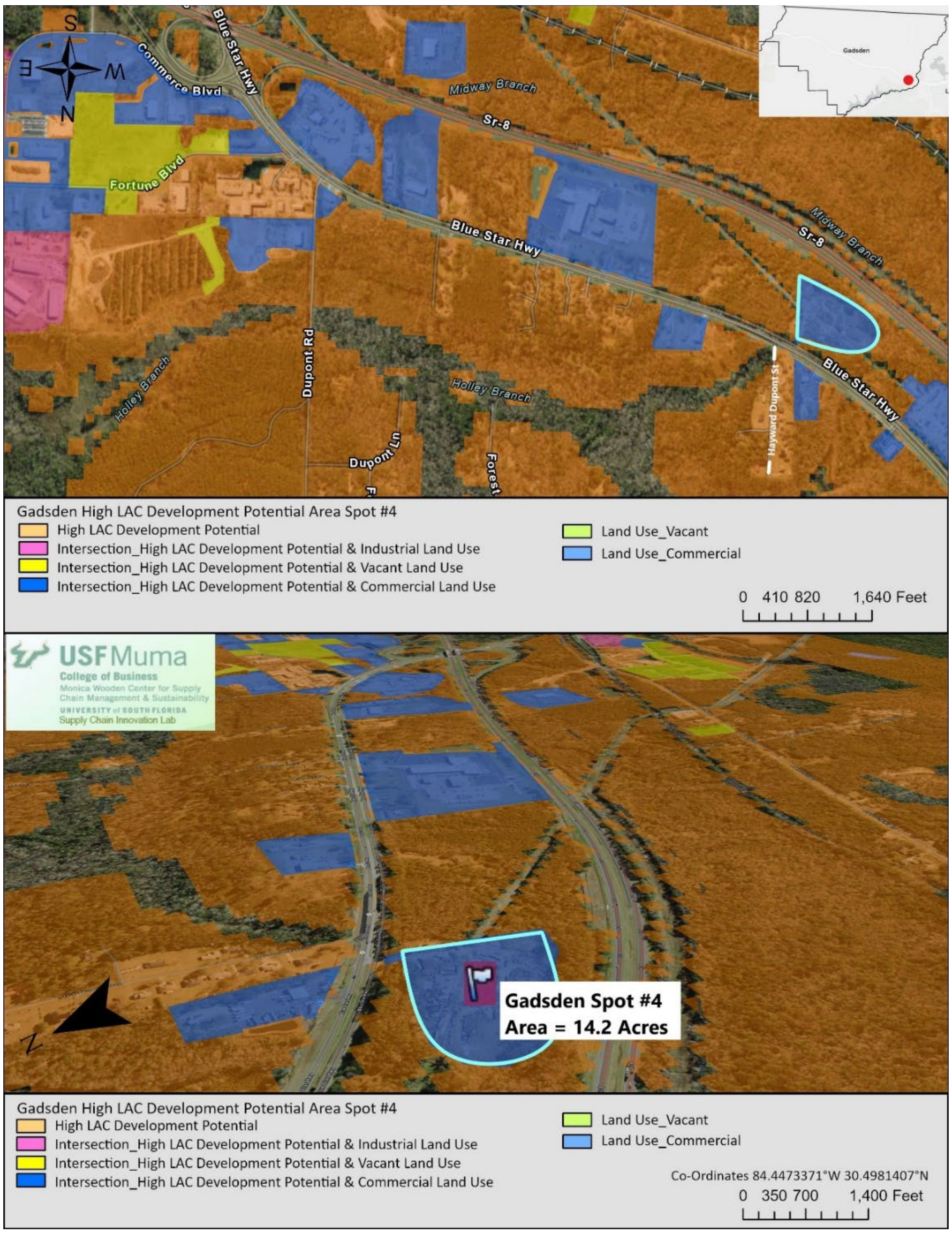

Figure B 75. Gadsden County Spot 4

GADSDEN SPOT #5

As per the criteria developed in this study, this 12.8-acre land parcel in the below image (Figure B 76) located in Quincy, FL at the intersection of Ben Bostick Rd and Blue Star Hwy has high LAC development potential in the Gadsden County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

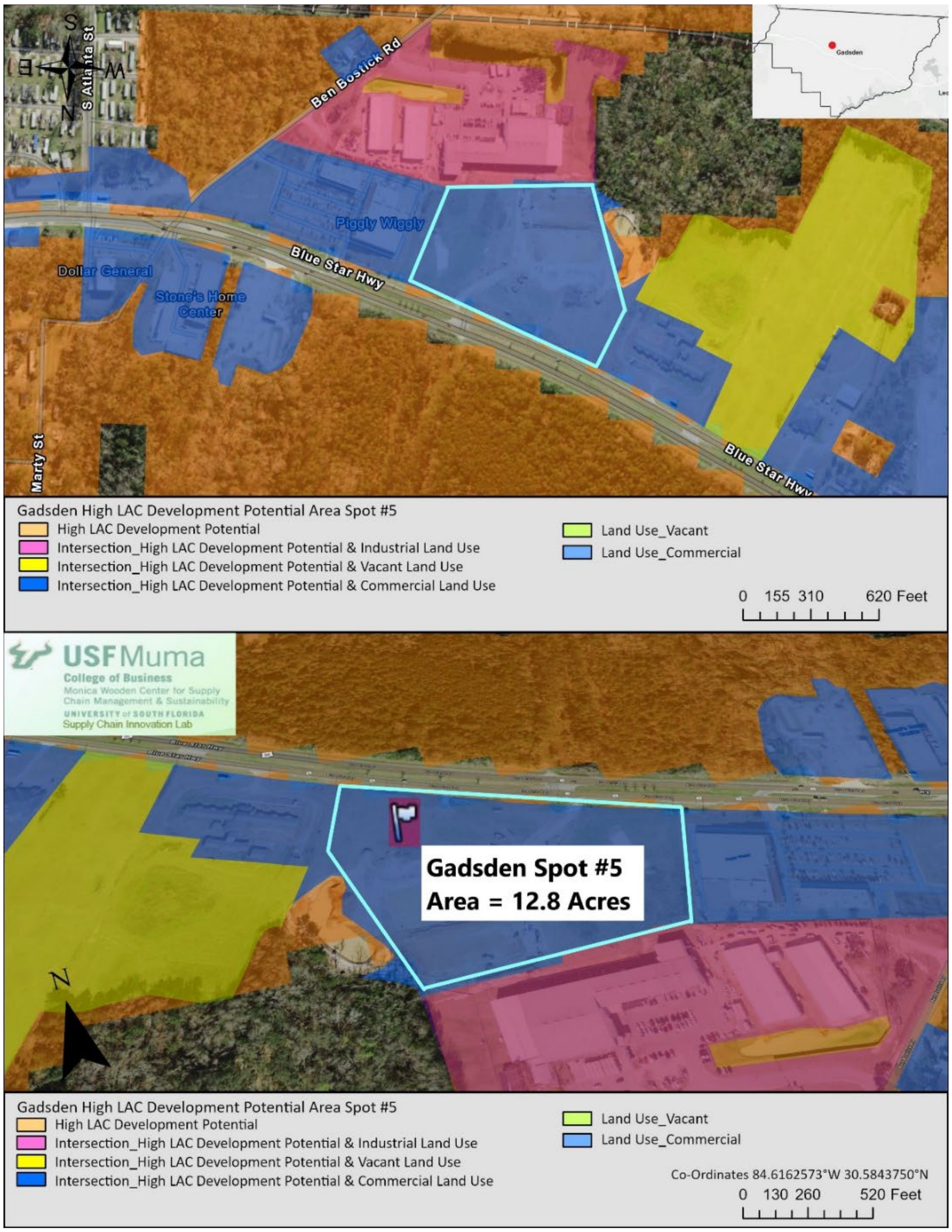

Figure B 76. Gadsden County Spot 5

Gilchrist County

GILCHRIST SPOT #2

As per the criteria developed in this study, this 51.2-acre land parcel in the below image (Figure B 77) located in Trenton, FL at the intersection of SW Country Road 307 and 307A has high LAC development potential in the Gilchrist County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has one of the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 77. Gilchrist County Spot 2

GILCHRIST SPOT #3

As per the criteria developed in this study, this 18.5-acre land parcel in the below image (Figure B 78) located in Bell, FL at the intersection of Rodeo Ave and NW 40th Ave has moderate LAC development potential in the Gilchrist County. It is less than 2.5 miles from State roads, has one of the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

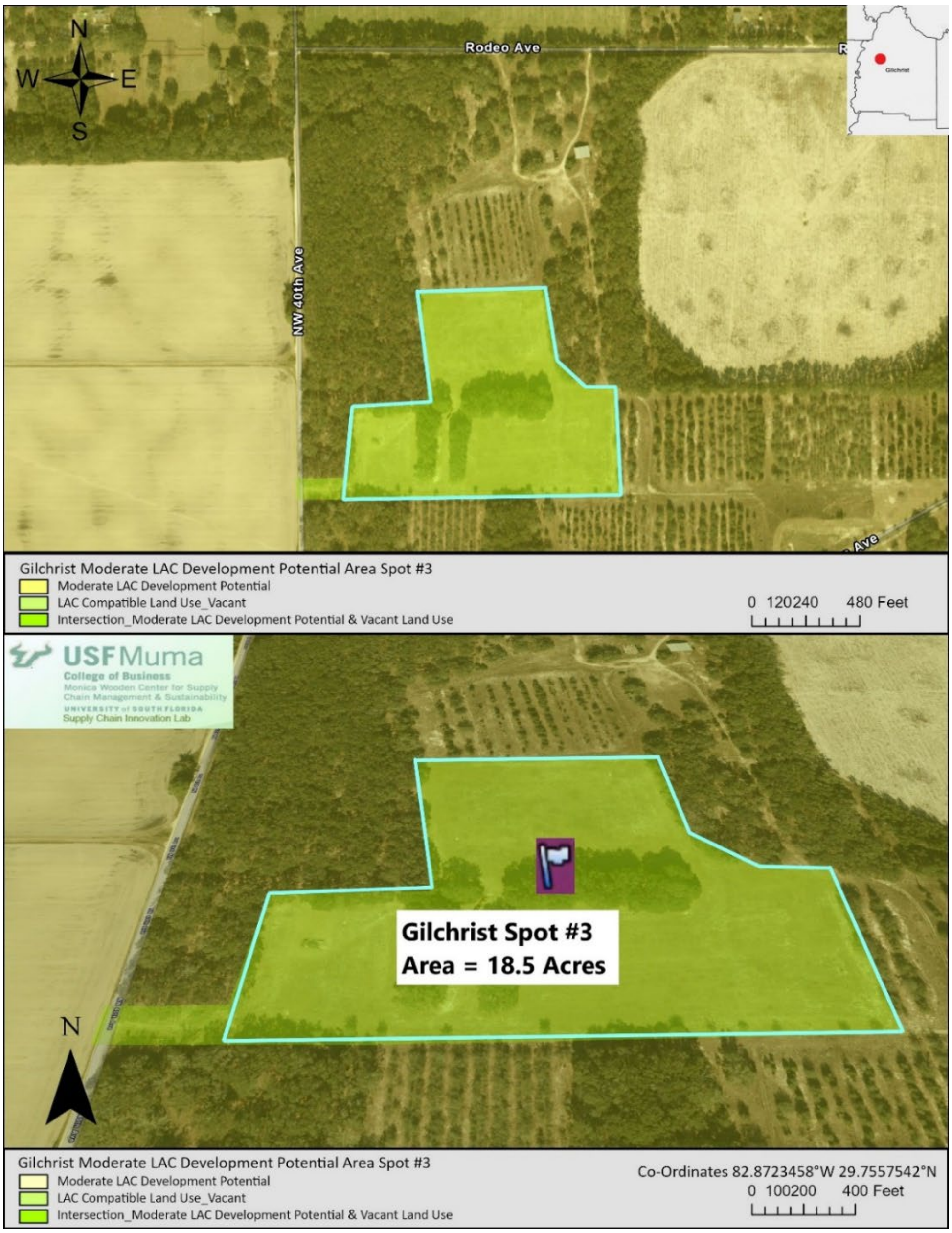

Figure B 78. Gilchrist County Spot 3

GILCHRIST SPOT #4

As per the criteria developed in this study, this 294-acre land parcel in the below image (Figure B 79) located in Bell, FL at the intersection of SW 22nd Ct and SW 50th St has moderate LAC development potential in the Gilchrist County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

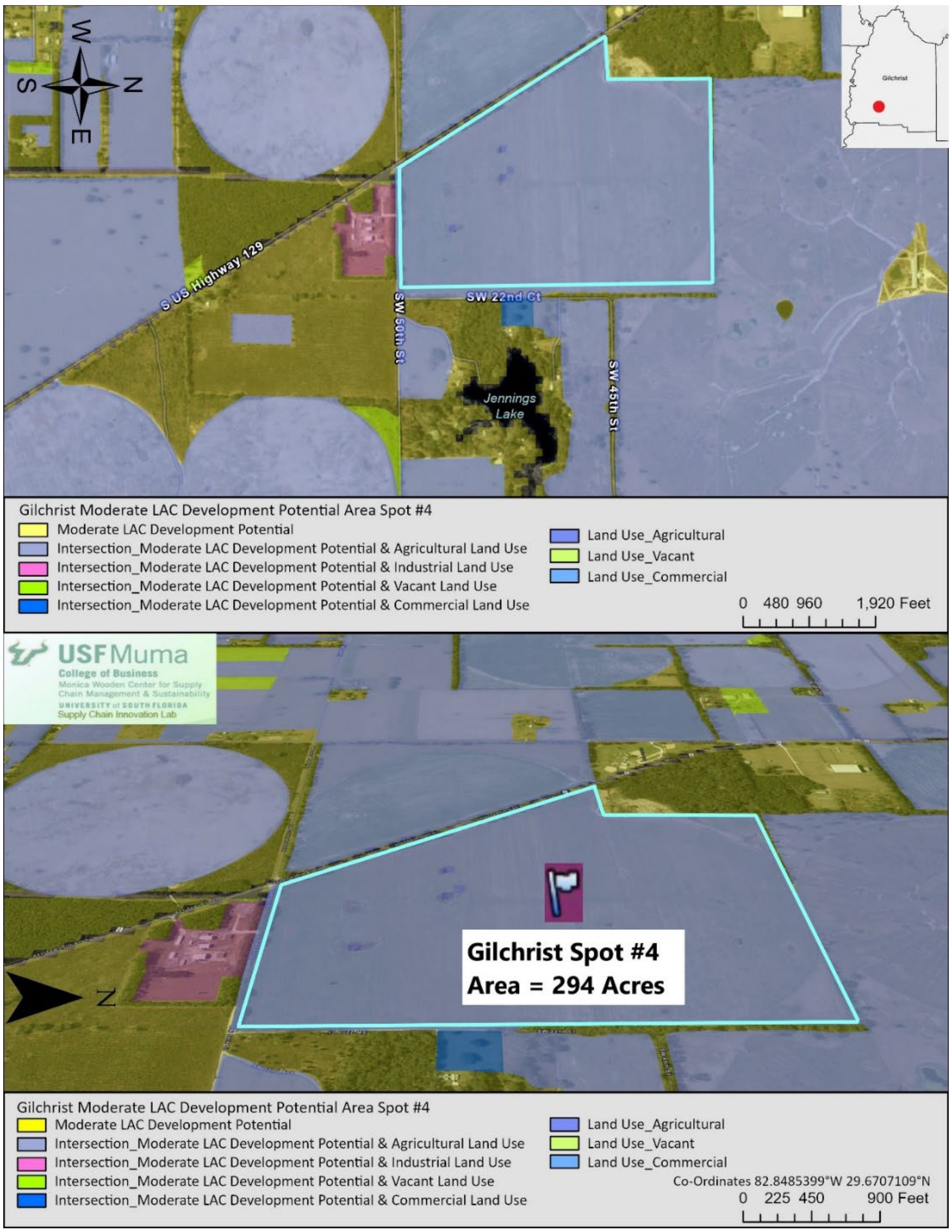

Figure B 79. Gilchrist County Spot 4

GILCHRIST SPOT #5

As per the criteria developed in this study, this 346.5-acre land parcel in the below image (Figure B 80) located in Bell, FL at the intersection of NW 29th Ter and NW 20th St has moderate LAC development potential in the Gilchrist County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

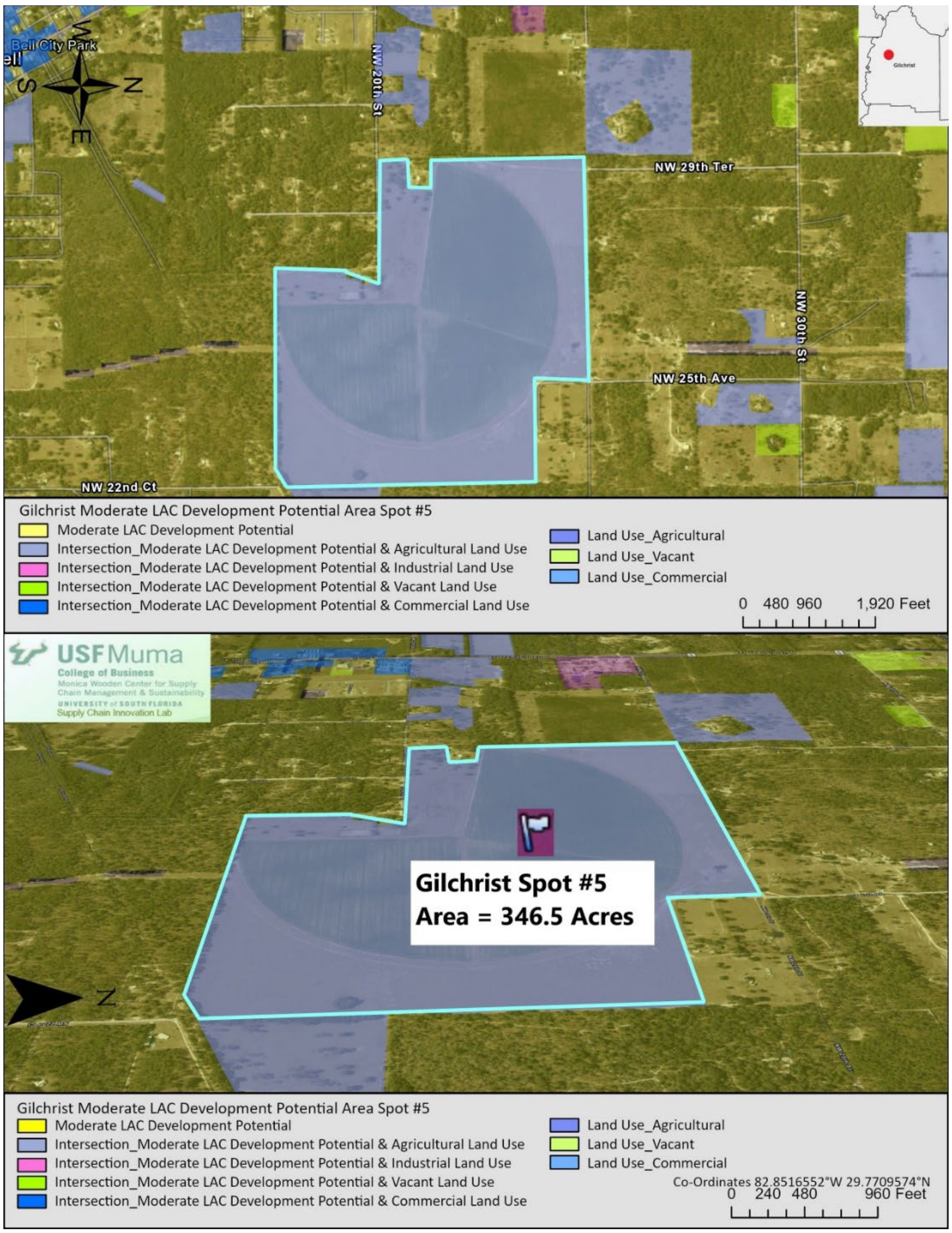

Figure B 80. Gilchrist County Spot 5

Glades County

GLADES SPOT #2

As per the criteria developed in this study, this 15.6-acre land parcel in the below image (Figure B 81) located in Moore Haven, FL at the intersection of E County Road 720 and US Highway 27 has high LAC development potential in the Glades County. It is less than 5 miles away from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

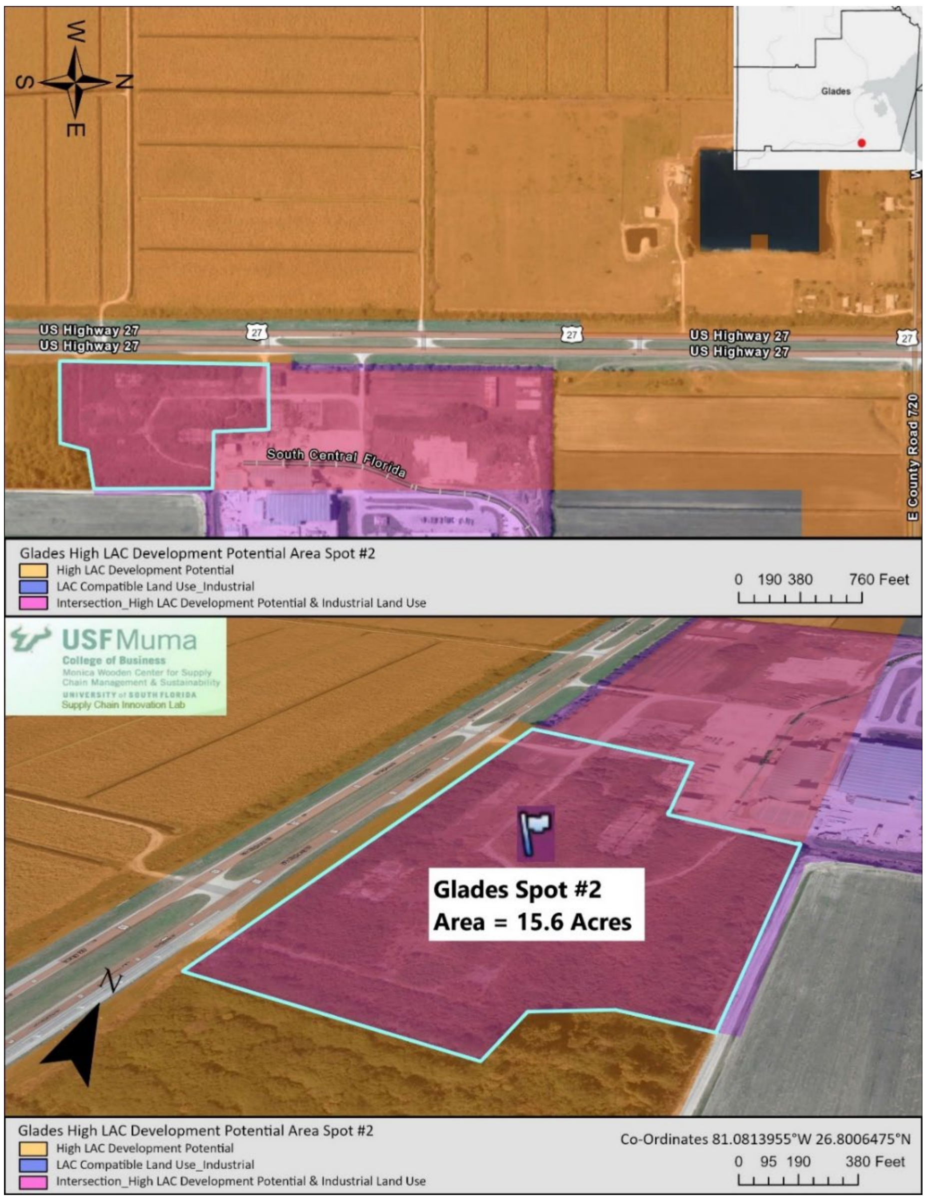

Figure B 81. Glades County Spot 2

GLADES SPOT #3

As per the criteria developed in this study, this 6-acre land parcel in the below image (Figure B 82) located in Moore Haven, FL at the intersection of Foxnoor St and Fox Ln SW has moderate LAC development potential in the Glades County. It is less than 7.5 miles away from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

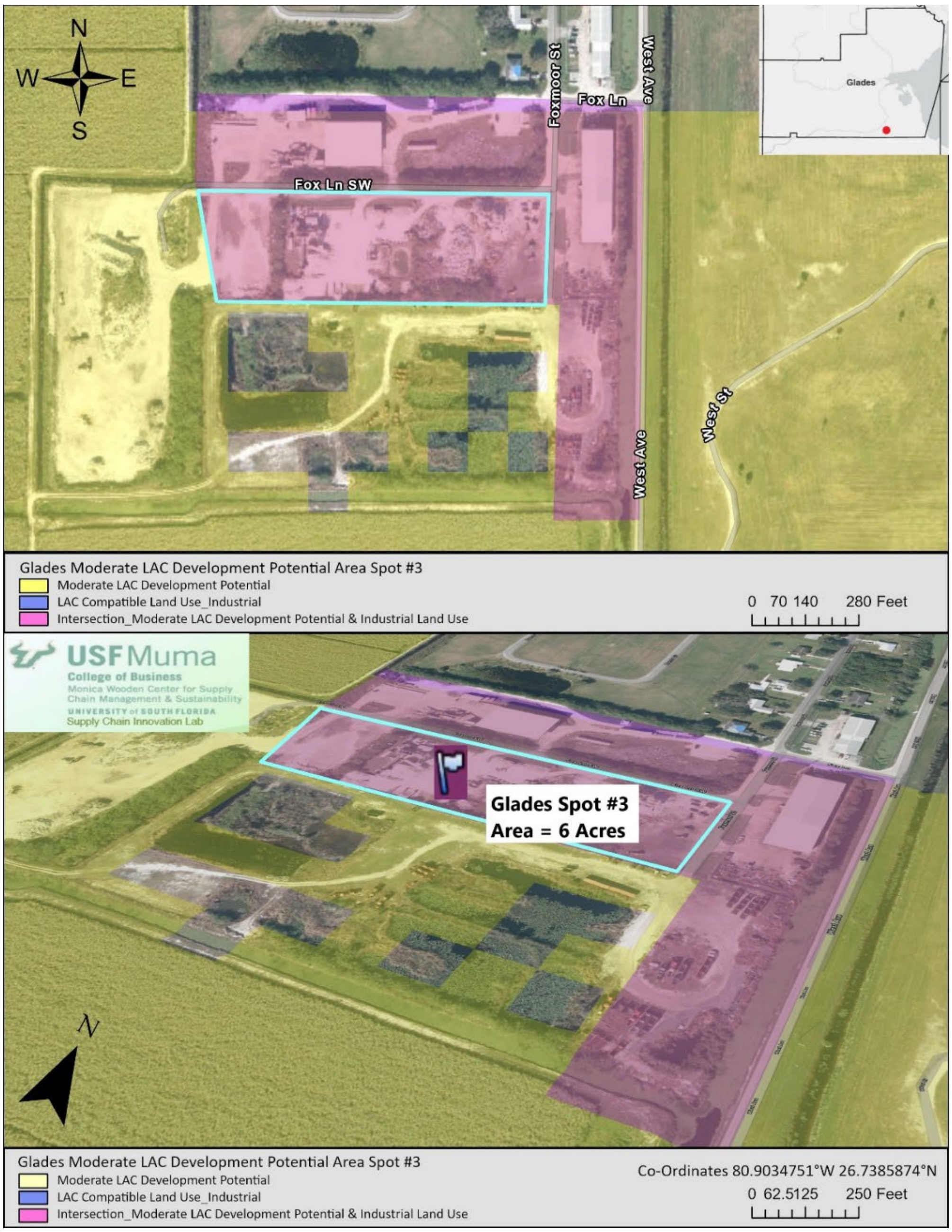

Figure B 82. Glades County Spot 3

GLADES SPOT #4

As per the criteria developed in this study, this 434-acre land parcel in the below image (Figure B 83) located in Moore Haven, FL at the intersection of S US Highway 27 and Baker Hwy has very high LAC development potential in the Glades County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

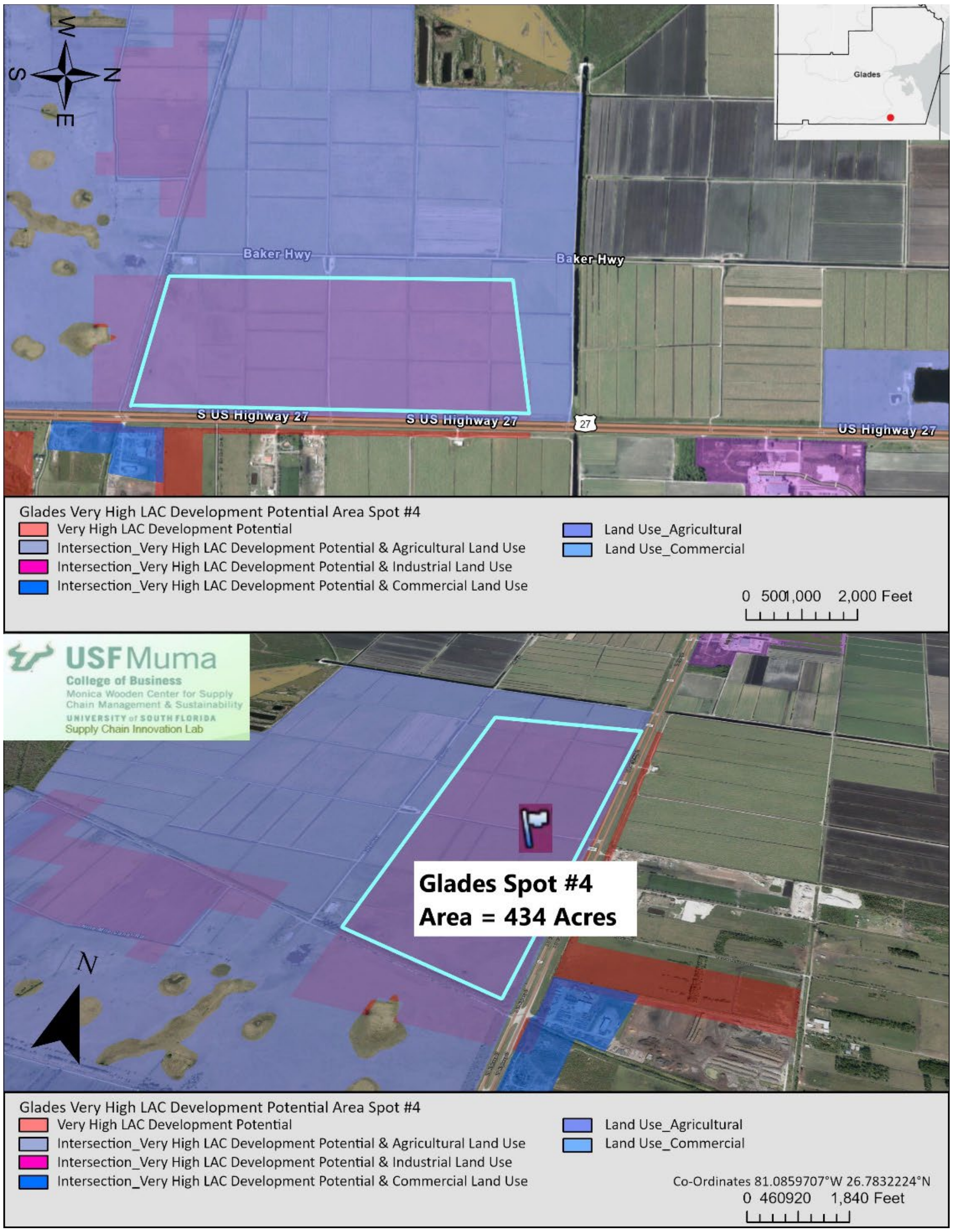

Figure B 83. Glades County Spot 4

GLADES SPOT #5

As per the criteria developed in this study, this huge 96-acre land parcel in the below image (Figure B 84) located in Moore Haven, FL at the intersection of Nine Mile Canal Rd and Baker Hwy has very high LAC development potential in the Glades County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

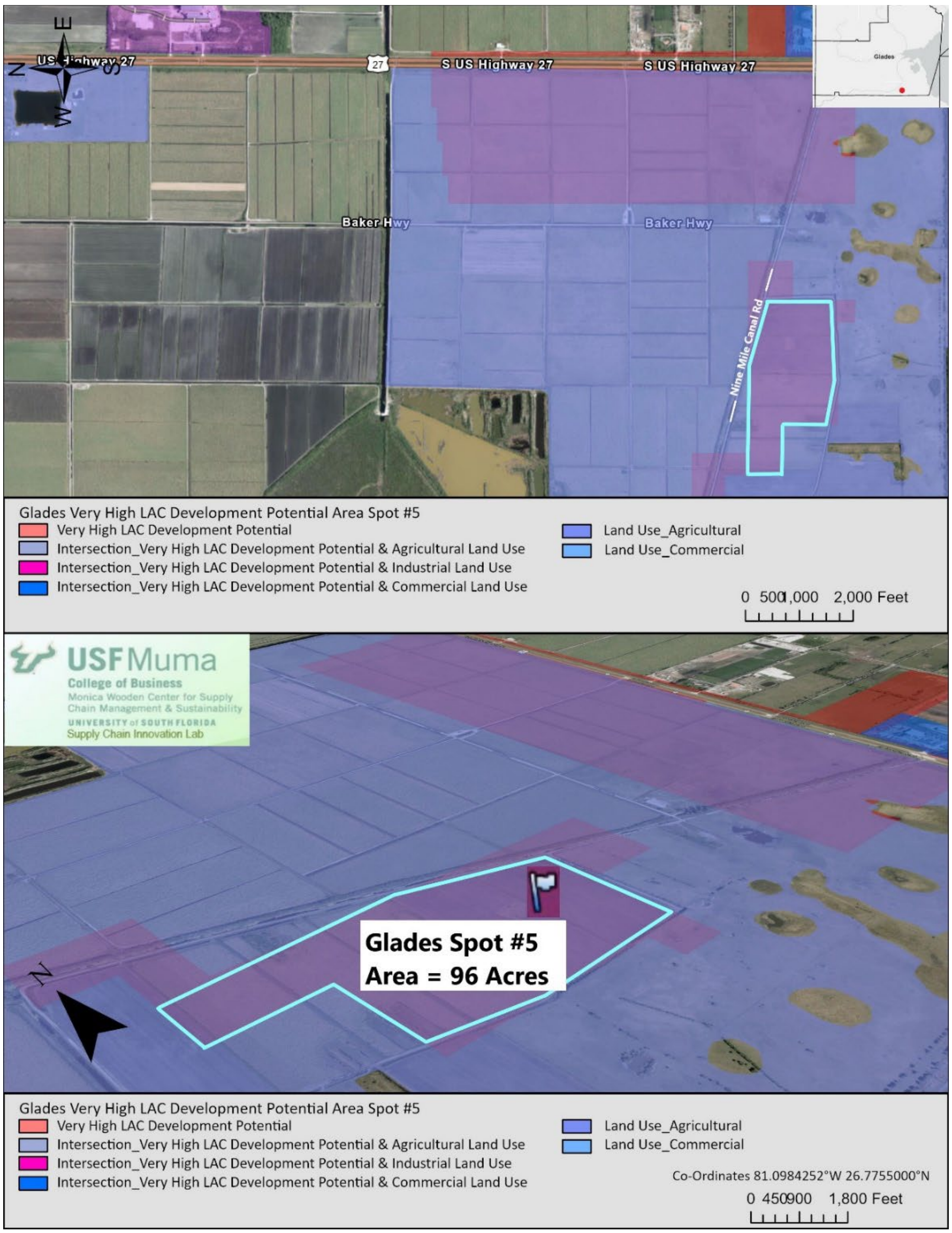

Figure B 84. Glades County Spot 5

Gulf County

GULF SPOT #2

As per the criteria developed in this study, this 70.3-acre land parcel in the below image (Figure B 85) located in Port St Joe, FL at the intersection of Howards Rd and W Highway 98 has high LAC development potential in the Gulf County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest seaport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 85. Gulf County Spot 2

GULF SPOT #3

As per the criteria developed in this study, this 54.5-acre land parcel in the below image (Figure B 86) located in Port St Joe, FL at the intersection of Industrial Rd and W Highway 98 has high LAC development potential in the Gulf County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest seaport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

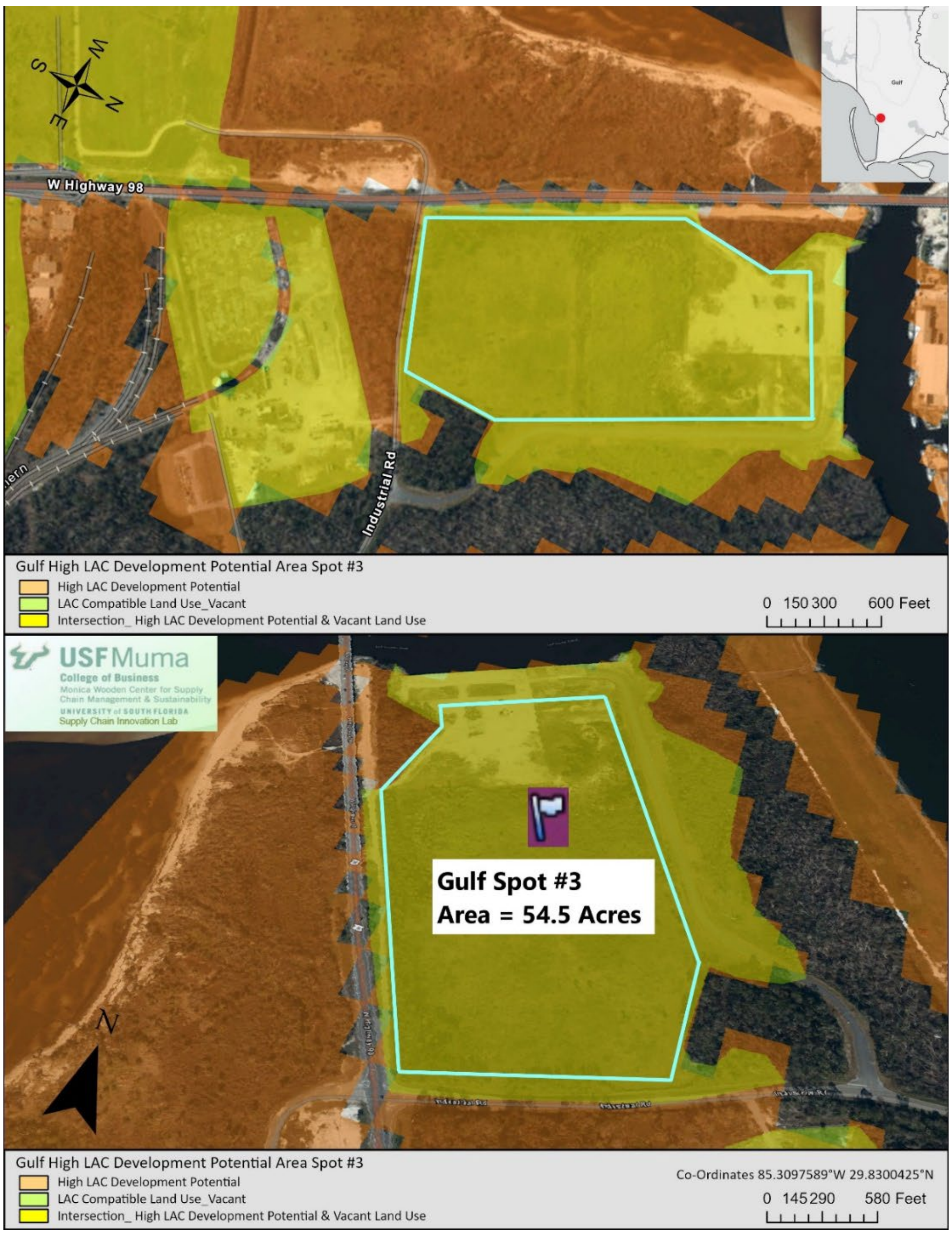

Figure B 86. Gulf County Spot 3

GULF SPOT #4

As per the criteria developed in this study, this 12.5-acre land parcel in the below image (Figure B 87) located in Wewahitchka, FL at the intersection of Old Niles Tram Rd and Highway 71 has moderate LAC development potential in the Gulf County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands in its vicinity which makes it suitable for re-zoning.

Figure B 87. Gulf County Spot 4

GULF SPOT #5

As per the criteria developed in this study, this 19.3-acre land parcel in the below image (Figure B 88) located in Wewahitchka, FL at the intersection of Old Diary Farm Rd and Wagon Trl has moderate LAC development potential in the Gulf County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

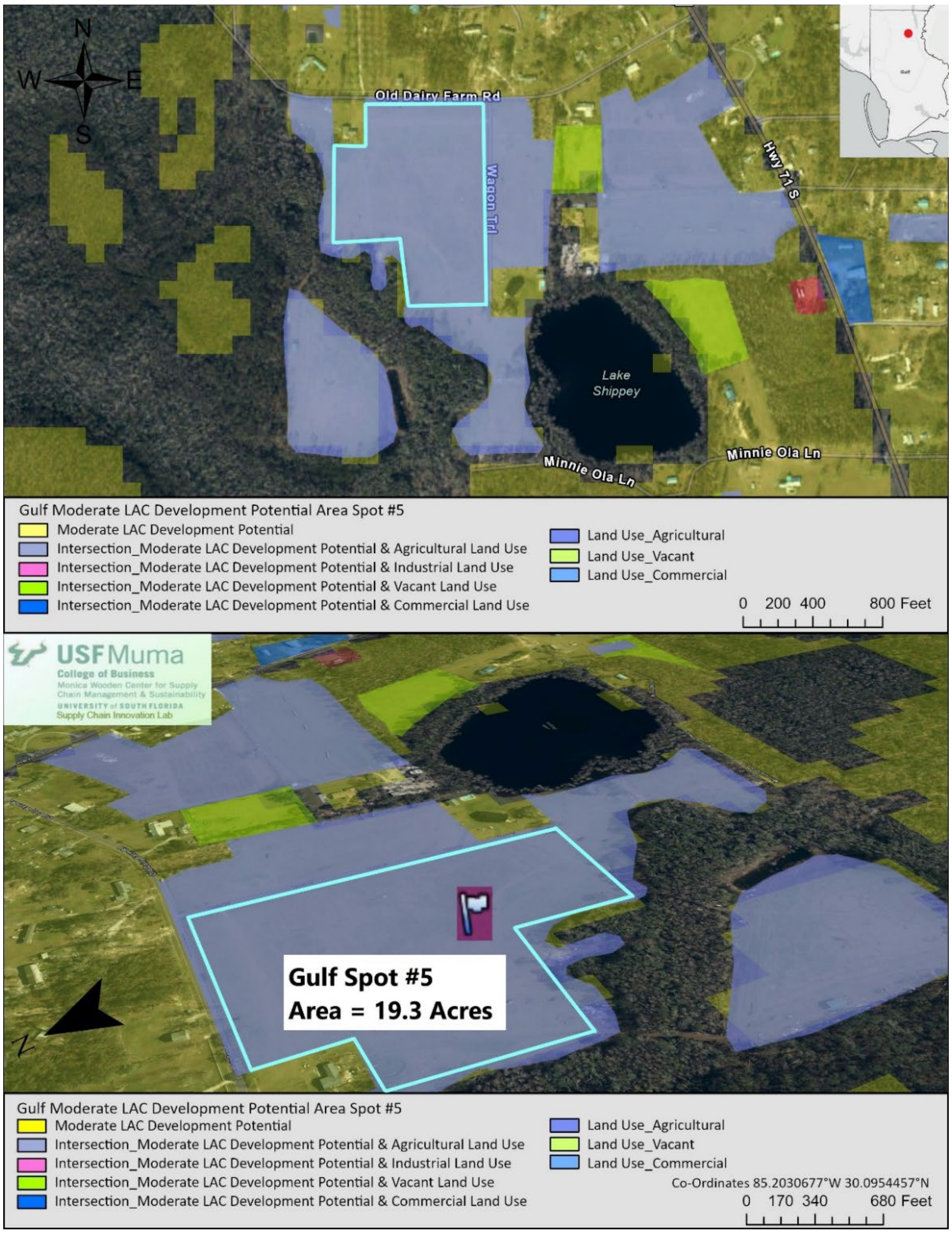

Figure B 88. Gulf County Spot 5

Hamilton County

HAMILTON SPOT #2

As per the criteria developed in this study, this 17.5-acre land parcel in the below image (Figure B 89) located in Jasper, FL at the intersection of SE 50th Dr and SE County Rd 137 has very high LAC development potential in the Hamilton County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

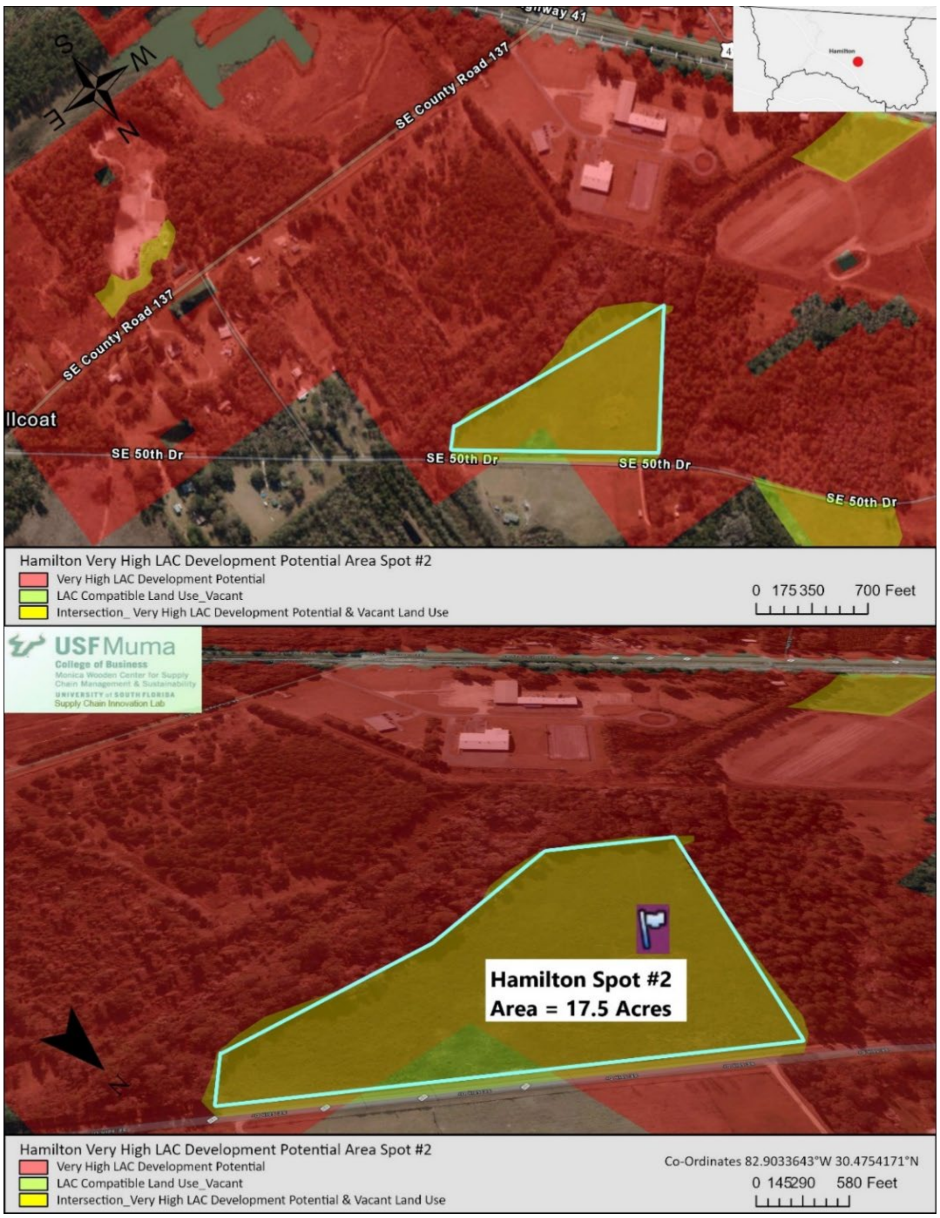

Figure B 89. Hamilton County Spot 2

HAMILTON SPOT #3

As per the criteria developed in this study, this 16.2-acre land parcel in the below image (Figure B 90) located in Jennings, FL at the intersection of NW County Rd 141 and NW 9th Dr has high LAC development potential in the Hamilton County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 90. Hamilton County Spot 3

HAMILTON SPOT #4

As per the criteria developed in this study, this huge 141-acre land parcel in the below image (Figure B 91) located in Jennings, FL at the intersection of SW Co Rd 751 and State Road 6W has moderate LAC development potential in the Hamilton County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 91. Hamilton County Spot 4

HAMILTON SPOT #5

As per the criteria developed in this study, this 19.5-acre land parcel in the below image (Figure B 92) located in Jasper, FL at the intersection of SE 120th Ln and SE US Highway 41 has very high LAC development potential in the Hamilton County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 92. Hamilton County Spot 5

Hardee County

HARDEE SPOT #2

As per the criteria developed in this study, this 22.5-acre land parcel in the below image (Figure B 93) located in Wauchula, FL at the intersection of State Road 64 E and Lockmiller Rd has moderate LAC development potential in the Hardee County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

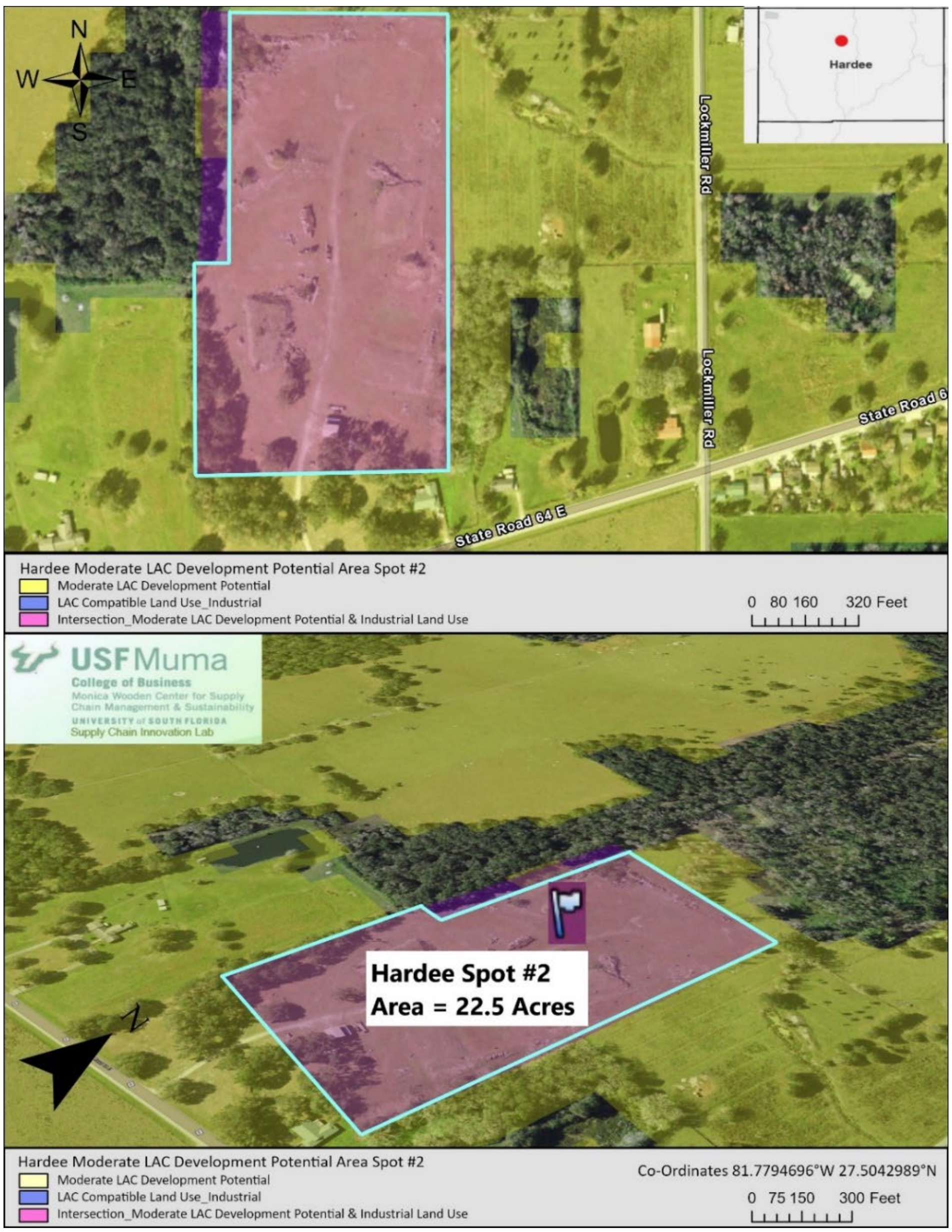

Figure B 93. Hardee County Spot 2

HARDEE SPOT #3

As per the criteria developed in this study, this 34.5-acre land parcel in the below image (Figure B 94) located in Wauchula, FL at the intersection of King Rd and E Main St has moderate LAC development potential in the Hardee County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

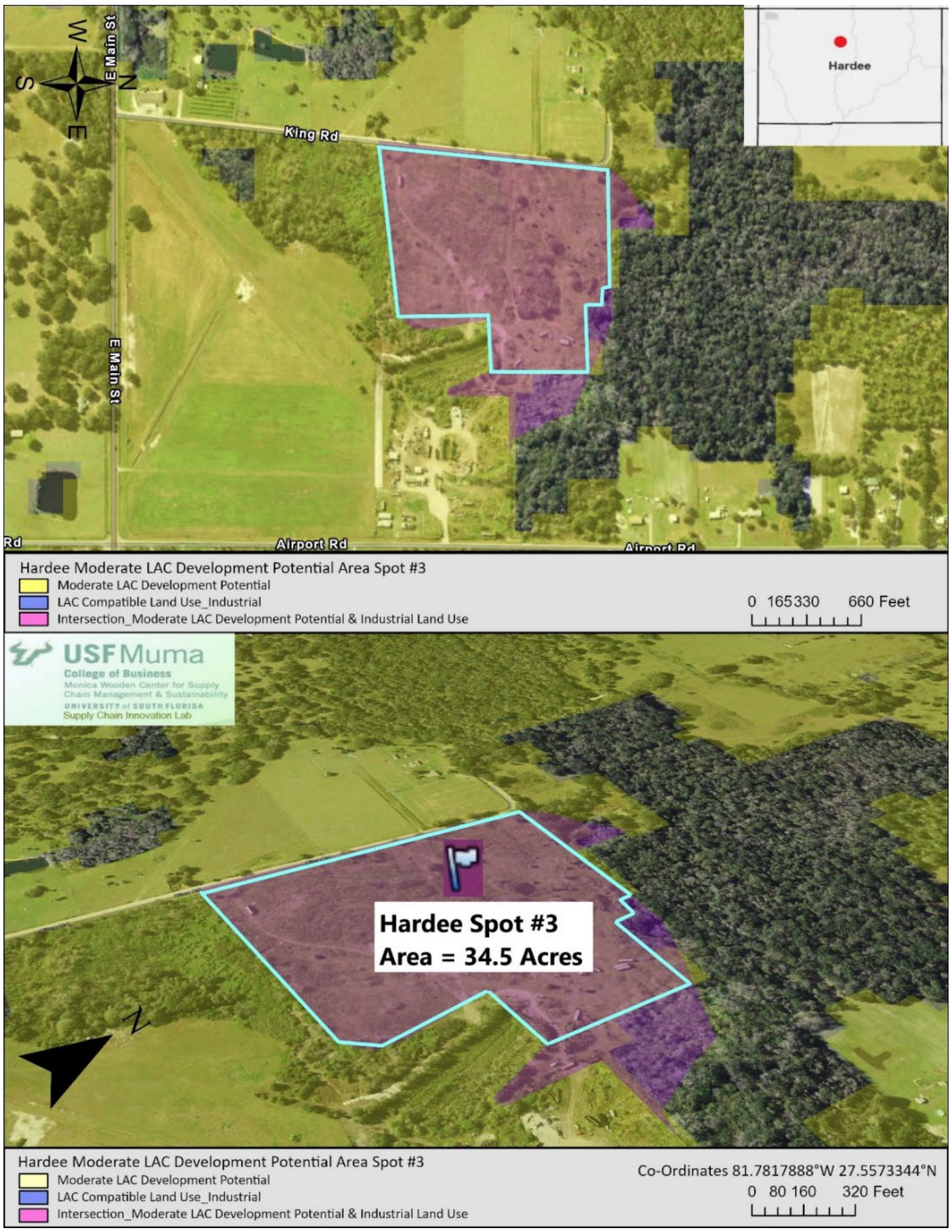

Figure B 94. Hardee County Spot 3

HARDEE SPOT #4

As per the criteria developed in this study, this 47.2-acre land parcel in the below image (Figure B 95) located in Wauchula, FL at the intersection of Farrell Rd and Steve Roberts Special has moderate LAC development potential in the Hardee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

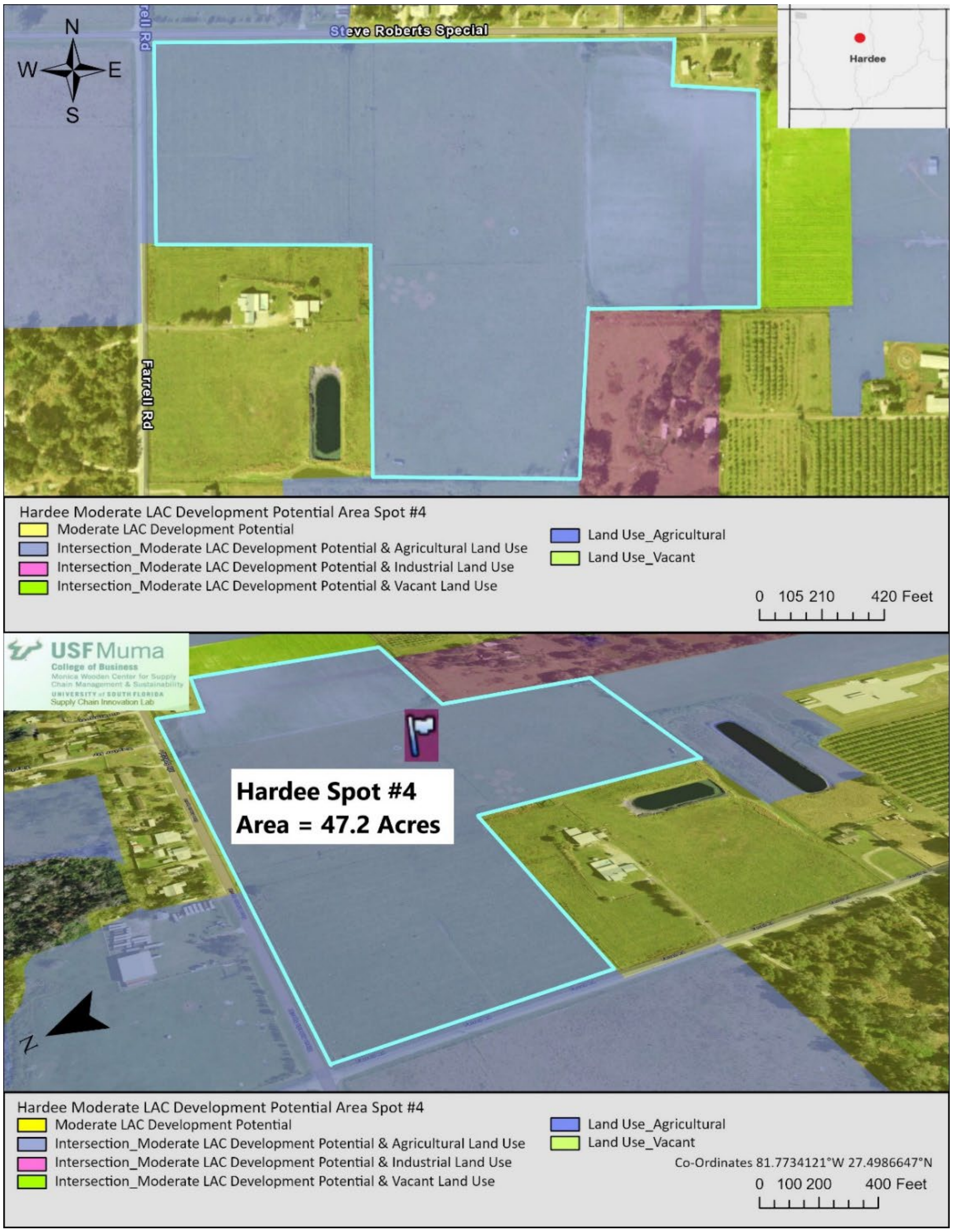

Figure B 95. Hardee County Spot 4

HARDEE SPOT #5

As per the criteria developed in this study, this 67-acre land parcel in the below image (Figure B 96) located in Wauchula, FL at the intersection of Airport Road and E Main St has moderate LAC development potential in the Hardee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

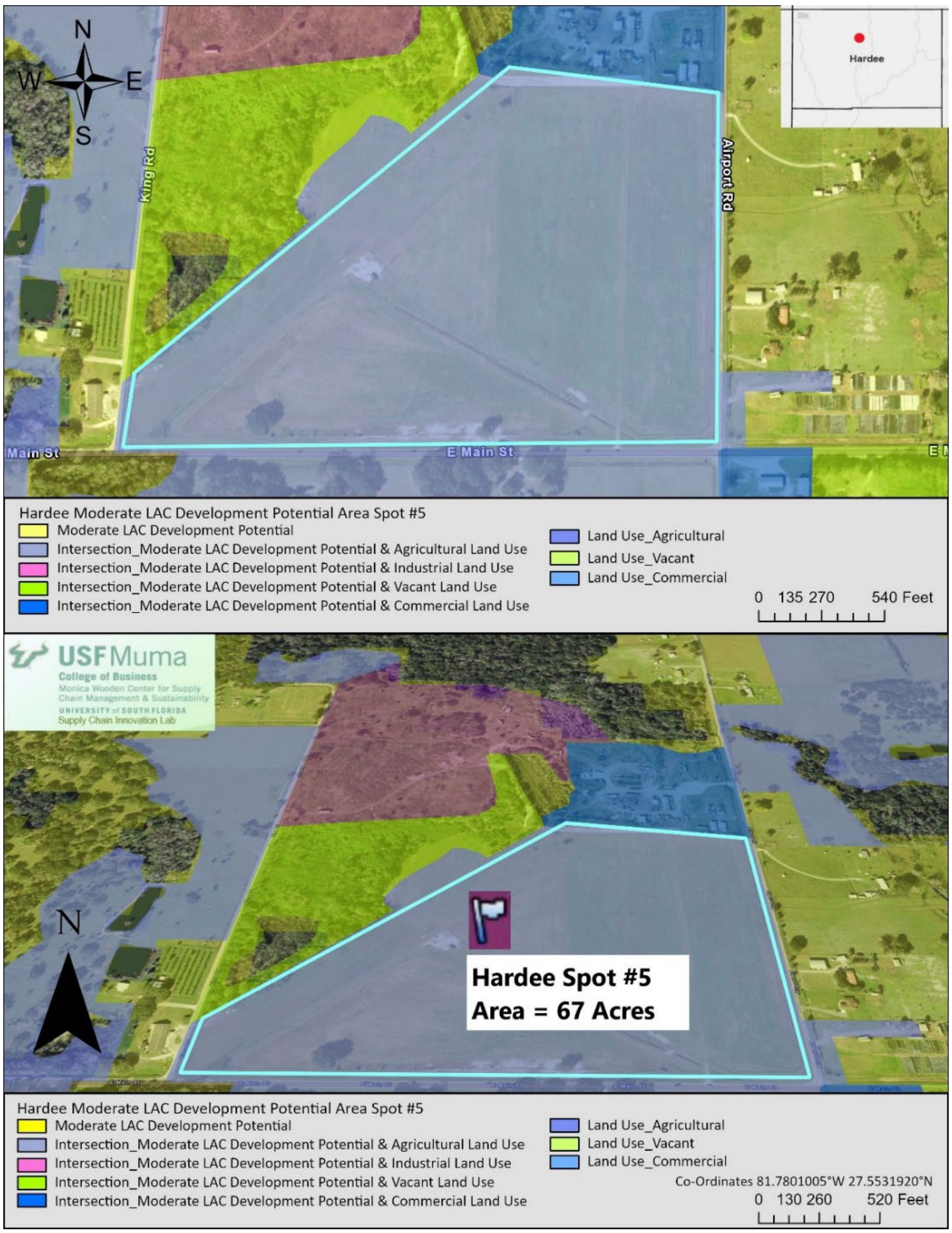

Figure B 96. Hardee County Spot 5

Hendry County

HENDRY SPOT #2

As per the criteria developed in this study, this 15-acre land parcel in the below image (Figure B 97) located near the Hendry County Motorsports Park in Clewiston, FL at the intersection of E State Road 80 and Southland Dr has high LAC development potential in the Hendry County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

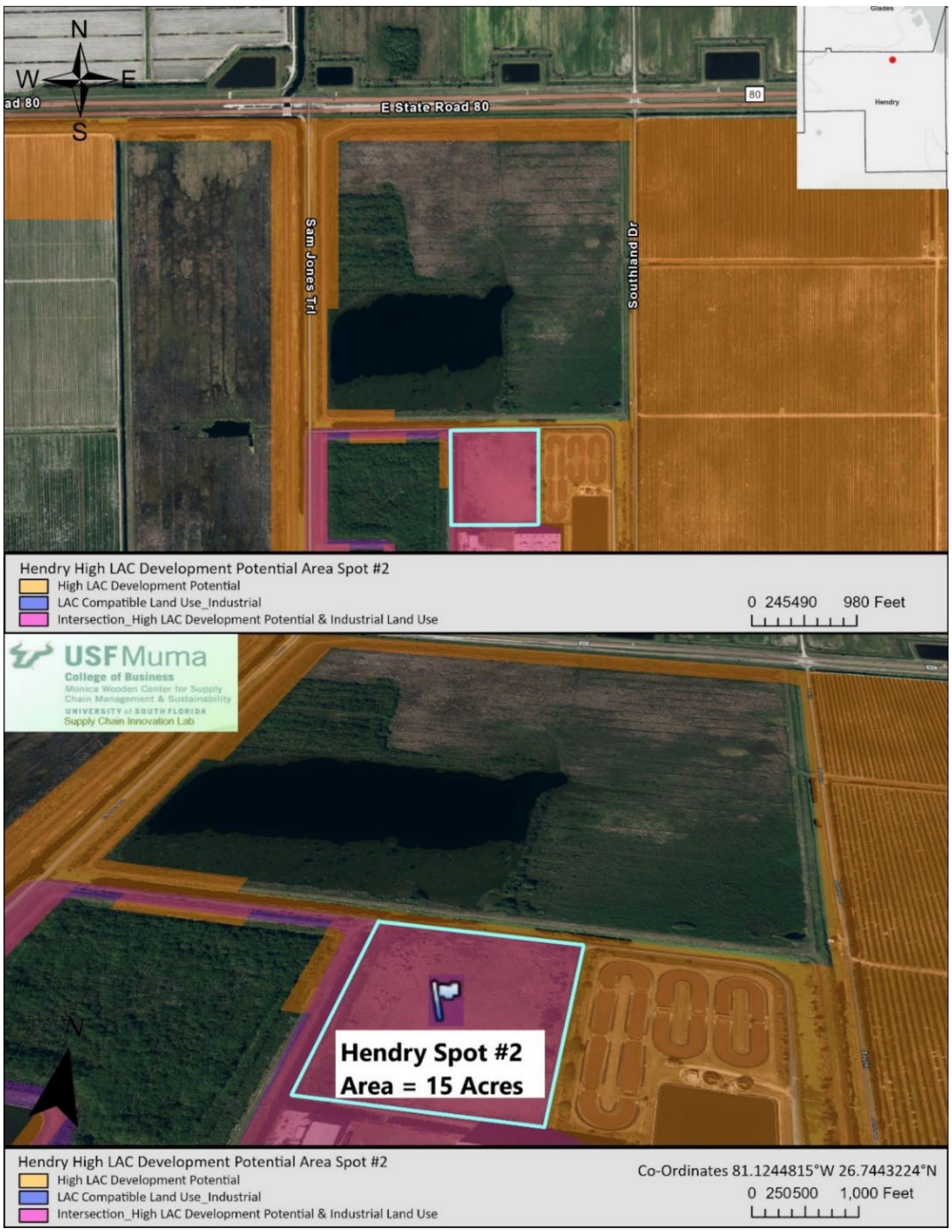

Figure B 97. Hendry County Spot 2

HENDRY SPOT #3

As per the criteria developed in this study, this 10.2-acre land parcel in the below image (Figure B 98) located near the WC Bo. Pelham Jr. Park in Clewiston, FL at the intersection of Davidson Rd and Evercane Rd has moderate LAC development potential in the Hendry County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

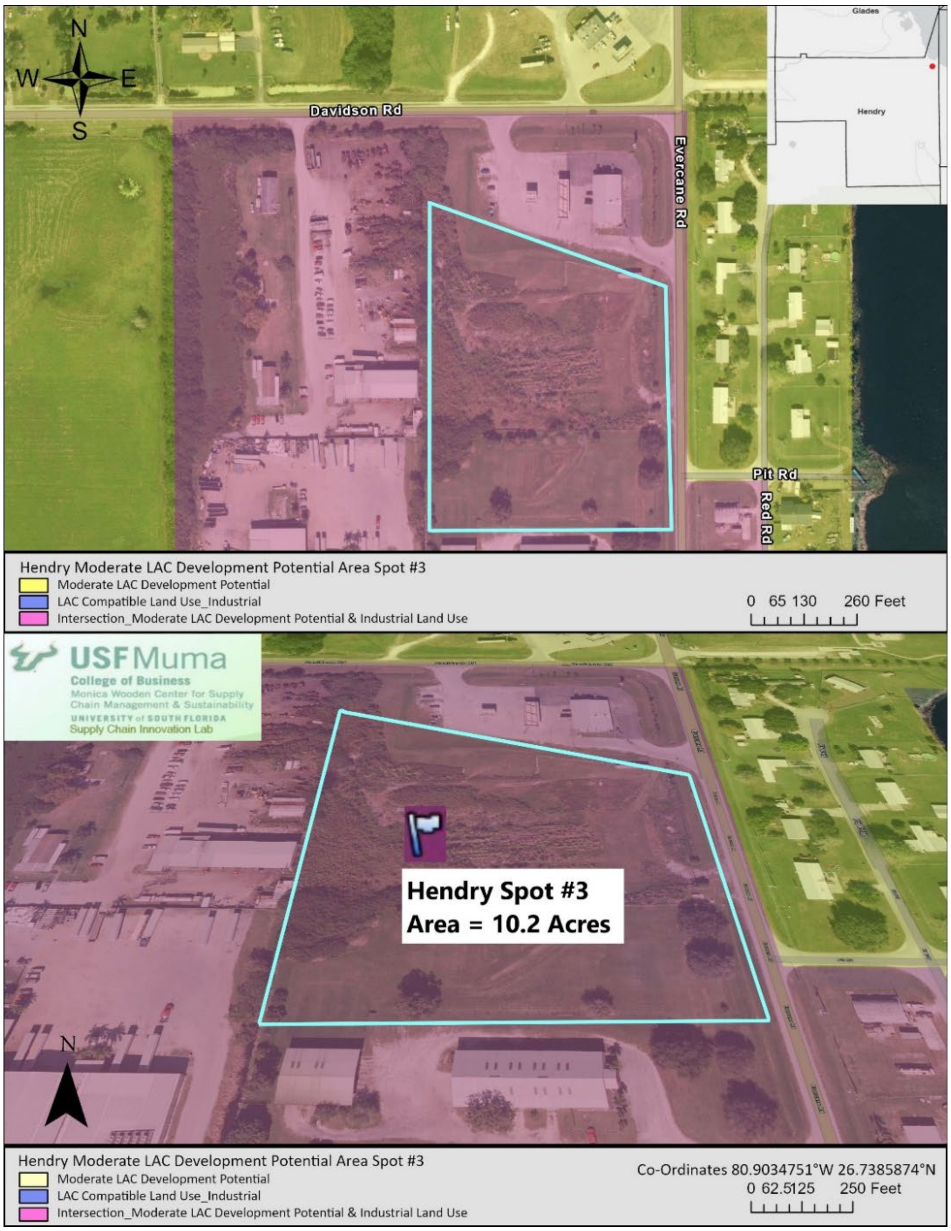

Figure B 98. Hendry County Spot 3

HENDRY SPOT #4

As per the criteria developed in this study, this massive 326-acre land parcel in the below image (Figure B 99) located near the Hendry County Motorsports Park in Clewiston, FL at the intersection of State Road 80 and Southland Dr has moderate LAC development potential in the Hendry County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

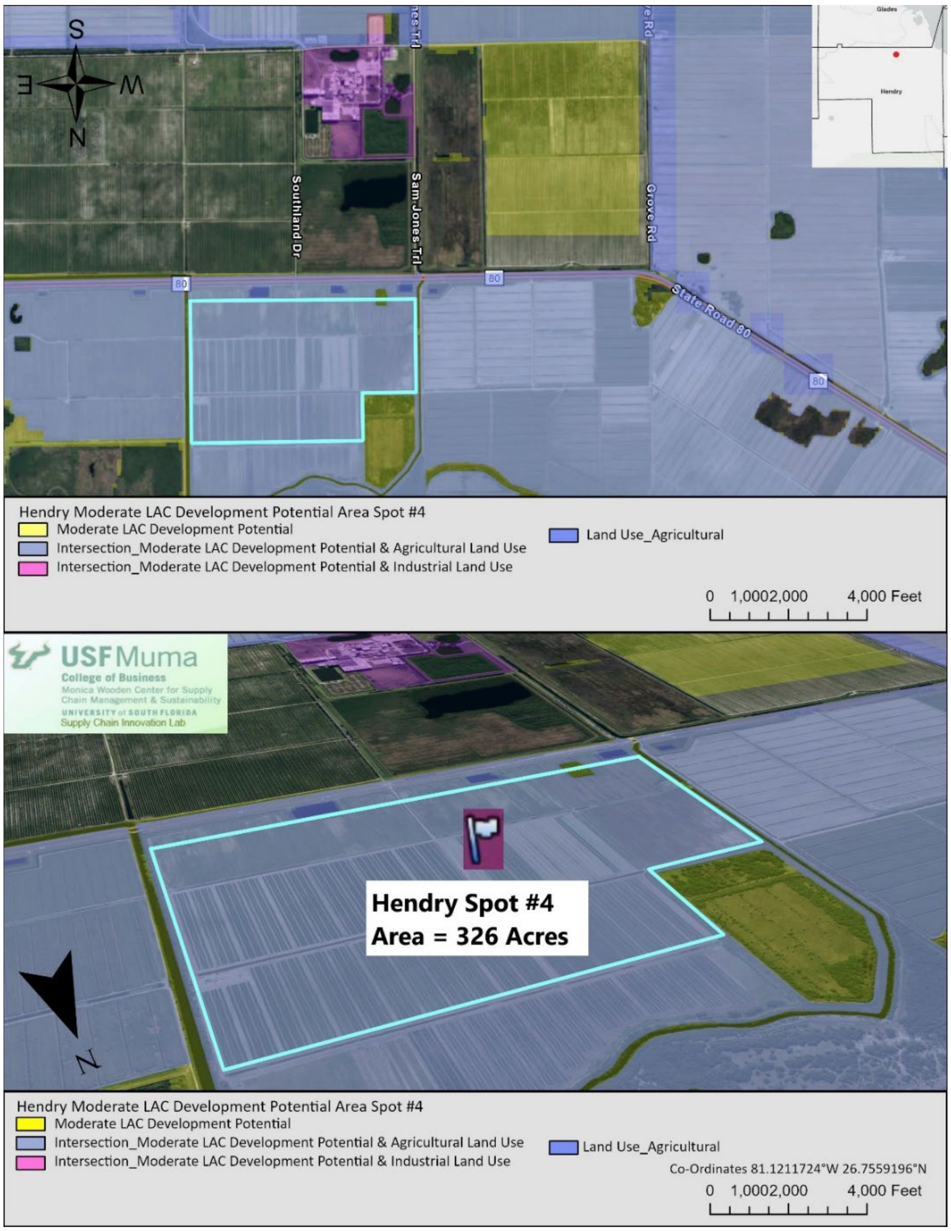

Figure B 99. Hendry County Spot 4

HENDRY SPOT #5

As per the criteria developed in this study, this massive 252-acre land parcel in the below image (Figure B 100) located near the Skydive Spaceland Florida in Clewiston, FL at the intersection of Sam Jones Trl and Southland Dr has moderate LAC development potential in the Hendry County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

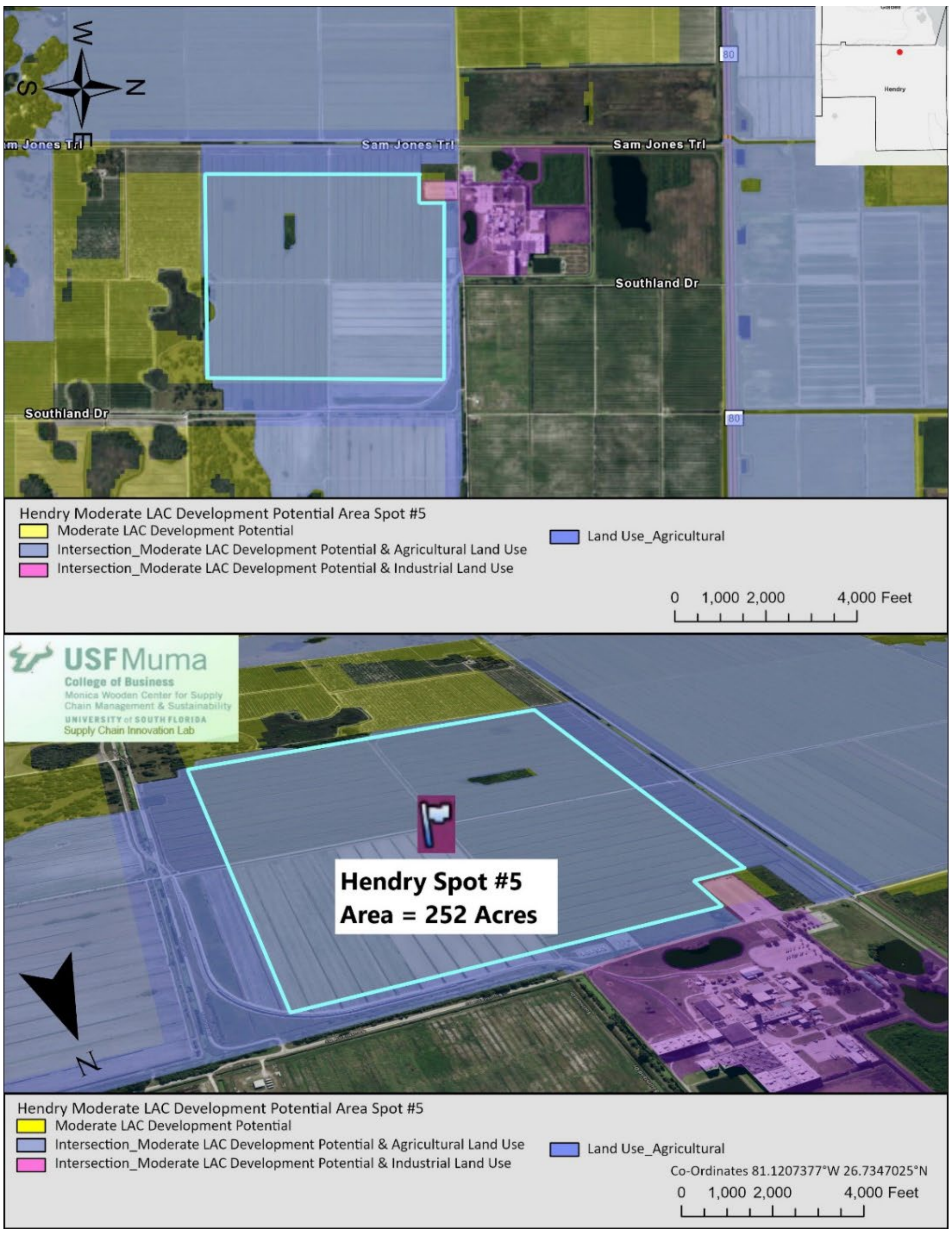

Figure B 100. Hendry County Spot 5

Hernando County

HERNANDO SPOT #2

As per the criteria developed in this study, this 39.6-acre land parcel in the below image (Figure B 101) located near the Hernando County Airport at the intersection of Technology Dr and Aerial Way has very high LAC development potential in the Hernando County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

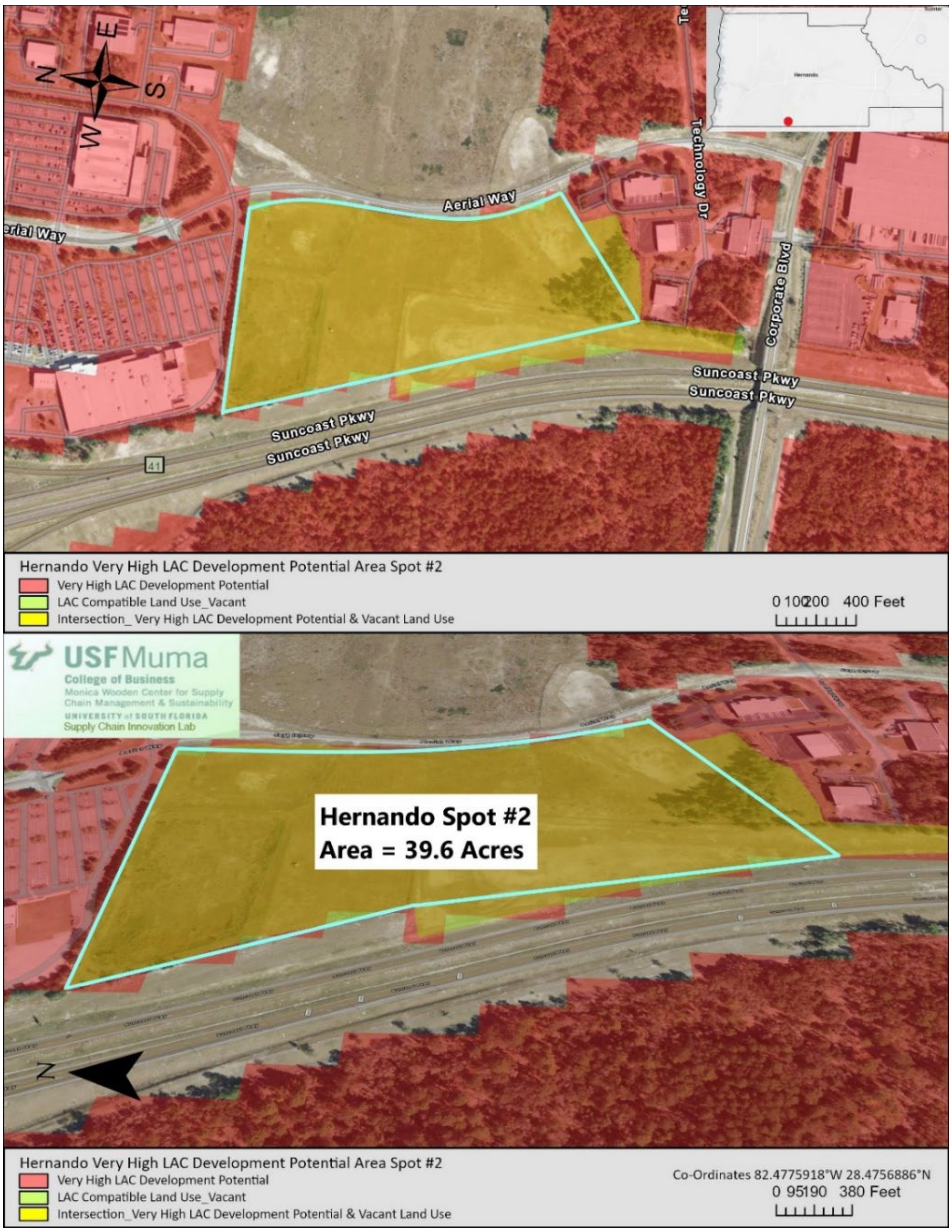

Figure B 101. Hernando County Spot 2

HERNANDO SPOT #3

As per the criteria developed in this study, this 21.8-acre land parcel in the below image (Figure B 102) located near the Hernando County Airport at the intersection of Ayers Rd and Broad St has very high LAC development potential in the Hernando County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

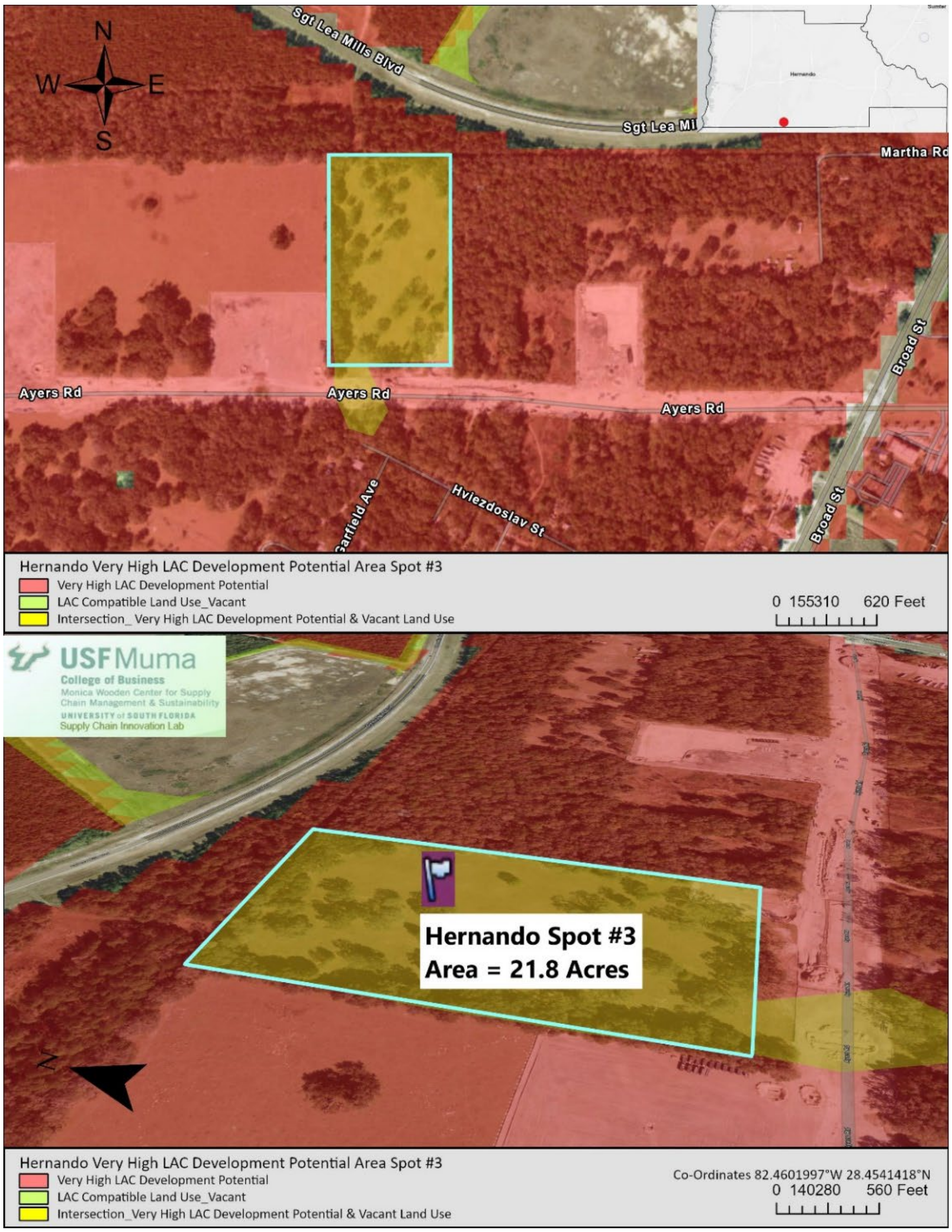

Figure B 102. Hernando County Spot 3

HERNANDO SPOT #4

As per the criteria developed in this study, this 117-acre land parcel in the below image (Figure B 103) located near the Hernando County Airport at the intersection of California St and Spring Hill Dr has very high LAC development potential in the Hernando County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and institutional lands (Govt. Owned and operated) around it which makes it suitable for re-zoning.

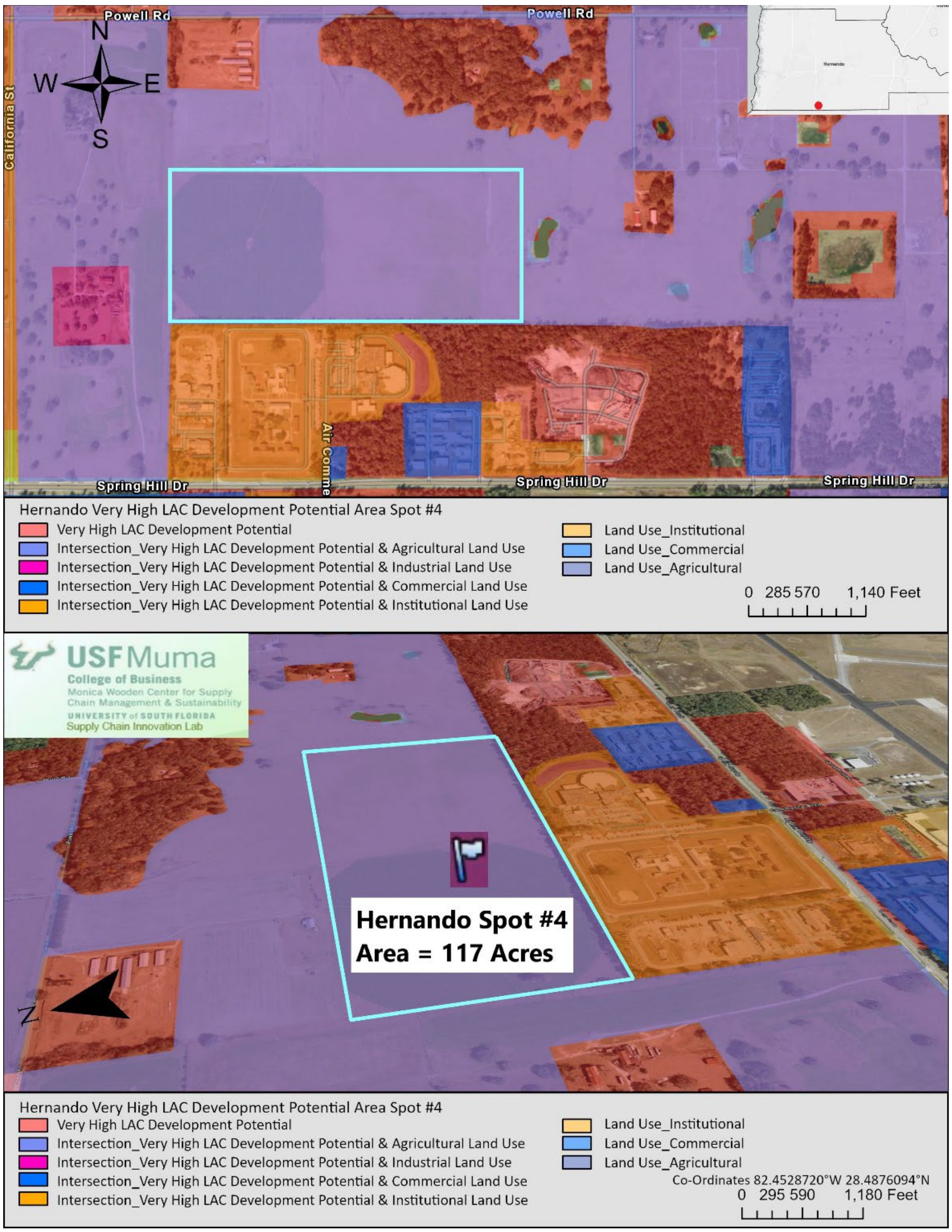

Figure B 103. Hernando County Spot 4

HERNANDO SPOT #5

As per the criteria developed in this study, this 68.6-acre land parcel in the below image (Figure B 104) located in Ridge Manor, FL at the intersection of Treiman Blvd and Cortez Blvd has very high LAC development potential in the Hernando County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

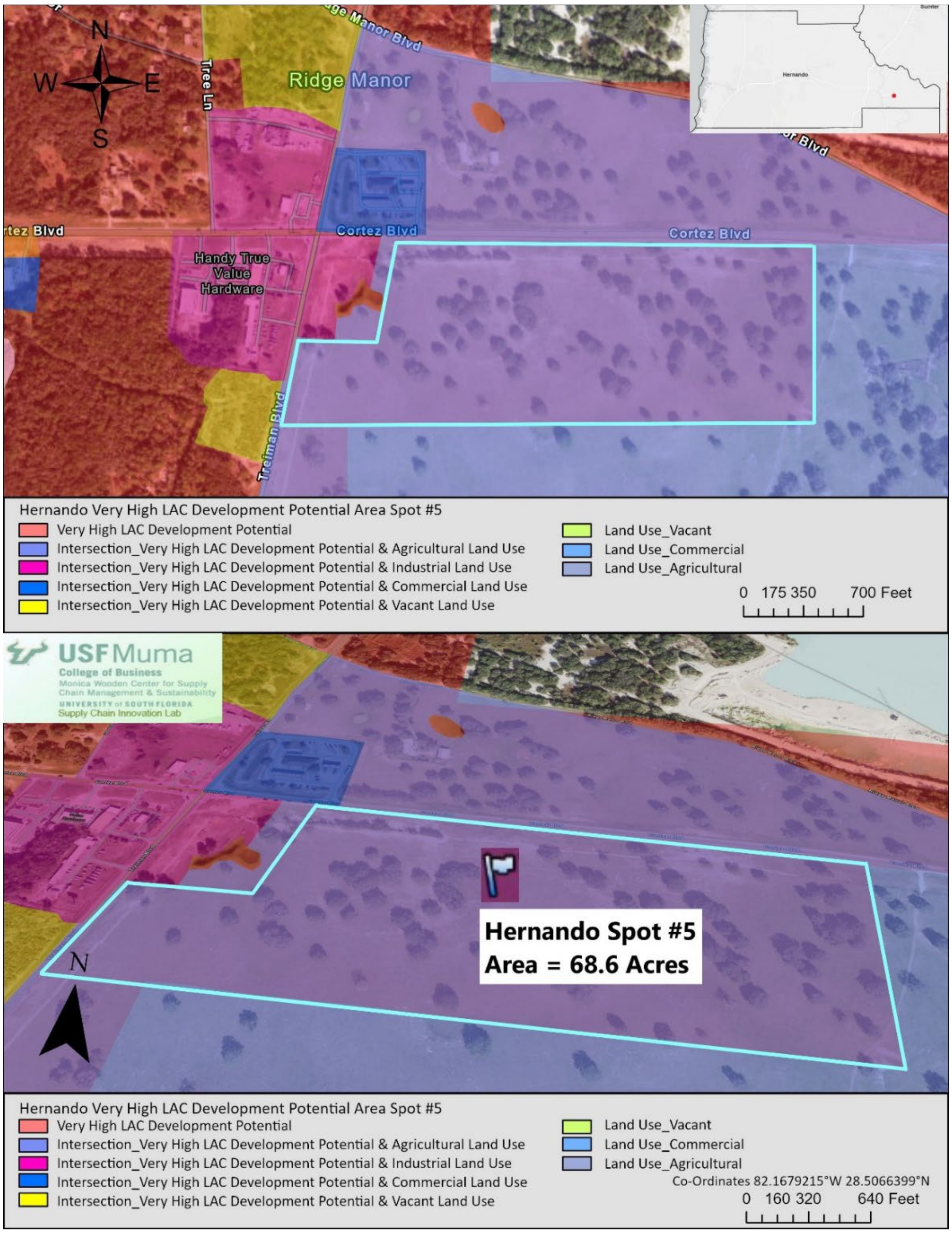

Figure B 104. Hernando County Spot 5

Highlands County

HIGHLANDS SPOT #2

As per the criteria developed in this study, this 28.5-acre land parcel in the below image (Figure B 105) located near the transportation department in Sebring, FL at the intersection of Industrial Way E and Kenilworth Rd has high LAC development potential in the Highlands County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

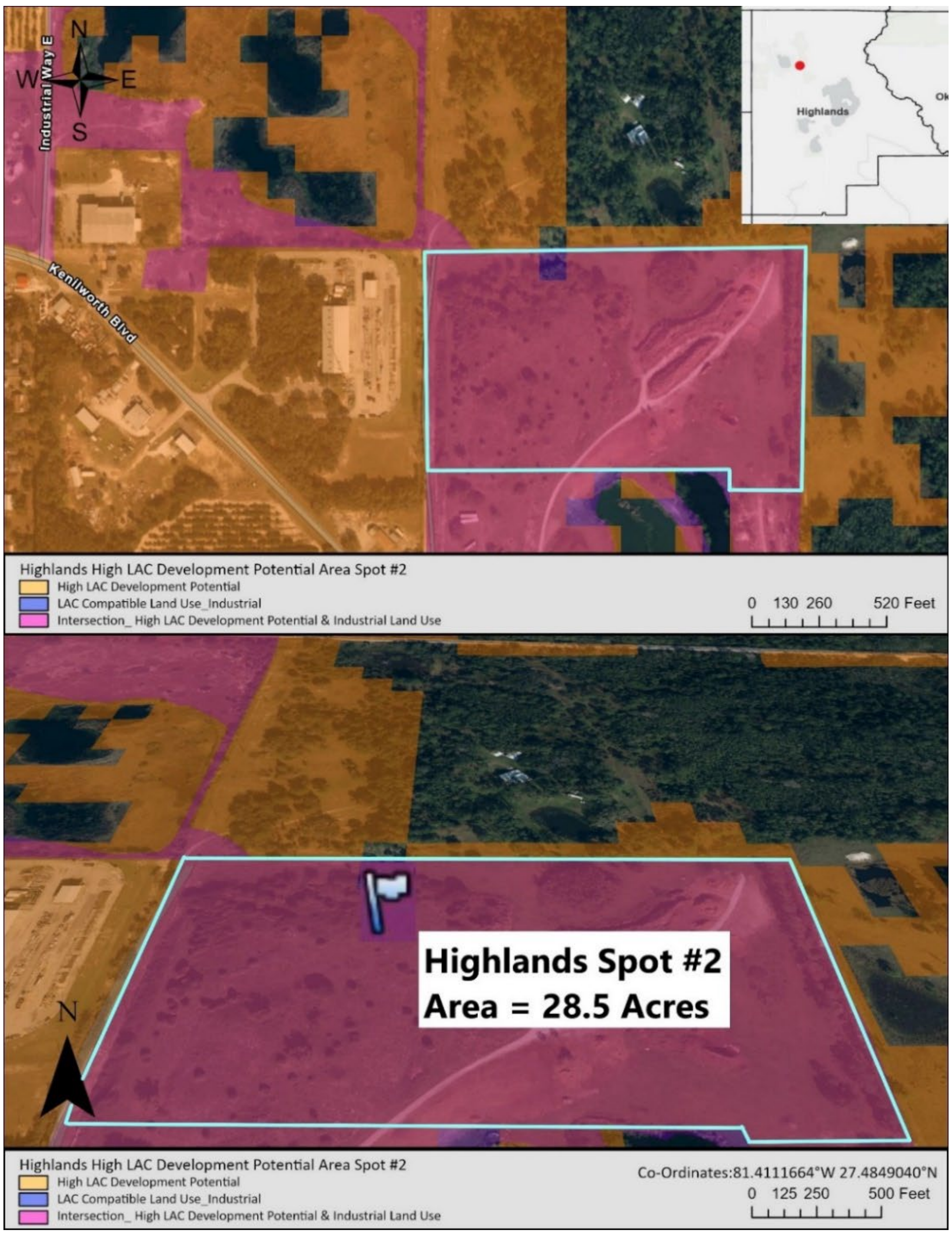

Figure B 105. Highlands County Spot 2

HIGHLANDS SPOT #3

As per the criteria developed in this study, this 9.5-acre total land parcel in the below image (Figure B 106) located near the intersection of W Lake Isis Ave and Kathleen St has high LAC development potential in the Highlands County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below \$8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

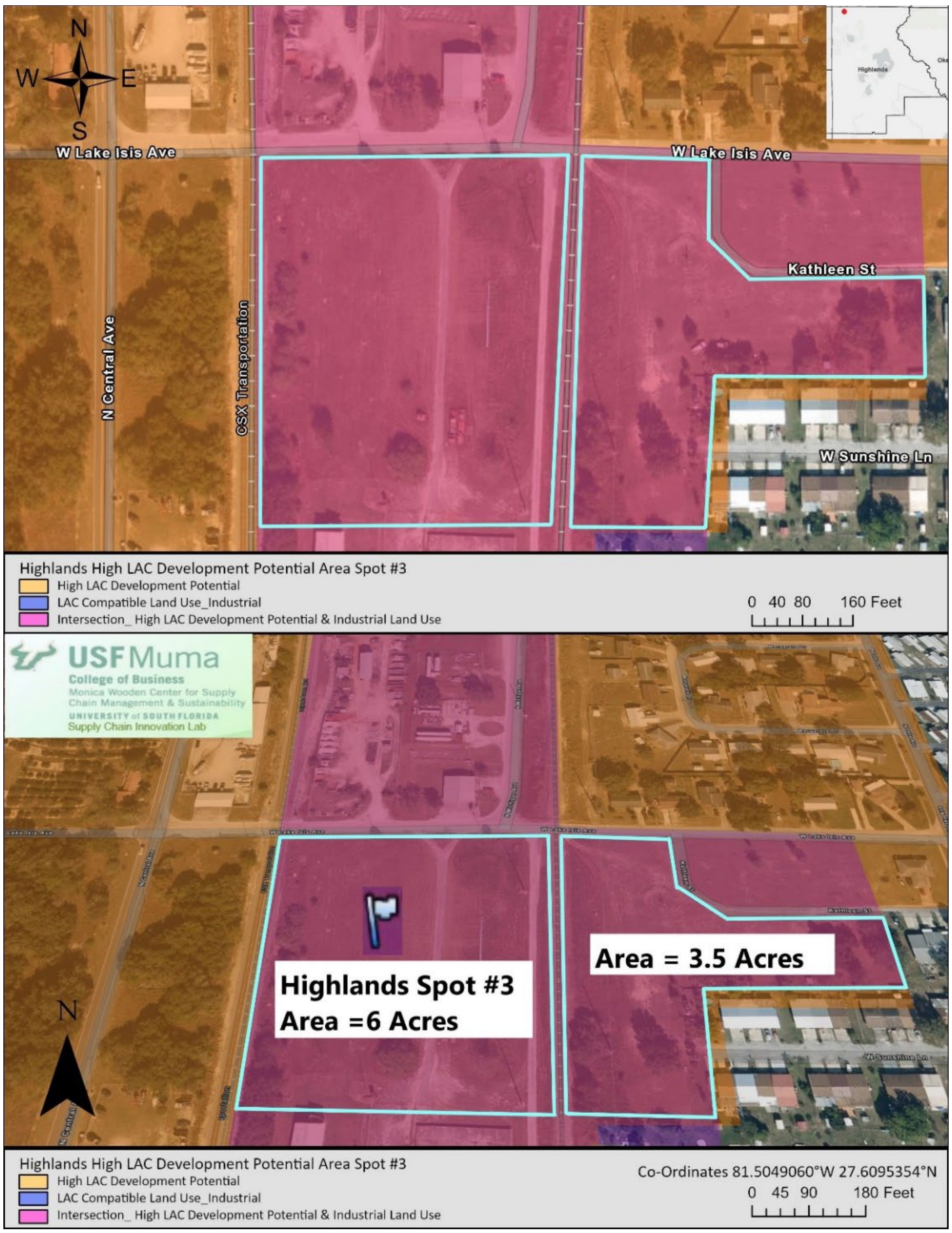

Figure B 106. Highlands County Spot 3

HIGHLANDS SPOT #4

As per the criteria developed in this study, this 66.5-acre land parcel in the below image (Figure B 107) located near the Sebring Airport Authority at the intersection of Central Blvd and Peach Blossom St has high LAC development potential in the Highlands County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

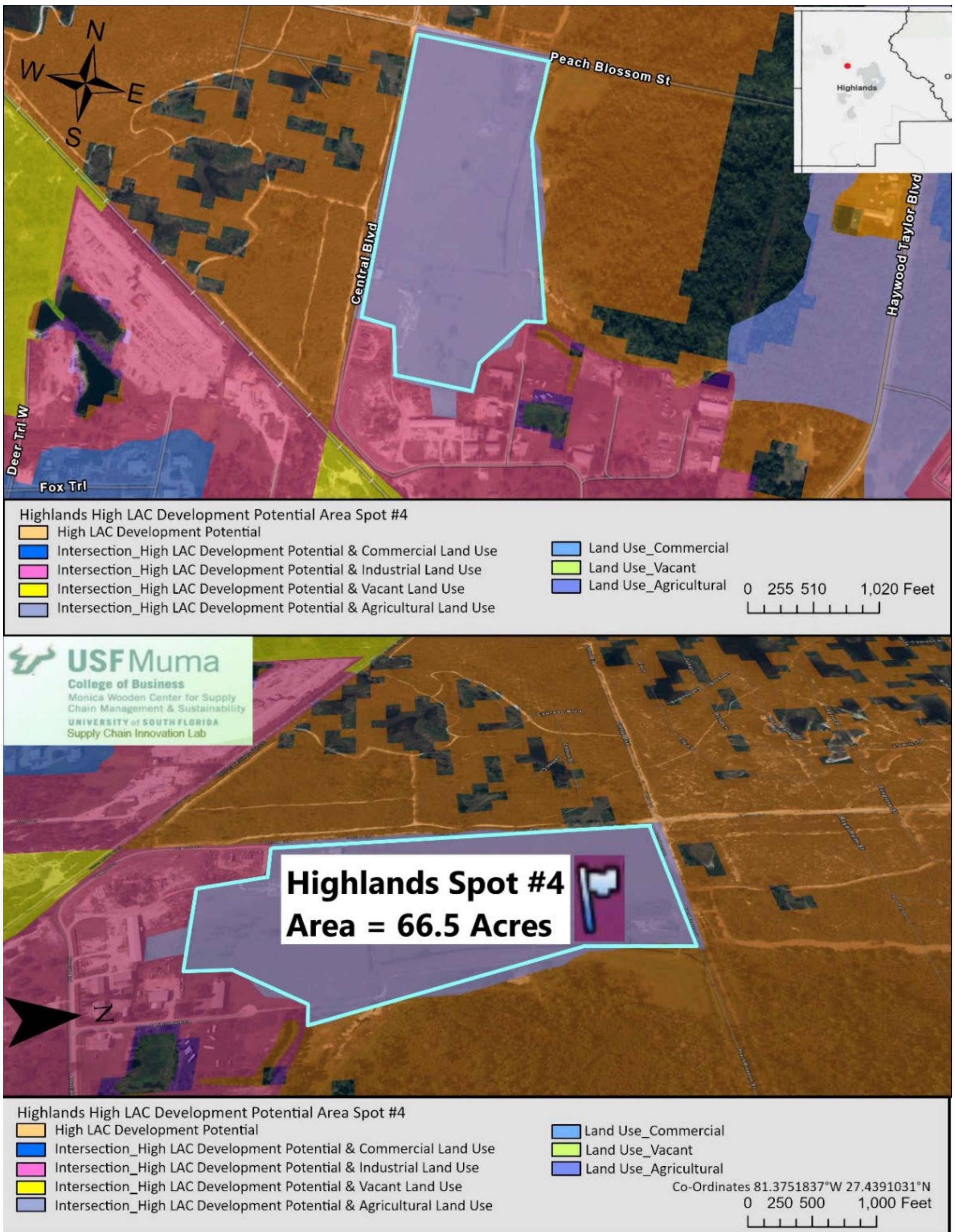

Figure B 107. Highlands County Spot 4

HIGHLANDS SPOT #5

As per the criteria developed in this study, this 5-acre land parcel in the below image (Figure B 108) located at the intersection of US Highway 98 and Deer Tri W has high LAC development potential in the Highlands County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

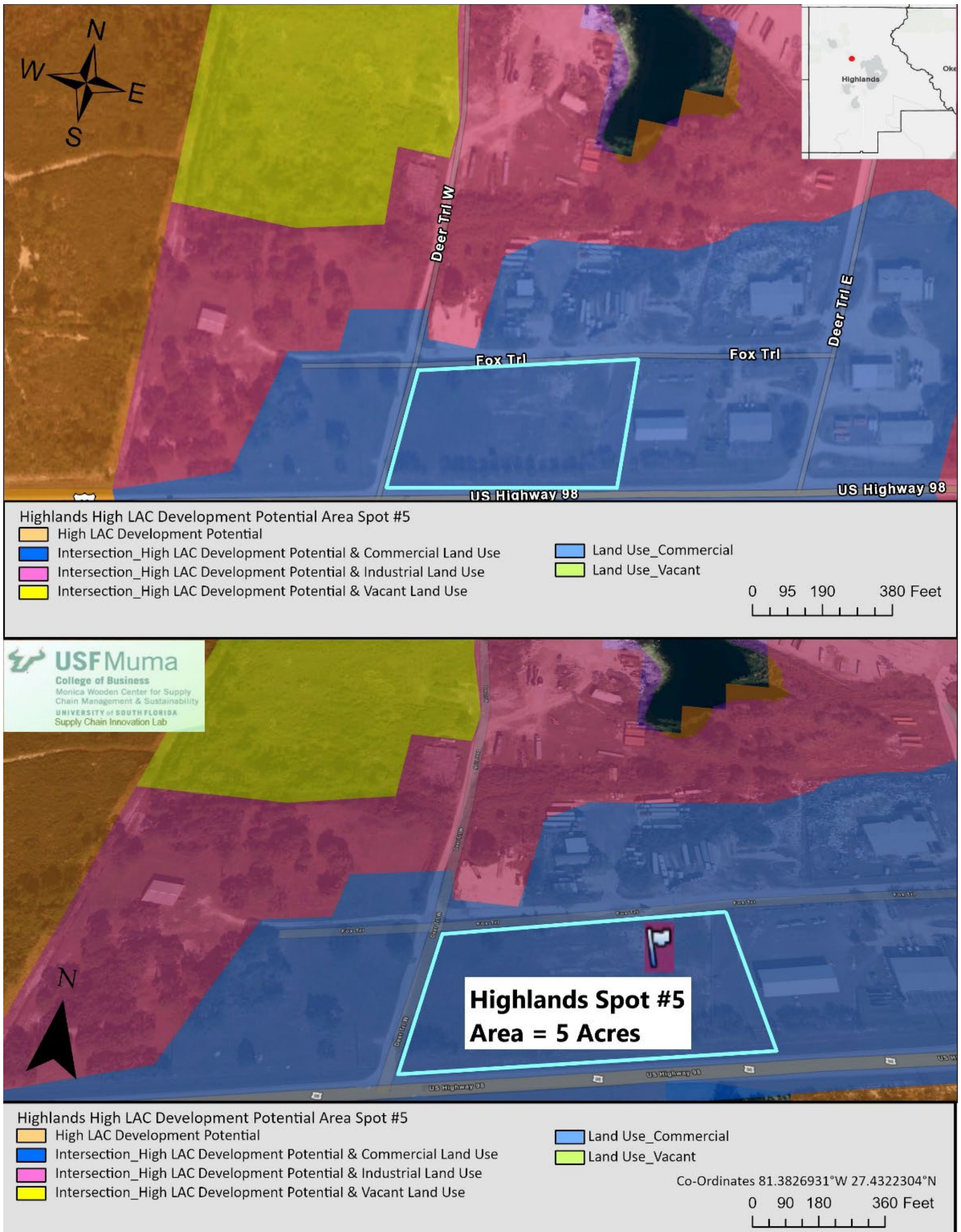

Figure B 108. Highlands County Spot 5

Hillsborough County

HILLSBOROUGH SPOT #2

As per the criteria developed in this study, this 25.7-acre land parcel in the below image (Figure B 109) located near the intersection of Jordan Rd and Dr Martin Luther King Jr Rd has very high LAC development potential in the Hillsborough County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and around 14 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure B 109. Hillsborough County Spot 2

HILLSBOROUGH SPOT #3

As per the criteria developed in this study, this 29.1-acre land parcel in the below image (Figure B 110) located near the Plant City Facilities Maintenance Building has very high LAC development potential in the Hillsborough County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

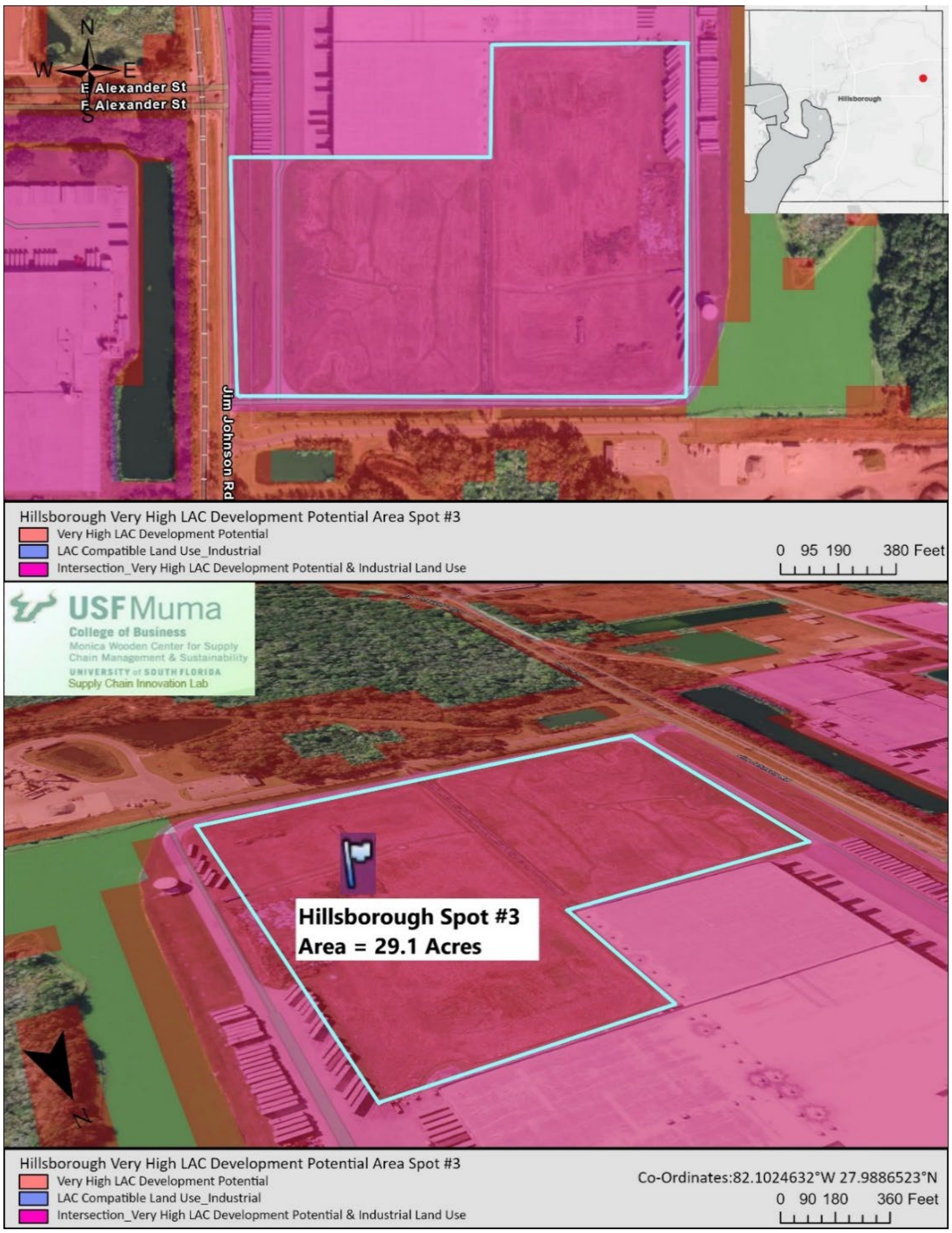

Figure B 110. Hillsborough County Spot 3

HILLSBOROUGH SPOT #4

As per the criteria developed in this study, this 13.9-acre land parcel in the below image (Figure B 111) located at the intersection of W Linebaugh Ave and Merchants Center Dr has very high LAC development potential in the Hillsborough County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds vacant and industrial lands around it which makes it suitable for re-zoning.

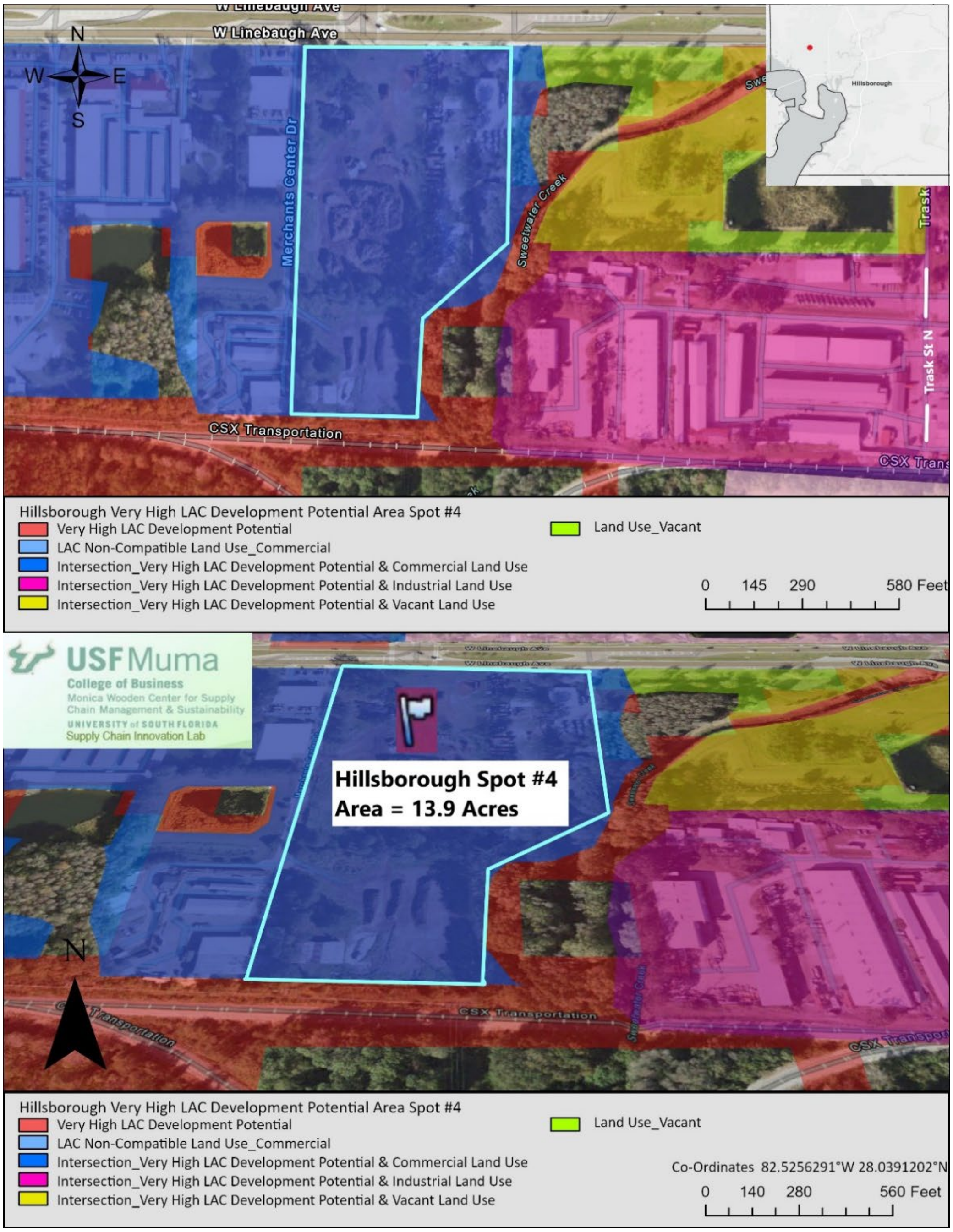

Figure B 111. Hillsborough County Spot 4

HILLSBOROUGH SPOT #5

As per the criteria developed in this study, this 37-acre land parcel in the below image (Figure B 112) located at the intersection of Harney Rd and Maislin Dr has very high LAC development potential in the Hillsborough County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds commercial and industrial lands around it which makes it suitable for re-zoning.

Figure B 112. Hillsborough County Spot 5

Holmes County

HOLMES SPOT #2

As per the criteria developed in this study, this 13.8-acre land parcel in the below image (Figure B 113) located in Bonifay, FL at the intersection of Dona Rob Rd and S Chance Rd has high LAC development potential in the Holmes County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

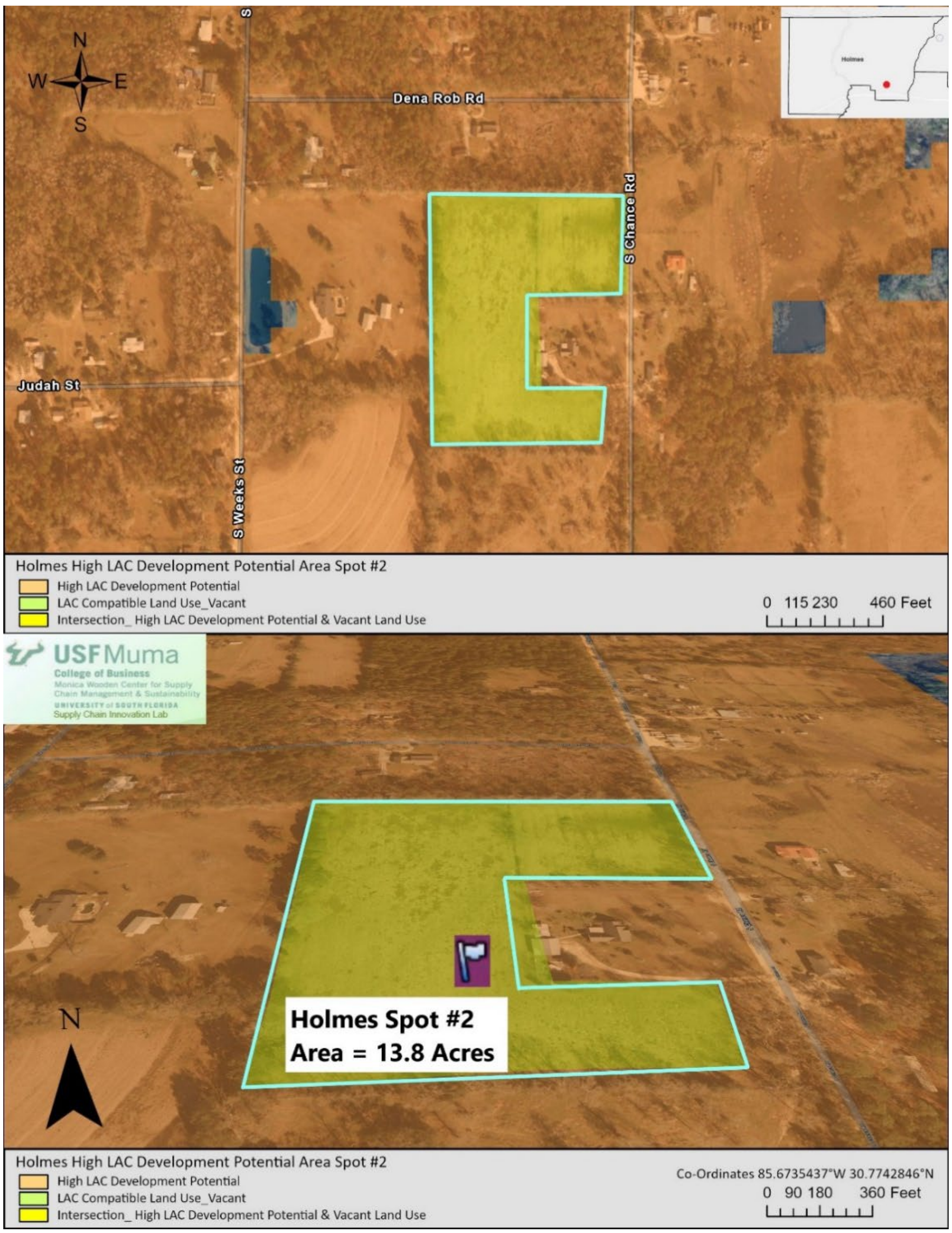

Figure B 113. Holmes County Spot 2

HOLMES SPOT #3

As per the criteria developed in this study, this 18.9-acre land parcel in the below image (Figure B 114) located in Bonifay, FL at the intersection of E Nebraska Ave and Joe White Rd has high LAC development potential in the Holmes County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

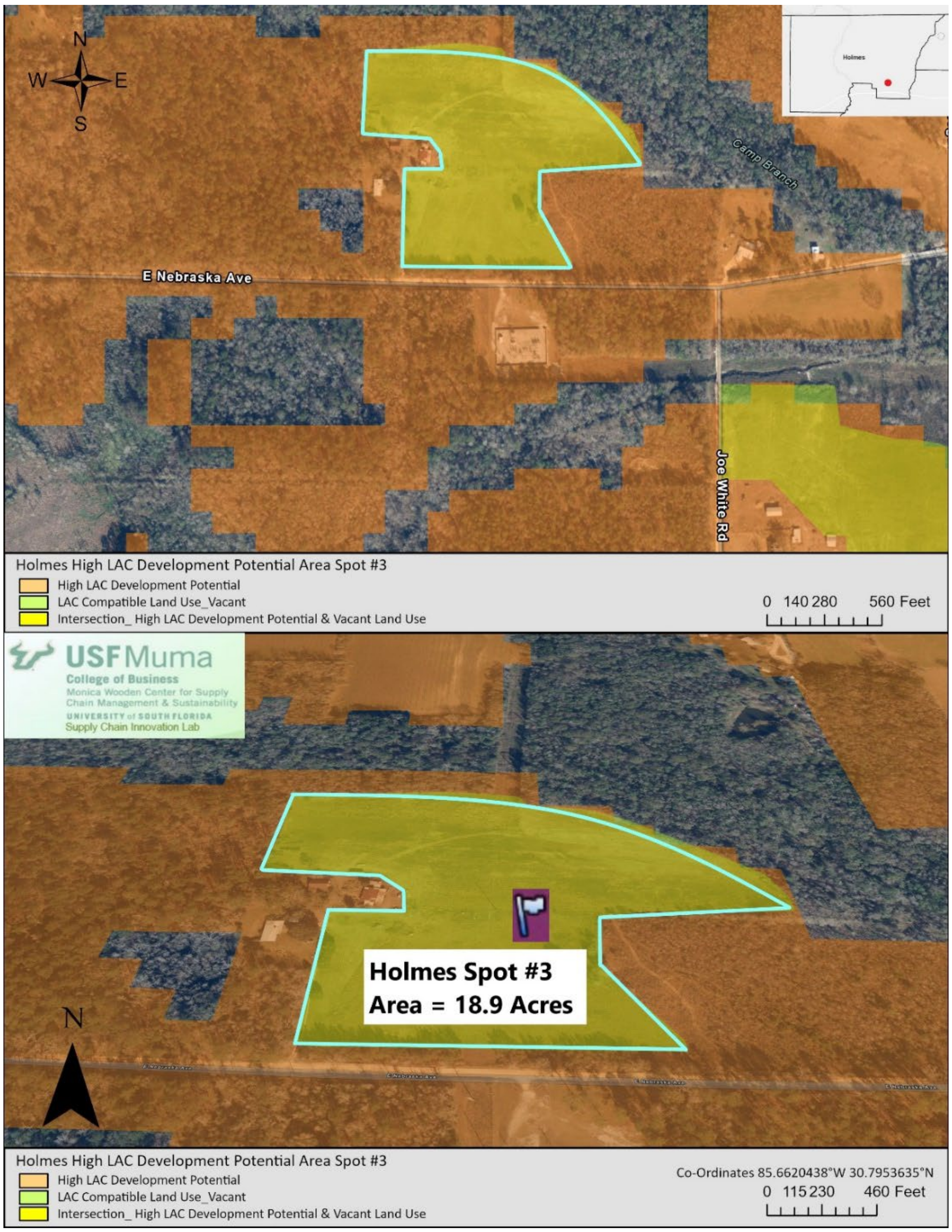

Figure B 114. Holmes County Spot 3

HOLMES SPOT #4

As per the criteria developed in this study, this 75.3-acre land parcel in the below image (Figure B 115) located in Graceville, FL at the intersection of C&M Rd and Selma Church Rd has moderate LAC development potential in the Holmes County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

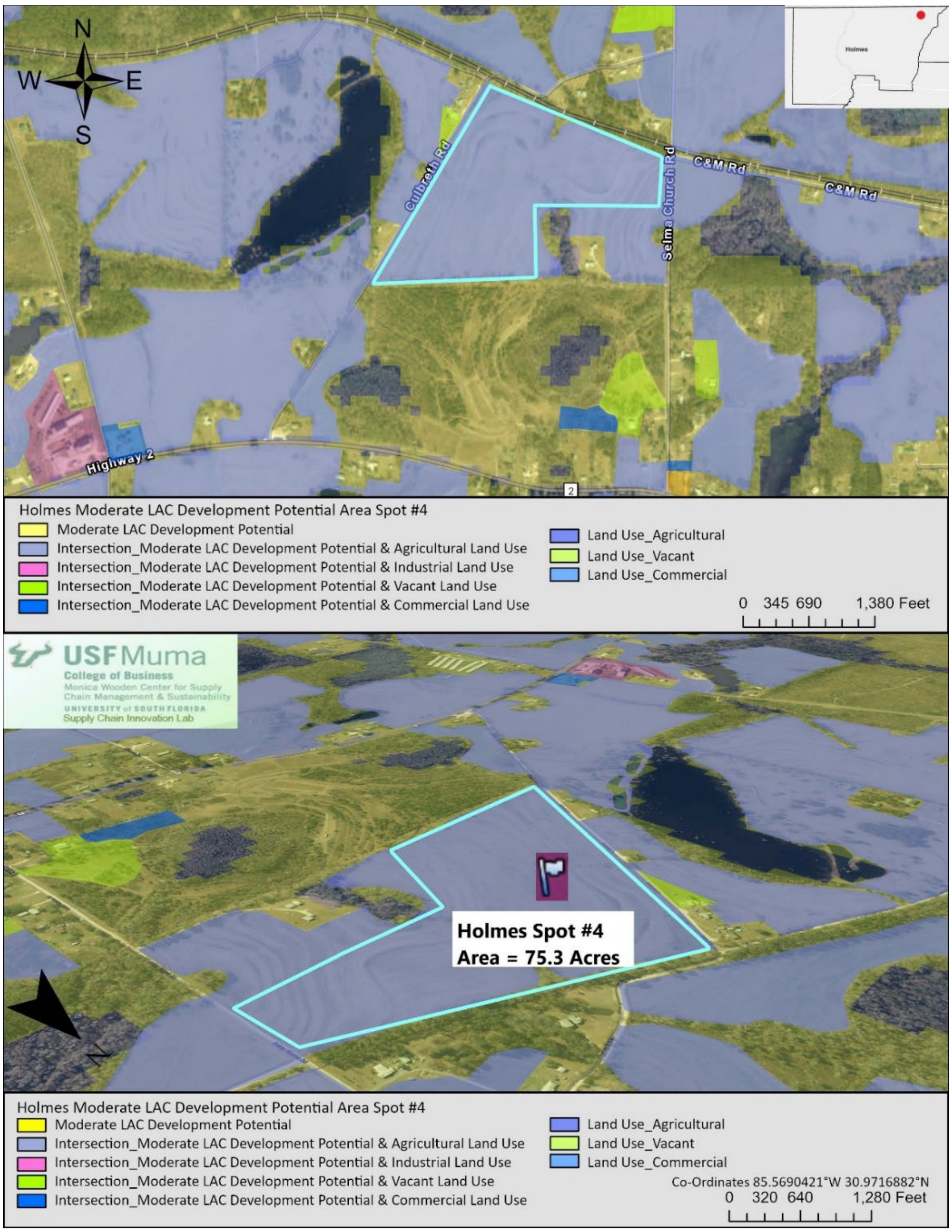

Figure B 115. Holmes County Spot 4

HOLMES SPOT #5

As per the criteria developed in this study, this 23.5-acre land parcel in the below image (Figure B 116) located in Graceville, FL at the intersection of Highway 2 and Highway 173 has moderate LAC development potential in the Holmes County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands, which makes it suitable for re-zoning.

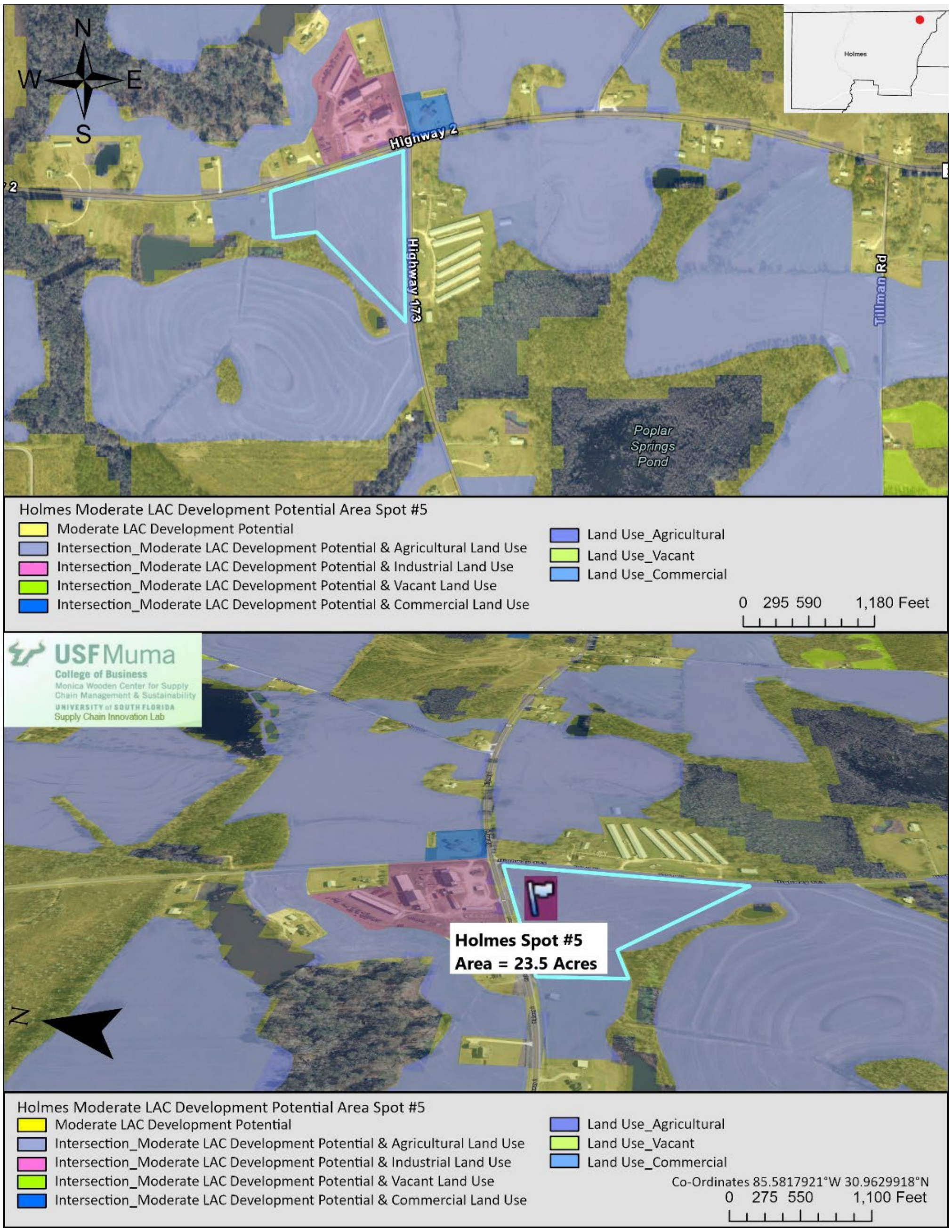

Figure B 116. Holmes County Spot 5

Indian River County

INDIAN RIVER SPOT #2

As per the criteria developed in this study, this 25.3-acre land parcel in the below image (Figure B 117) located near the Vero Beach Regional Airport at the intersection of 41st St and 56th Ave has high LAC development potential in the Indian River County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

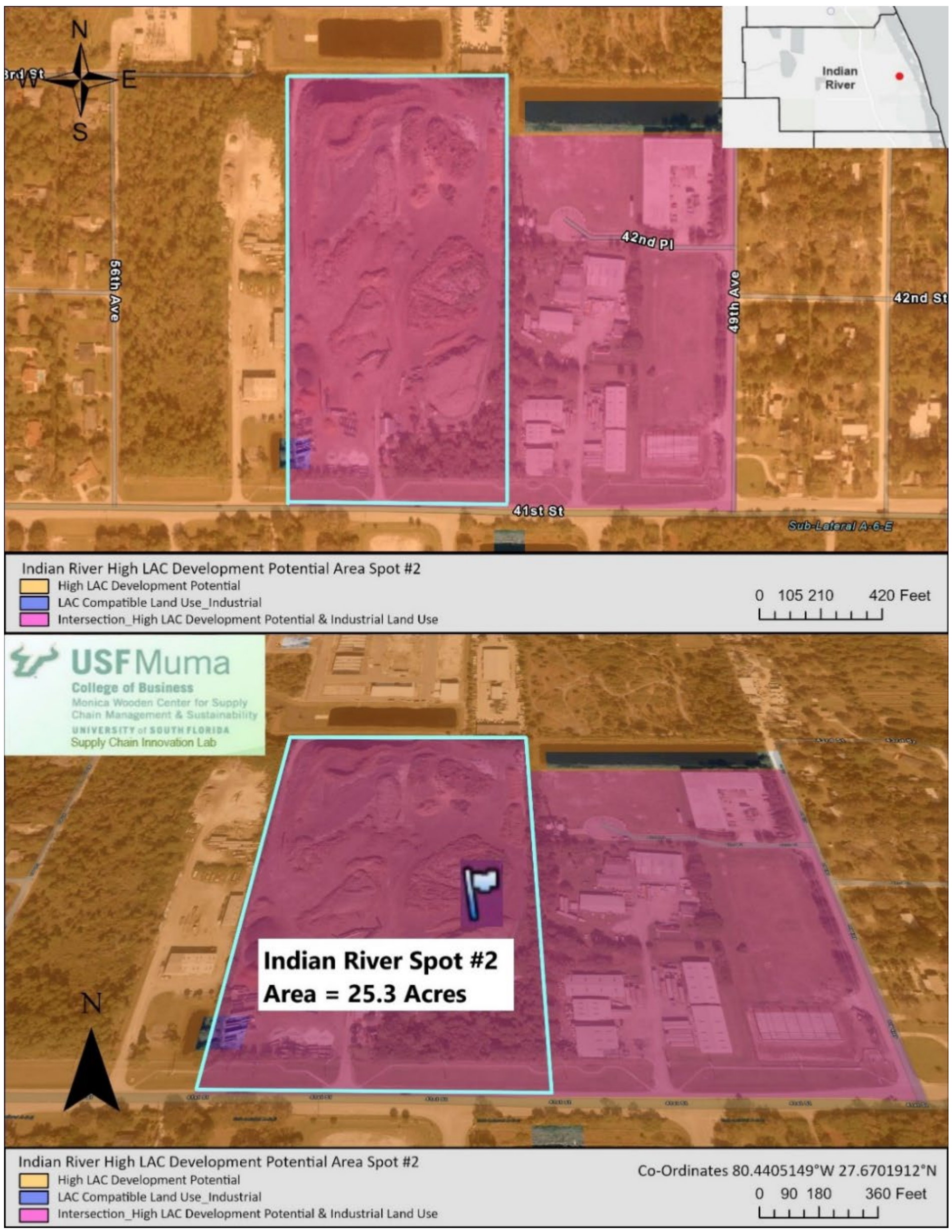

Figure B 117. Indian River County Spot 2

INDIAN RIVER SPOT #3

As per the criteria developed in this study, this 16.2-acre land parcel in the below image (Figure B 118) located near the Vero Beach Regional Airport at the intersection of 29th Ct and 51st Pl has high LAC development potential in the Indian River County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

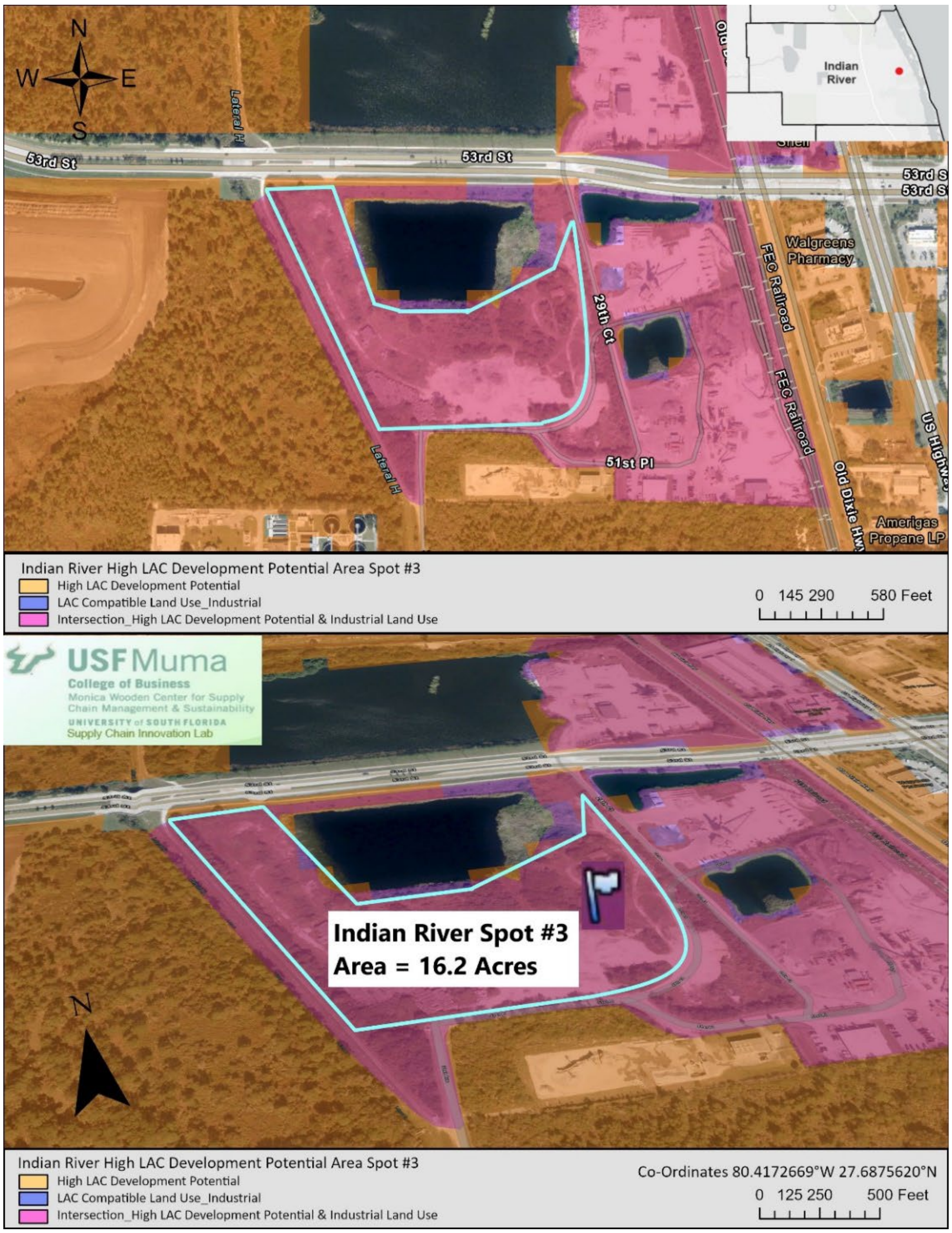

Figure B 118. Indian River County Spot 3

INDIAN RIVER SPOT #4

As per the criteria developed in this study, this 53-acre land parcel in the below image (Figure B 119) located near the Vero Beach Outlets at the intersection of 16th St and 98th Ave has moderate LAC development potential in the Indian River County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

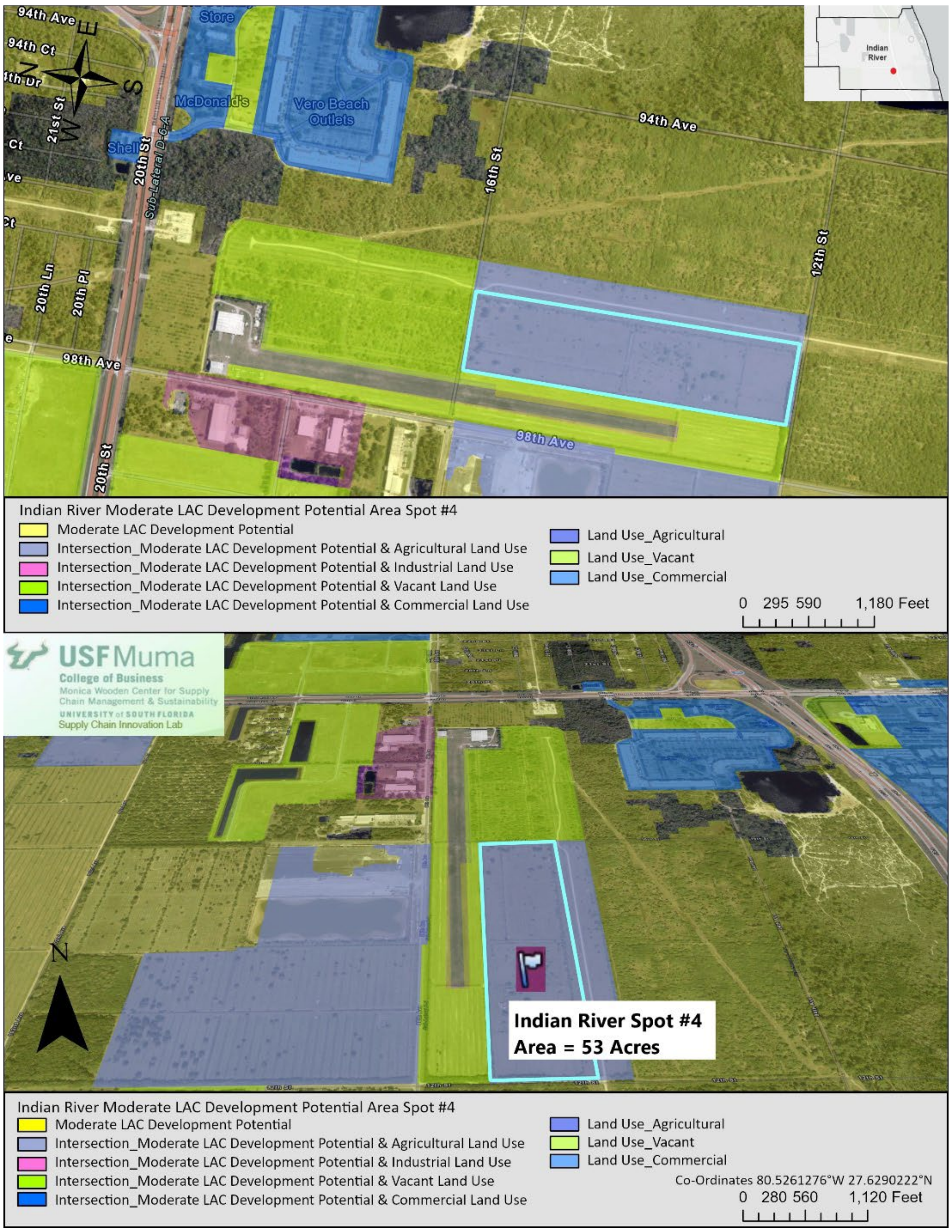

Figure B 119. Indian River County Spot 4

INDIAN RIVER SPOT #5

As per the criteria developed in this study, this 8.5-acre land parcel in the below image (Figure B 120) located near the Sebastian-Roseland Municipal Airport at the intersection of 130th St and 79th Ave has high LAC development potential in the Indian River County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 120. Indian River County Spot 5

Jackson County

JACKSON SPOT #2

As per the criteria developed in this study, this 17-acre land parcel in the below image (Figure B 121) located in Cottondale, FL at the intersection of Highway 231 and Barber Rd has very high LAC development potential in the Jackson County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

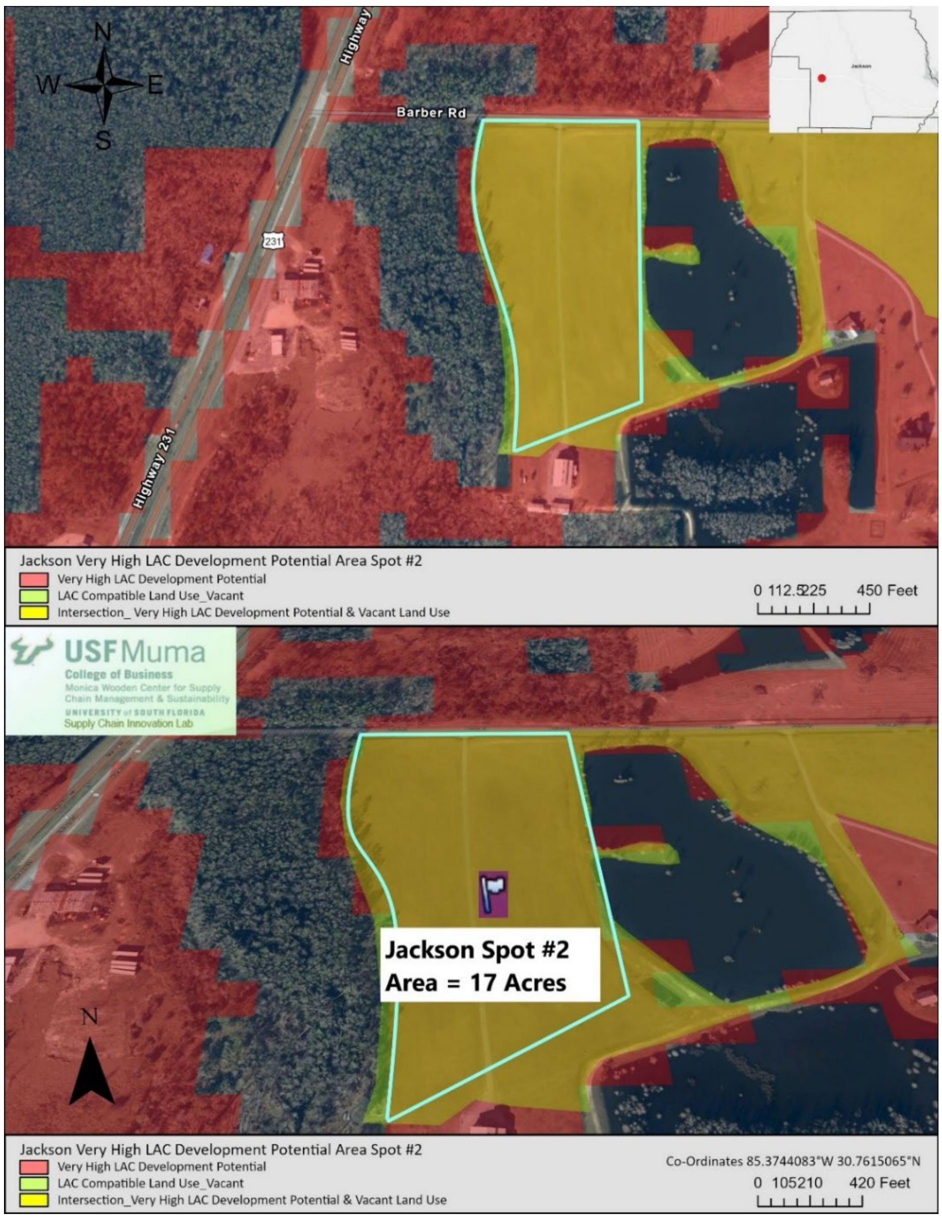

Figure B 121. Jackson County Spot 2

JACKSON SPOT #3

As per the criteria developed in this study, this 20.4-acre land parcel in the below image (Figure B 122) located in Cottondale, FL at the intersection of Highway 90 and Cumbaa Rd has high LAC development potential in the Jackson County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

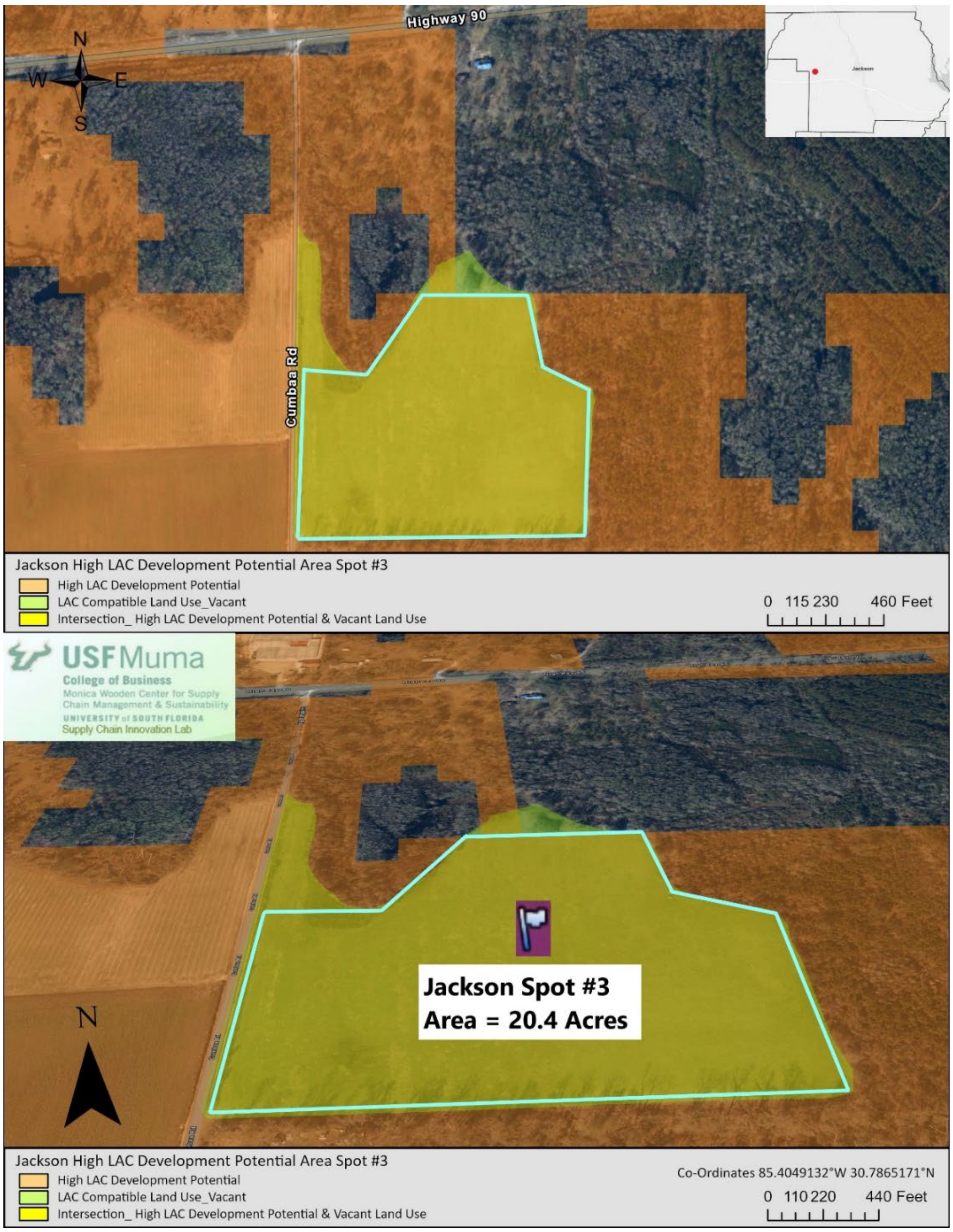

Figure B 122. Jackson County Spot 3

JACKSON SPOT #4

As per the criteria developed in this study, this 31.8-acre land parcel in the below image (Figure B 123) located in Campbellton, FL at the intersection of Highway 231 and Fernwood St has moderate LAC development potential in the Jackson County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

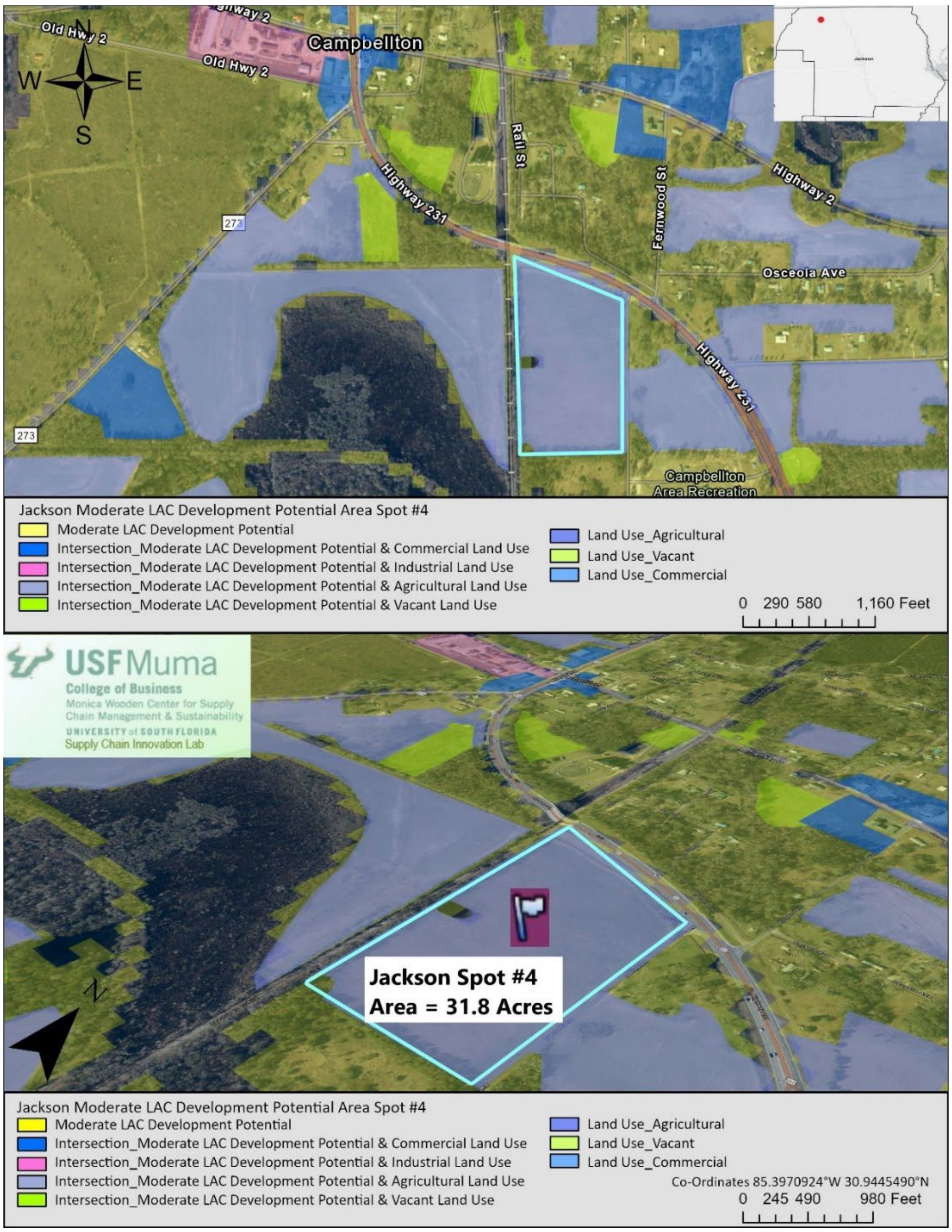

Figure B 123. Jackson County Spot 4

JACKSON SPOT #5

As per the criteria developed in this study, this 16.3-acre land parcel in the below image (Figure B 124) located in Campbellton, FL at the intersection of Old Highway 2 and Hwy 2 has moderate LAC development potential in the Jackson County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

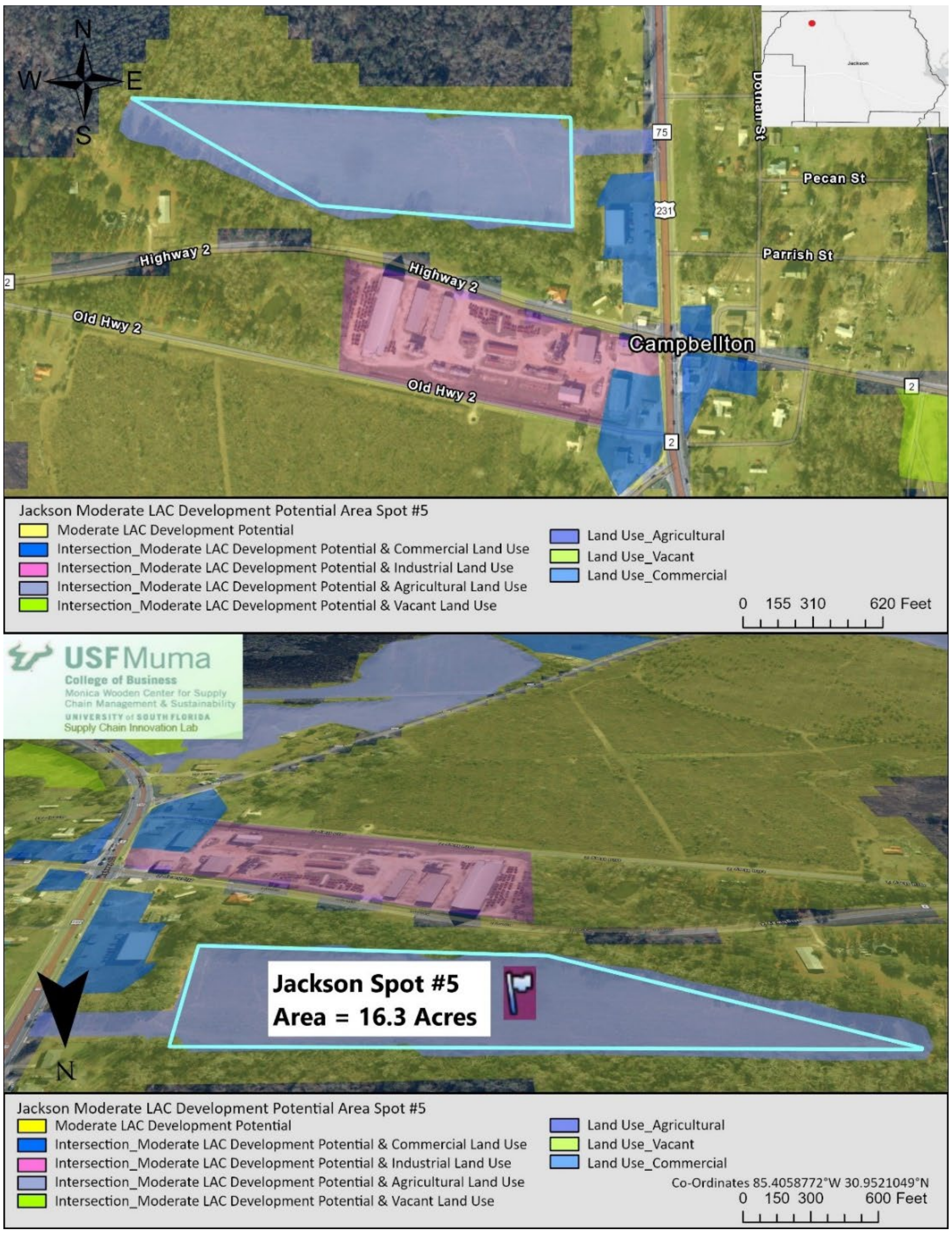

Figure B 124. Jackson County Spot 5

Jefferson County

JEFFERSON SPOT #2

As per the criteria developed in this study, this 10.7-acre land parcel in the below image (Figure B 125) located in Monticello, FL at the intersection of E Glenn Rd and Pinney Woods Rd has high LAC development potential in the Jefferson County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 125. Jefferson County Spot 2

JEFFERSON SPOT #3

As per the criteria developed in this study, this 46.7-acre land parcel in the below image (Figure B 126) located in Monticello, FL at the intersection of W Glenn Rd and Pinney Woods Rd has moderate LAC development potential in the Jefferson County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 126. Jefferson County Spot 3

JEFFERSON SPOT #4

As per the criteria developed in this study, this 25.5-acre land parcel in the below image (Figure B 127) located in Monticello, FL near the intersection of Aucilla Rd and Old Drifton Rd has high LAC development potential in the Jefferson County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

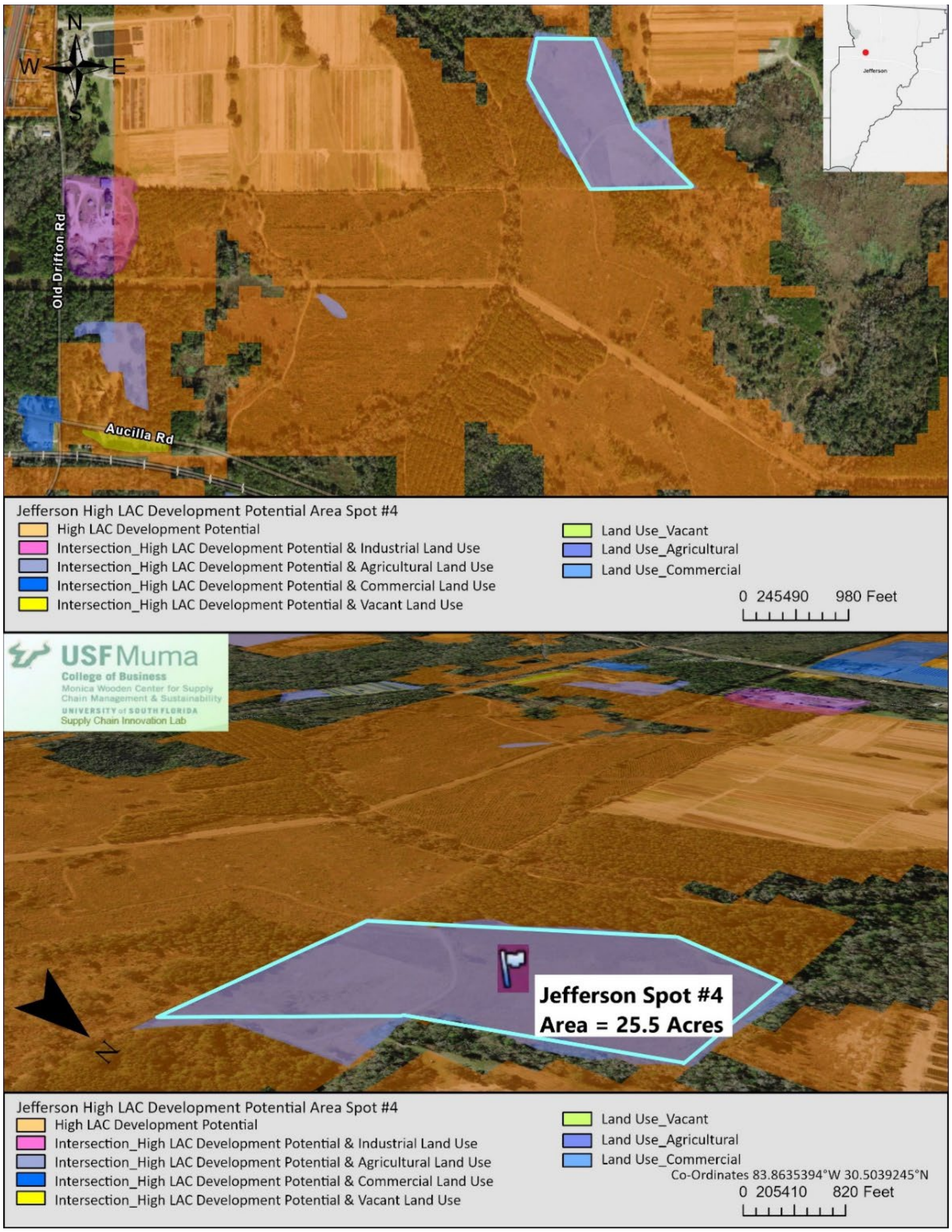

Figure B 127. Jefferson County Spot 4

JEFFERSON SPOT #5

As per the criteria developed in this study, this 47.5-acre land parcel in the below image (Figure B 128) located in Monticello, FL at the intersection of Phelps Rd and Old Drifton Rd has high LAC development potential in the Jefferson County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

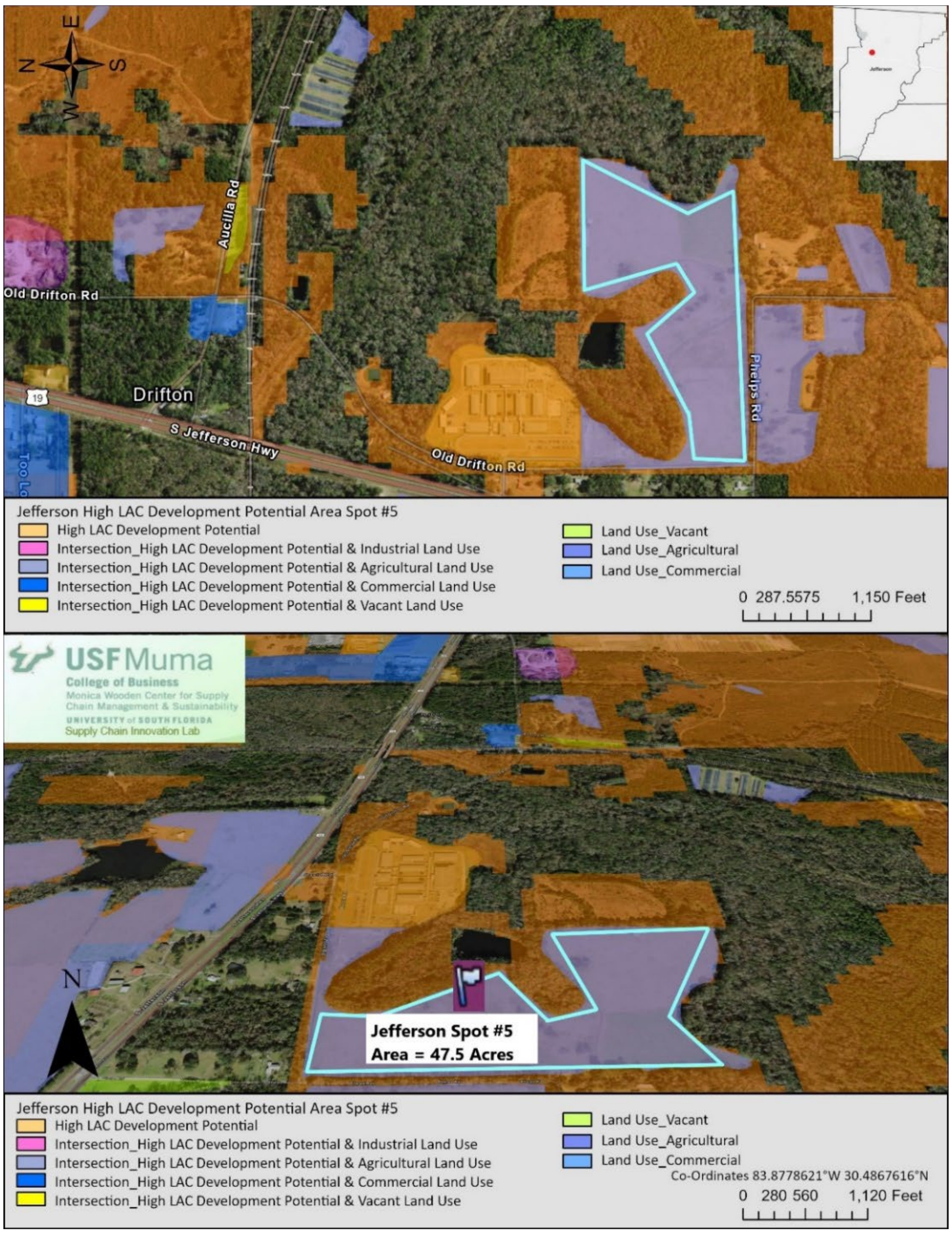

Figure B 128. Jefferson County Spot 5

Lafayette County

LAFAYETTE SPOT #2

As per the criteria developed in this study, this 7.5-acre land parcel in the below image (Figure B 129) located in Mayo, FL at the intersection of SW Rocky Pit Rd and W US 27 has moderate LAC development potential in the Lafayette County. It is less than 2.5 miles from State roads, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

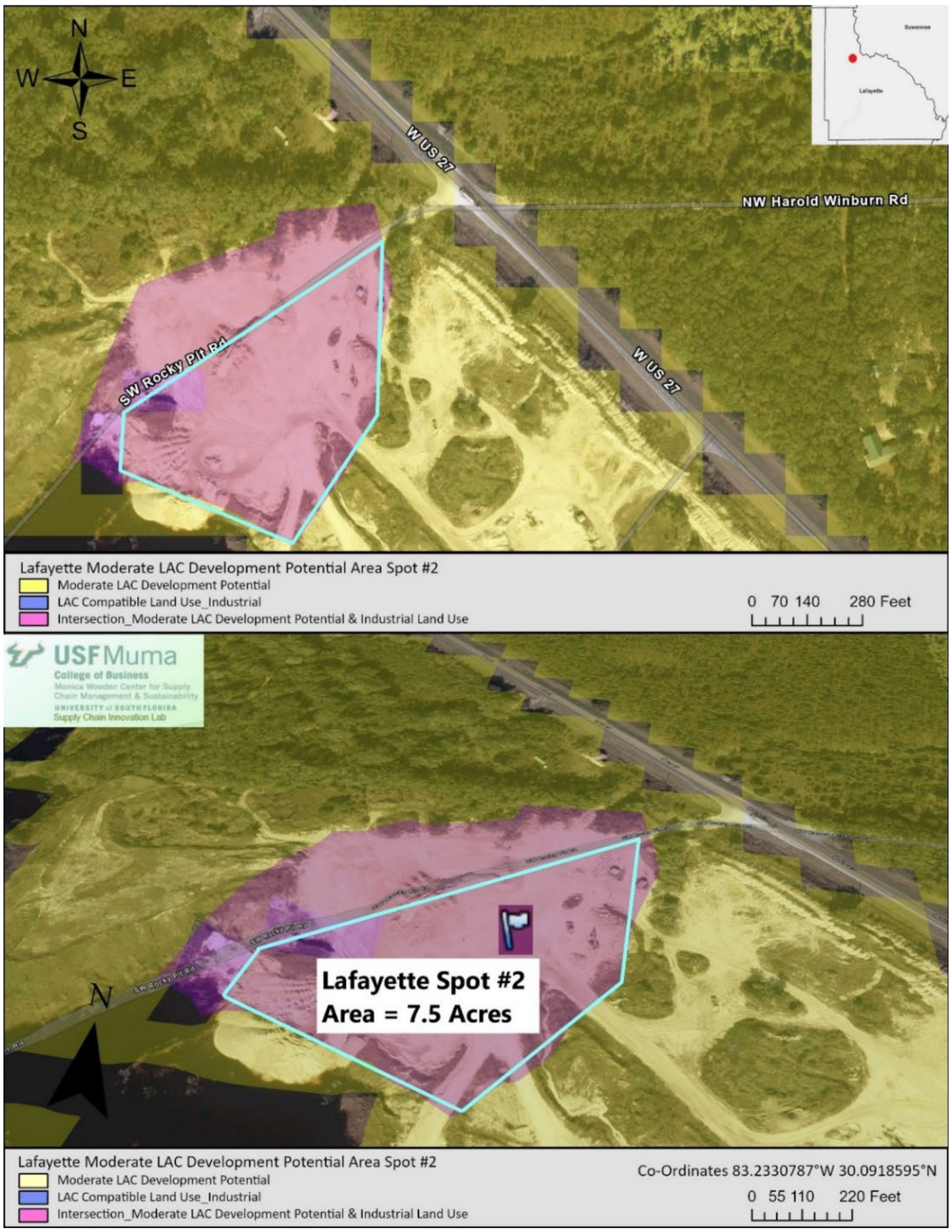

Figure B 129. Lafayette County Spot 2

LAFAYETTE SPOT #3

As per the criteria developed in this study, this 42.5-acre land parcel in the below image (Figure B 130) located in Mayo, FL at the intersection of NW Pacific Rd and NW Lafayette Ave has moderate LAC development potential in the Lafayette County. It is less than 2.5 miles from State roads, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 130. Lafayette County Spot 3

LAFAYETTE SPOT #4

As per the criteria developed in this study, this 205-acre land parcel in the below image (Figure B 131) located in Mayo, FL at the intersection of SW Independence Rd and SW County Road 534 has moderate LAC development potential in the Lafayette County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

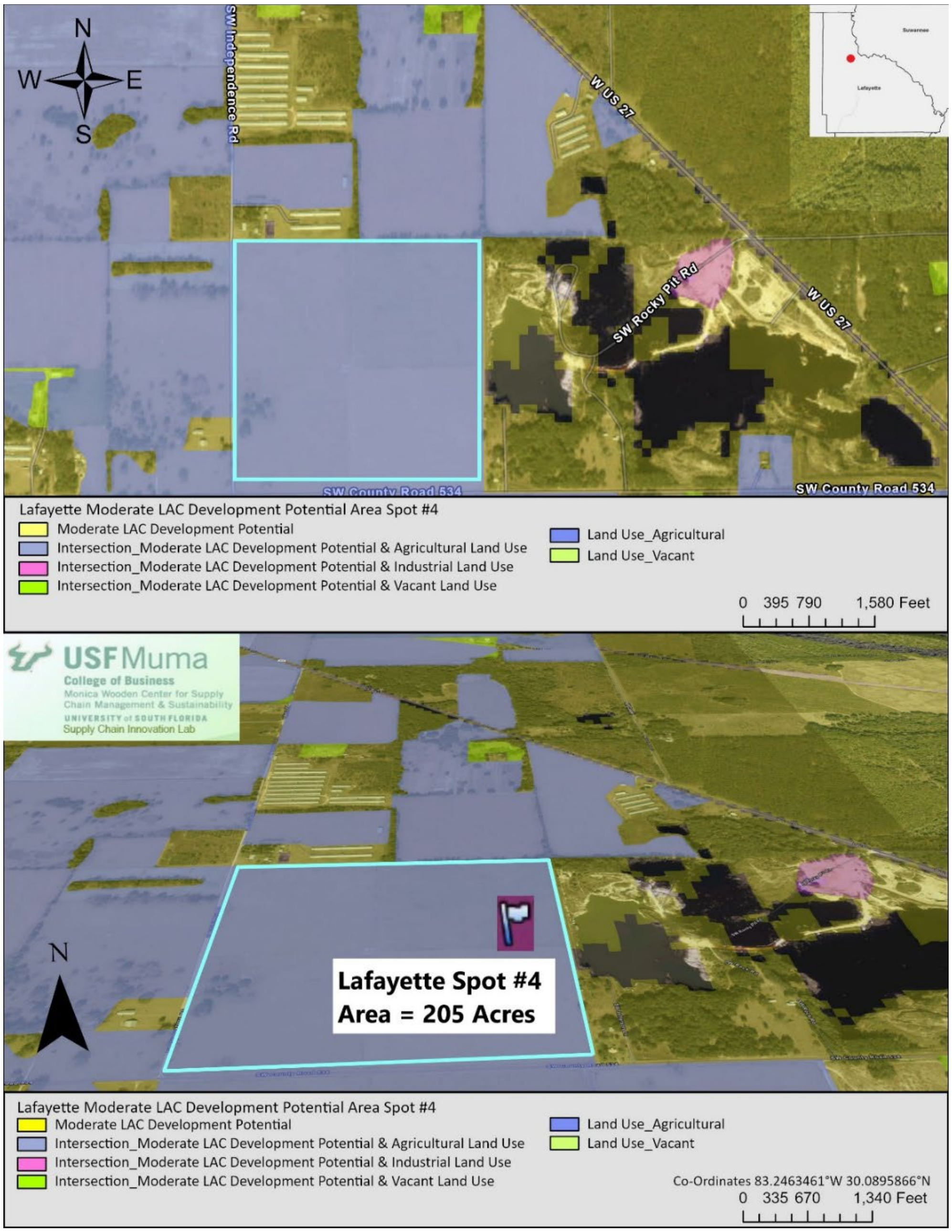

Figure B 131. Lafayette County Spot 4

LAFAYETTE SPOT #5

As per the criteria developed in this study, this 80-acre land parcel in the below image (Figure B 132) located in Mayo, FL at the intersection of E US 27 and SE Wayfare Rd has moderate LAC development potential in the Lafayette County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

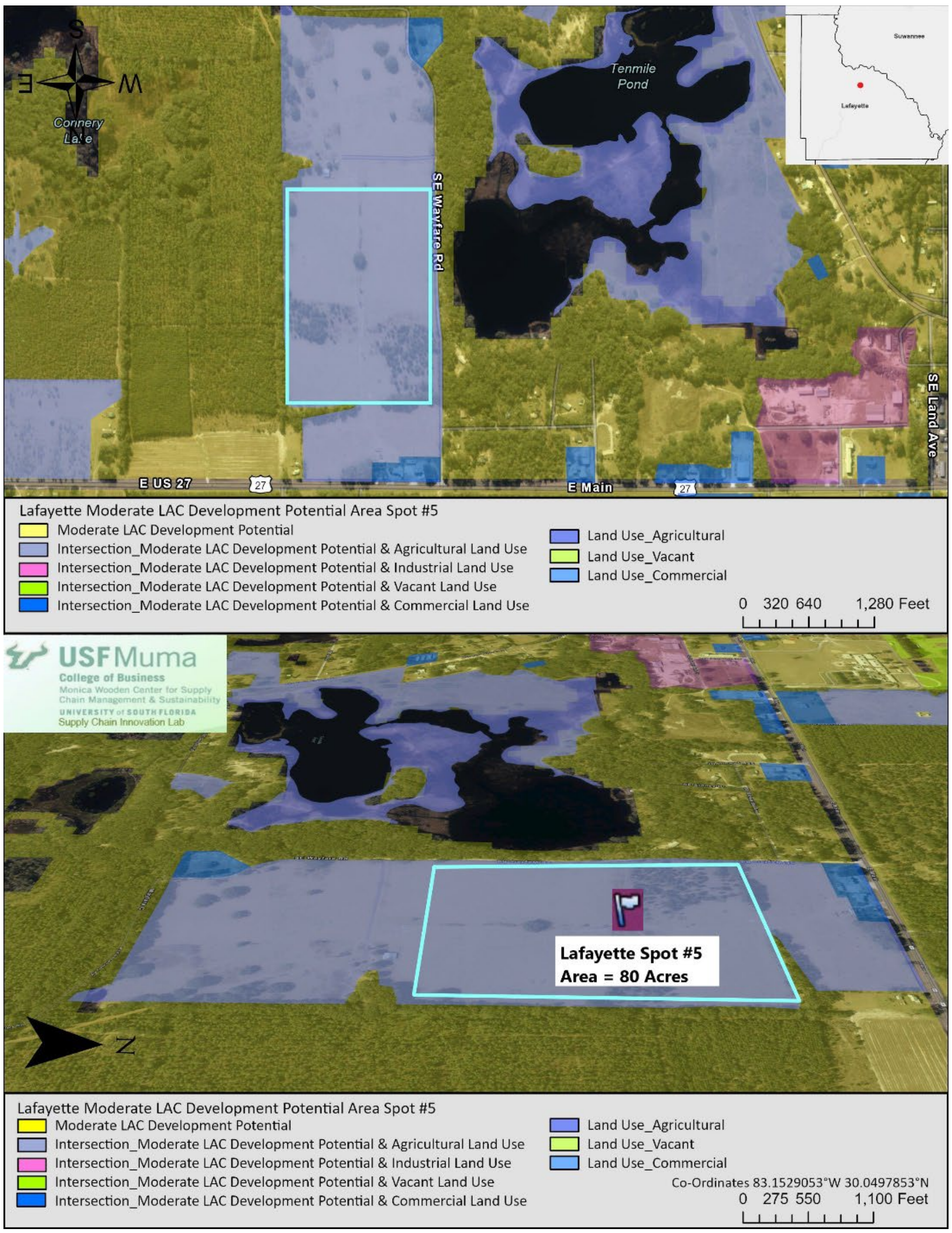

Figure B 132. Lafayette County Spot 5

Lake County

LAKE SPOT #2

As per the criteria developed in this study, this 24.5-acre land parcel in the below image (Figure B 133) located in Groveland, FL industrial area at the intersection of State Road 19 and Allegiance Ct has very high LAC development potential in the Lake County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 10 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

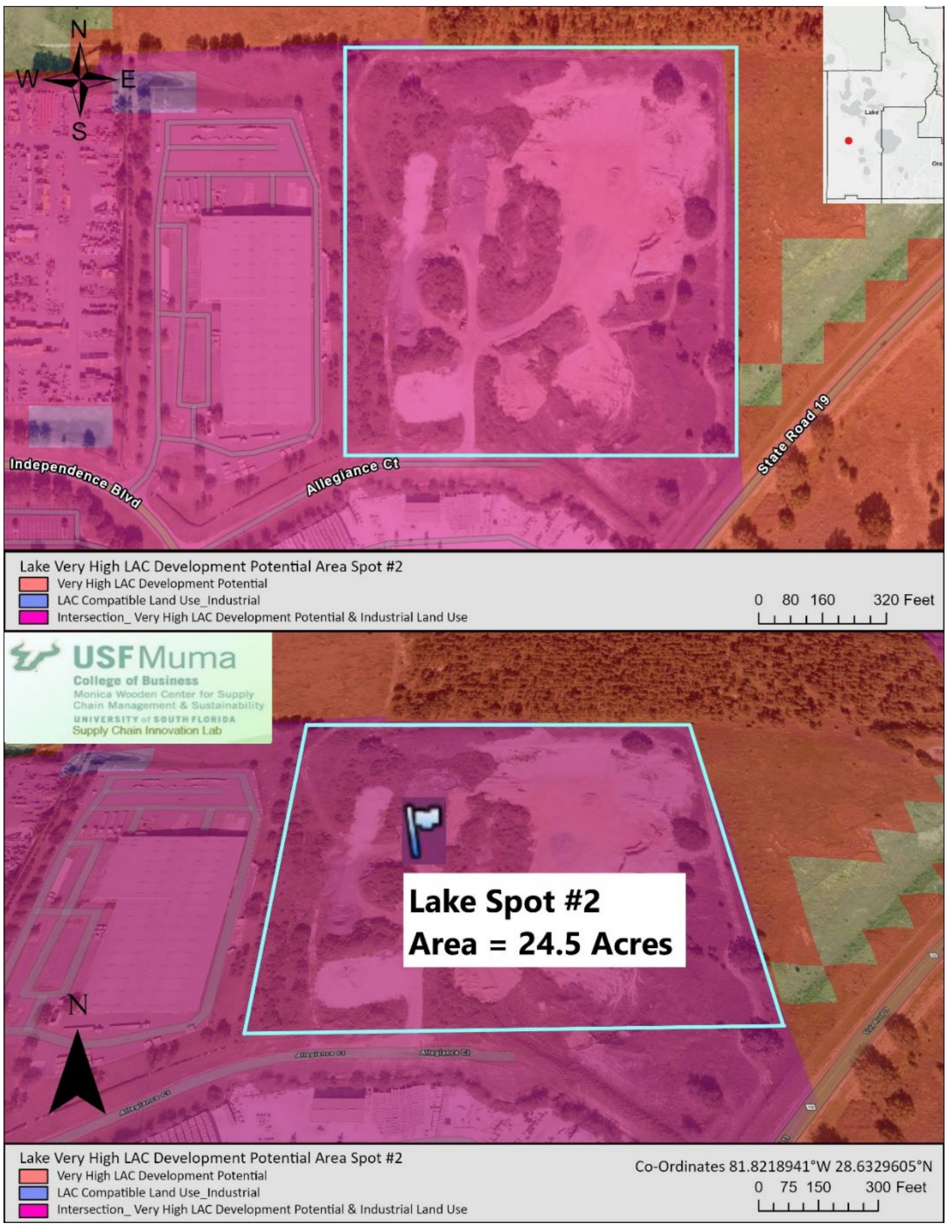

Figure B 133. Lake County Spot 2

LAKE SPOT #3

As per the criteria developed in this study, this 18.3-acre land parcel in the below image (Figure B 134) located in Leesburg, FL at the intersection of County Road 33 and 1st St has very high LAC development potential in the Lake County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 10 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

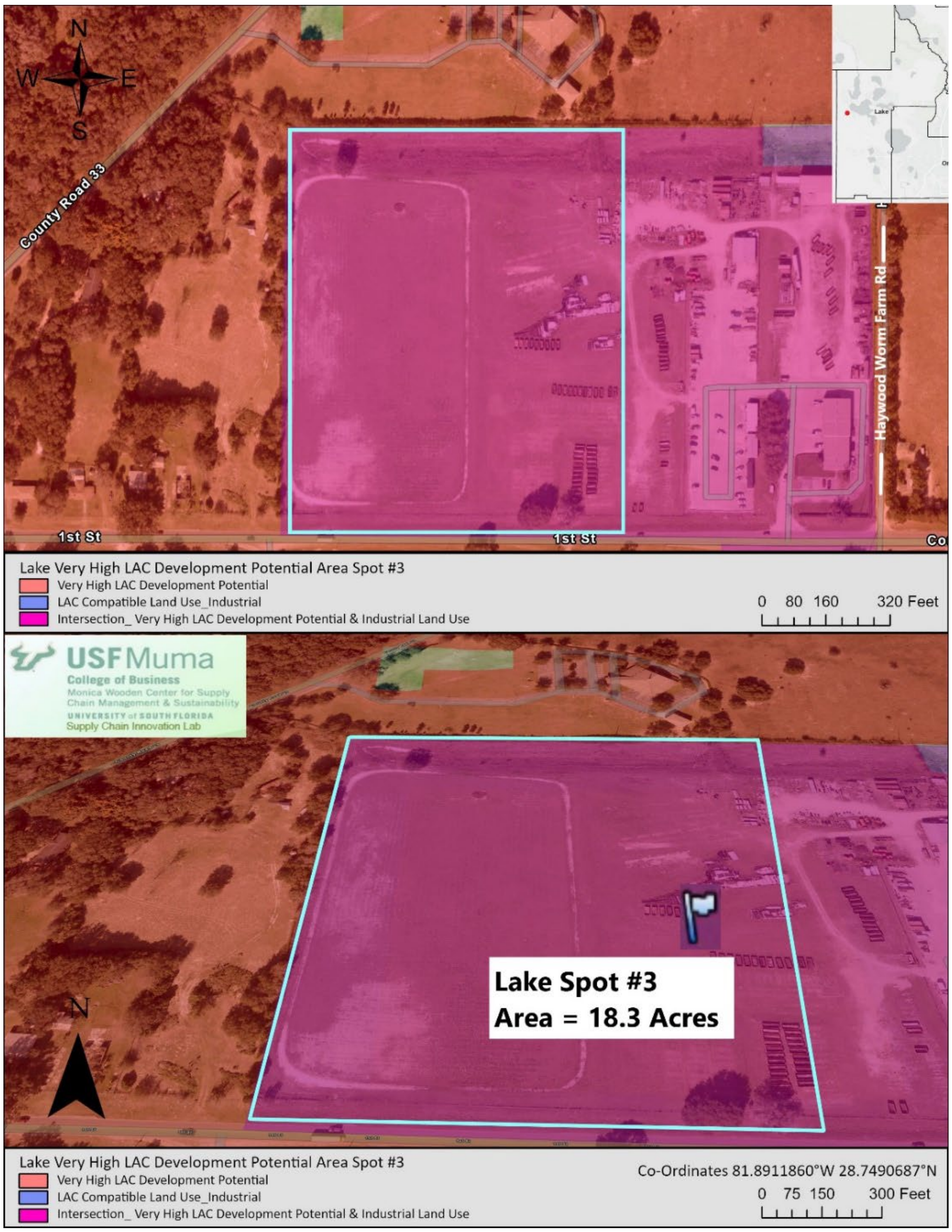

Figure B 134. Lake County Spot 3

LAKE SPOT #4

As per the criteria developed in this study, this 35.8-acre land parcel in the below image (Figure B 135) located in Groveland, FL at the intersection of State Road 50 and Sampey Rd has very high LAC development potential in the Lake County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

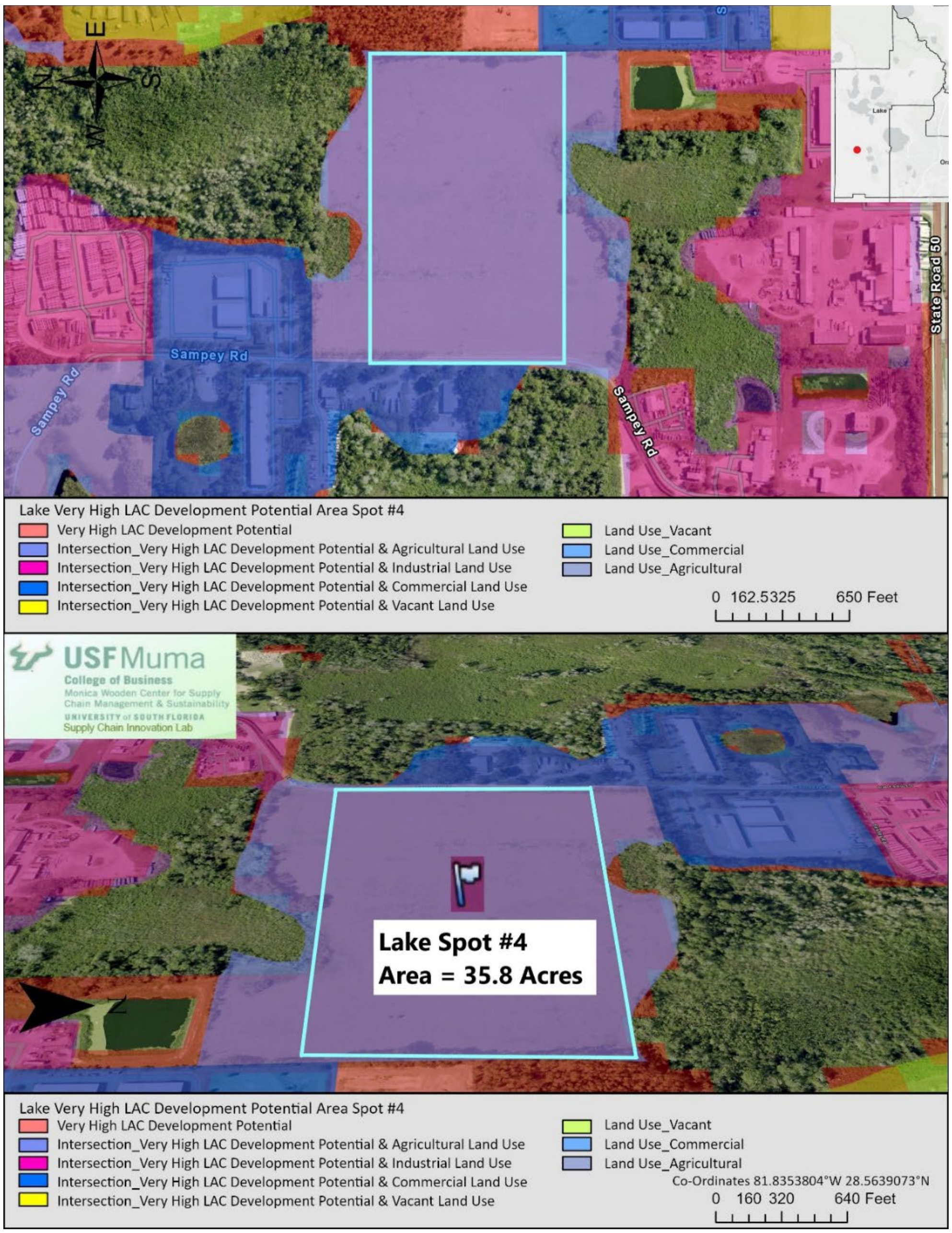

Figure B 135. Lake County Spot 4

LAKE SPOT #5

As per the criteria developed in this study, this 70.7-acre land parcel in the below image (Figure B 136) located in Groveland, FL at the intersection of State Road 19 and S Obrein Rd has very high LAC development potential in the Lake County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

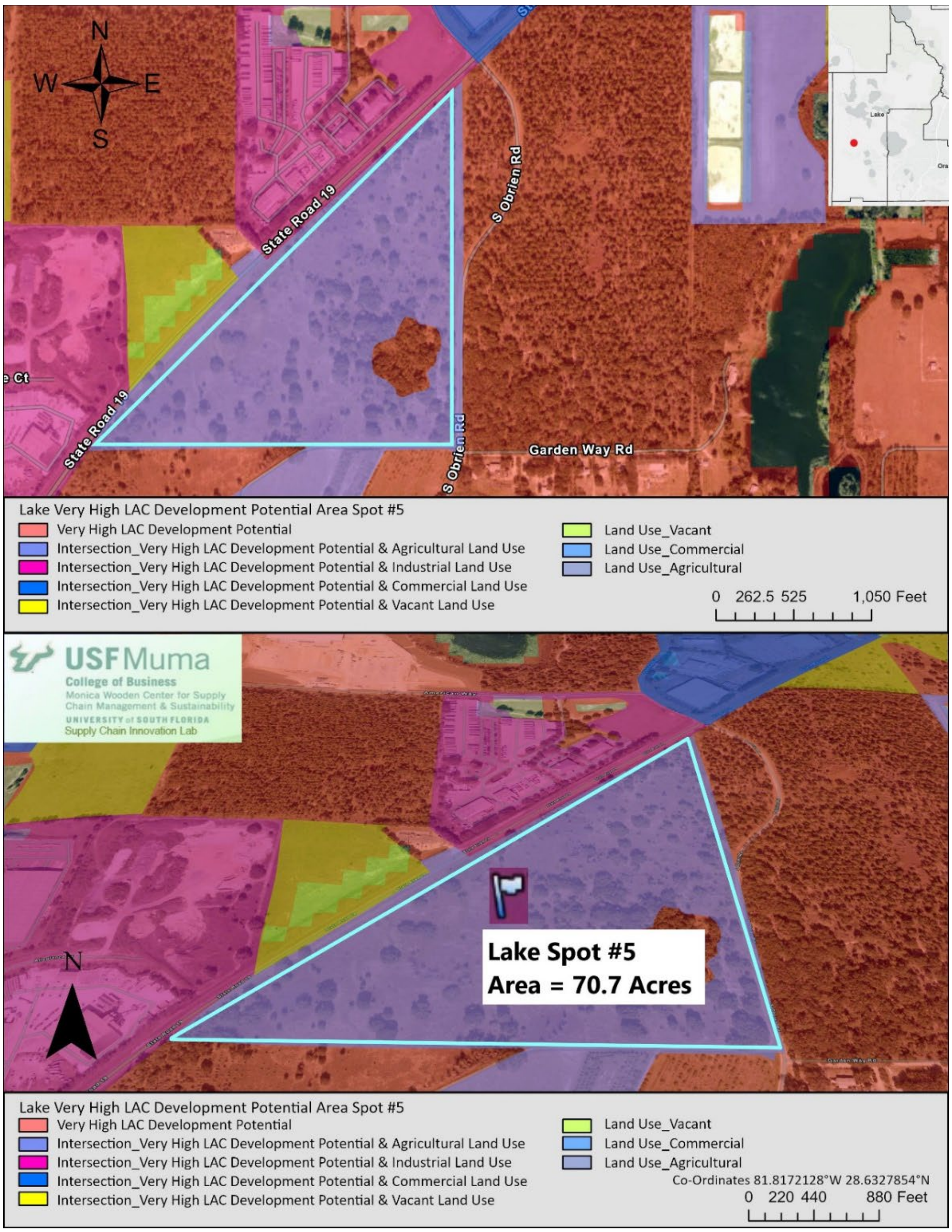

Figure B 136. Lake County Spot 5

Lee County

LEE SPOT #2

As per the criteria developed in this study, this 15.5-acre land parcel in the below image (Figure B 137) located next to Fort Myers Fire Station 14 at the intersection of Benchmark Ave and Cummins Ct has very high LAC development potential in the Lee County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

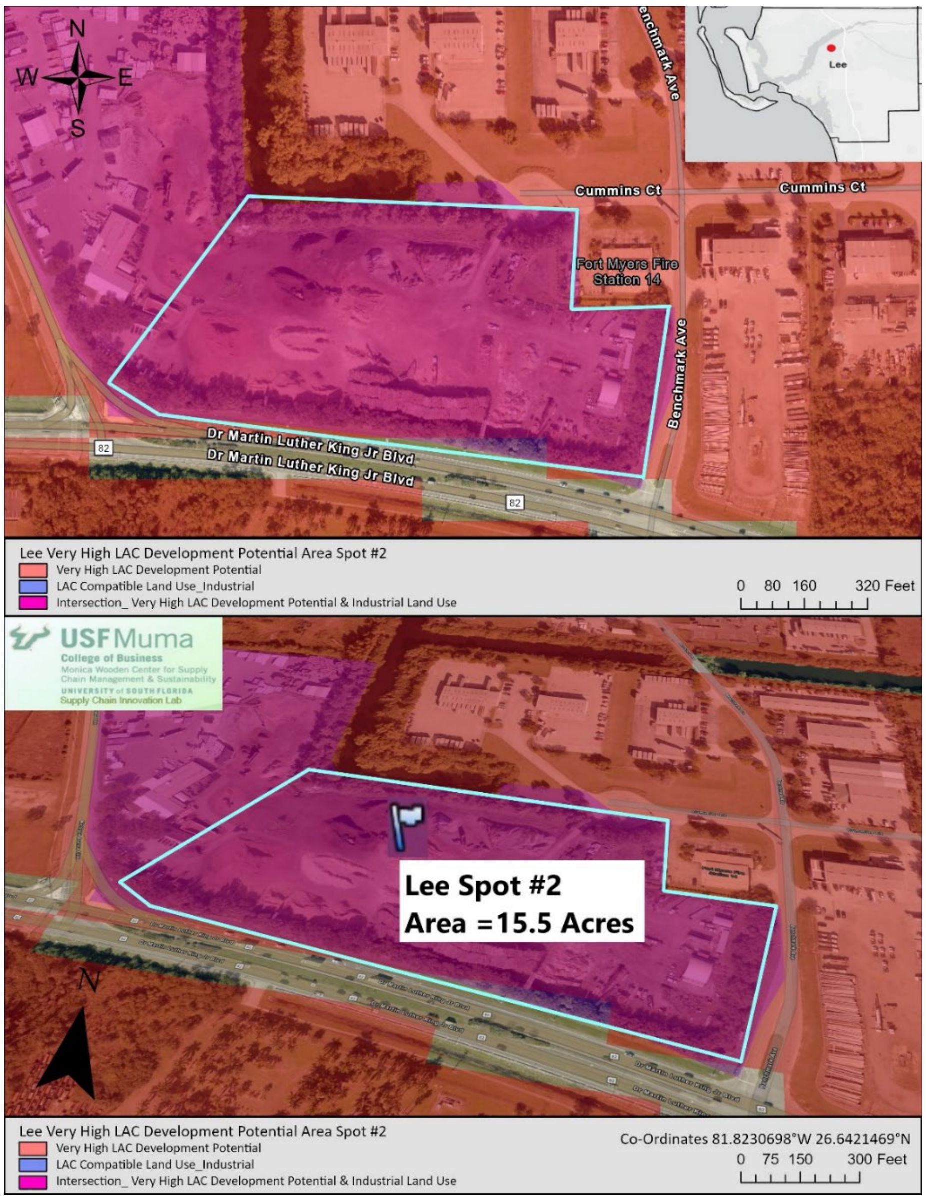

Figure B 137. Lee County Spot 2

LEE SPOT #3

As per the criteria developed in this study, this 237-acre land parcel in the below image (Figure B 138) located at the intersection of Oriole Rd and Alico Rd located next to the Industrial hub on Gator Rd and near the upcoming Amazon Warehouse has very high LAC development potential in the Lee County. It is less than 2.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from the nearest air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

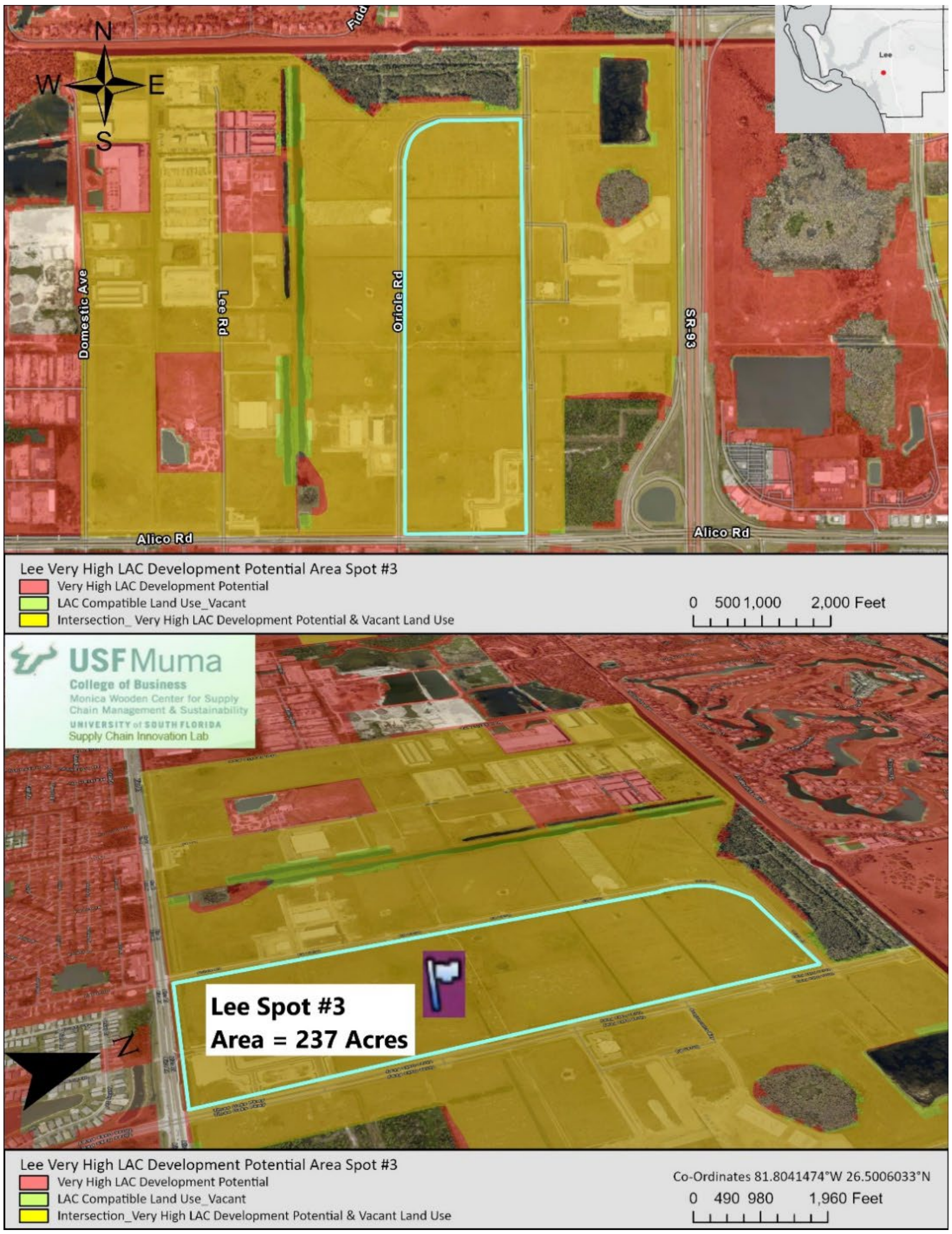

Figure B 138. Lee County Spot 3

LEE SPOT #4

As per the criteria developed in this study, this 6.3-acre land parcel in the below image (Figure B 139) located at the intersection of Hunter St and Old Metro Pkwy has very high LAC development potential in the Lee County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 139. Lee County Spot 4

LEE SPOT #5

As per the criteria developed in this study, this 12.7-acre land parcel in the below image (Figure B 140) located at the intersection of SW Pine Island Rd and SW 19th Ave has high LAC development potential in the Lee County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

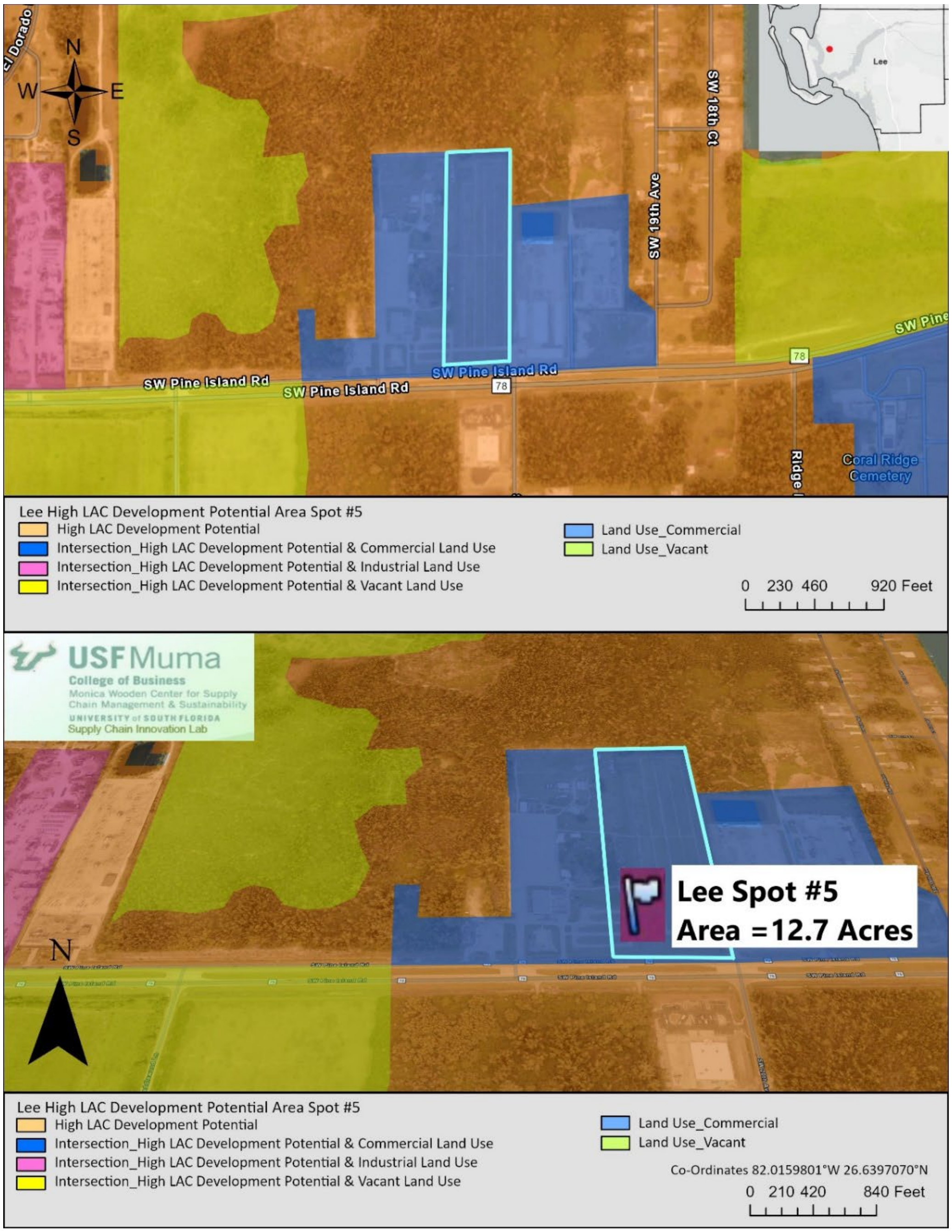

Figure B 140. Lee County Spot 5

Leon County

LEON SPOT #2

As per the criteria developed in this study, this 13.2-acre land parcel in the below image (Figure B 141) located in Tallahassee, FL at the intersection of Assembly Ct and Manufacturer Ct has very high LAC development potential in the Leon County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

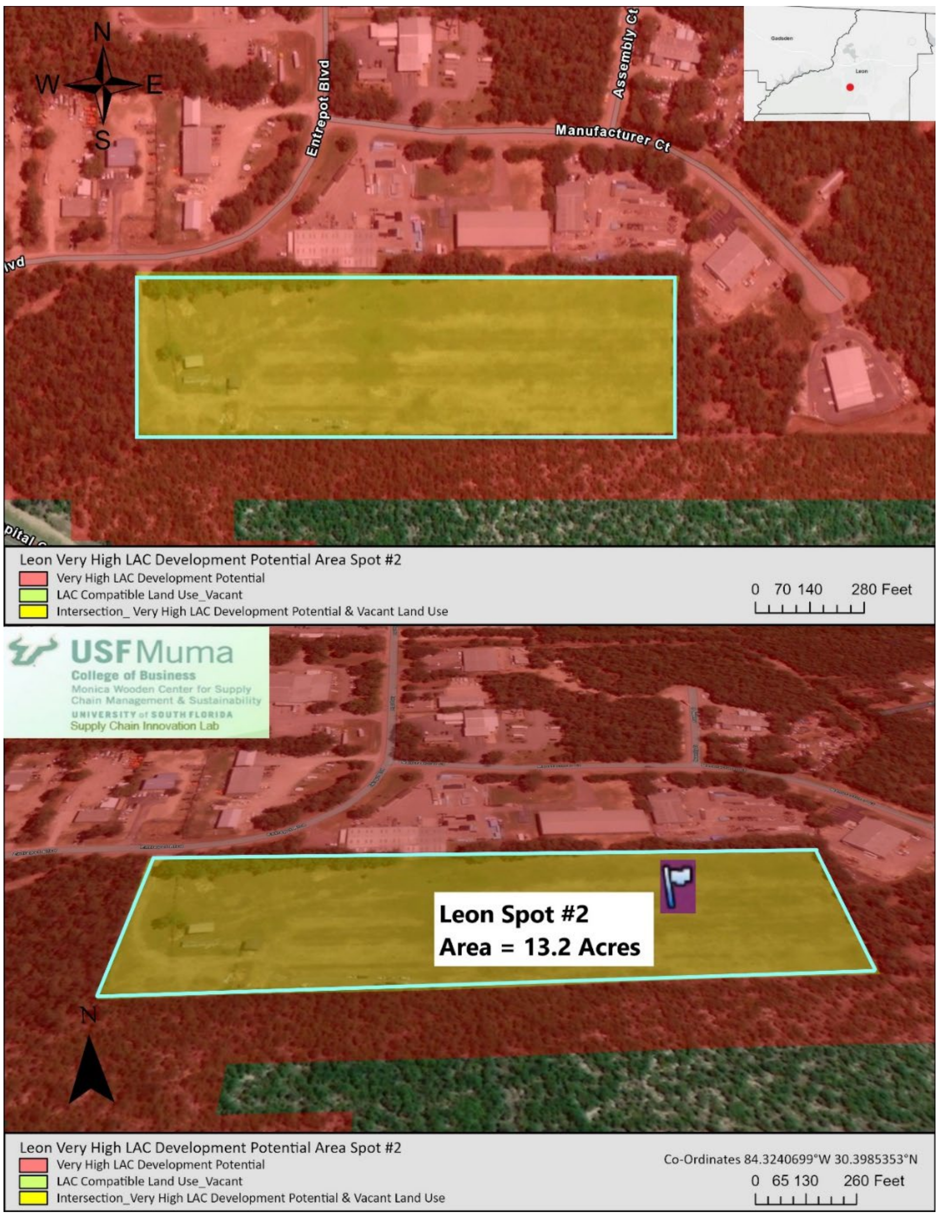

Figure B 141. Leon County Spot 2

LEON SPOT #3

As per the criteria developed in this study, this 10.5-acre land parcel in the below image (Figure B 142) located in Tallahassee, FL at the intersection of E Orange Ave and S Meridian St has very high LAC development potential in the Leon County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, less than 5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure B 142. Leon County Spot 3

LEON SPOT #4

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 143) located in Tallahassee, FL at the intersection of Trails End Ln and Aenon Church Rd has very high LAC development potential in the Leon County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

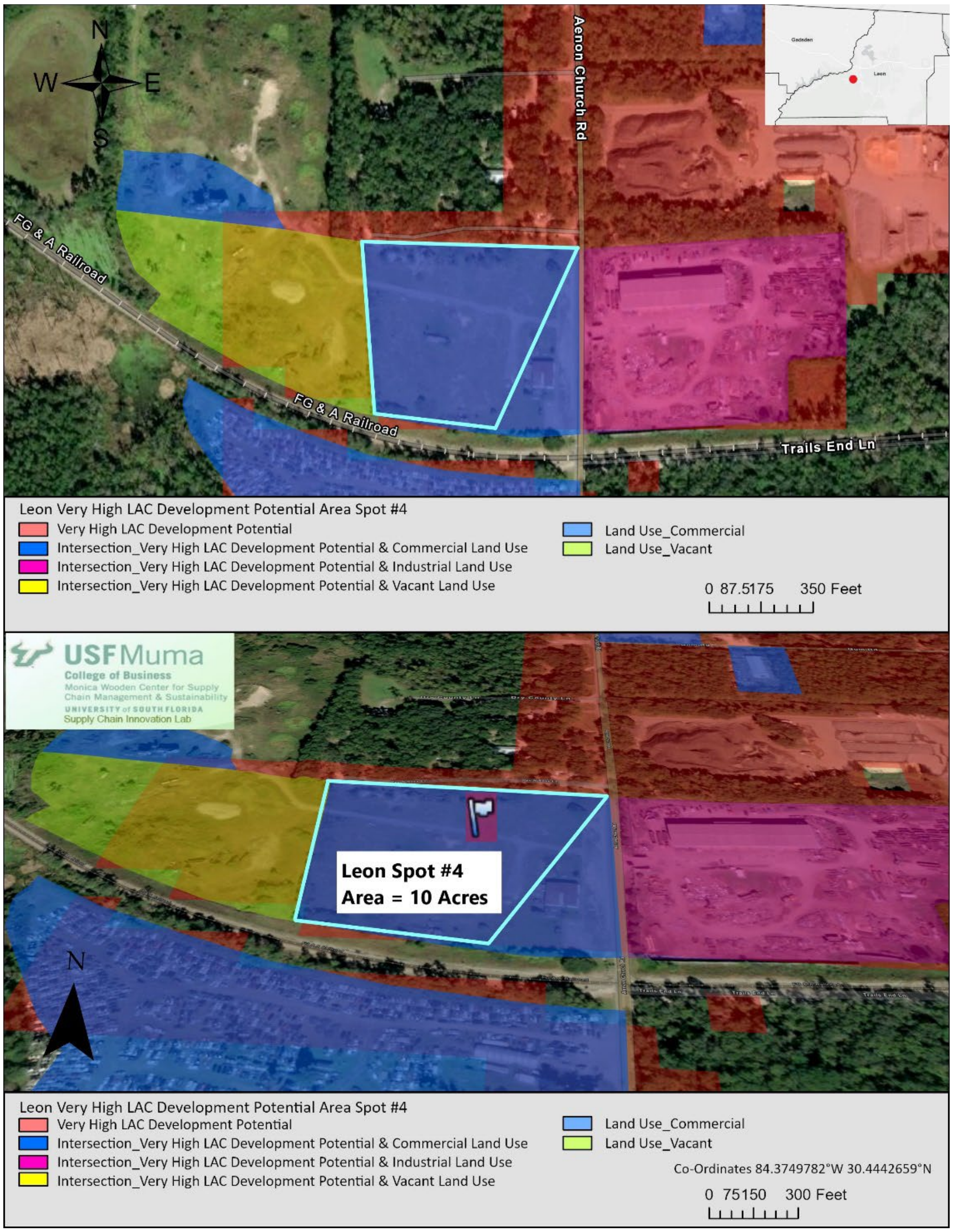

Figure B 143. Leon County Spot 4

LEON SPOT #5

As per the criteria developed in this study, this 10.7-acre land parcel in the below image (Figure B 144) located in Tallahassee, FL at the intersection of Blountstown Hwy and Aenon Church Rd has very high LAC development potential in the Leon County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

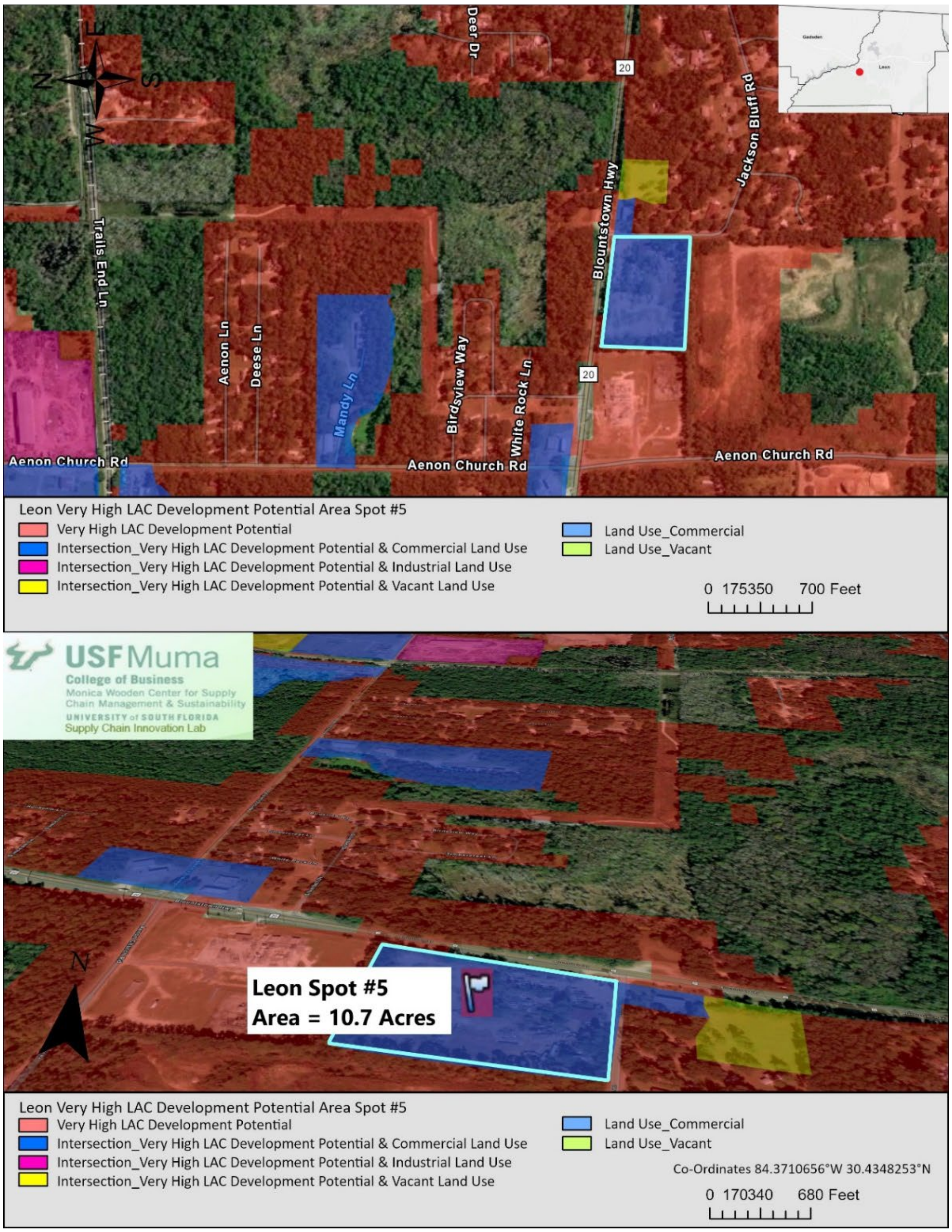

Figure B 144. Leon County Spot 5

Levy County

LEVY SPOT #2

As per the criteria developed in this study, this 11.5-acre land parcel in the below image (Figure B 145) located in Williston, FL near the Williston Municipal Airport at the intersection of NE 35th St and NE Highway 27 has high LAC development potential in the Levy County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

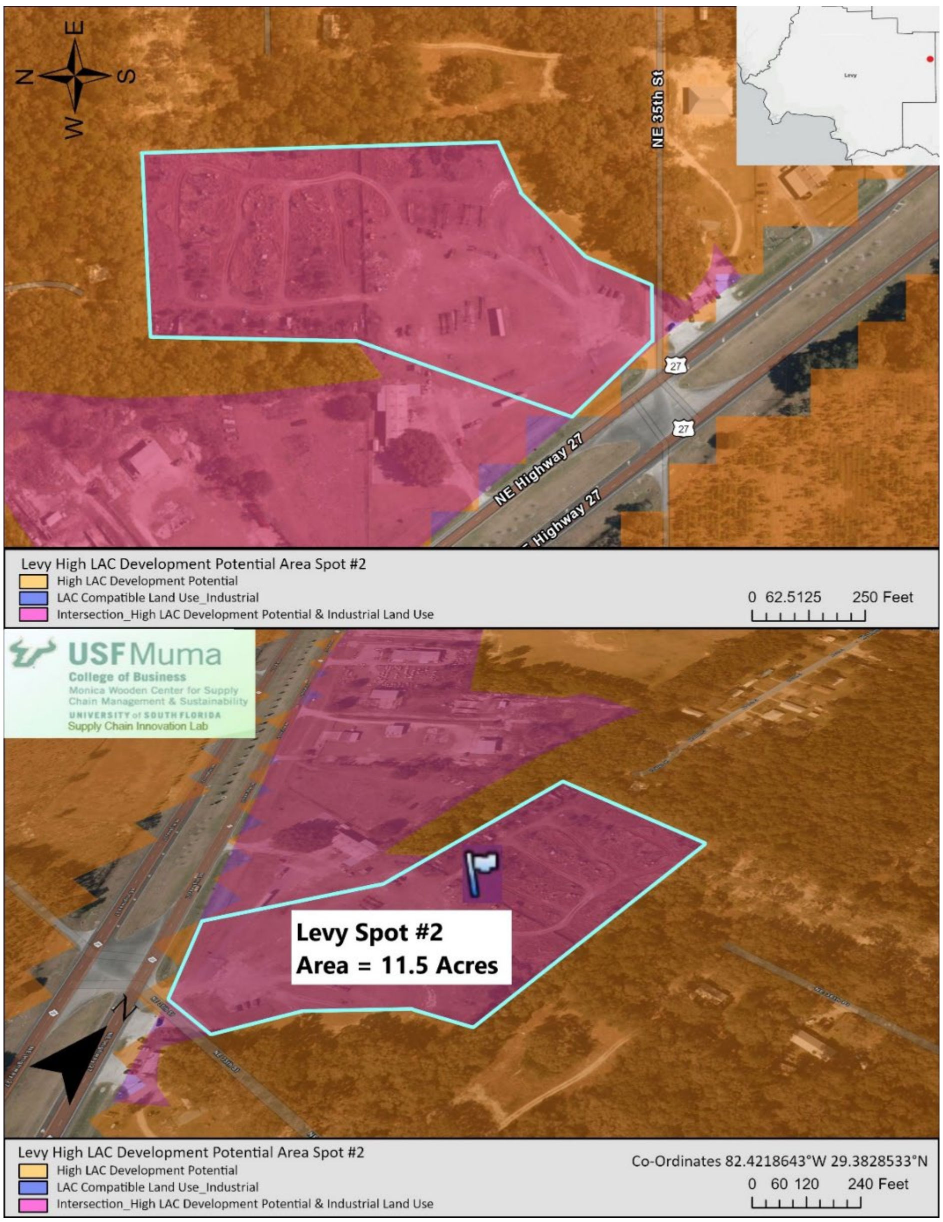

Figure B 145. Levy County Spot 2

LEVY SPOT #3

As per the criteria developed in this study, this 73-acre land parcel in the below image (Figure B 146) located in Williston, FL near the Williston Municipal Airport at the intersection of NE 200th Ave and NE 17th Pl has high LAC development potential in the Levy County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 146. Levy County Spot 3

LEVY SPOT #4

As per the criteria developed in this study, this 102.5-acre land parcel in the below image (Figure B 147) located in Fanning Springs, FL at the intersection of NW 80th Ct and NW 164th St has high LAC development potential in the Levy County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

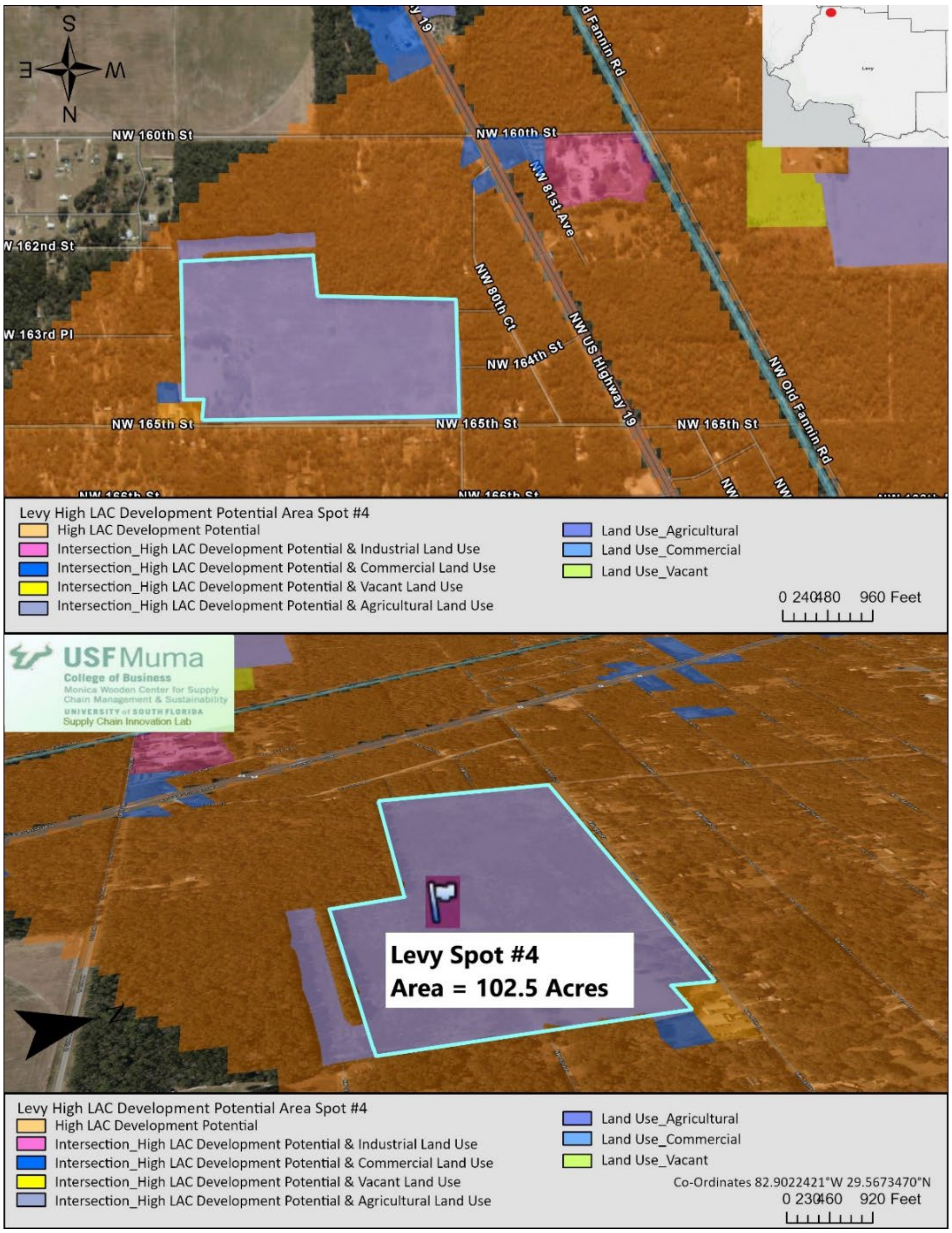

Figure B 147. Levy County Spot 4

LEVY SPOT #5

As per the criteria developed in this study, this 74.5-acre land parcel in the below image (Figure B 148) located in Chiefland, FL at the intersection of NW 127th Pl and NW 14th St has high LAC development potential in the Levy County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

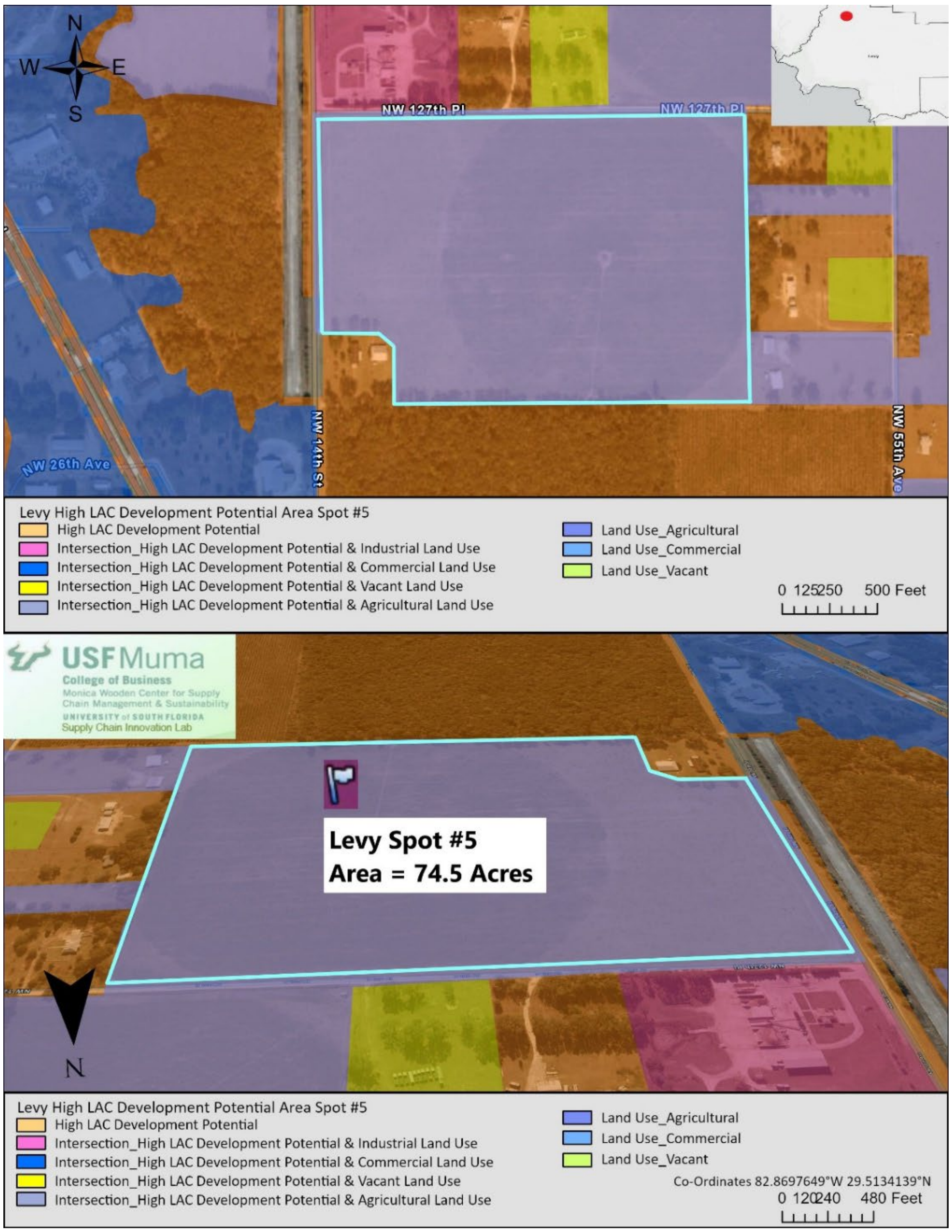

Figure B 148. Levy County Spot 5

Liberty County

LIBERTY SPOT #2

As per the criteria developed in this study, this 231-acre land parcel in the below image (Figure B 149) located in Bristol, FL at the intersection of NE Dogwood Ln and NW Sr 20 has moderate LAC development potential in the Liberty County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

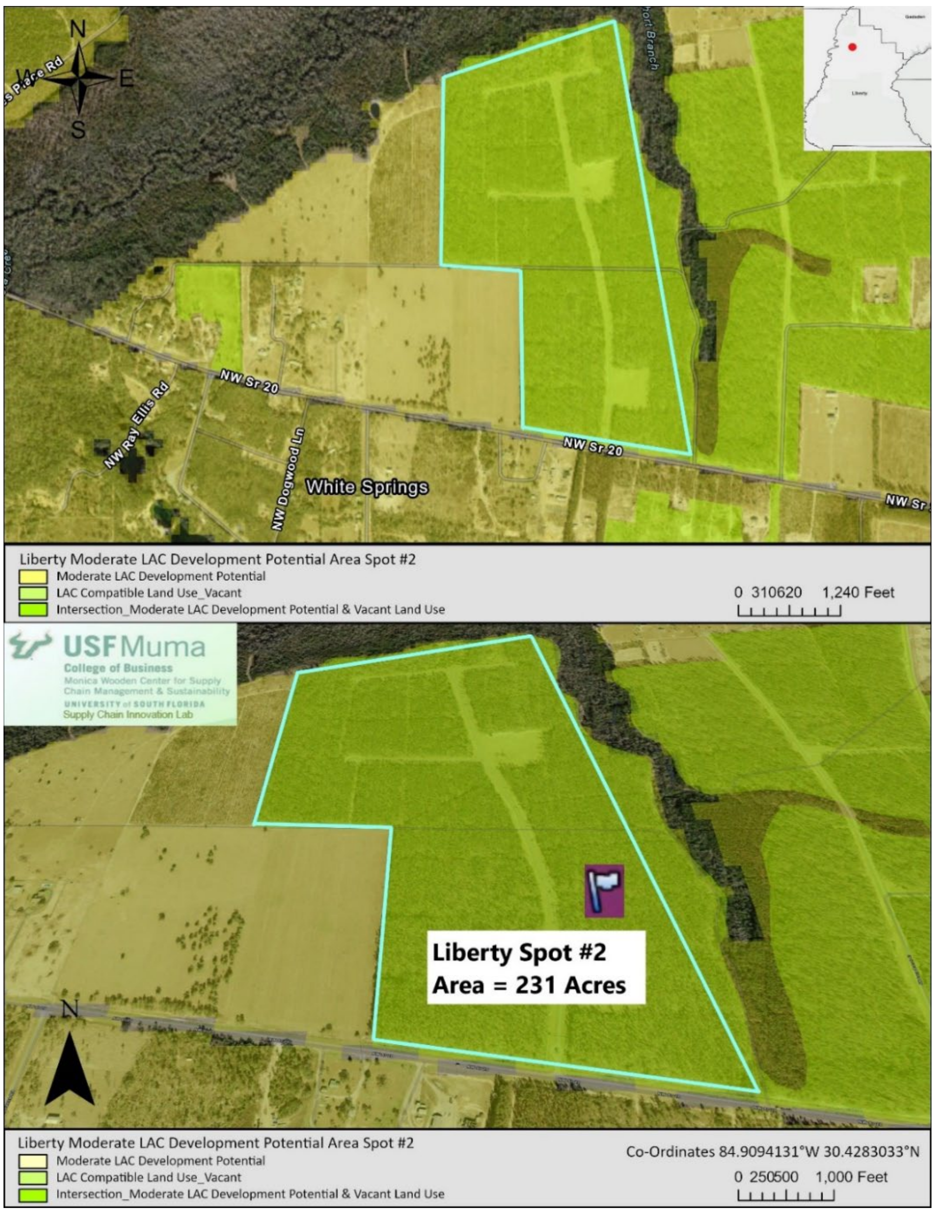

Figure B 149. Liberty County Spot 2

LIBERTY SPOT #3

As per the criteria developed in this study, this 9-acre land parcel in the below image (Figure B 150) located in Telogia, FL at the intersection of NE Arnold Kelly Rd and NE Sr 65 has moderate LAC development potential in the Liberty County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

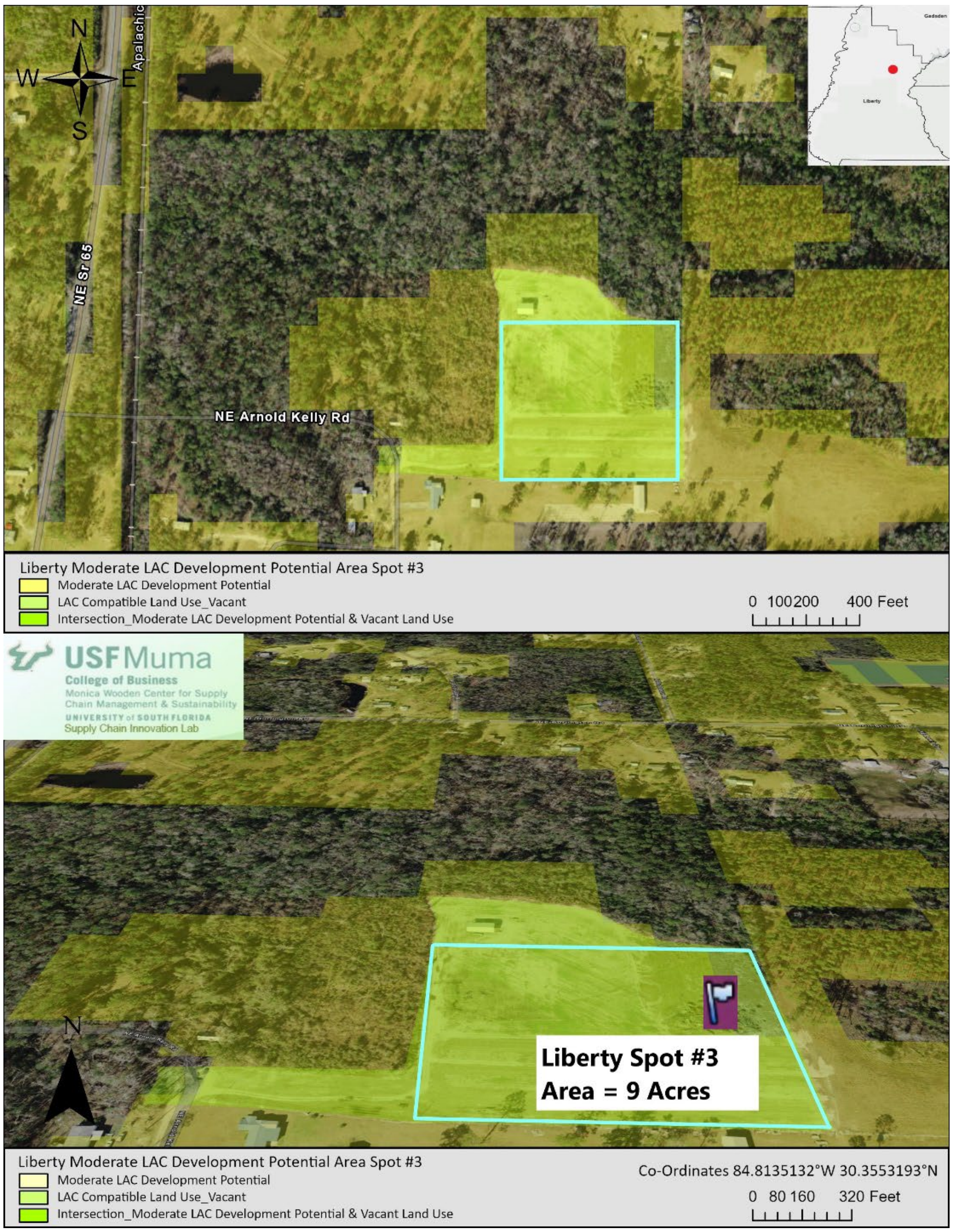

Figure B 150. Liberty County Spot 3

LIBERTY SPOT #4

As per the criteria developed in this study, this 12.5-acre land parcel in the below image (Figure B 151) located in Hosford, FL near the intersection of NE Kent Rd and NE State Road 65 has moderate LAC development potential in the Liberty County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

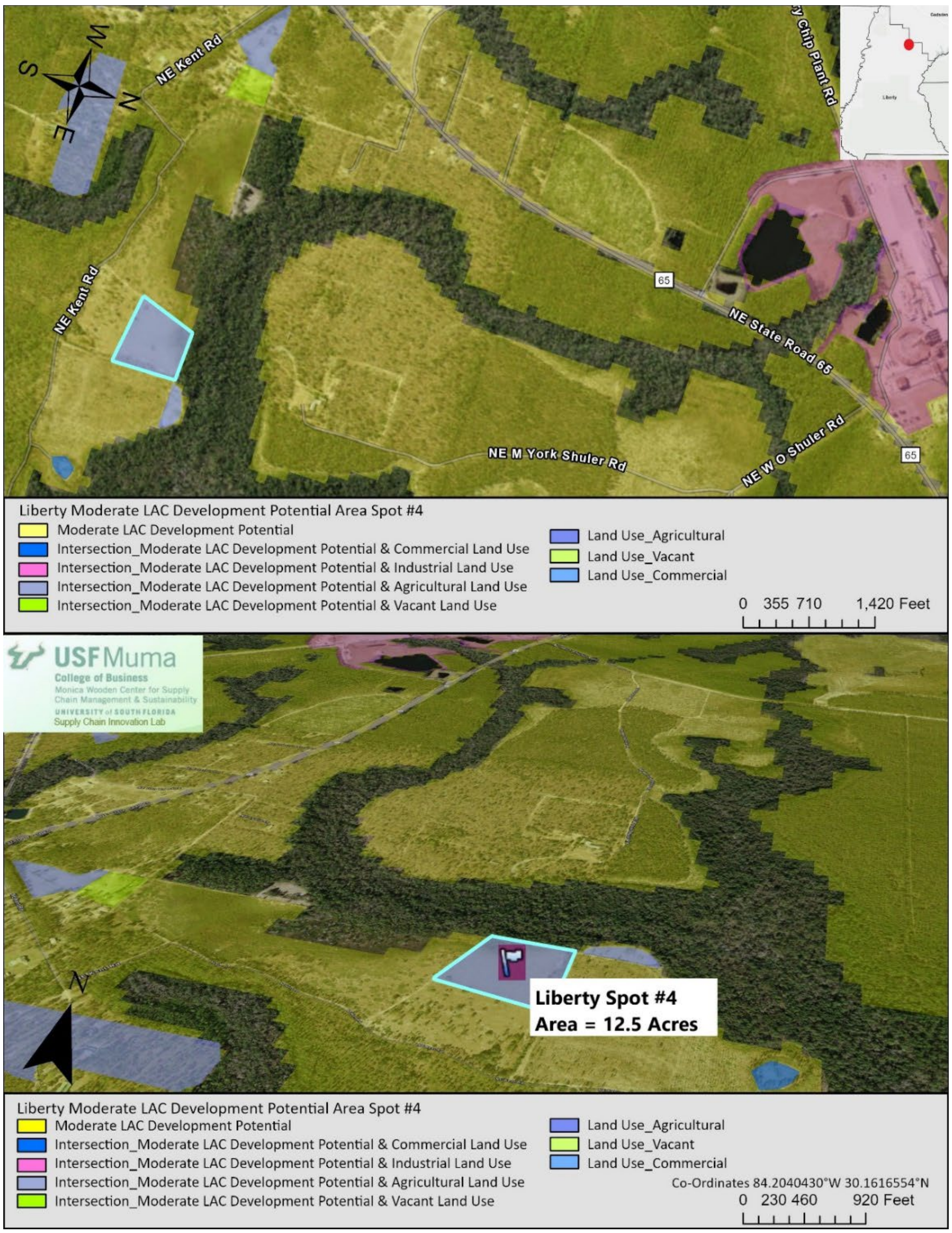

Figure B 151. Liberty County Spot 4

LIBERTY SPOT #5

As per the criteria developed in this study, this 6.5-acre land parcel in the below image (Figure B 152) located in Hosford, FL at the intersection of NE Kent Rd and NE State Road 65 has moderate LAC development potential in the Liberty County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

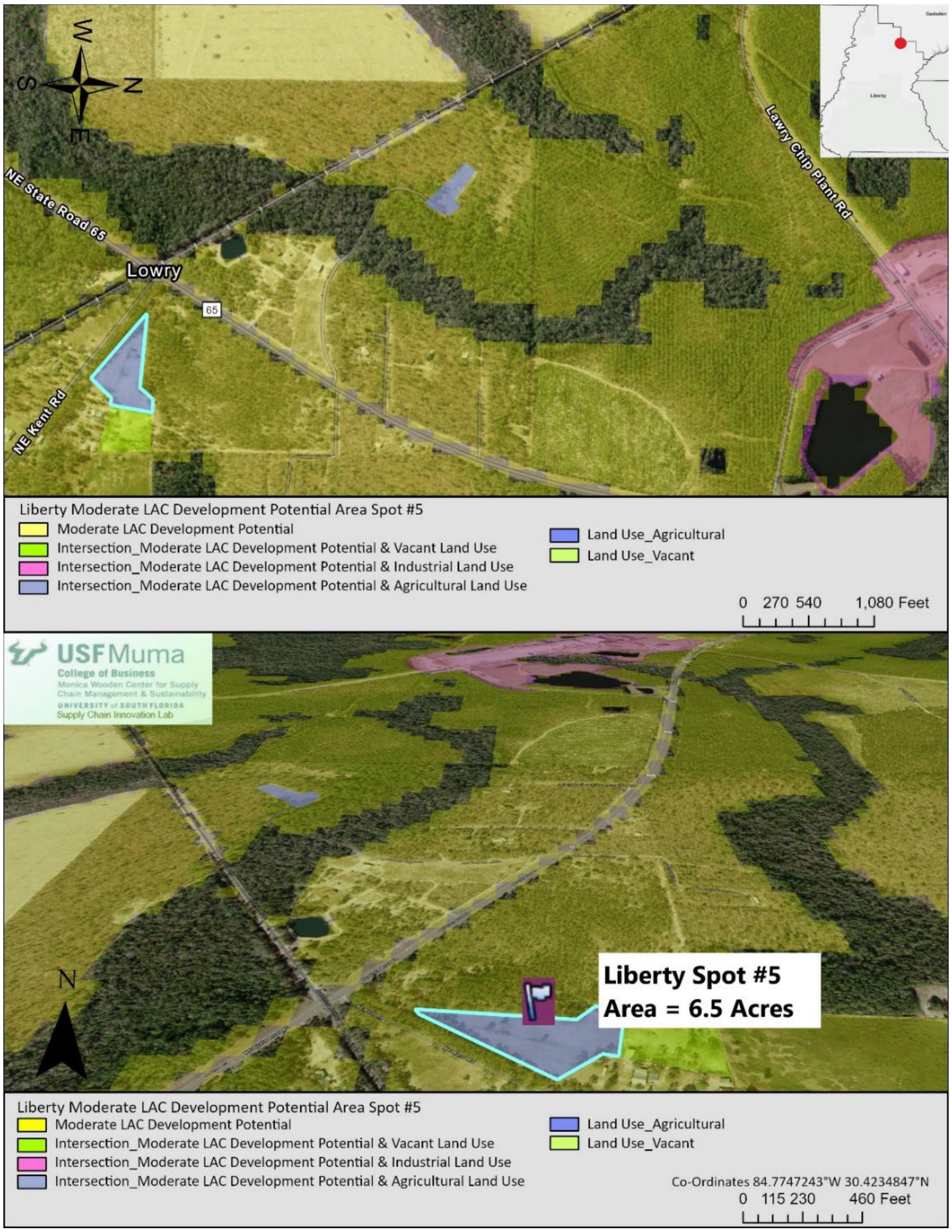

Figure B 152. Liberty County Spot 5

Madison County

MADISON SPOT #2

As per the criteria developed in this study, this 27.5-acre land parcel in the below image (Figure B 153) located in Madison, FL at the intersection of SW CR-360 and SW Jim Clark Rd has high LAC development potential in the Madison County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

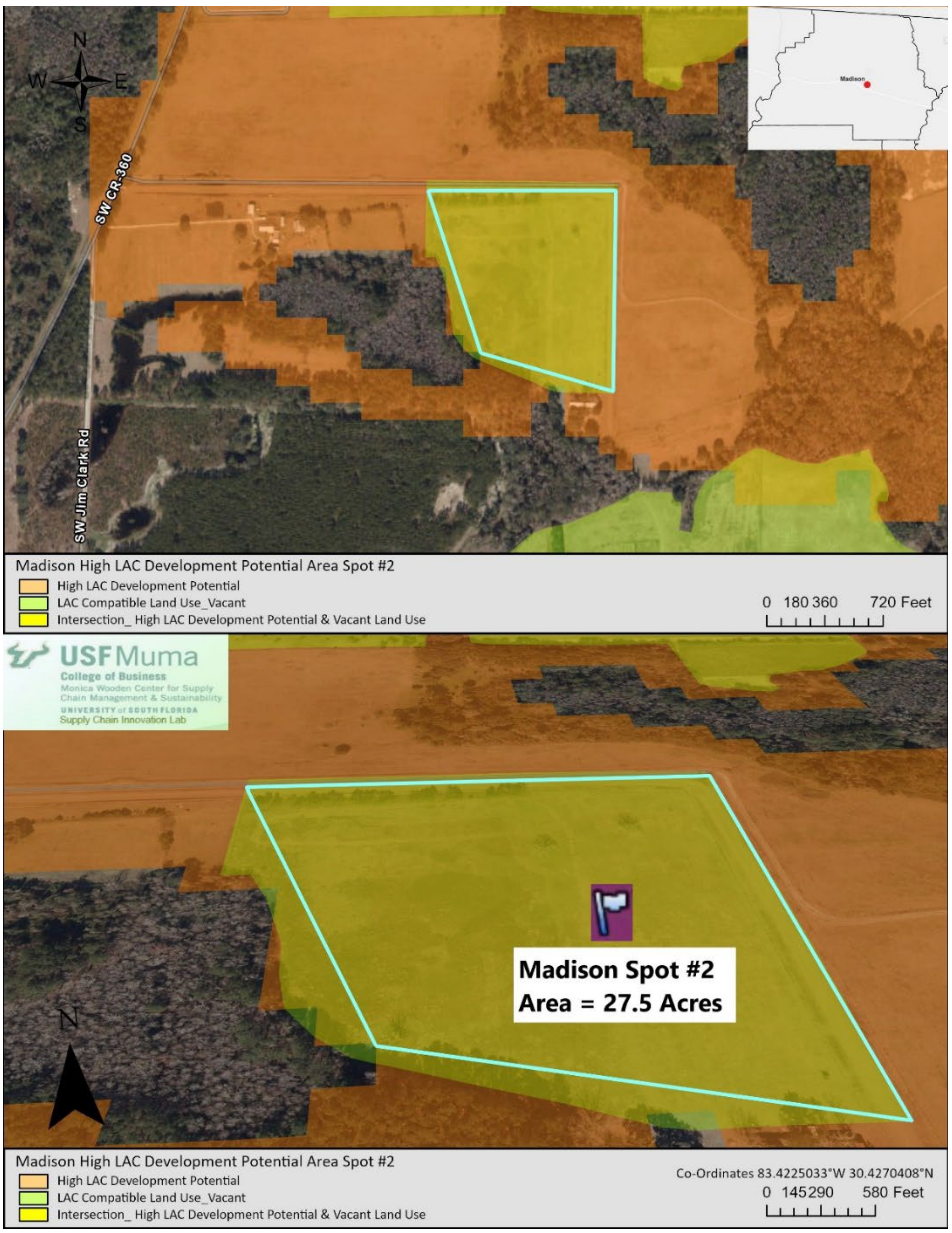

Figure B 153. Madison County Spot 2

MADISON SPOT #3

As per the criteria developed in this study, this 47.5-acre land parcel in the below image (Figure B 154) located in Madison, FL at the intersection of SE Farm Rd and SE Balboa Dr has high LAC development potential in the Madison County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 154. Madison County Spot 3

MADISON SPOT #4

As per the criteria developed in this study, this 27.5-acre land parcel in the below image (Figure B 155) located in Madison, FL at the intersection of SW Commerce Dr and SW Industrial Ext has high LAC development potential in the Madison County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

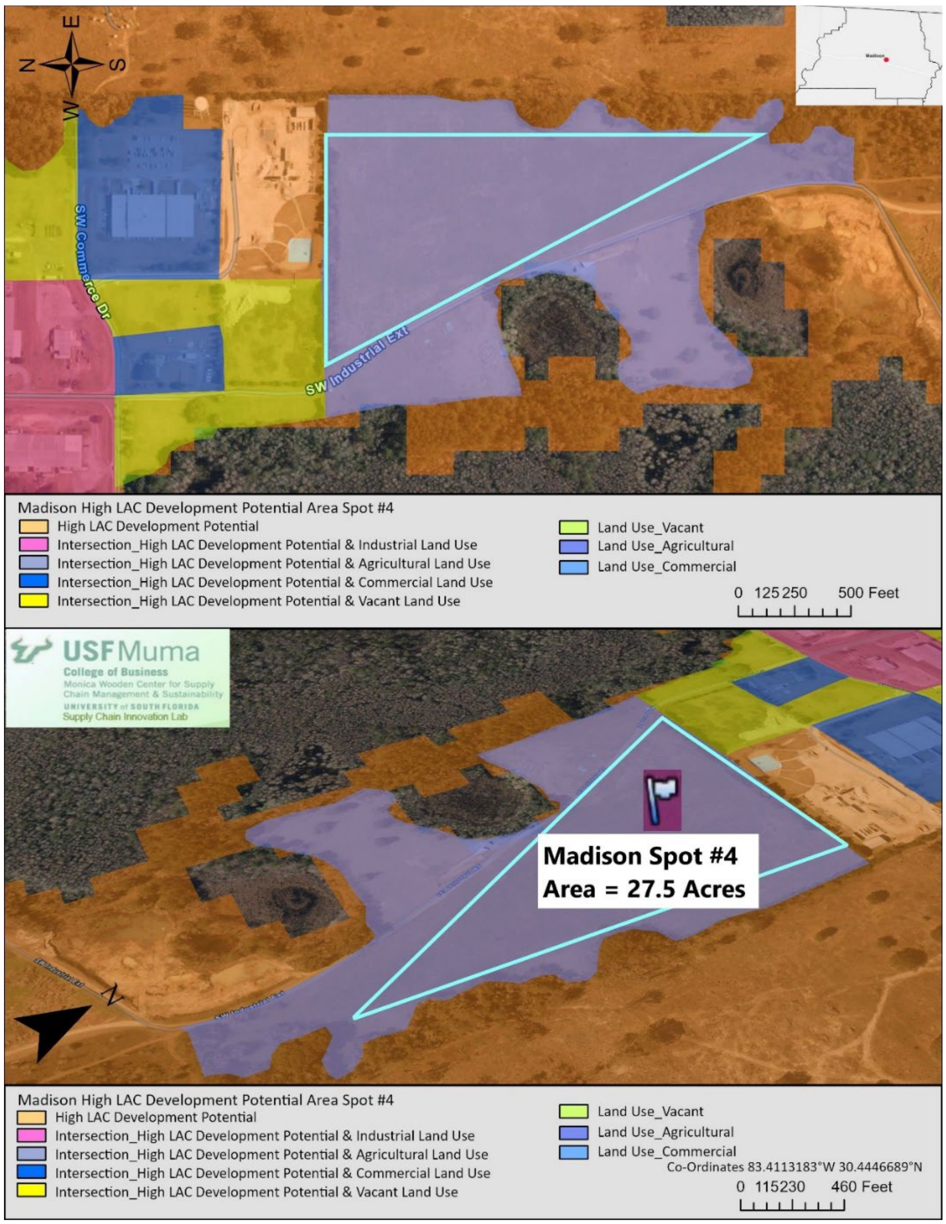

Figure B 155. Madison County Spot 4

MADISON SPOT #5

As per the criteria developed in this study, this 159.5-acre land parcel in the below image (Figure B 156) located in Lee, FL at the intersection of SE Davidson Way and SE Donaldson Rd has moderate LAC development potential in the Madison County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

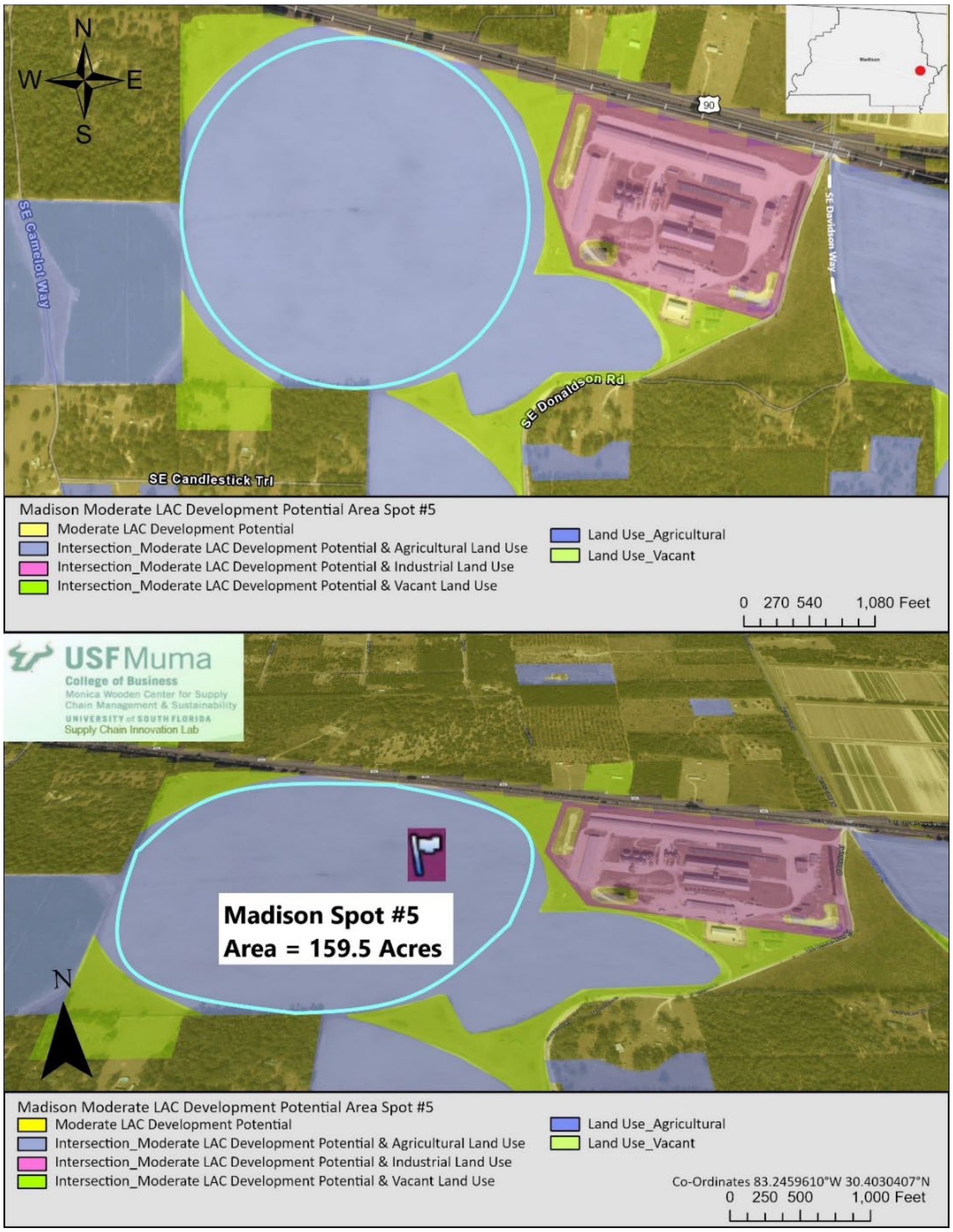

Figure B 156. Madison County Spot 5

Manatee County

MANATEE SPOT #2

As per the criteria developed in this study, this 9.5-acre land parcel in the below image (Figure B 157) located near the Blackburn Elementary School at the intersection of 17th St E and 28th Ave Rd has very high LAC development potential in the Manatee County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from the nearest seaport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

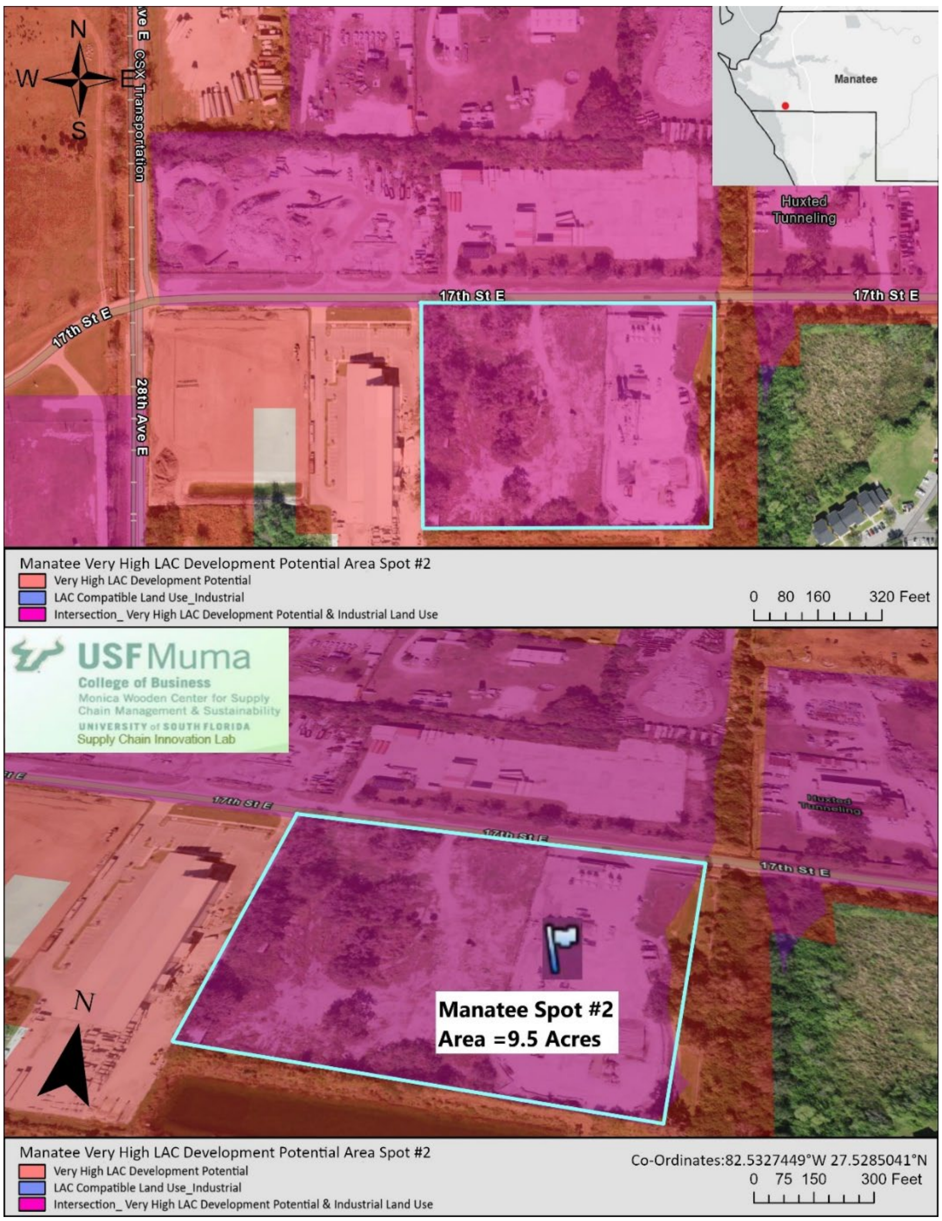

Figure B 157. Manatee County Spot 2

MANATEE SPOT #3

As per the criteria developed in this study, this 8.4-acre land parcel in the below image (Figure B 158) located at the intersection of 57th Ave E and 15th St E has very high LAC development potential in the Manatee County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

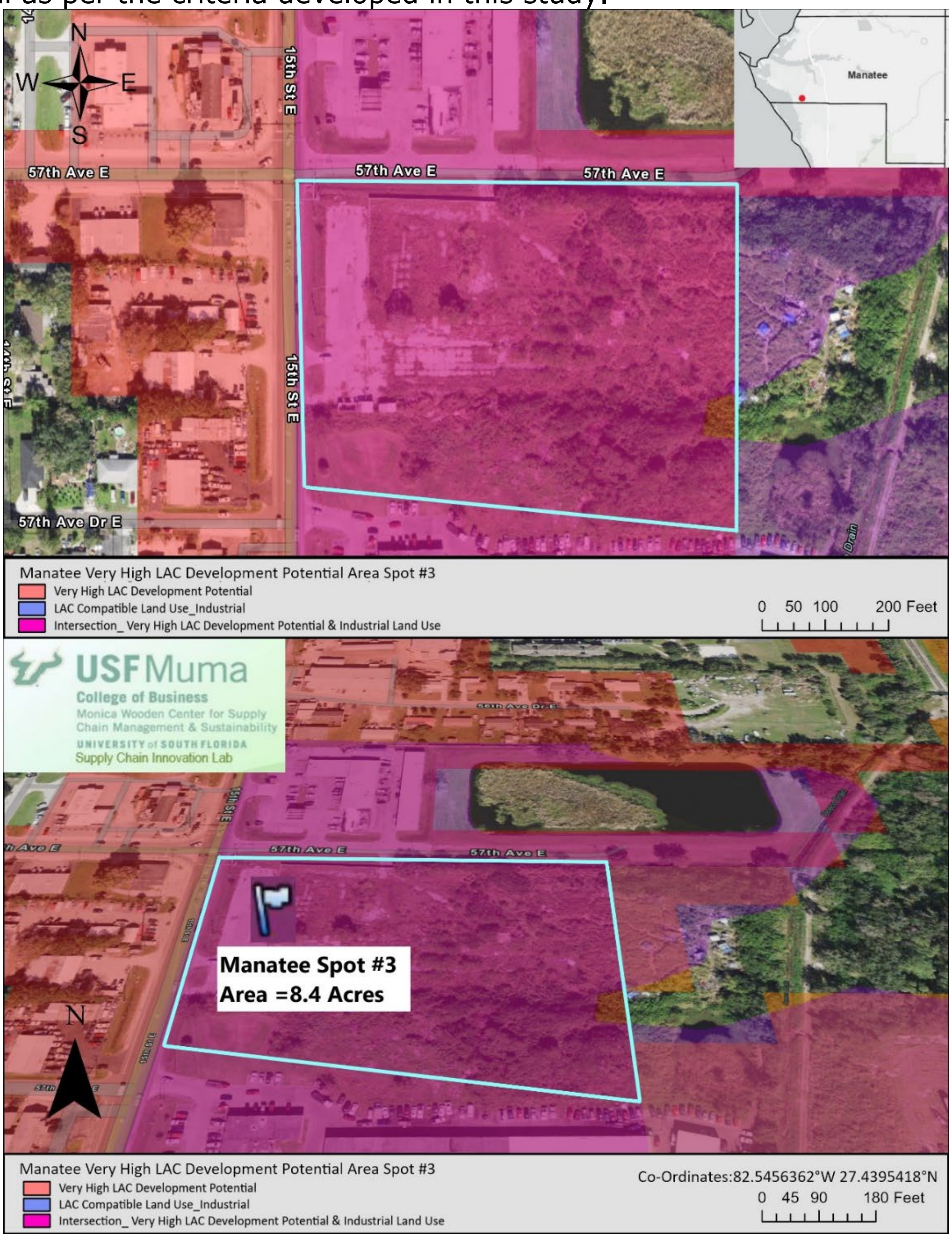

Figure B 158. Manatee County Spot 3

MANATEE SPOT #4

As per the criteria developed in this study, this huge 39-acre land parcel in the below image (Figure B 159) located at the intersection of 17th St E and 28th Ave E has very high LAC development potential in the Manatee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

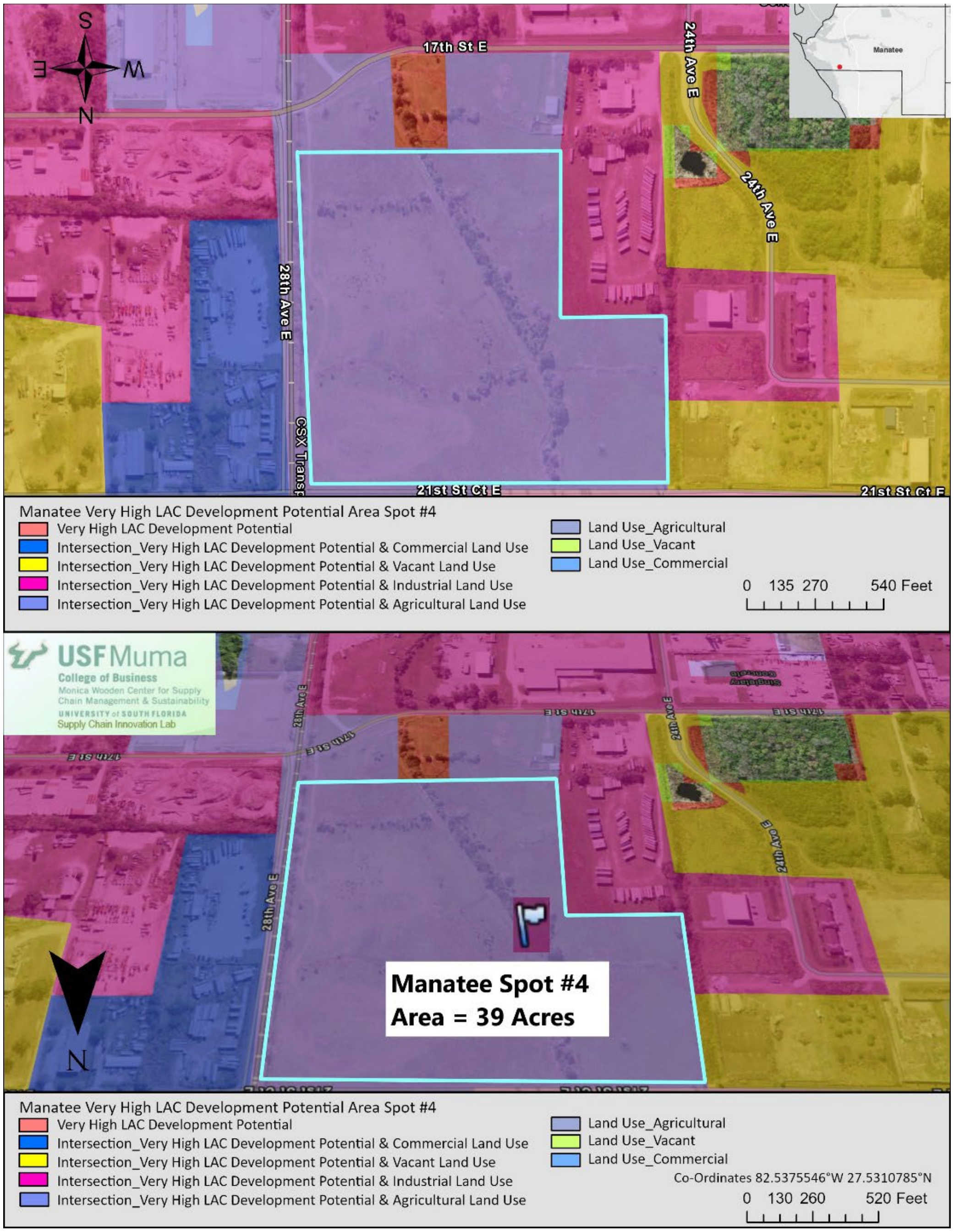

Figure B 159. Manatee County Spot 4

MANATEE SPOT #5

As per the criteria developed in this study, this 144-acre total land parcel in the below image (Figure B 160) located near the Manasota Industrial Park and Manatee County Public Safety Complex has very high LAC development potential in the Manatee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

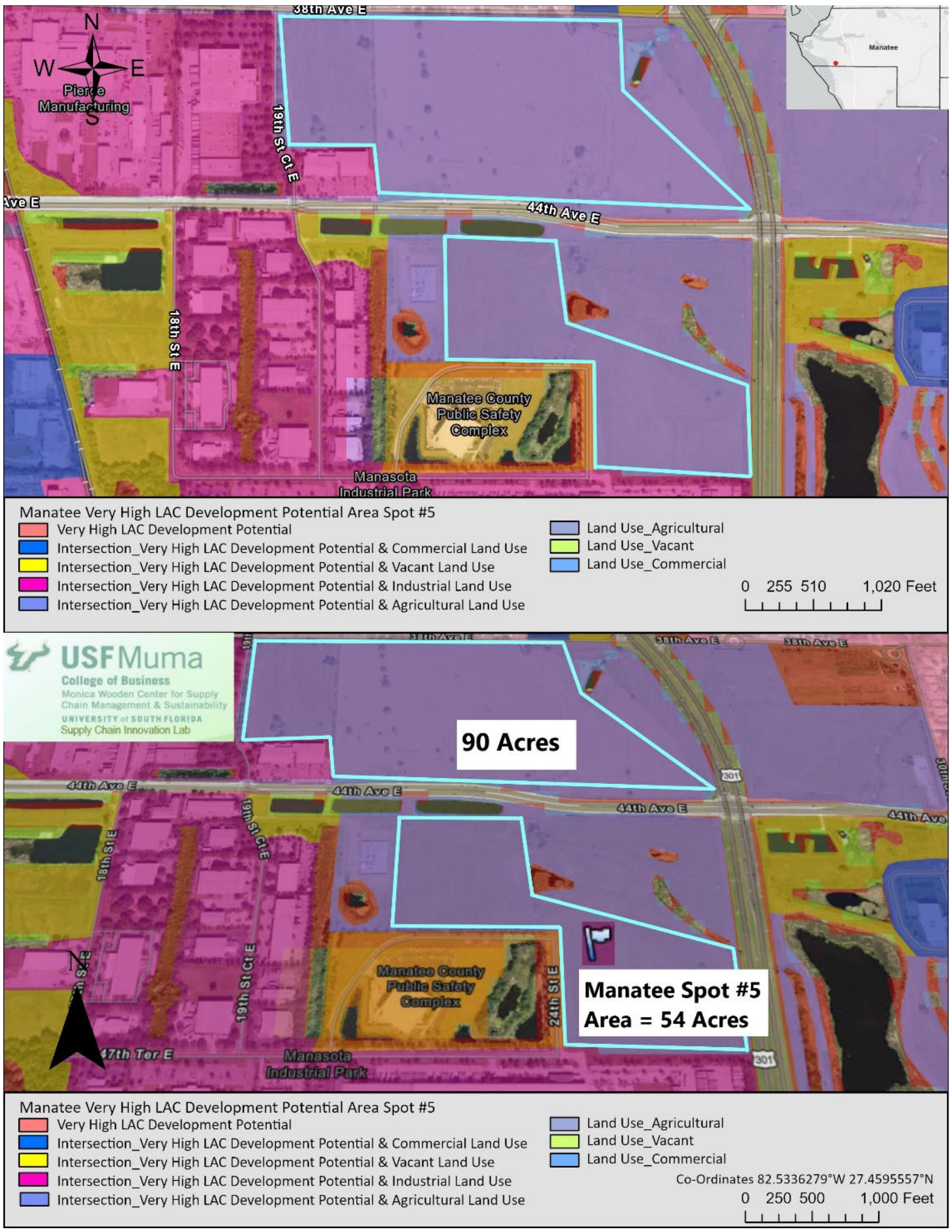

Figure B 160. Manatee County Spot 5

Marion County

MARION SPOT #2

As per the criteria developed in this study, this 18-acre land parcel in the below image (Figure B 161) located in Ocala, FL near the Marion County Speedway at the intersection of NW 63rd St and NW 44th Ave has very high LAC development potential in the Marion County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

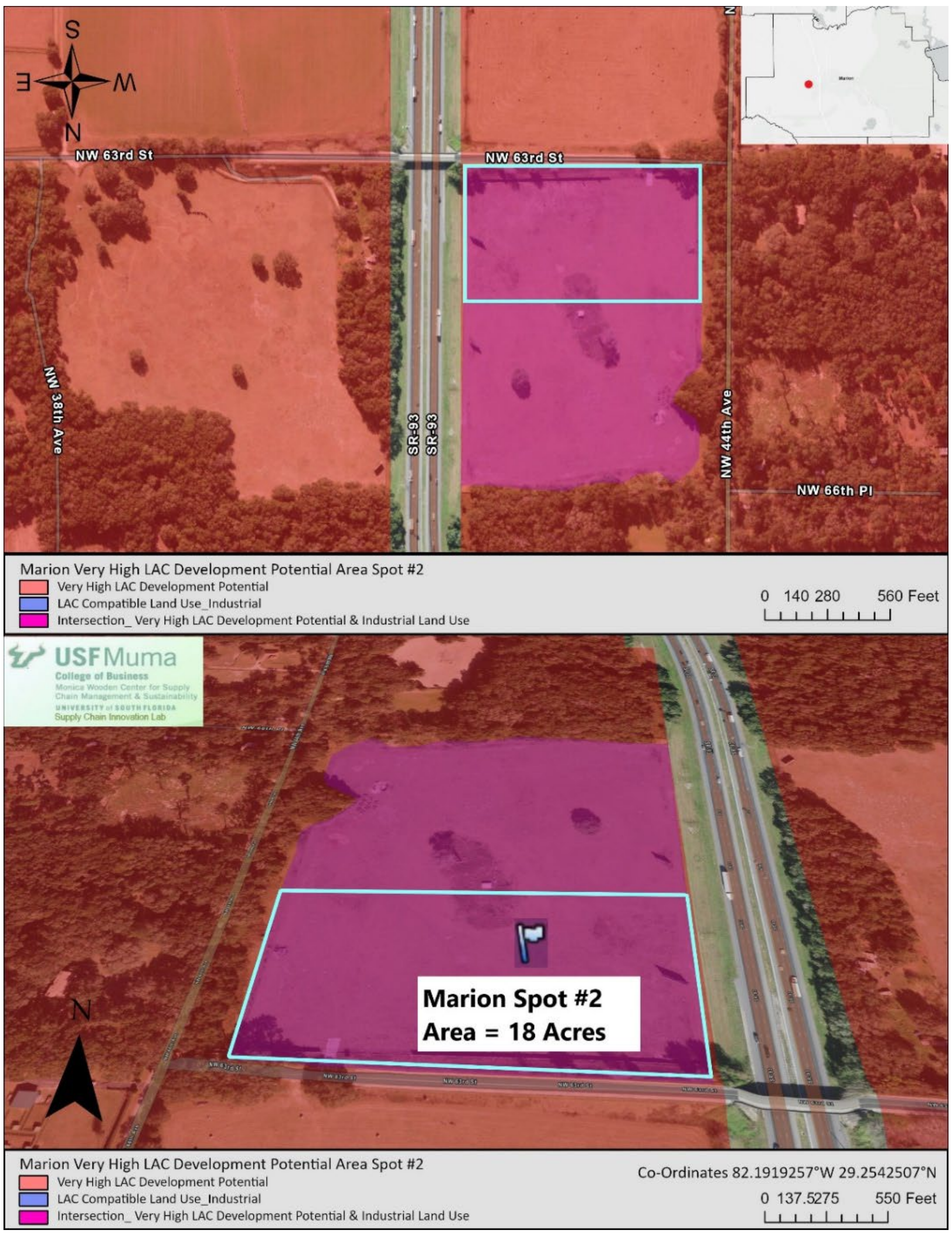

Figure B 161. Marion County Spot 2

MARION SPOT #3

As per the criteria developed in this study, this 22.5-acre land parcel in the below image (Figure B 162) located in Ocala, FL industrial area near the Ocala Vortac at the intersection of SW 20th St and SW 44th Ave has very high LAC development potential in the Marion County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

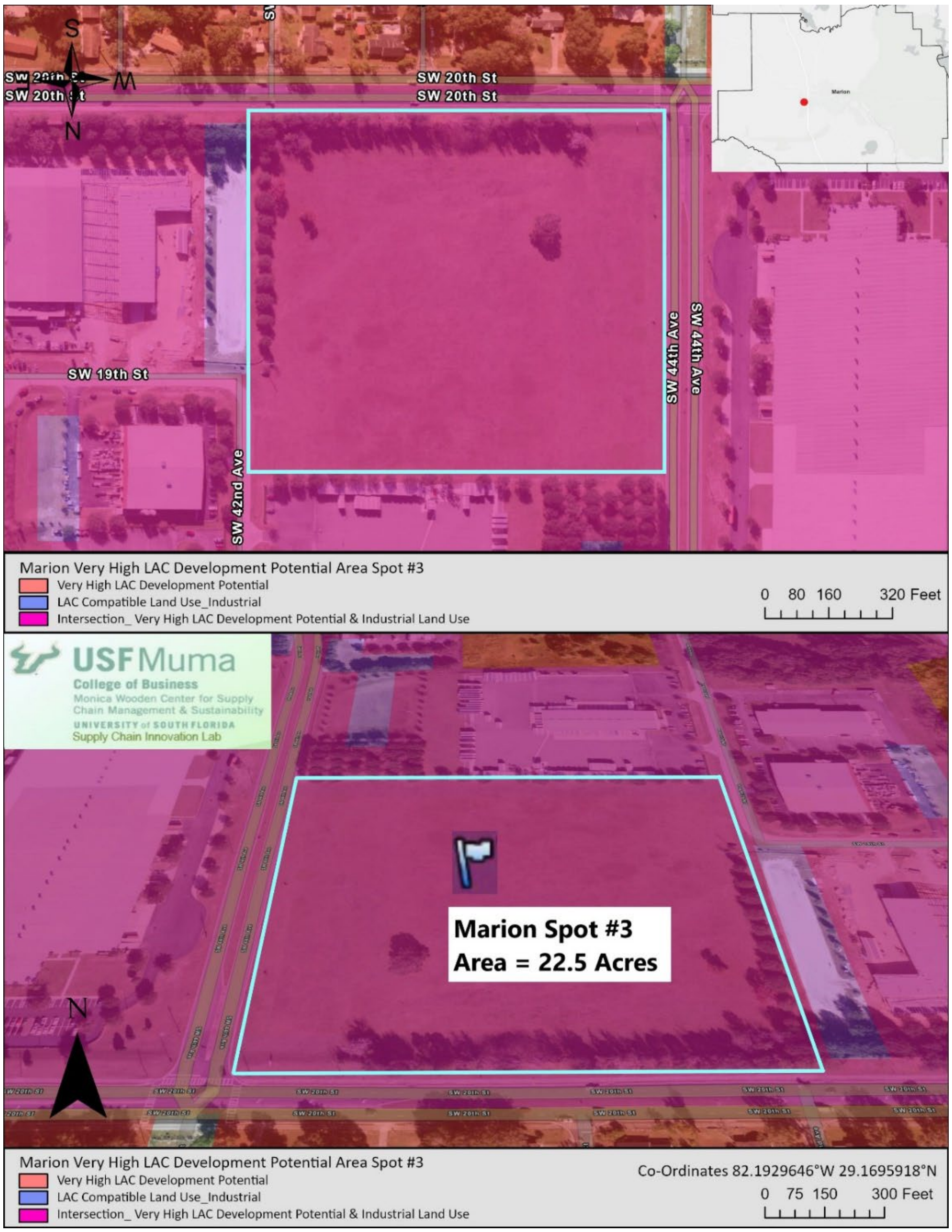

Figure B 162. Marion County Spot 3

MARION SPOT #4

As per the criteria developed in this study, this 390-acre land parcel in the below image (Figure B 163) located near the Ocala Vortac industrial area at the intersection of SW 38th St and SW 80th Ave has very high LAC development potential in the Marion County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

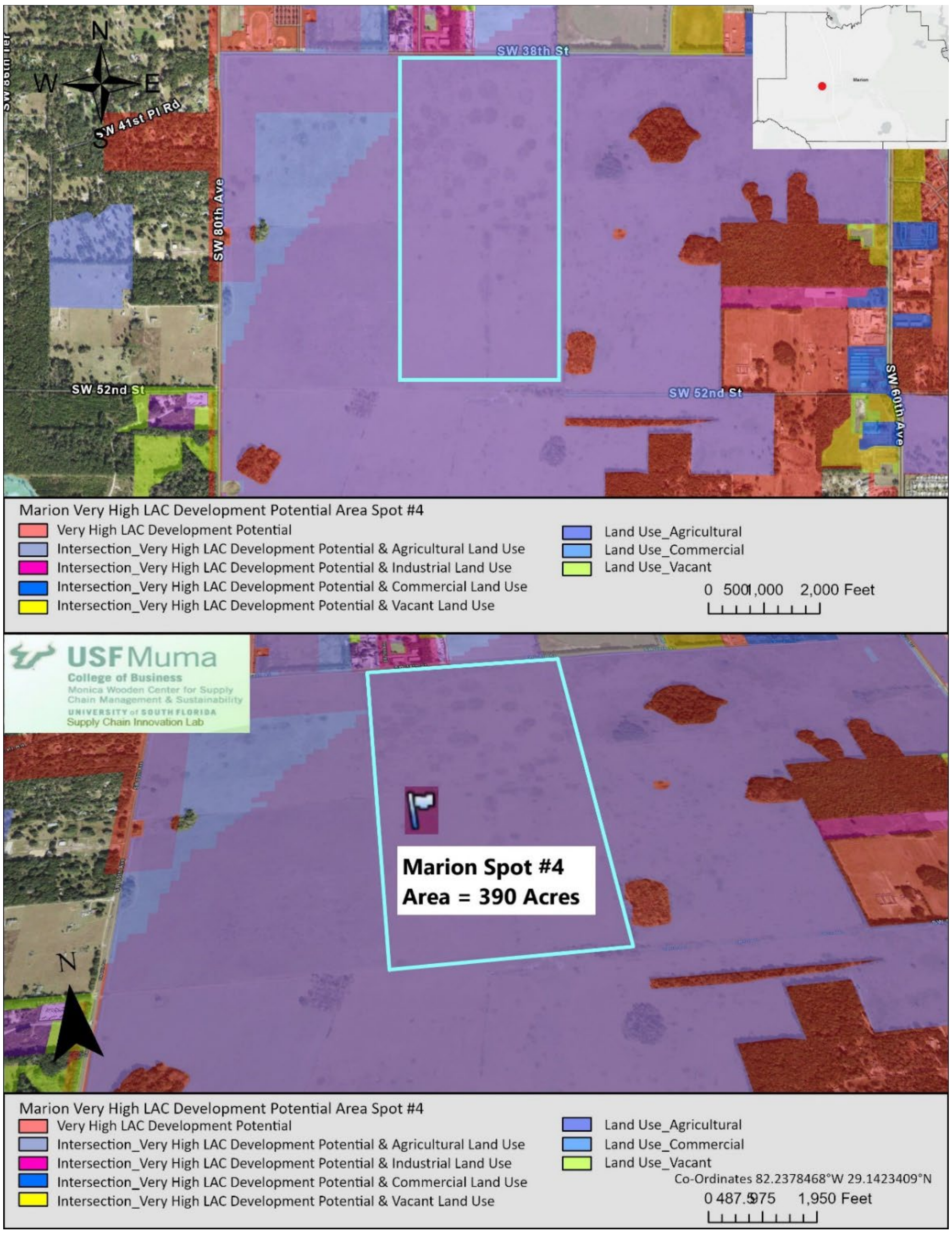

Figure B 163. Marion County Spot 4

MARION SPOT #5

As per the criteria developed in this study, this 135-acre land parcel in the below image (Figure B 164) located near the Ocala Vortac industrial area at the intersection of NW 68th Ave and W Highway 40 has very high LAC development potential in the Marion County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

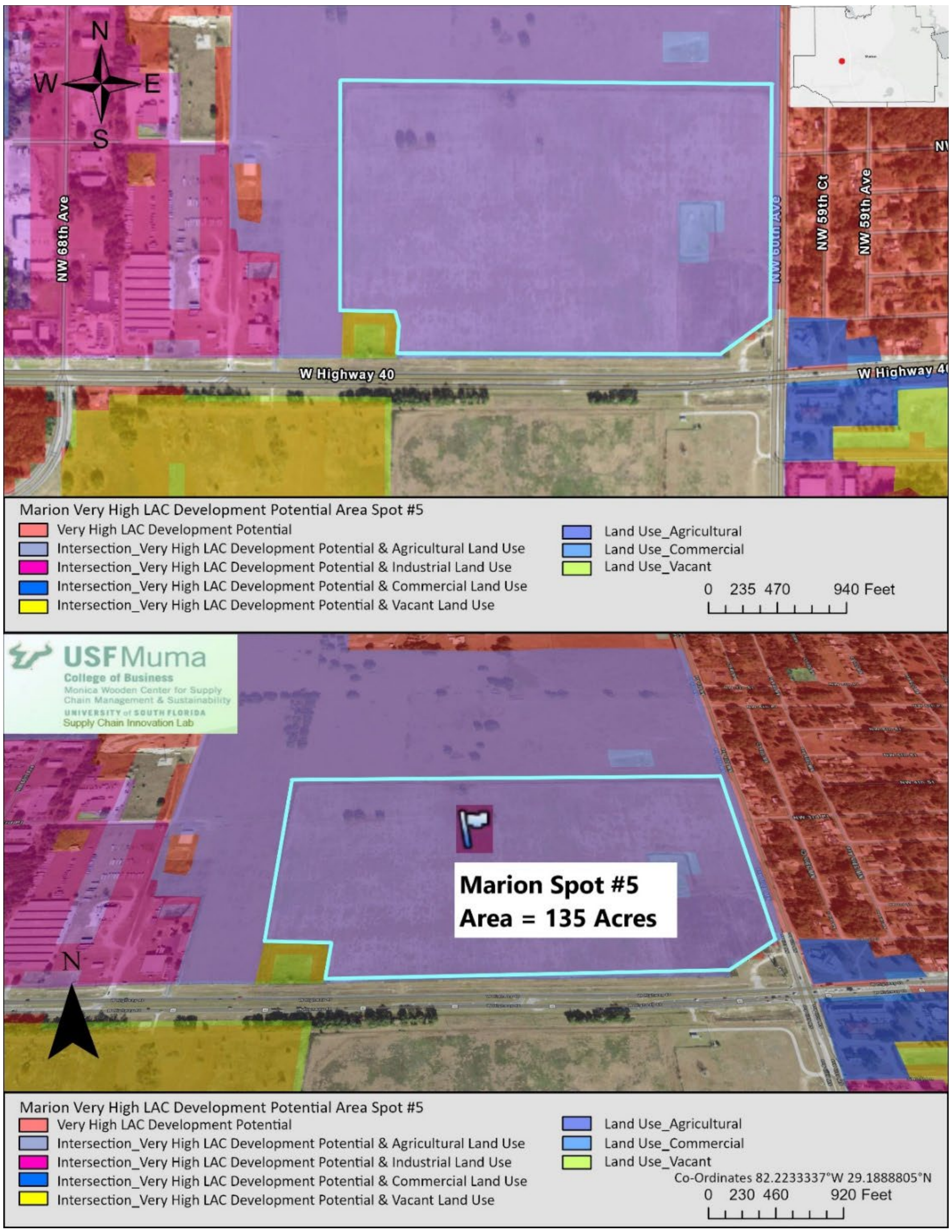

Figure B 164. Marion County Spot 5

Martin County

MARTIN SPOT #2

As per the criteria developed in this study, this 22-acre land parcel in the below image (Figure B 165) located in Stuart, FL near the Martin County Airport at the intersection of SE Edler Dr and SE Monterey Rd has very high LAC development potential in the Martin County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

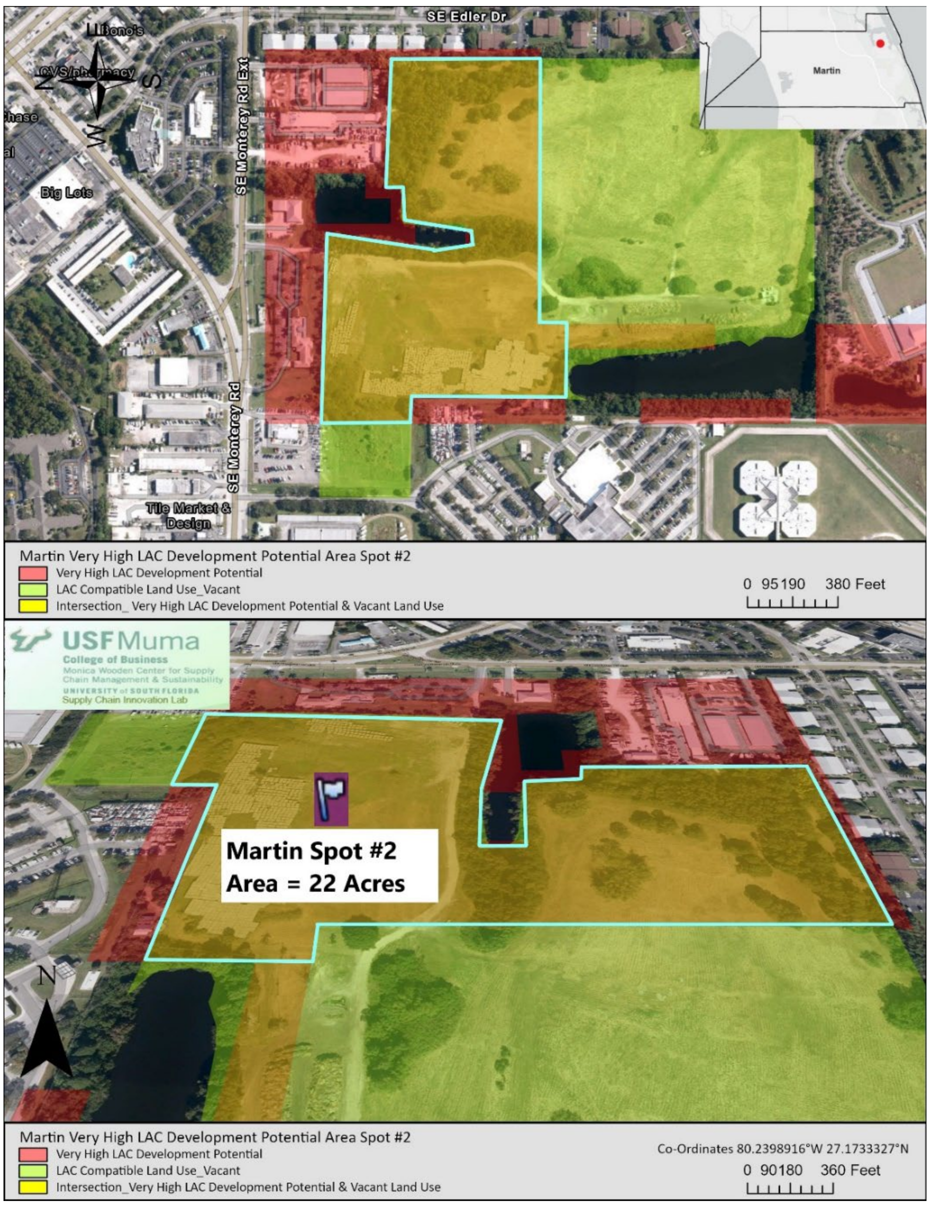

Figure B 165. Martin County Spot 2

MARTIN SPOT #3

As per the criteria developed in this study, this 19-acre land parcel in the below image (Figure B 166) located in Stuart, FL at the intersection of SW Old Kansas Ave and Coreentree Dr has very high LAC development potential in the Martin County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, less than 10 miles from nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

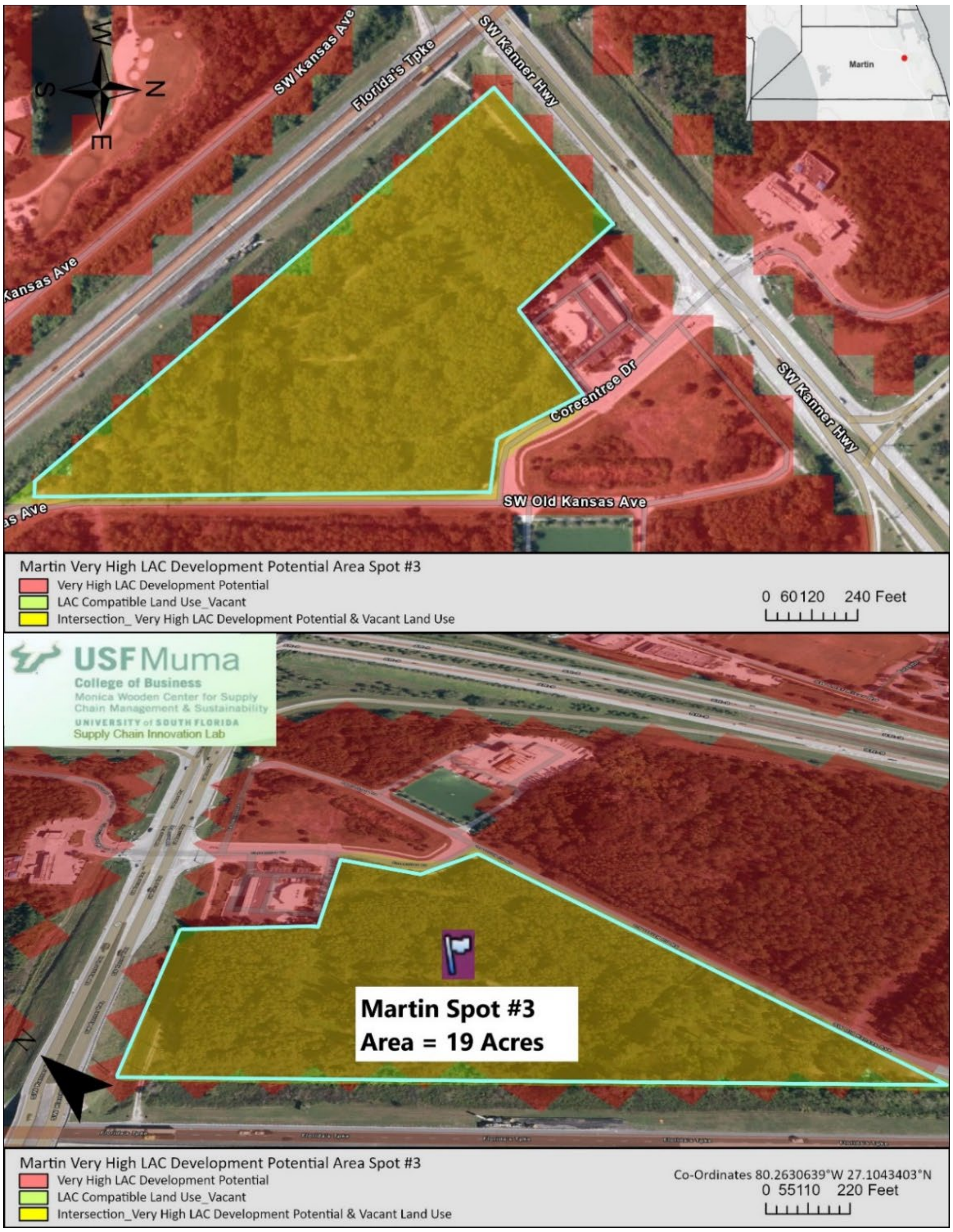

Figure B 166. Martin County Spot 3

MARTIN SPOT #4

As per the criteria developed in this study, this 96-acre land parcel in the below image (Figure B 167) located in Stuart, FL near South Fork High School near SR-9 has high LAC development potential in the Martin County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

Figure B 167. Martin County Spot 4

MARTIN SPOT #5

As per the criteria developed in this study, this 75-acre land parcel in the below image (Figure B 168) located in Indiantown, FL at the intersection of SW Fox Brown Rd and SW Warfield Blvd has high LAC development potential in the Martin County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

Figure B 168. Martin County Spot 5

Miami-Dade County

MIAMI-DADE SPOT #2

As per the criteria developed in this study, this 29.3-acre land parcel in the below image (Figure B 169) located at the intersection of NW 146th St and NW 112th Ave has very high LAC development potential in the Miami-Dade County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, around 12 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

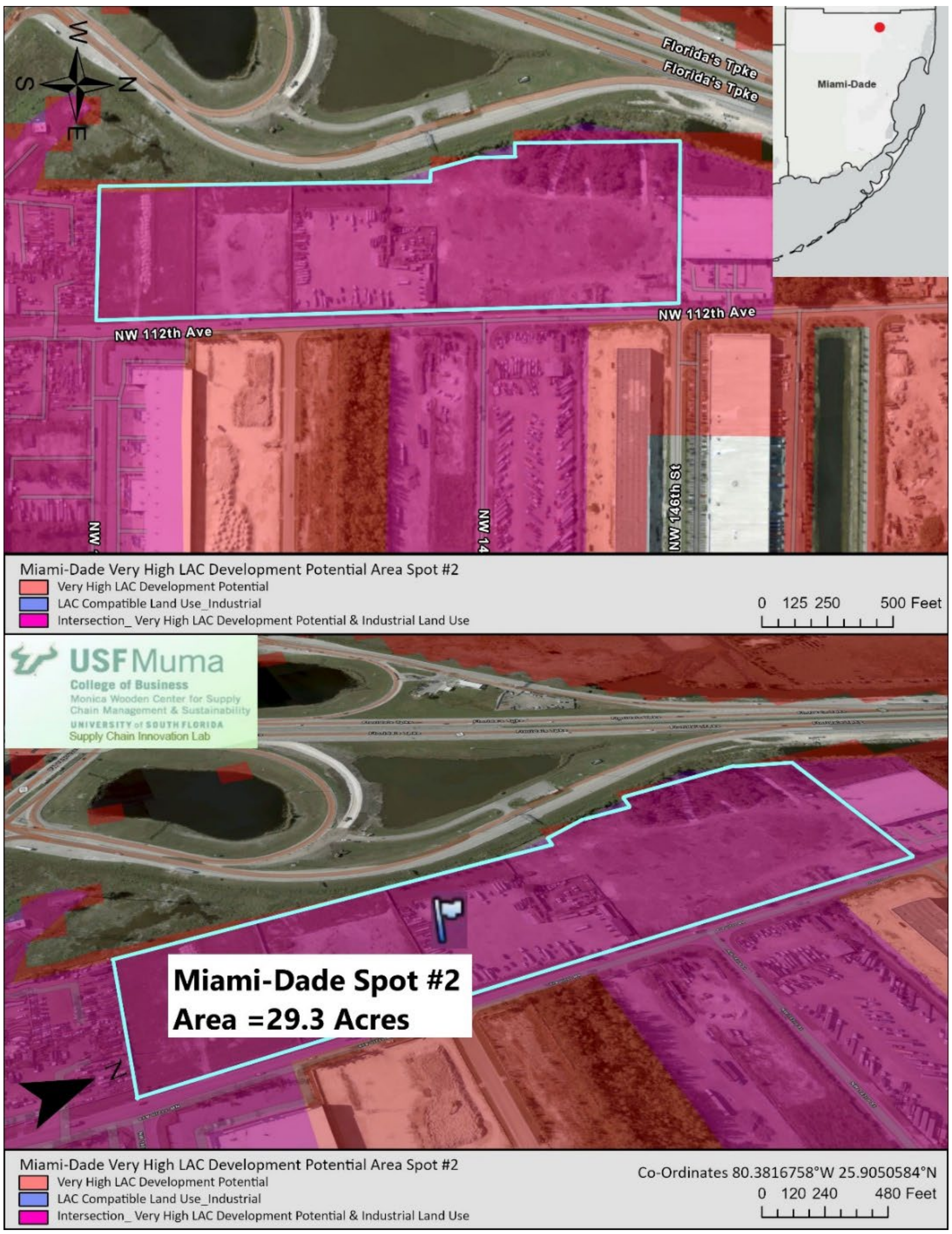

Figure B 169. Miami-Dade County Spot 2

MIAMI-DADE SPOT #3

As per the criteria developed in this study, this 10.5-acre land parcel in the below image (Figure B 170) located at the intersection of SE 38th Ave and Alex Muxo Blvd located near the Homestead Motor Sport Speedway has very high LAC development potential in the Miami-Dade County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, around 12 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

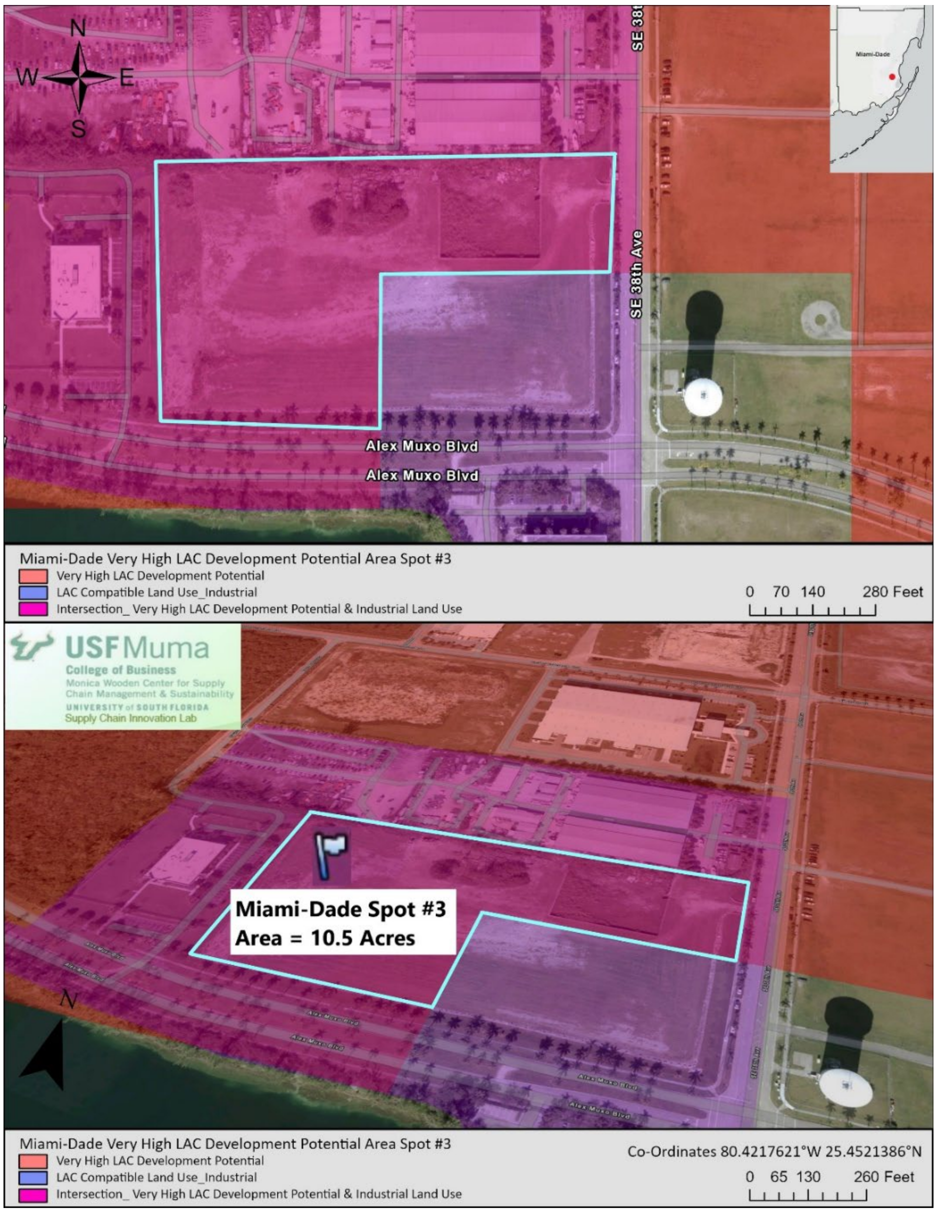

Figure B 170. Miami-Dade County Spot 3

MIAMI-DADE SPOT #4

As per the criteria developed in this study, this 185.5-acre land parcel in the below image (Figure B 171) located at the intersection of NW 117th Ave and W Okeechobee Rd has very high LAC development potential in the Miami-Dade County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, vacant, and commercial lands around it which makes it suitable for re-zoning.

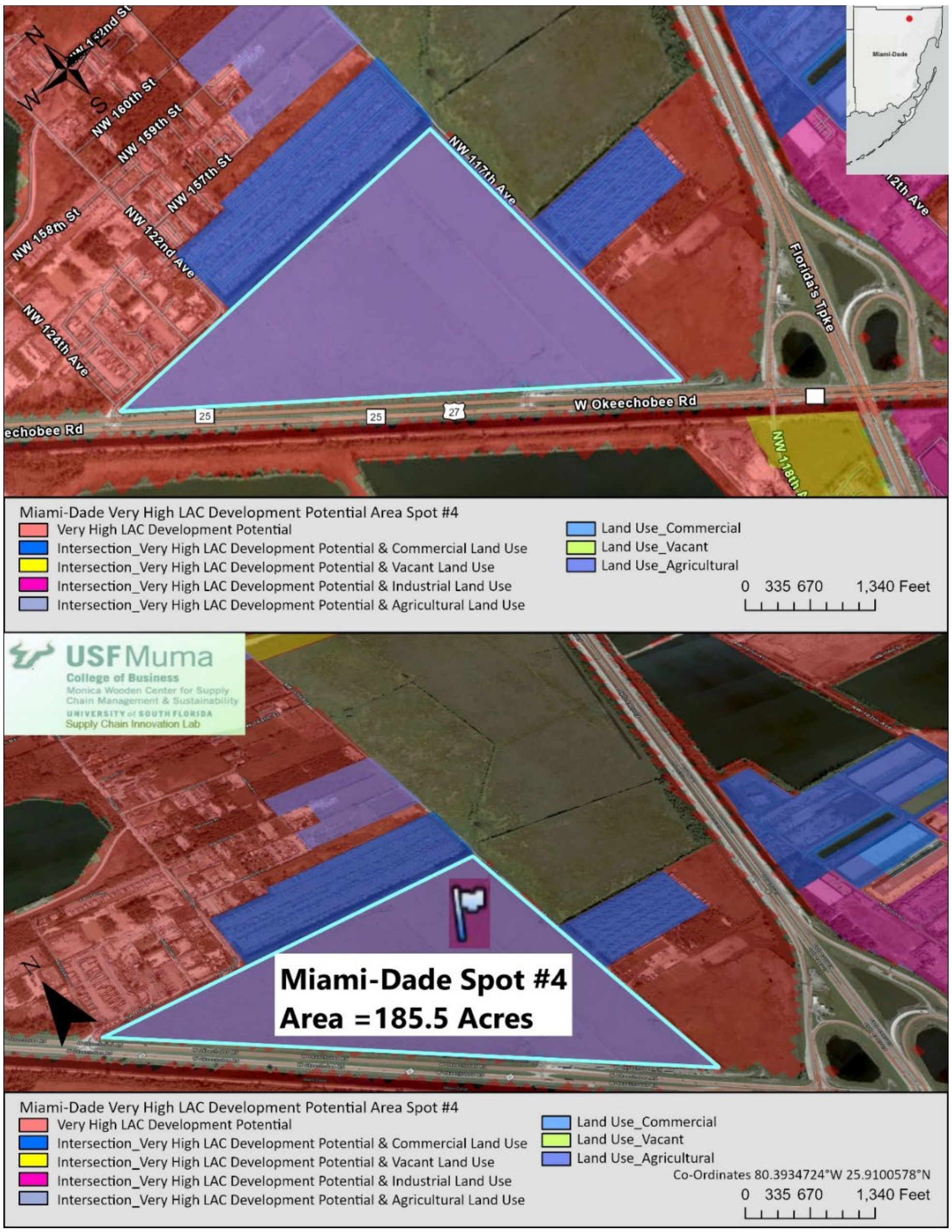

Figure B 171. Miami-Dade County Spot 4

MIAMI-DADE SPOT #5

As per the criteria developed in this study, this 45.5-acre land parcel in the below image (Figure B 172) located at the intersection of NW 102nd Ave and NW 138th St has very high LAC development potential in the Miami-Dade County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, vacant and commercial lands around it which makes it suitable for re-zoning.

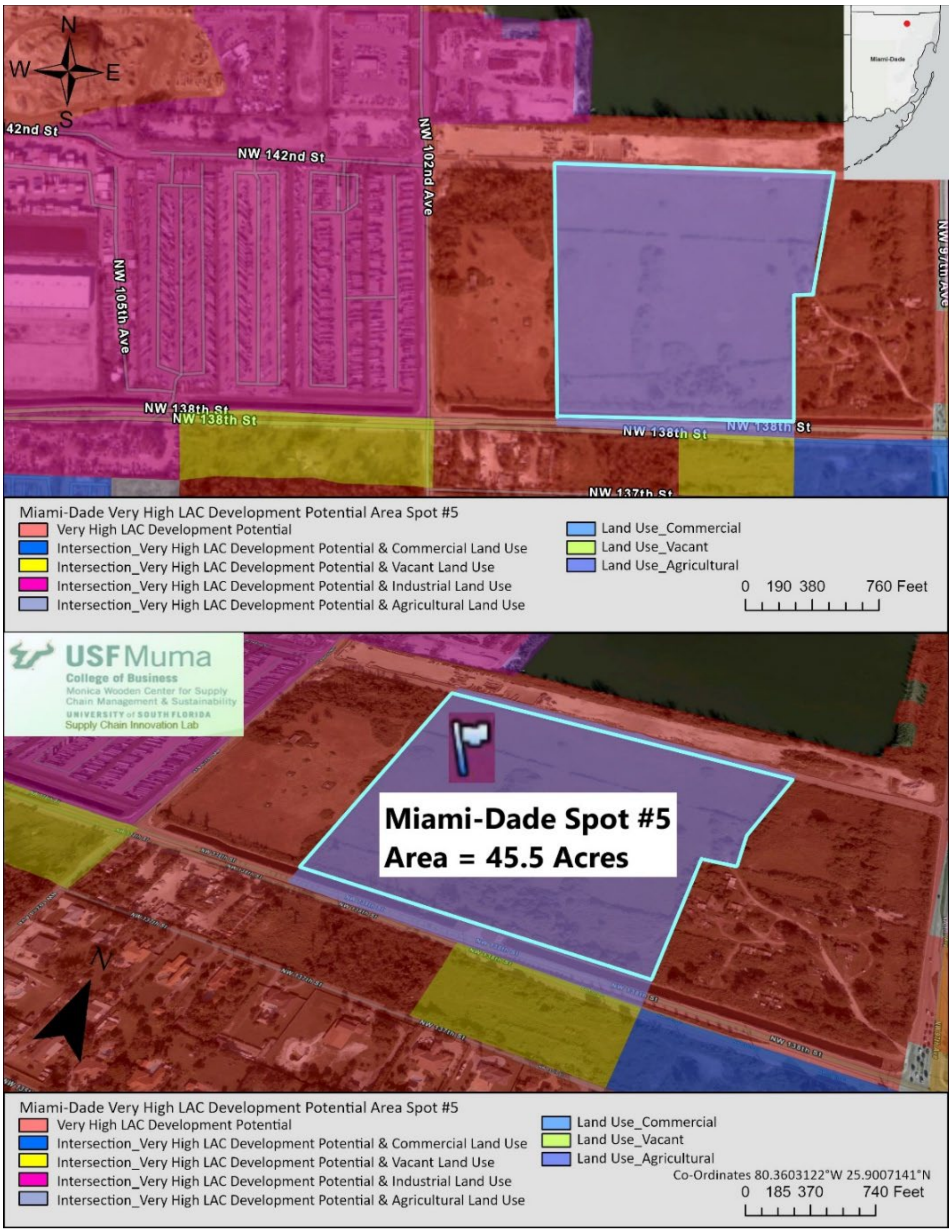

Figure B 172. Miami-Dade County Spot 5

Monroe County

MONROE SPOT #2

As per the criteria developed in this study, this 7.5-acre land parcel in the below image (Figure B 173) located in Tavernier, FL at the intersection of Orange Blossom Rd and Overseas Hwy has moderate LAC development potential in the Monroe County. It is less than 2.5 miles from State roads, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

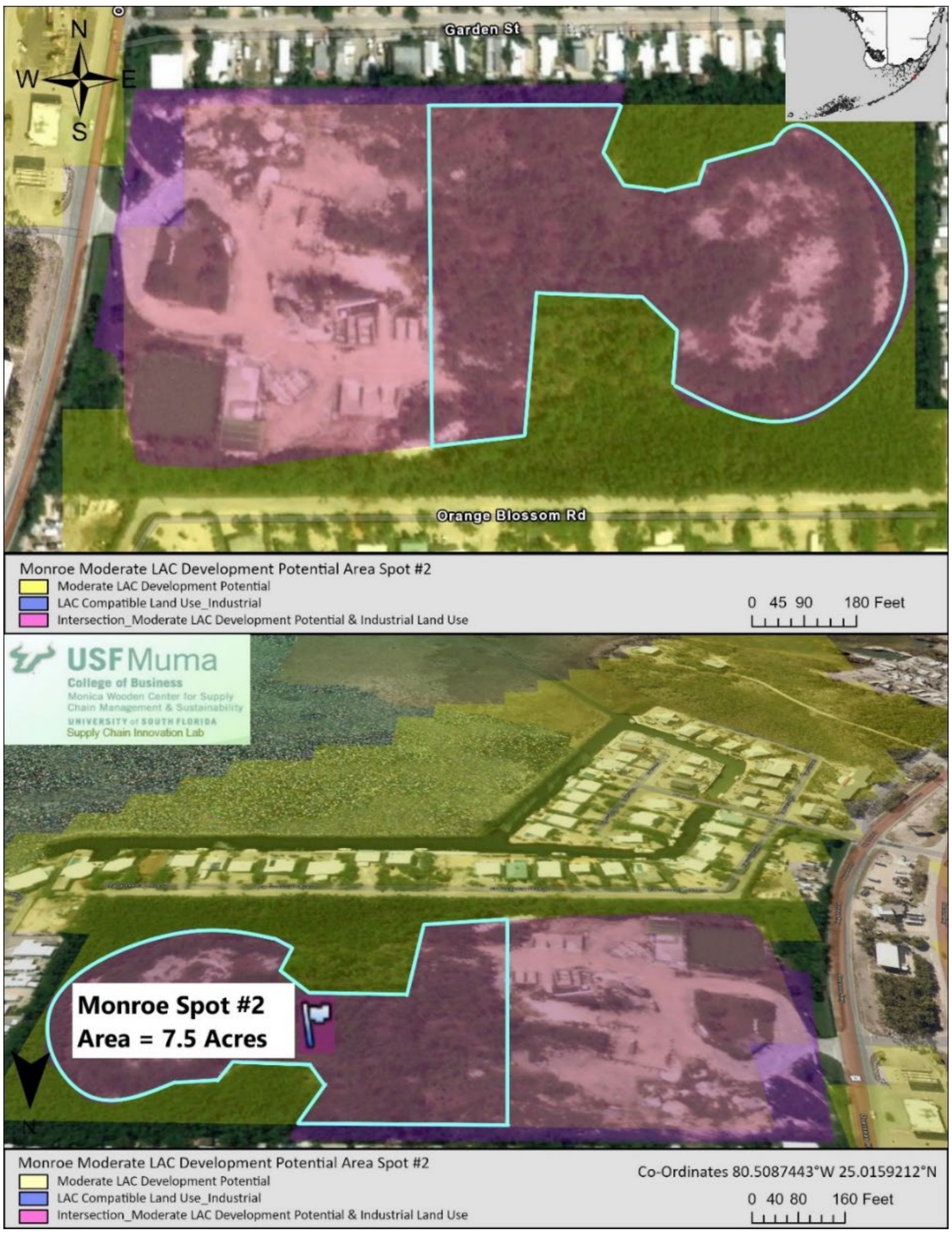

Figure B 173. Monroe County Spot 2

MONROE SPOT #3

As per the criteria developed in this study, this 28.2-acre land parcel in the below image (Figure B 174) located in Cudjoe Key, FL at the intersection of Cudjoe Dr and Spanish Main Dr has moderate LAC development potential in the Monroe County. It is less than 2.5 miles from State roads, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 174. Monroe County Spot 3

MONROE SPOT #4

As per the criteria developed in this study, this 7.2-acre land parcel in the below image (Figure B 175) located in Sugarloaf Shores, FL at the intersection of S Point Dr and Cypress Rd has moderate LAC development potential in the Monroe County. It is less than 2.5 miles from State roads, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 175. Monroe County Spot 4

MONROE SPOT #5

As per the criteria developed in this study, this 8.2-acre land parcel in the below image (Figure B 176) located in next to the Summerland Key Airport at the intersection of E Shore Dr and 12th St has moderate LAC development potential in the Monroe County. It is less than 2.5 miles from State roads, less than 2.5 miles from nearest airport, has low AADT traffic and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 176. Monroe County Spot 5

Nassau County

NASSAU SPOT #2

As per the criteria developed in this study, this 25.4-acre land parcel in the below image (Figure B 177) located in Callahan, FL at the intersection of US Highway 301 and Pickett Family Ct industrial area has high LAC development potential in the Nassau County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

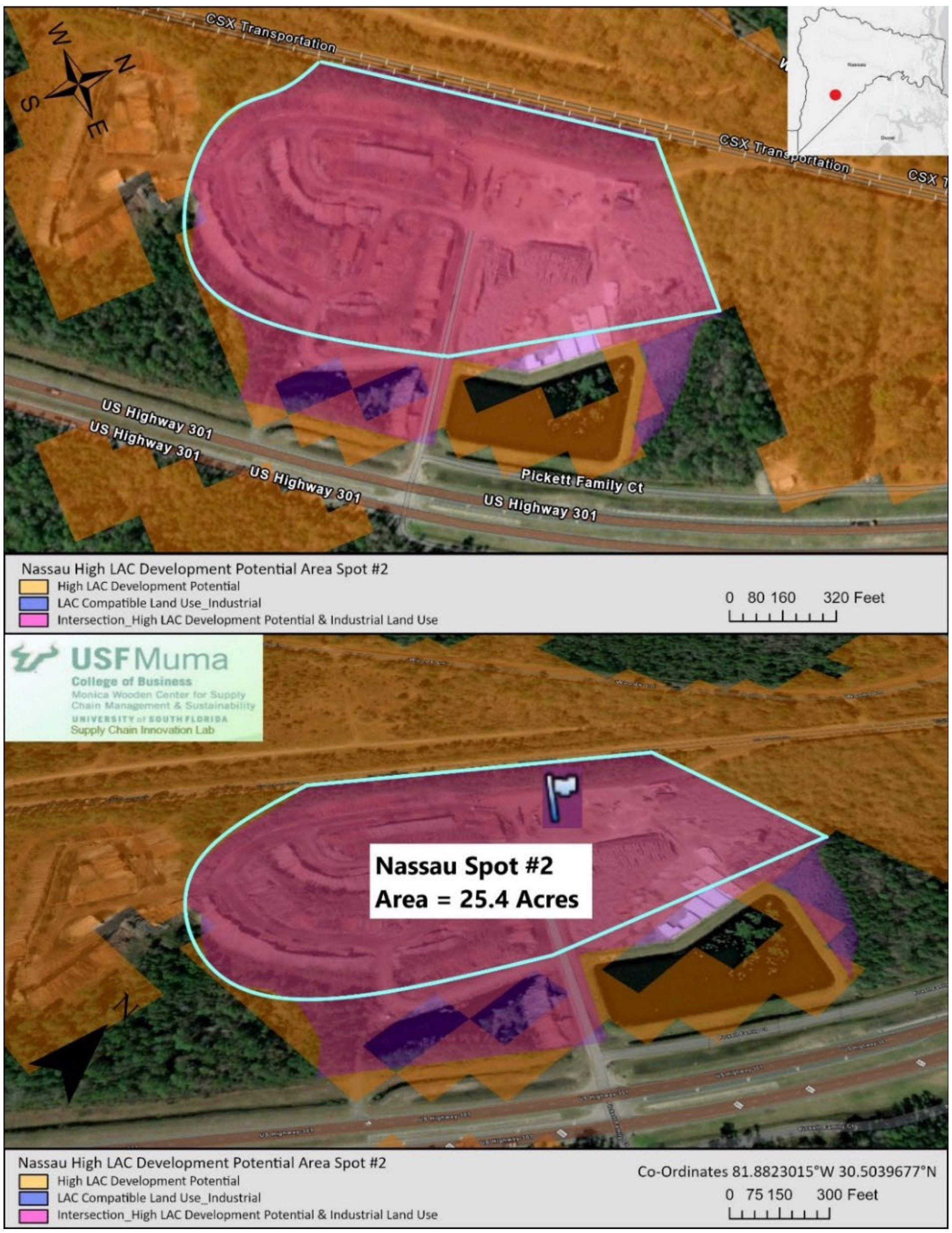

Figure B 177. Nassau County Spot 2

NASSAU SPOT #3

As per the criteria developed in this study, this 10.6-acre land parcel in the below image (Figure B 178) located in Callahan, FL at the intersection of US Highway 301 and Meadows Ln industrial area has high LAC development potential in the Nassau County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

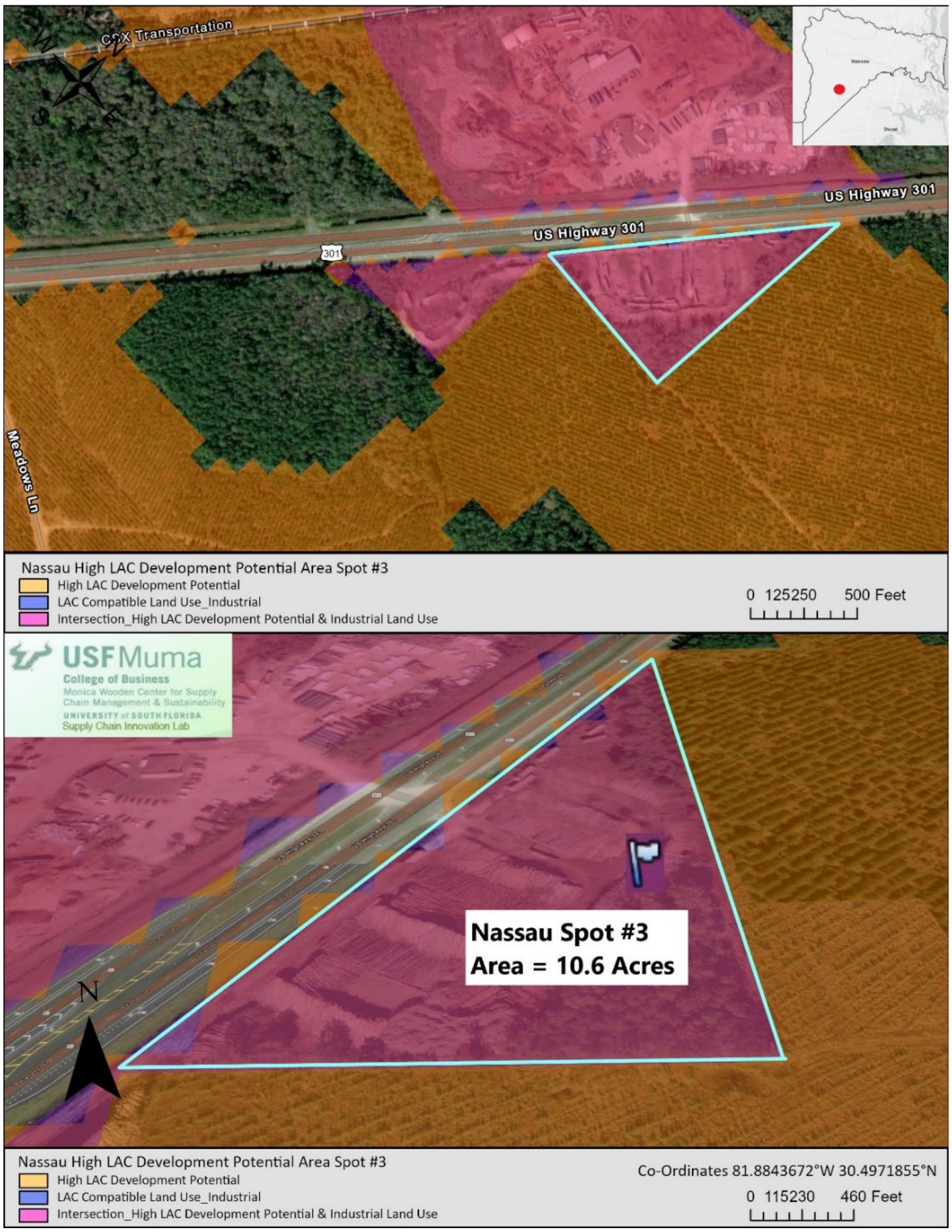

Figure B 178. Nassau County Spot 3

NASSAU SPOT #4

As per the criteria developed in this study, this 69.5-acre land parcel in the below image (Figure B 179) located in Yulee, FL at the intersection of Clyde Higginbotham Rd and Harts Rd has high LAC development potential in the Nassau County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

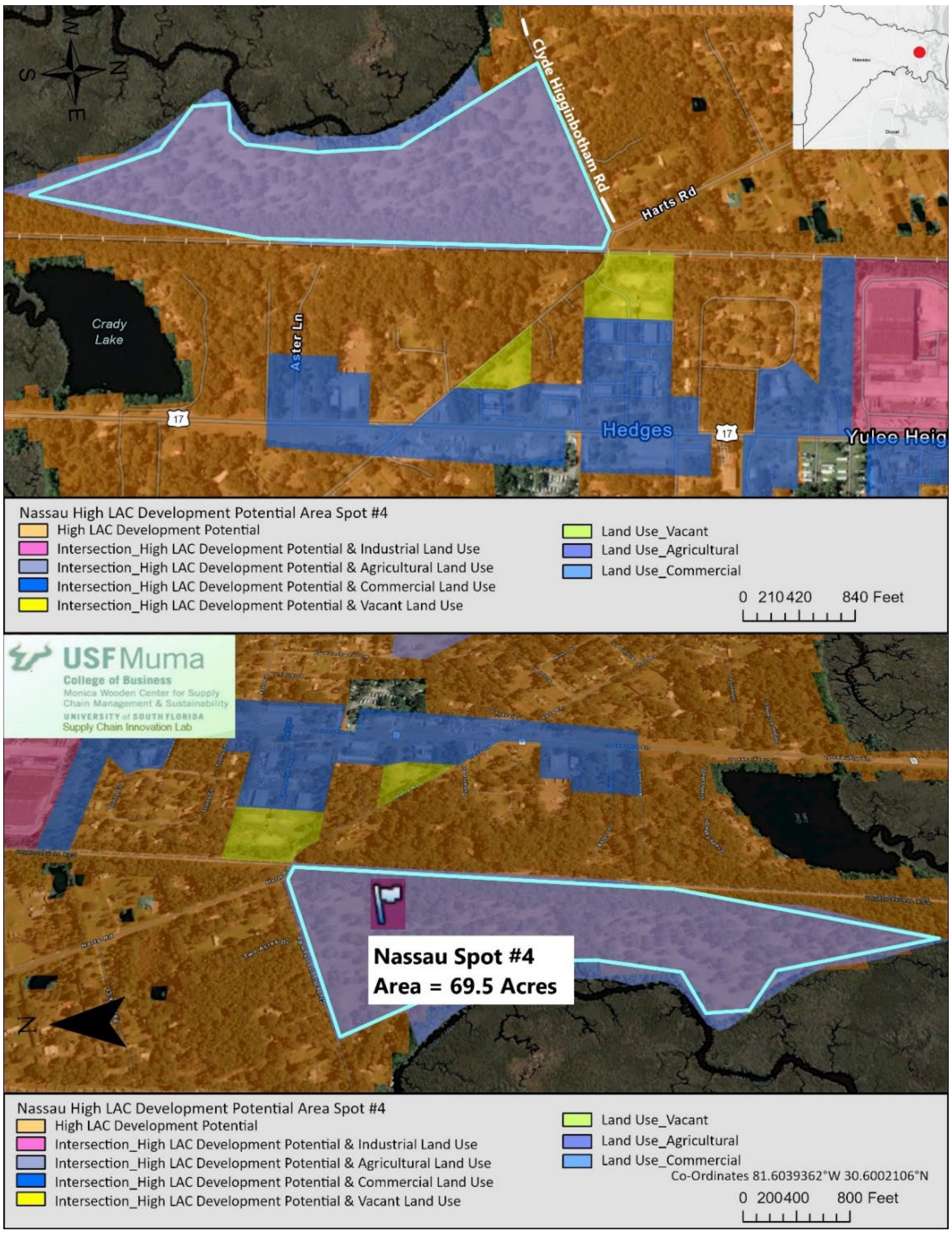

Figure B 179. Nassau County Spot 4

NASSAU SPOT #5

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 180) located in Yulee, FL at the intersection of Lee Plantation Dr and Pages Diary Rd has high LAC development potential in the Nassau County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial lands around it which makes it suitable for re-zoning.

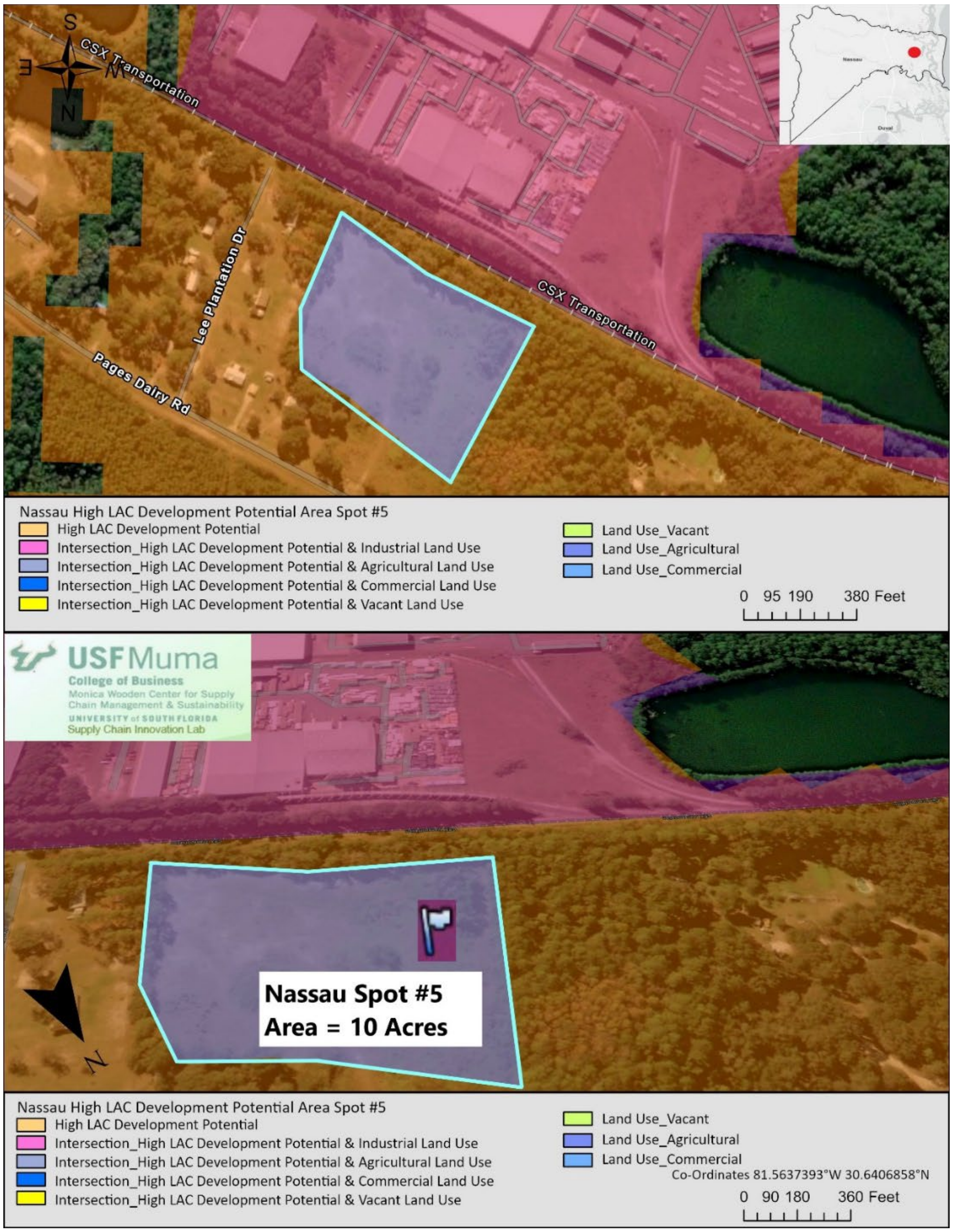

Figure B 180. Nassau County Spot 5

Okaloosa County

OKALOOSA SPOT #2

As per the criteria developed in this study, this 18-acre land parcel in the below image (Figure B 181) located near the intersection of Cayson Ave and Old Milligan Rd has high LAC development potential in the Okaloosa County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

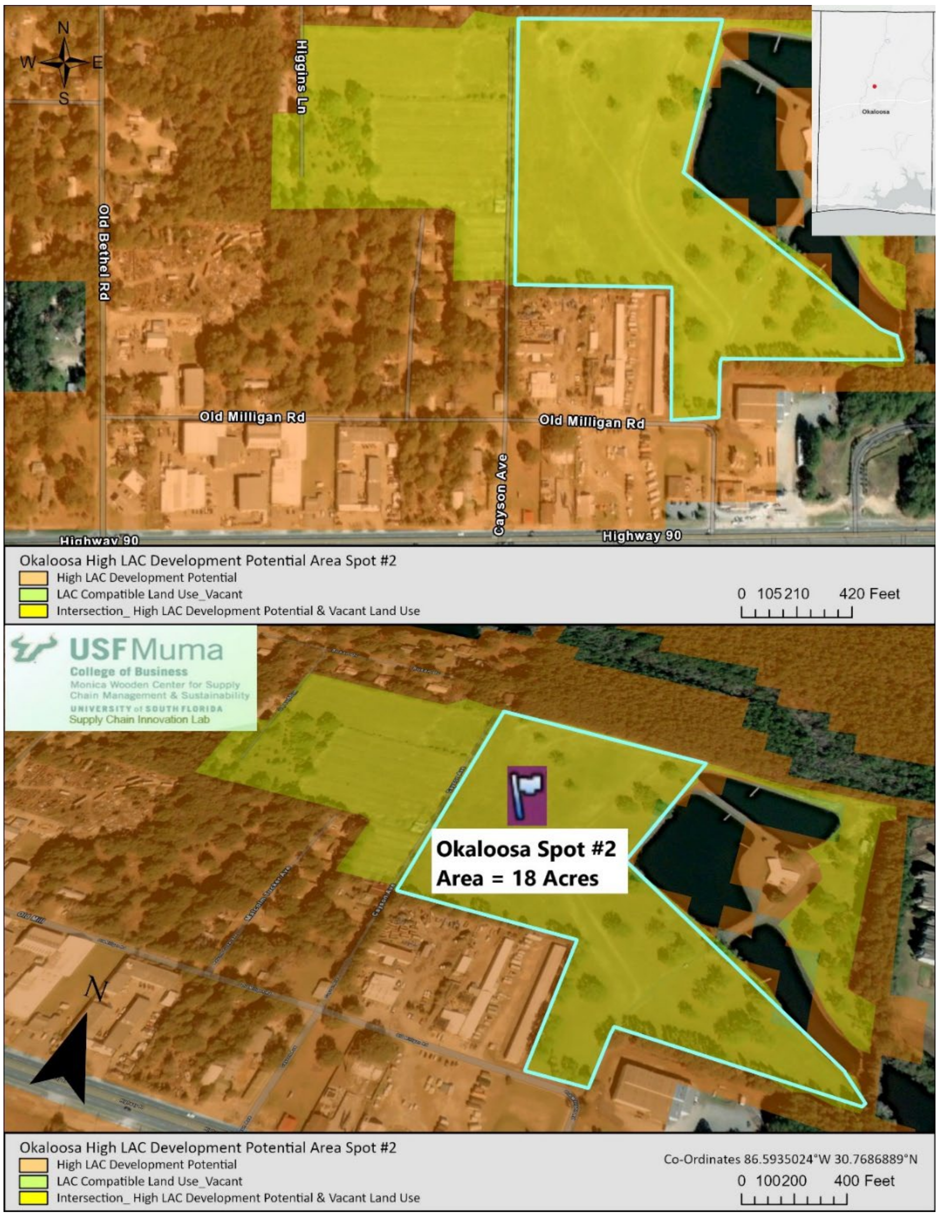

Figure B 181. Okaloosa County Spot 2

OKALOOSA SPOT #3

As per the criteria developed in this study, this 31.5-acre land parcel in the below image (Figure B 182) located near the intersection of Highway 90 and Monterrey Rd has high LAC development potential in the Okaloosa County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

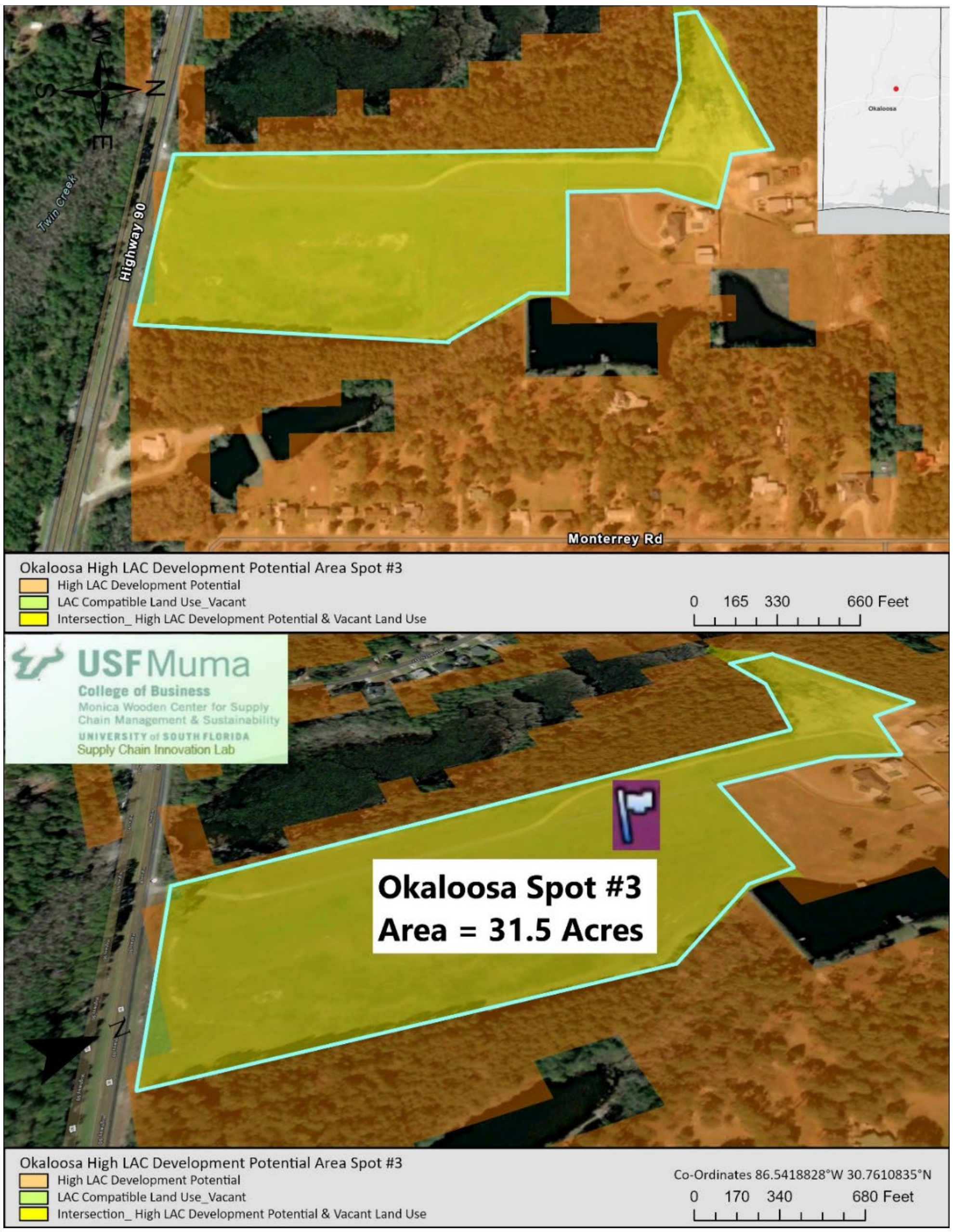

Figure B 182. Okaloosa County Spot 3

OKALOOSA SPOT #4

As per the criteria developed in this study, this 75-acre land parcel in the below image (Figure B 183) located near the intersection of Leitemann Rd and Keyser Mill Rd has high LAC development potential in the Okaloosa County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

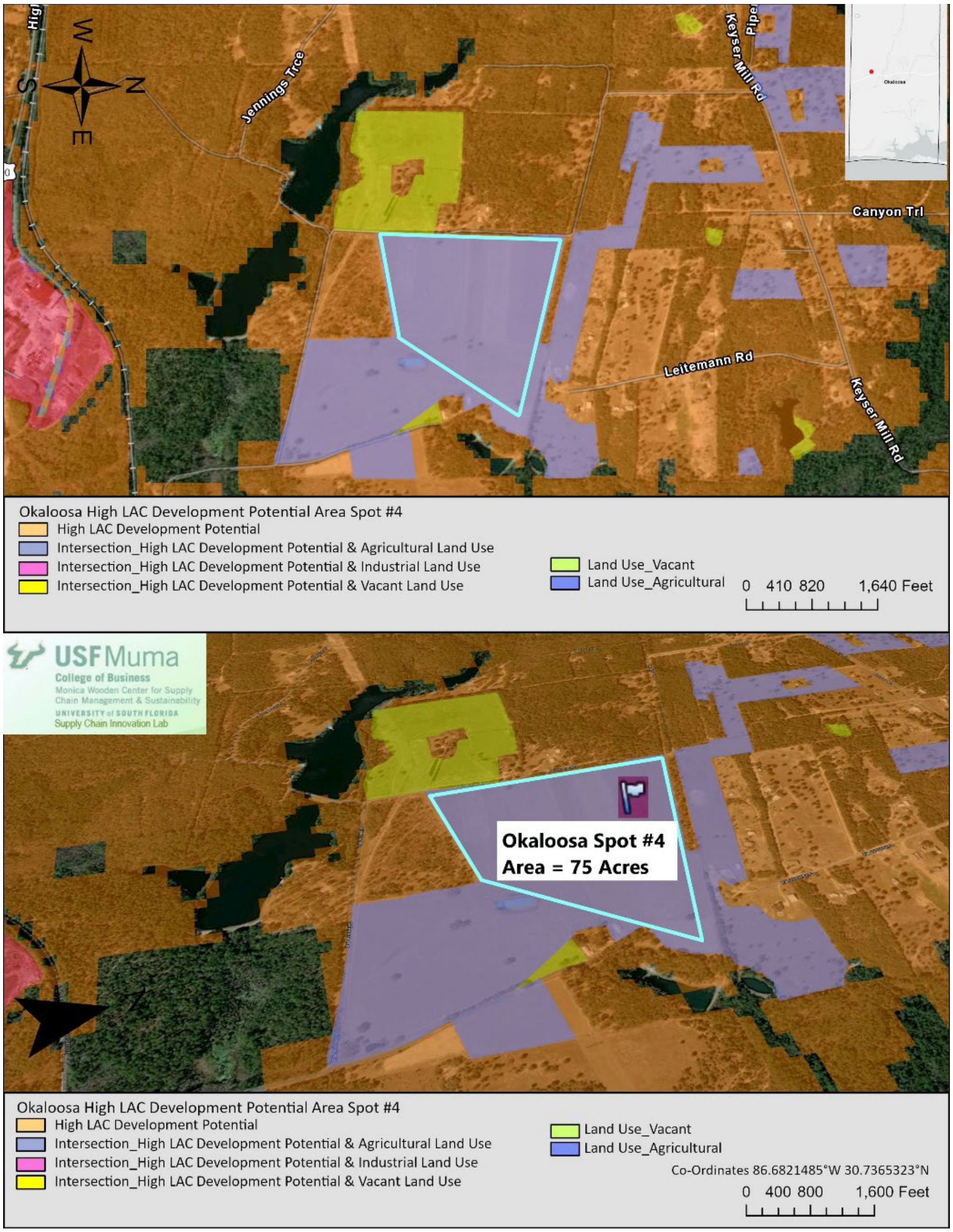

Figure B 183. Okaloosa County Spot 4

OKALOOSA SPOT #5

As per the criteria developed in this study, this 40.2-acre land parcel in the below image (Figure B 184) located at the intersection of State Line Rd and Mountain City Rd has moderate LAC development potential in the Okaloosa County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 184. Okaloosa County Spot 5

Okeechobee County

OKEECHOBEE SPOT #2

As per the criteria developed in this study, this 43.5-acre land parcel in the below image (Figure B 185) located at the intersection of State Road 70 E and NE 13th Ave has high LAC development potential in the Okeechobee County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

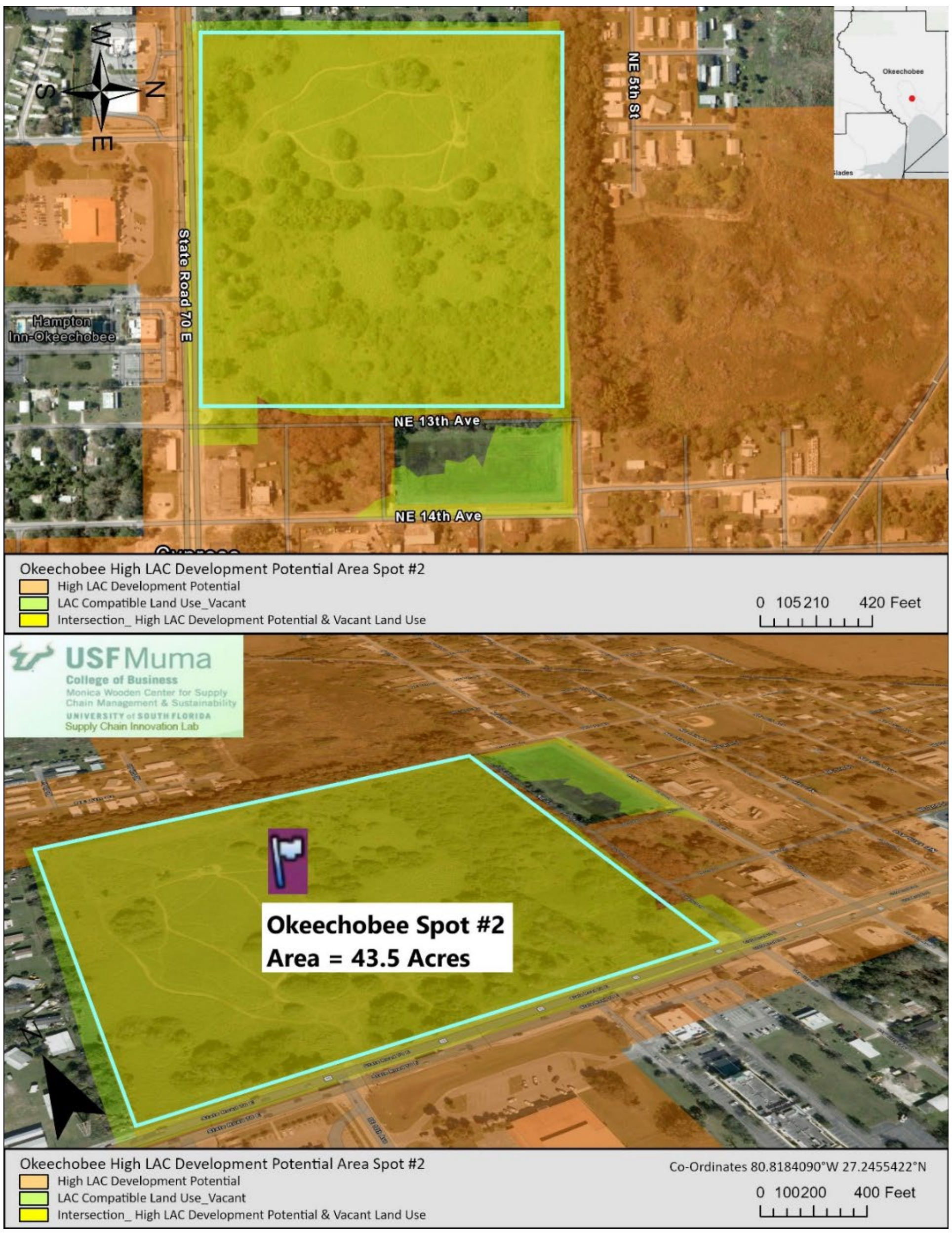

Figure B 185. Okeechobee County Spot 2

OKEECHOBEE SPOT #3

As per the criteria developed in this study, this 31.2-acre land parcel in the below image (Figure B 186) located in next to the Okeechobee County Airport at the intersection of NW 9th St and NW 10th Ave has high LAC development potential in the Okeechobee County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from nearest airport, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 186. Okeechobee County Spot 3

OKEECHOBEE SPOT #4

As per the criteria developed in this study, this 115-acre land parcel in the below image (Figure B 187) located near the Okeechobee County Airport at the intersection of NW 9th St and US Highway 98 N has high LAC development potential in the Okeechobee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

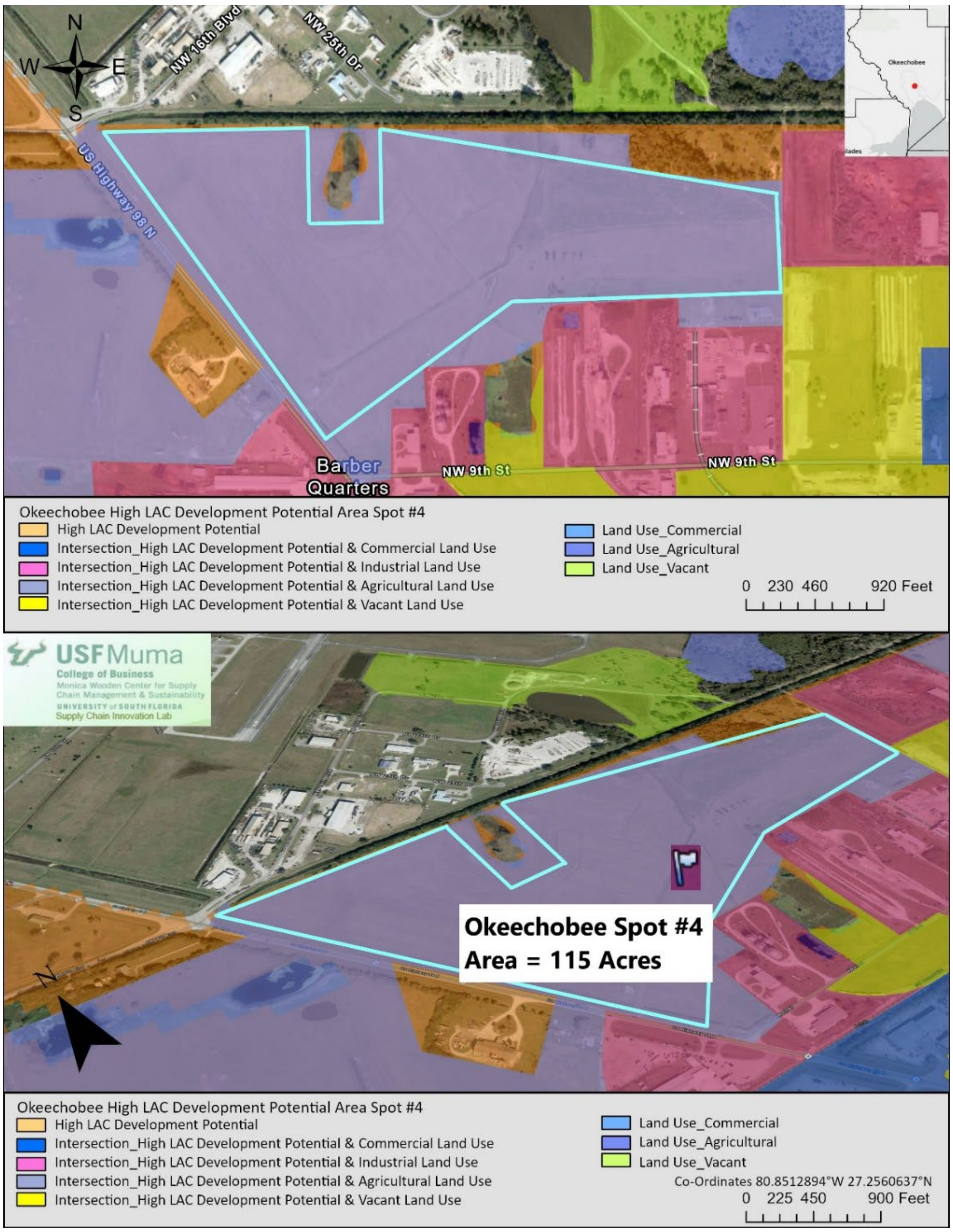

Figure B 187. Okeechobee County Spot 4

OKEECHOBEE SPOT #5

As per the criteria developed in this study, this huge 60-acre land parcel in the below image (Figure B 188) located near the Okeechobee County Airport at the intersection of NW 9th St and US Highway 98 N has high LAC development potential in the Okeechobee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

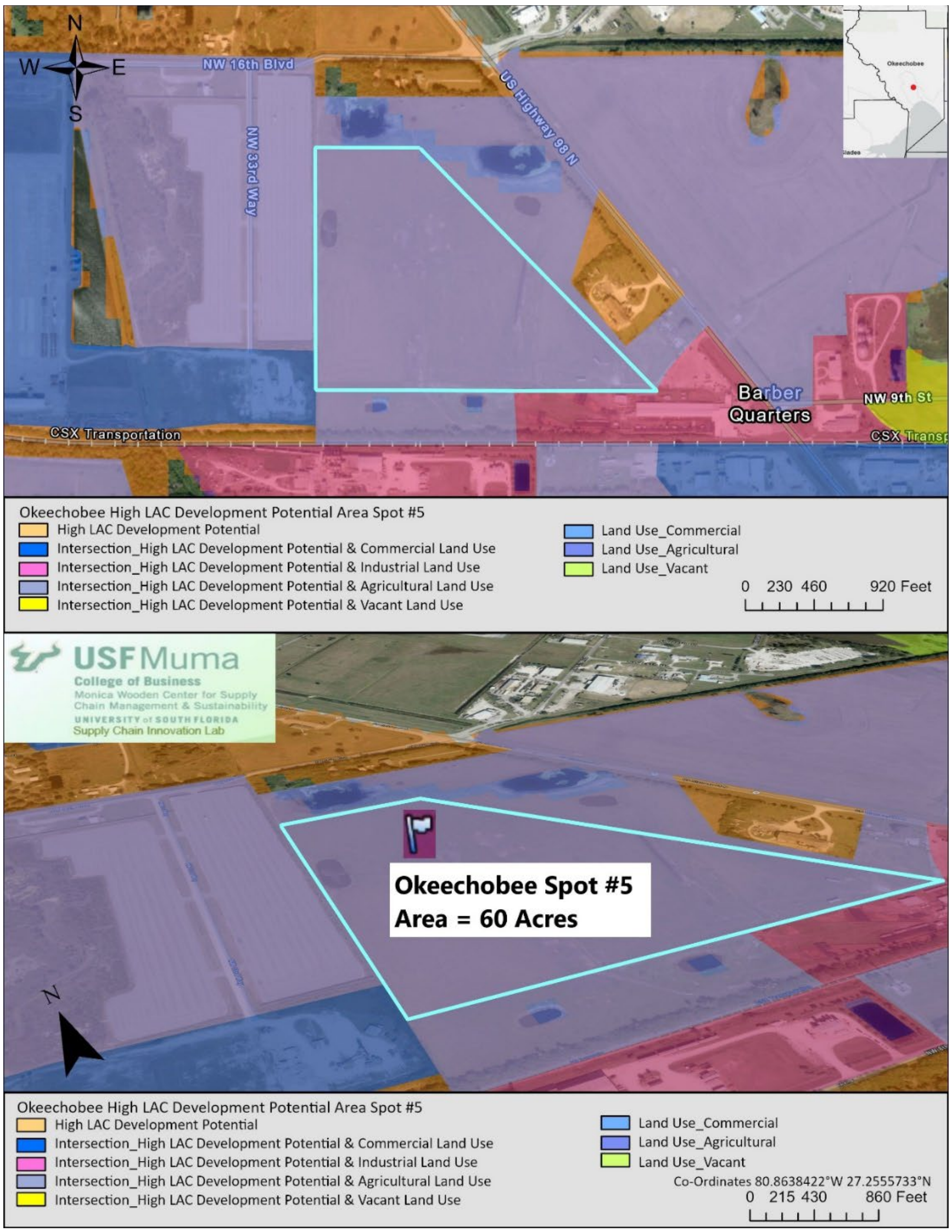

Figure B 188. Okeechobee County Spot 5

Orange County

ORANGE SPOT #2

As per the criteria developed in this study, this 15.3-acre land parcel in the below image (Figure B 189) located in Lockhart, FL at the intersection of Sharpe Road and Keystone Heights Rd has very high LAC development potential in the Orange County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has workforce availability of over 450,000 and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

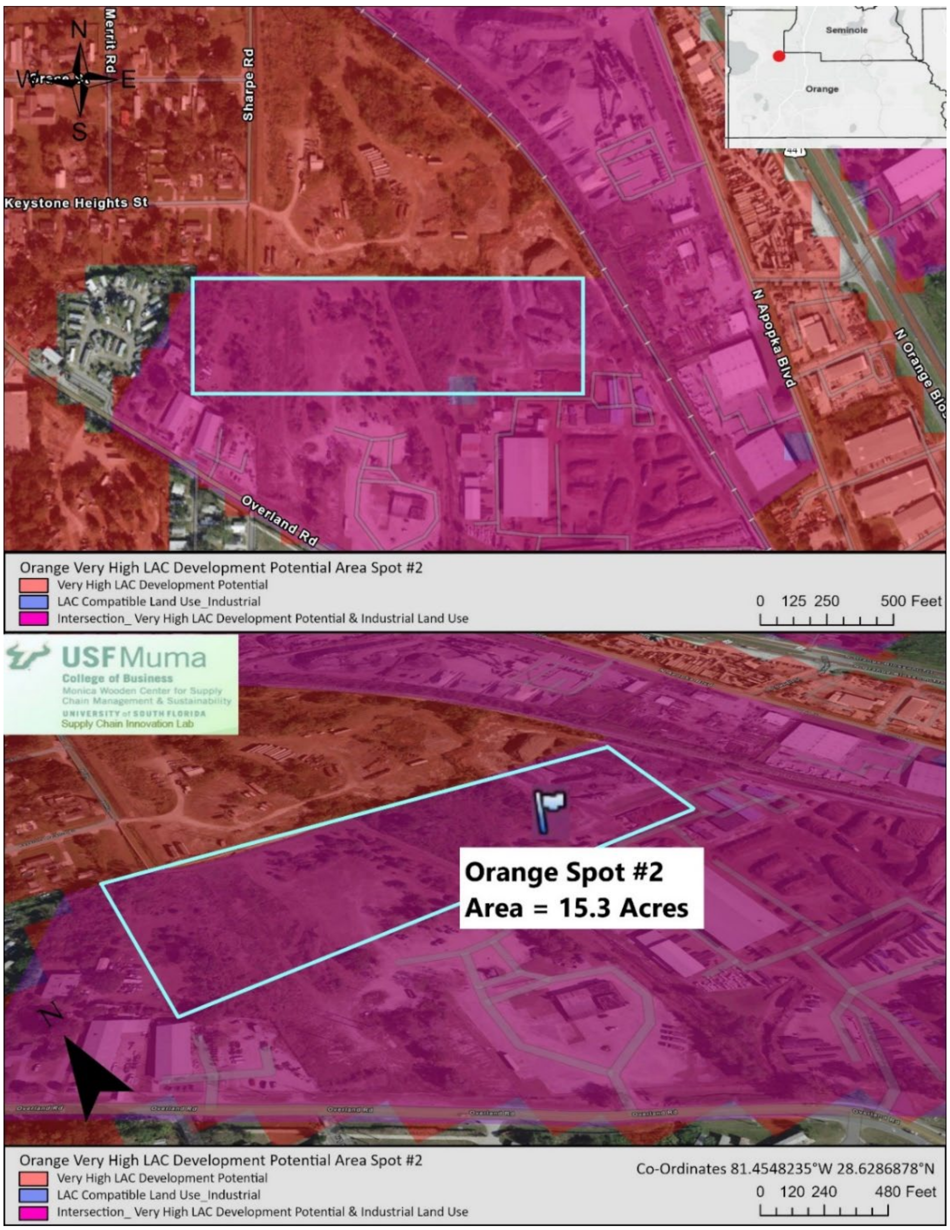

Figure B 189. Orange County Spot 2

ORANGE SPOT #3

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 190) located in Edgewood, FL at the intersection of Mary Jess Rd and Orange Ave S has very high LAC development potential in the Orange County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from the nearest airport, less than 6.25 miles from nearest Intermodal Logistics Center (ILC), has workforce availability of over 450,000 and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

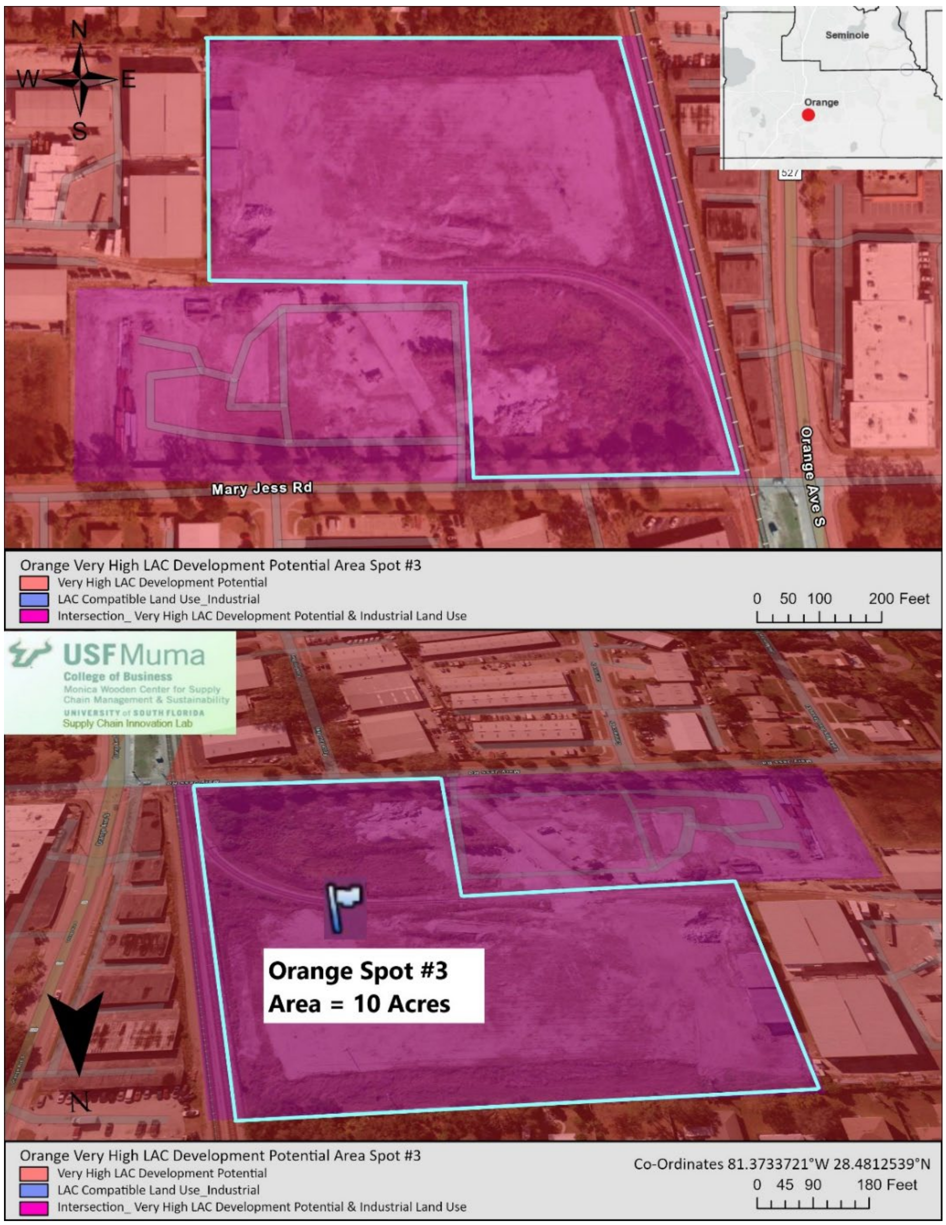

Figure B 190. Orange County Spot 3

ORANGE SPOT #4

As per the criteria developed in this study, this 16-acre land parcel in the below image (Figure B 191) located in Apopka, FL at the intersection of Vulcan Rd and S Apopka Blvd has very high LAC development potential in the Orange County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

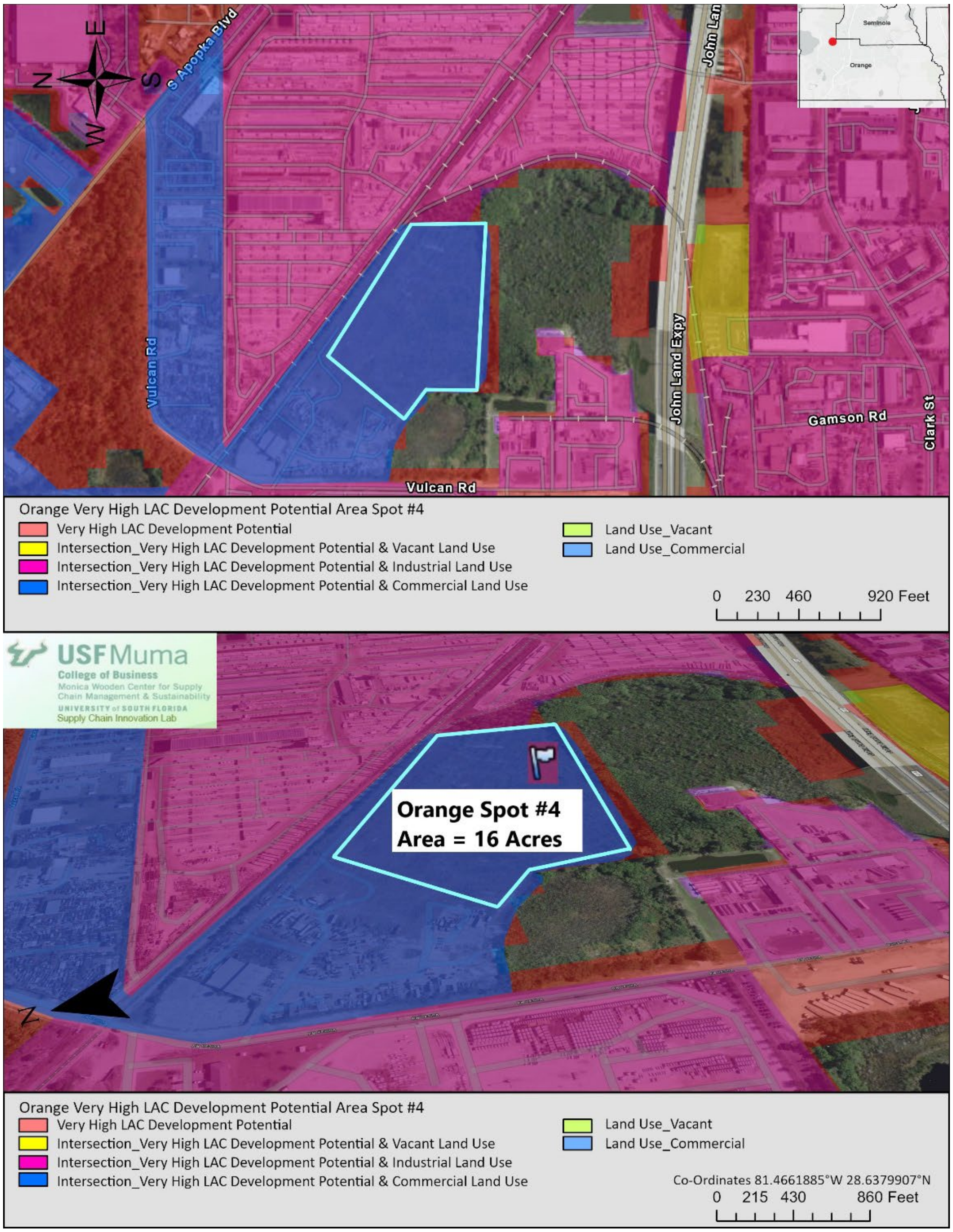

Figure B 191. Orange County Spot 4

ORANGE SPOT #5

As per the criteria developed in this study, this 51-acre land parcel in the below image (Figure B 192) located in Zellwood, FL at the intersection of Sadler Rd and Laughlin Rd has very high LAC development potential in the Orange County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

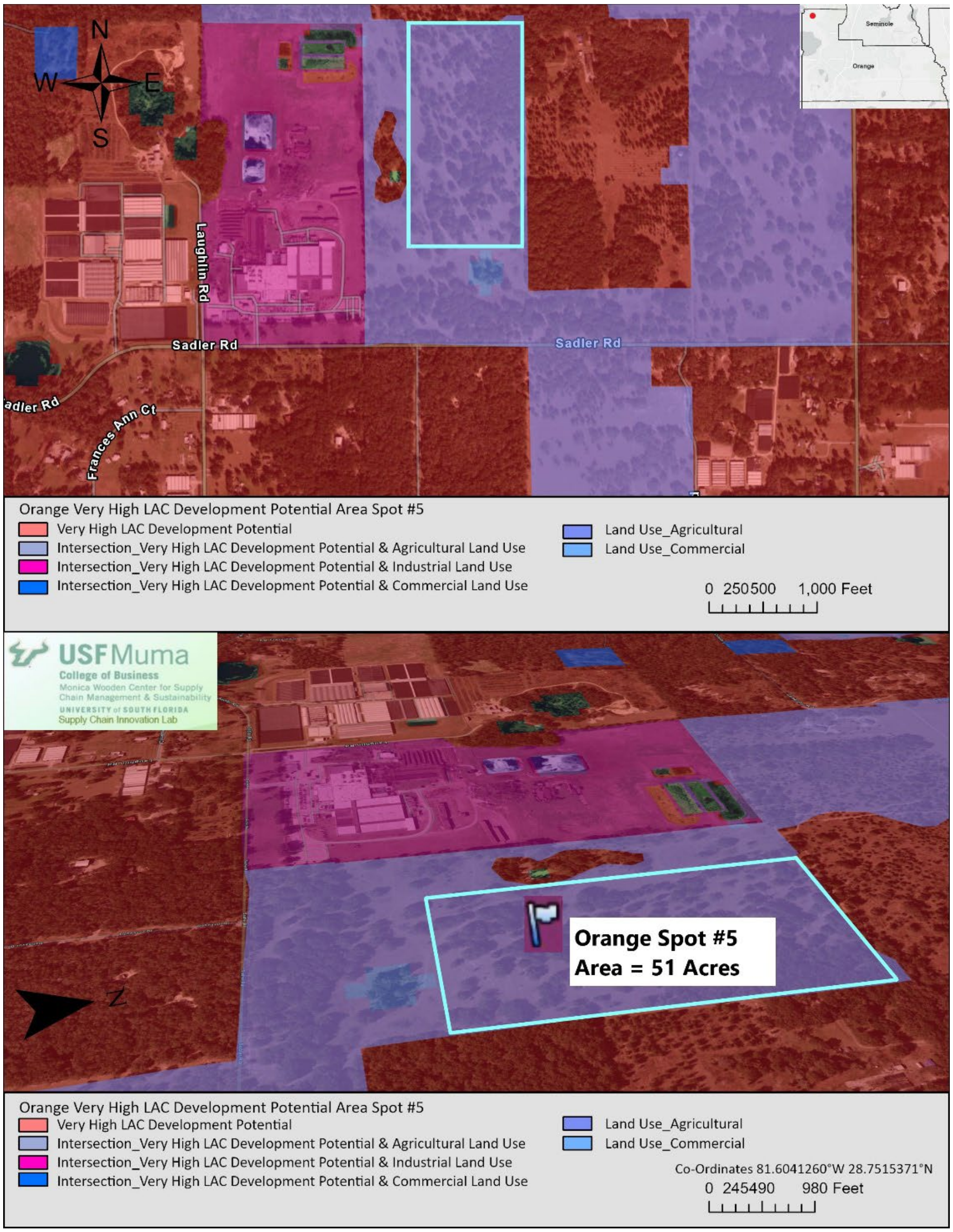

Figure B 192. Orange County Spot 5

Osceola County

OSCEOLA SPOT #2

As per the criteria developed in this study, this 10.2-acre land parcel in the below image (Figure B 193) located near the Kissimmee Gateway Airport at the intersection of Smith St and Lesesne St has very high LAC development potential in the Osceola County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

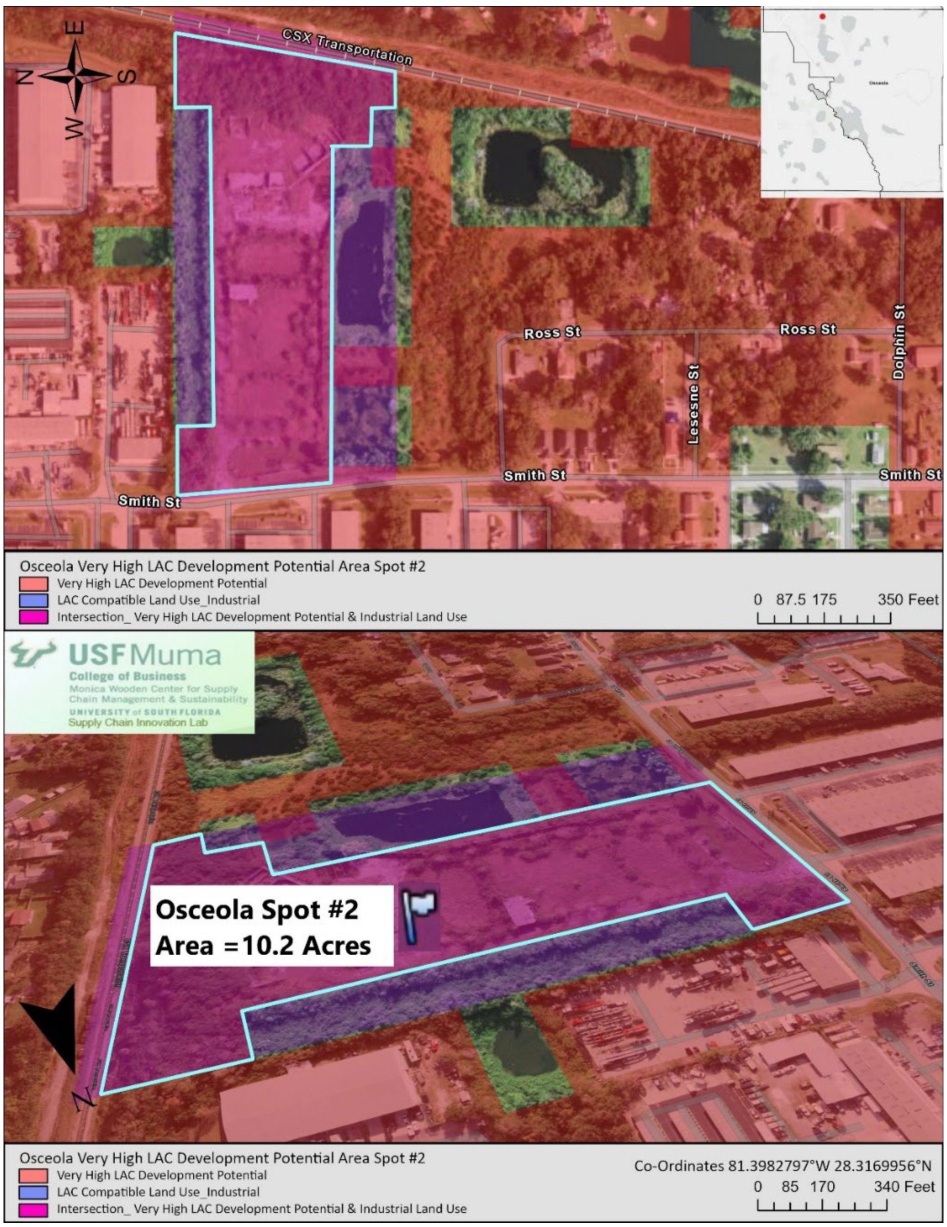

Figure B 193. Osceola County Spot 2

OSCEOLA SPOT #3

As per the criteria developed in this study, this 13.5-acre land parcel in the below image (Figure B 194) located near the Kissimmee Gateway Airport at the intersection of Old Tampa Hwy and S Hoagland Blvd has high LAC development potential in the Osceola County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

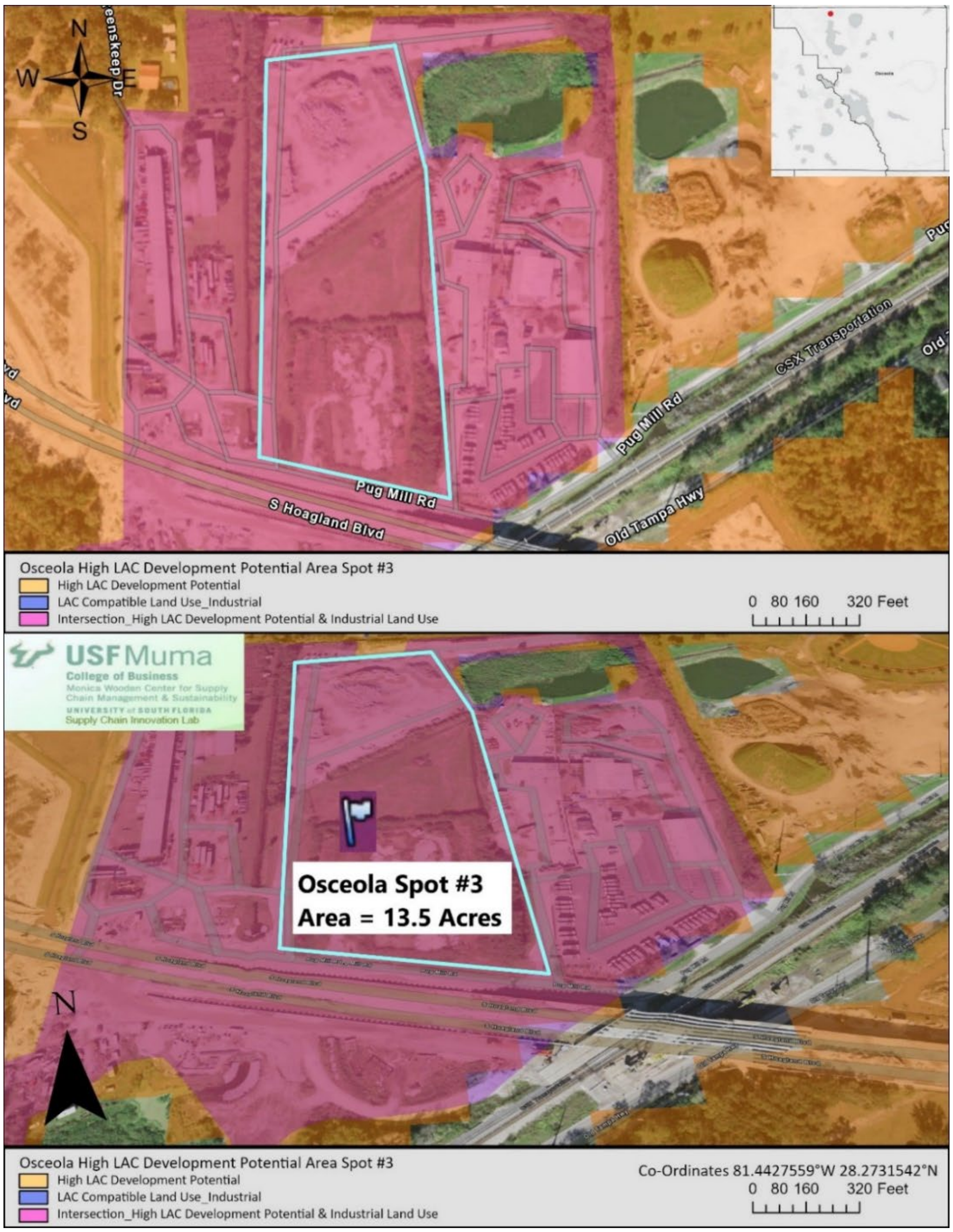

Figure B 194. Osceola County Spot 3

OSCEOLA SPOT #4

As per the criteria developed in this study, this 86.2-acre land parcel in the below image (Figure B 195) located near the Campbell City Osceola County tax collector's office at the intersection of Robert McLane Blvd and S Poinciana Blvd has high LAC development potential in the Osceola County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

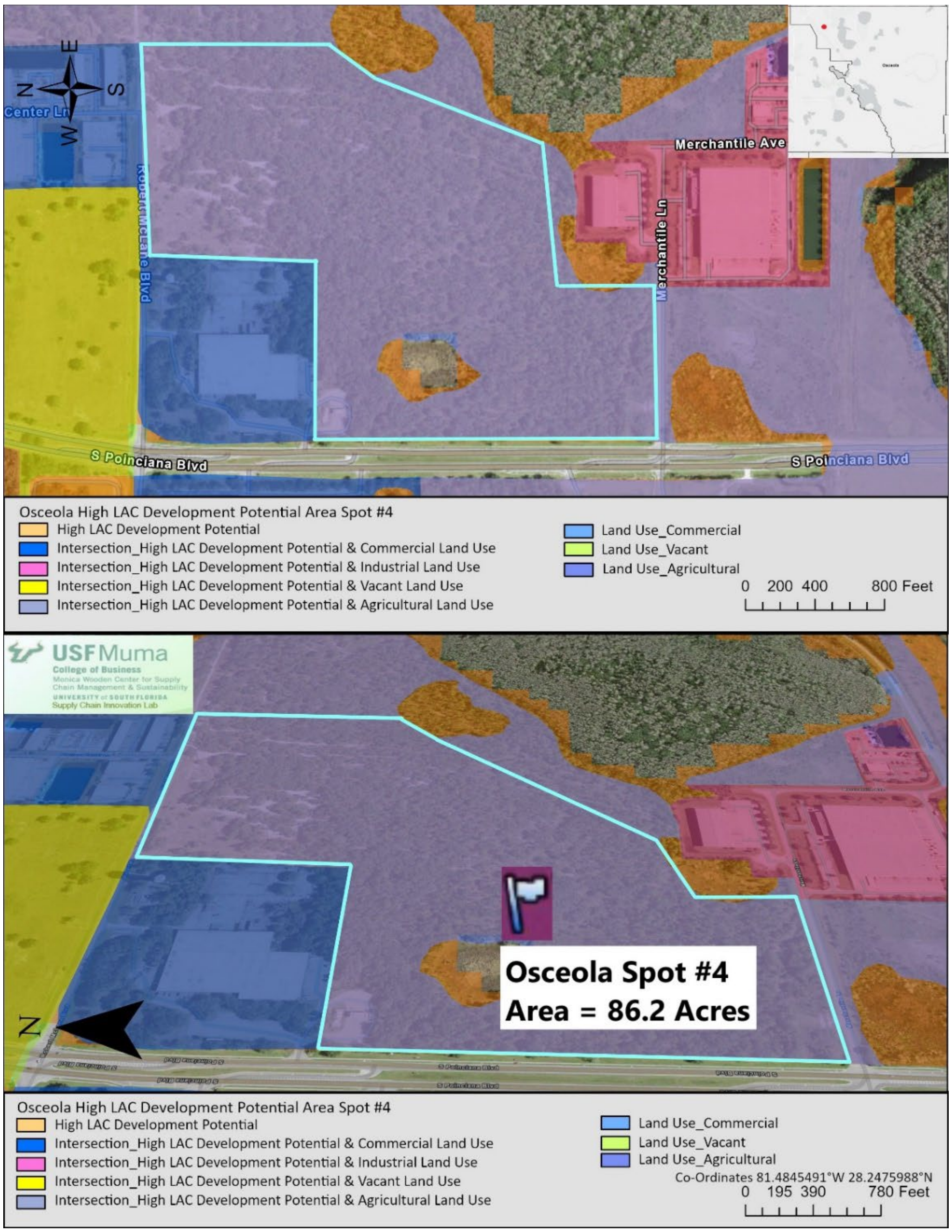

Figure B 195. Osceola County Spot 4

OSCEOLA SPOT #5

As per the criteria developed in this study, this 46.6-acre land parcel in the below image (Figure B 196) located near the Poinciana High School at the intersection of Avenue A and S Poinciana Blvd has high LAC development potential in the Osceola County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

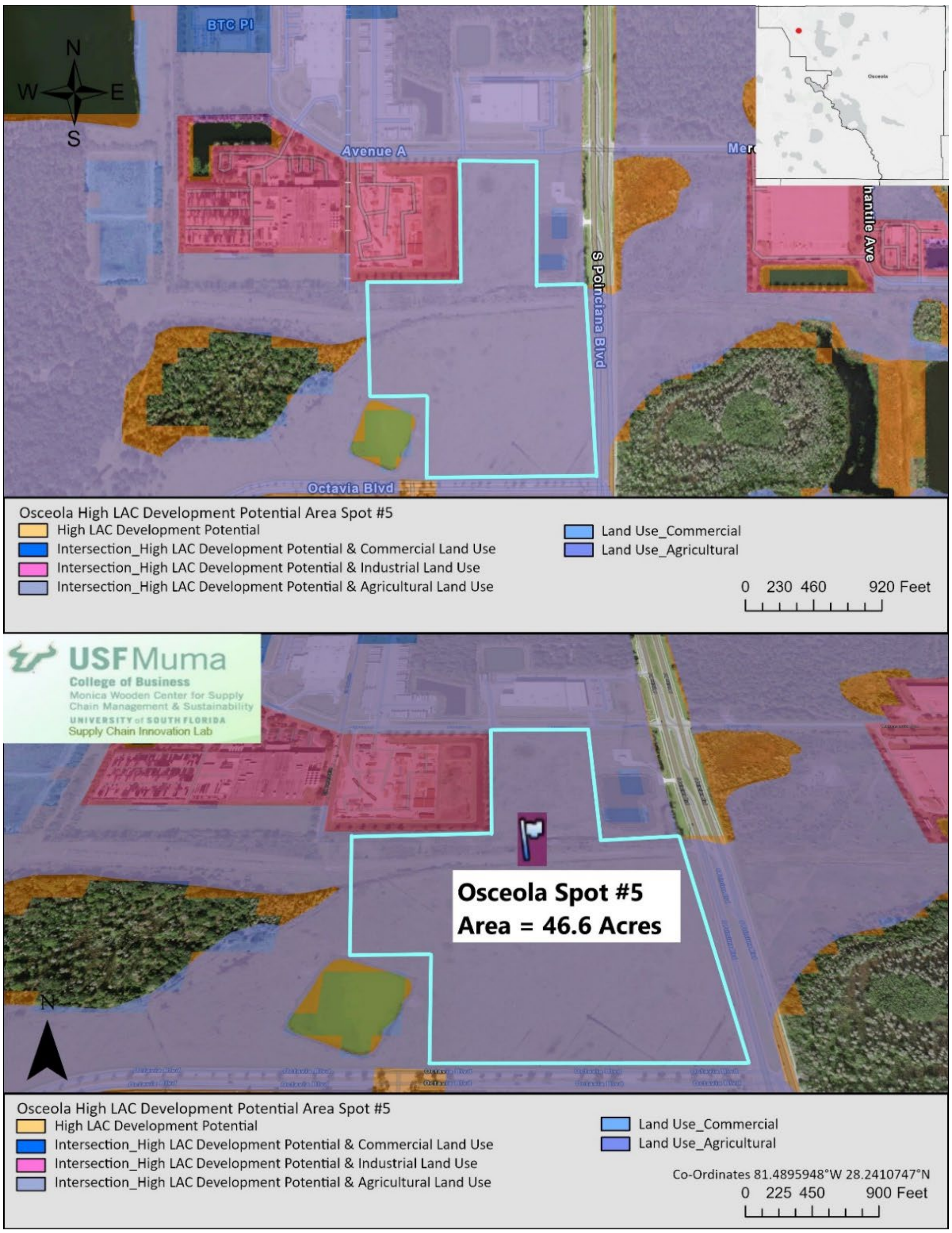

Figure B 196. Osceola County Spot 5

Palm Beach County

PALM BEACH SPOT #2

As per the criteria developed in this study, this 10-acre land parcel in the below image (Figure B 197) located at the intersection of Jog Rd and W Boyton Beach Blvd has very high LAC development potential in the Palm Beach County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

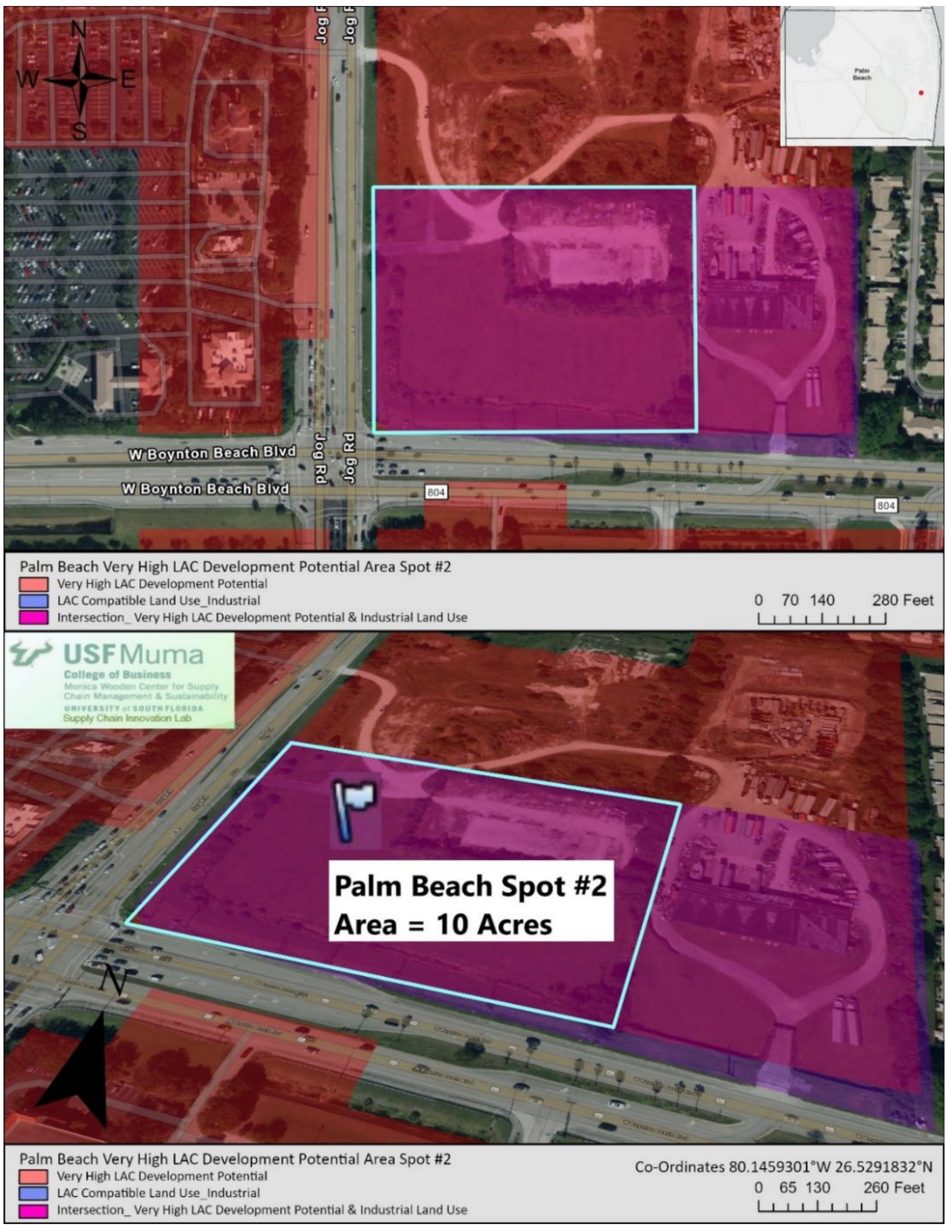

Figure B 197. Palm Beach County Spot 2

PALM BEACH SPOT #3

As per the criteria developed in this study, this 20.5-acre land parcel in the below image (Figure B 198) located in Boynton Beach area at the intersection of S State Road 7 and 97th Pl S has very high LAC development potential in the Palm Beach County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 10 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure B 198. Palm Beach County Spot 3

PALM BEACH SPOT #4

As per the criteria developed in this study, this 400-acre total land parcel in the below image (Figure B 199) located next to the Belle Glade State Municipal Airport has very high LAC development potential in the Palm Beach County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

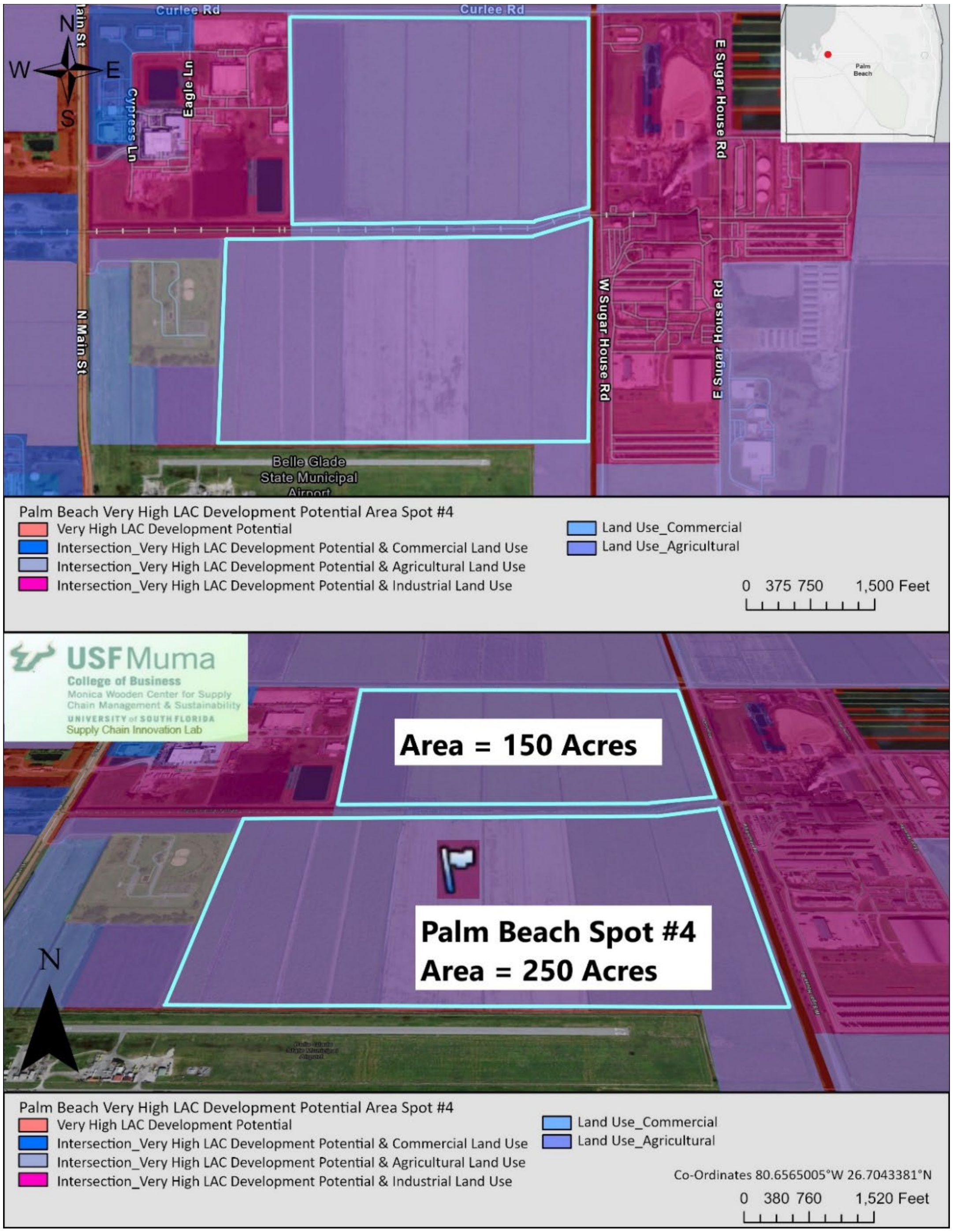

Figure B 199. Palm Beach County Spot 4

PALM BEACH SPOT #5

As per the criteria developed in this study, this 17.5-acre land parcel in the below image (Figure B 200) located near the William P Gwinn Airport at the intersection of Corporate Rd S and Park of Commerce Blvd has very high LAC development potential in the Palm Beach County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial lands around it which makes it suitable for re-zoning.

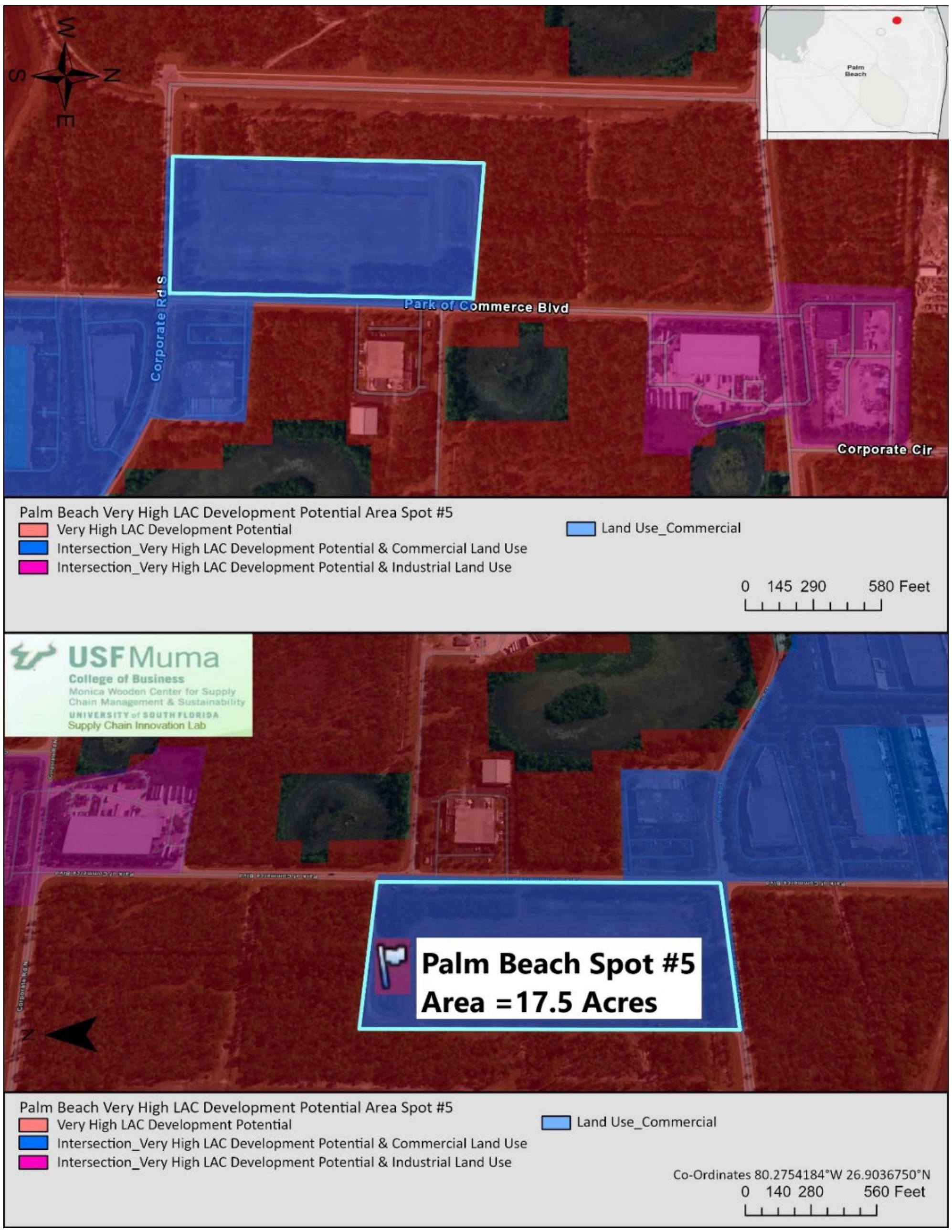

Figure B 200. Palm Beach County Spot 5

Pasco County

PASCO SPOT #2

As per the criteria developed in this study, this 22.5-acre land parcel in the below image (Figure B 201) located in Odessa, FL at the intersection of Perimeter Way and Lakepointe Pkwy has very high LAC development potential in the Pasco County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 10 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

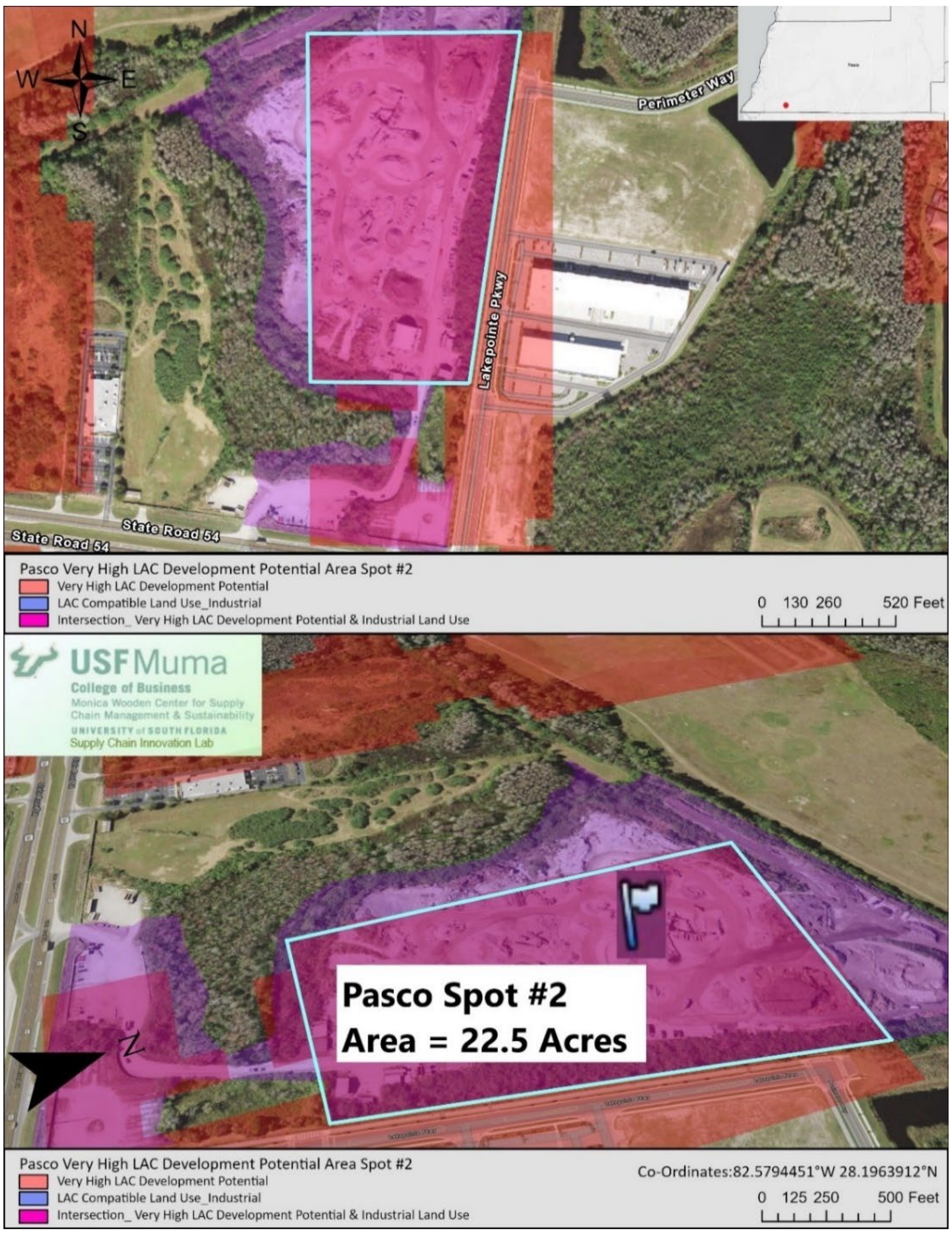

Figure B 201. Pasco County Spot 2

PASCO SPOT #3

As per the criteria developed in this study, this 81-acre land parcel in the below image (Figure B 202) located in Lacoochee, FL at the intersection of Coit Rd and Hines Rd has high LAC development potential in the Pasco County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT traffic and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

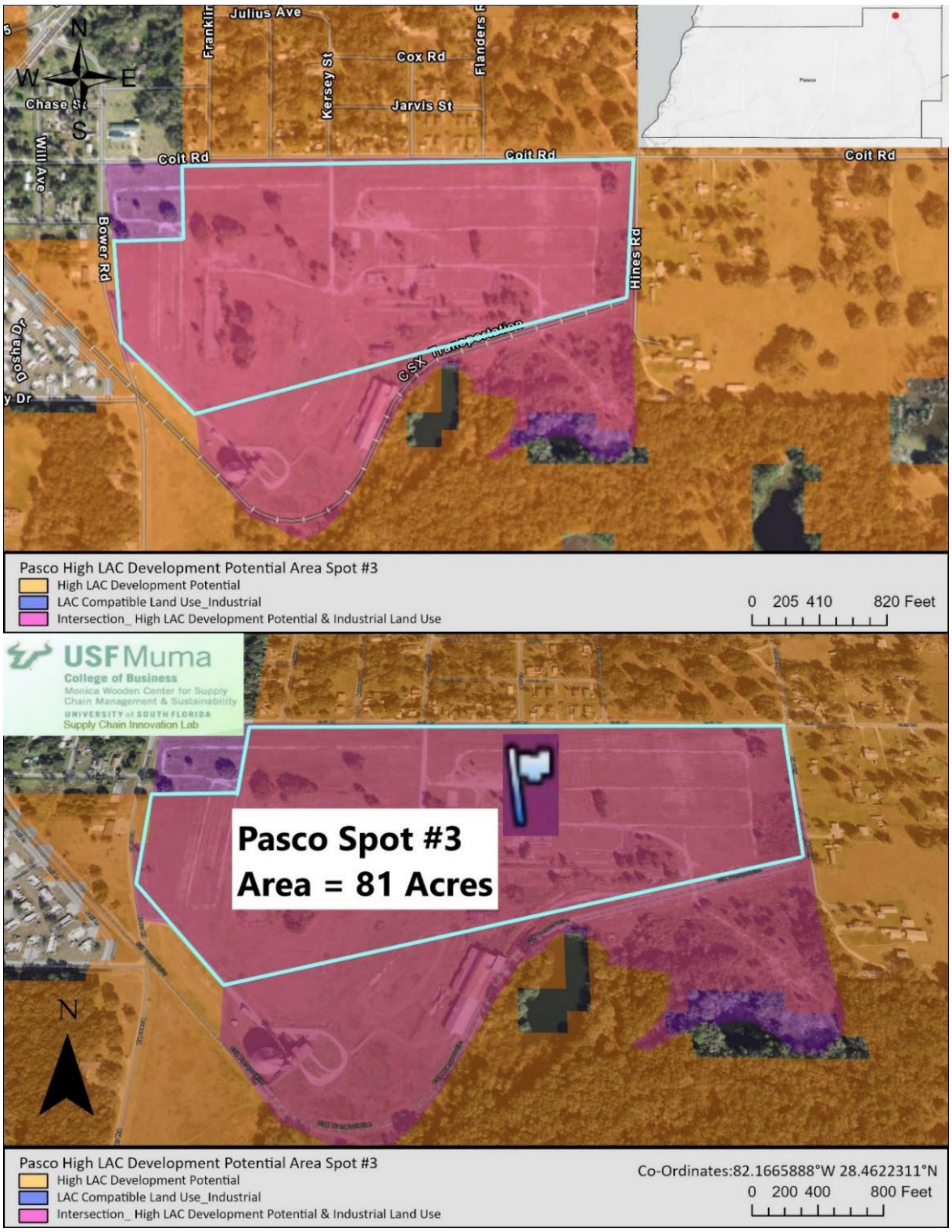

Figure B 202. Pasco County Spot 3

PASCO SPOT #4

As per the criteria developed in this study, this 13.2-acre land parcel in the below image (Figure B 203) located at the intersection of Heart Pine Ave and State Road 54 has high LAC development potential in the Pasco County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

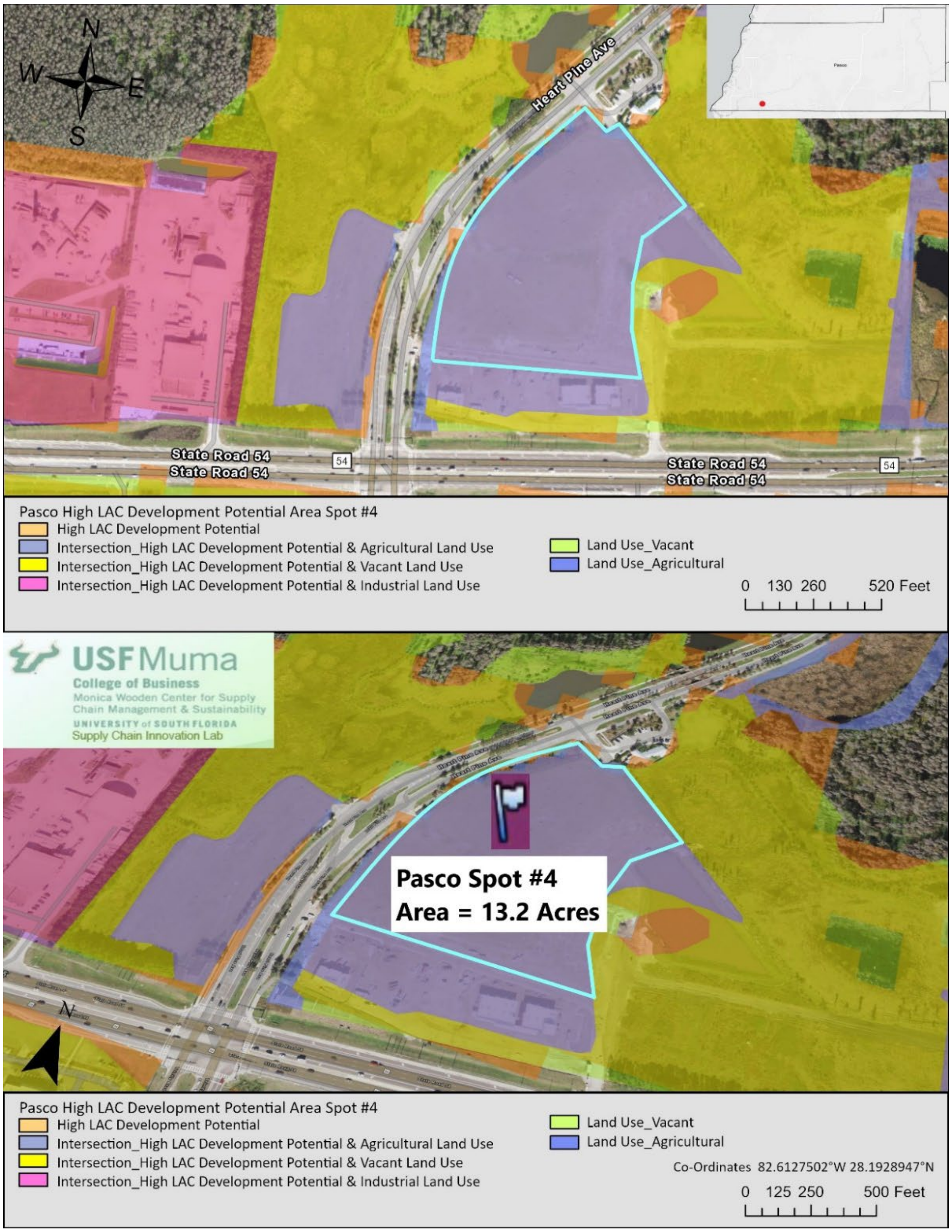

Figure B 203. Pasco County Spot 4

PASCO SPOT #5

As per the criteria developed in this study, this 10.3-acre land parcel in the below image (Figure B 204) located at the intersection of Orchid Lake Rd and Rutillo Ct has high LAC development potential in the Pasco County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial lands around it which makes it suitable for re-zoning.

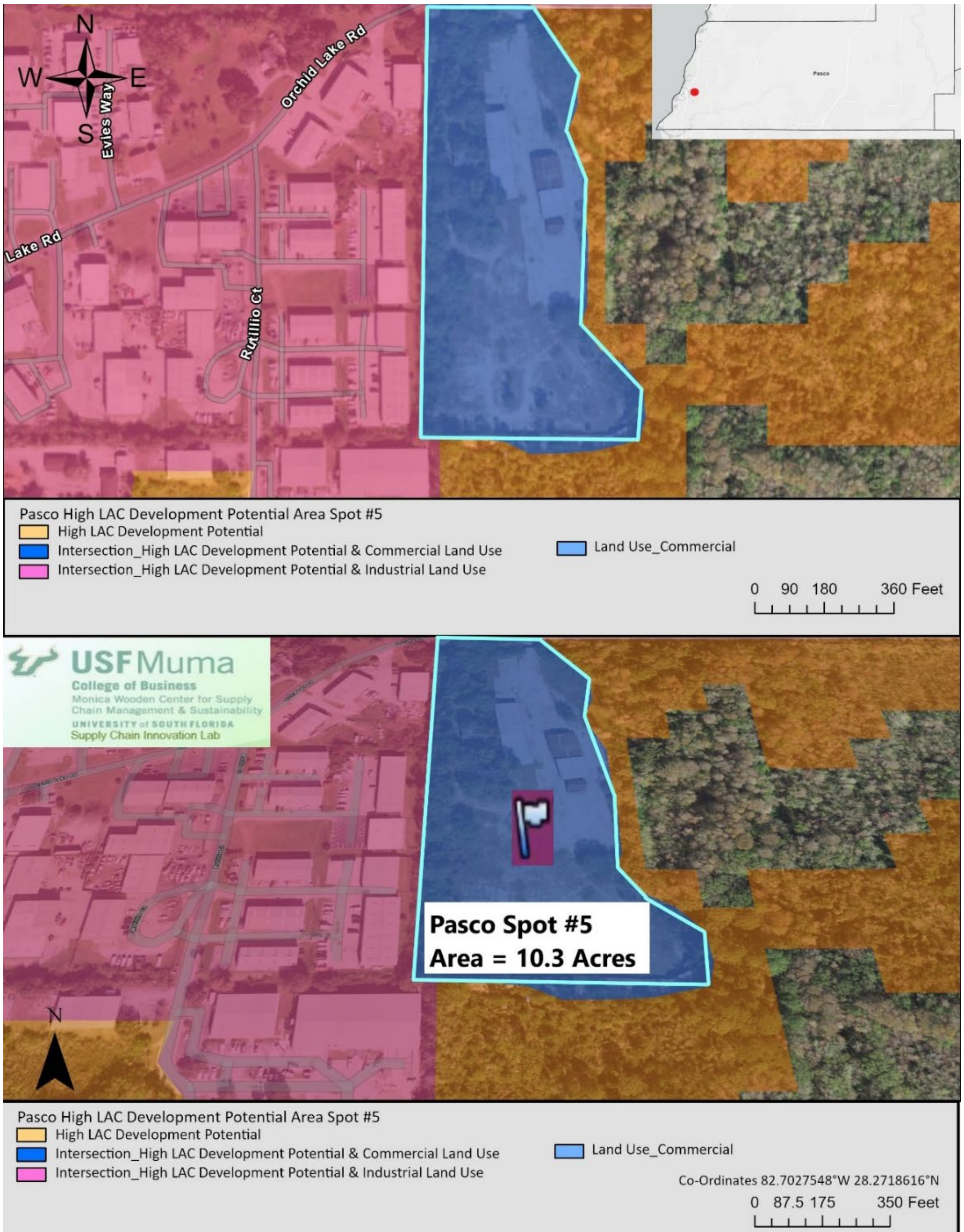

Figure B 204. Pasco County Spot 5

Pinellas County

PINELLAS SPOT #2

As per the criteria developed in this study, this 12.2-acre land parcel in the below image (Figure B 205) located in Largo, FL at the intersection of Bryan Diary Rd and US Highway 19 N has very high LAC development potential in the Pinellas County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from nearest airport, has workforce availability of above 450,000 and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

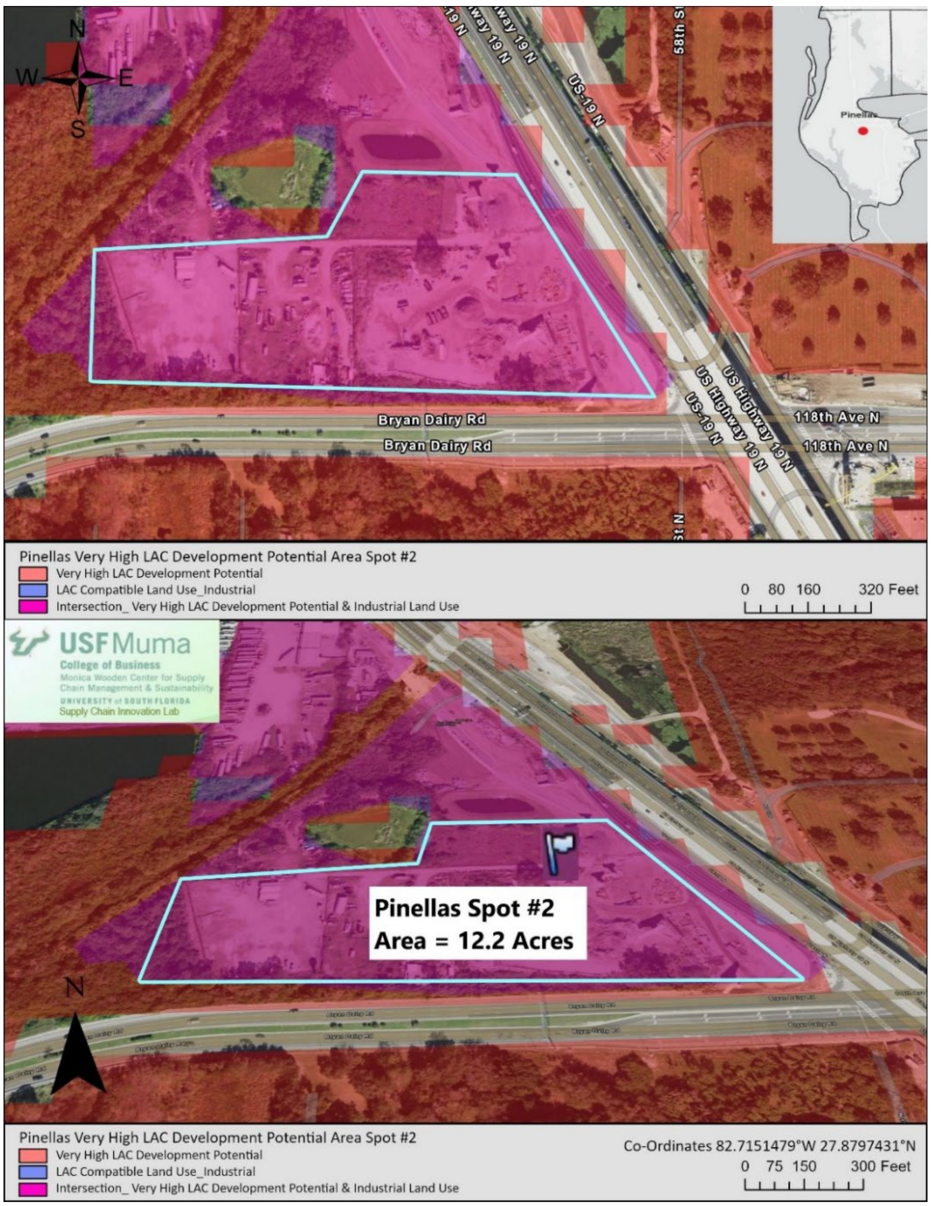

Figure B 205. Pinellas County Spot 2

PINELLAS SPOT #3

As per the criteria developed in this study, this 48-acre land parcel in the below image (Figure B 206) located in the Tarpon Industrial Cir at the intersection of Anclote Rd and Wesley Ave has very high LAC development potential in the Pinellas County. It is less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, has workforce availability of above 450,000 and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

Figure B 206. Pinellas County Spot 3

PINELLAS SPOT #4

As per the criteria developed in this study, this 6.5-acre land parcel of Commercial LAC Type which lies next to a 12-acre vacant land parcel (total 18.5 acres) in the below image (Figure B 207) located in the Tarpon Industrial Cir at the intersection of L and R Industrial Rd and Brady Rd has very high LAC development potential in the Pinellas County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

Figure B 207. Pinellas County Spot 4

PINELLAS SPOT #5

As per the criteria developed in this study, this 20-acre land parcel in the below image (Figure B 208) located next to the St. Pete-Clearwater Airport at the intersection of Automobile Blvd and 130th Ave N has very high LAC development potential in the Pinellas County but is not compatible for LAC Development as the LAC Type is Recreational. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

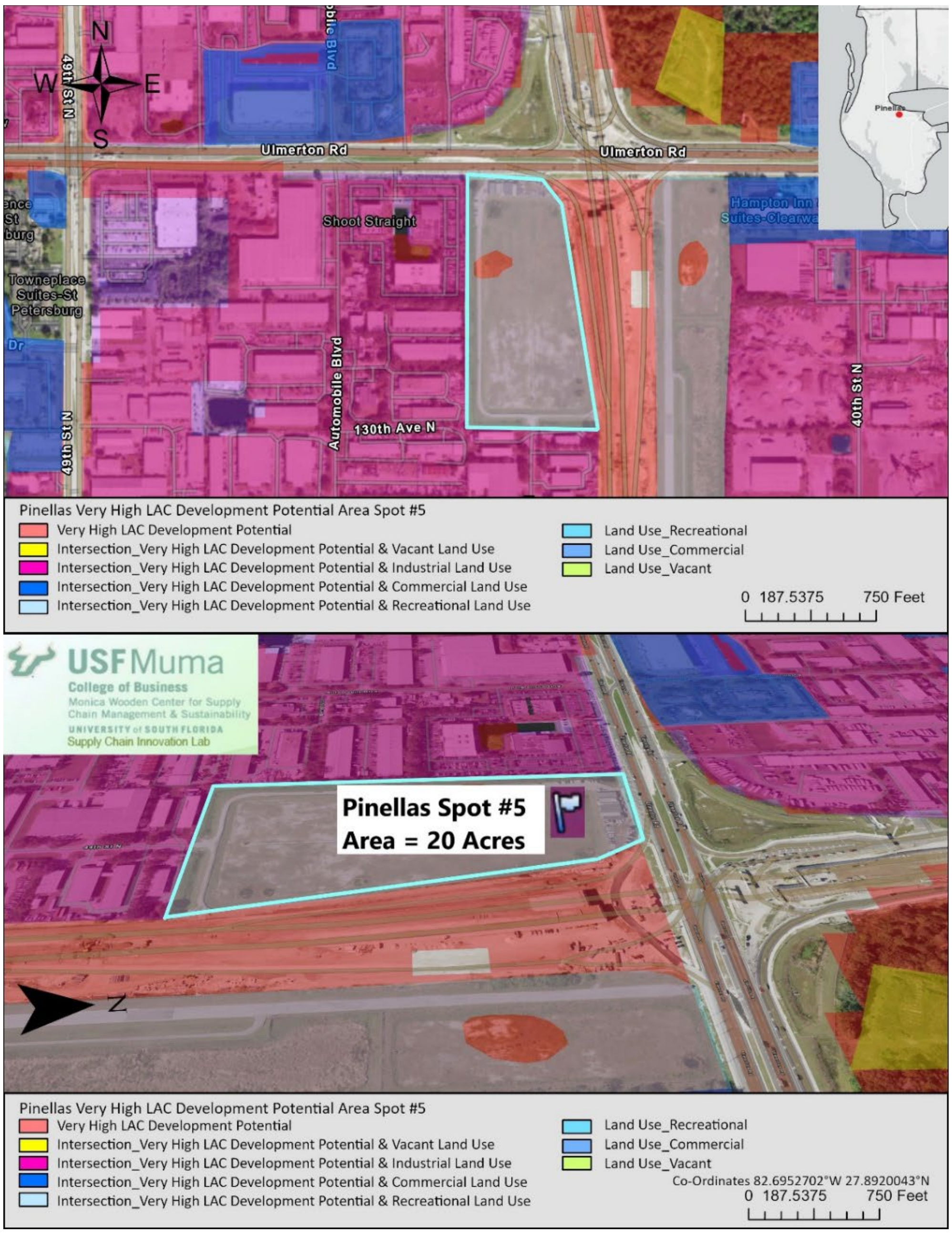

Figure B 208. Pinellas County Spot 5

Polk County

POLK SPOT #2

As per the criteria developed in this study, this 18.5-acre land parcel in the below image (Figure B 209) located near the Lakeland Linder International Airport at the intersection of Clark Rd and New Tampa Hwy has very high LAC development potential in the Polk County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from air transport facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

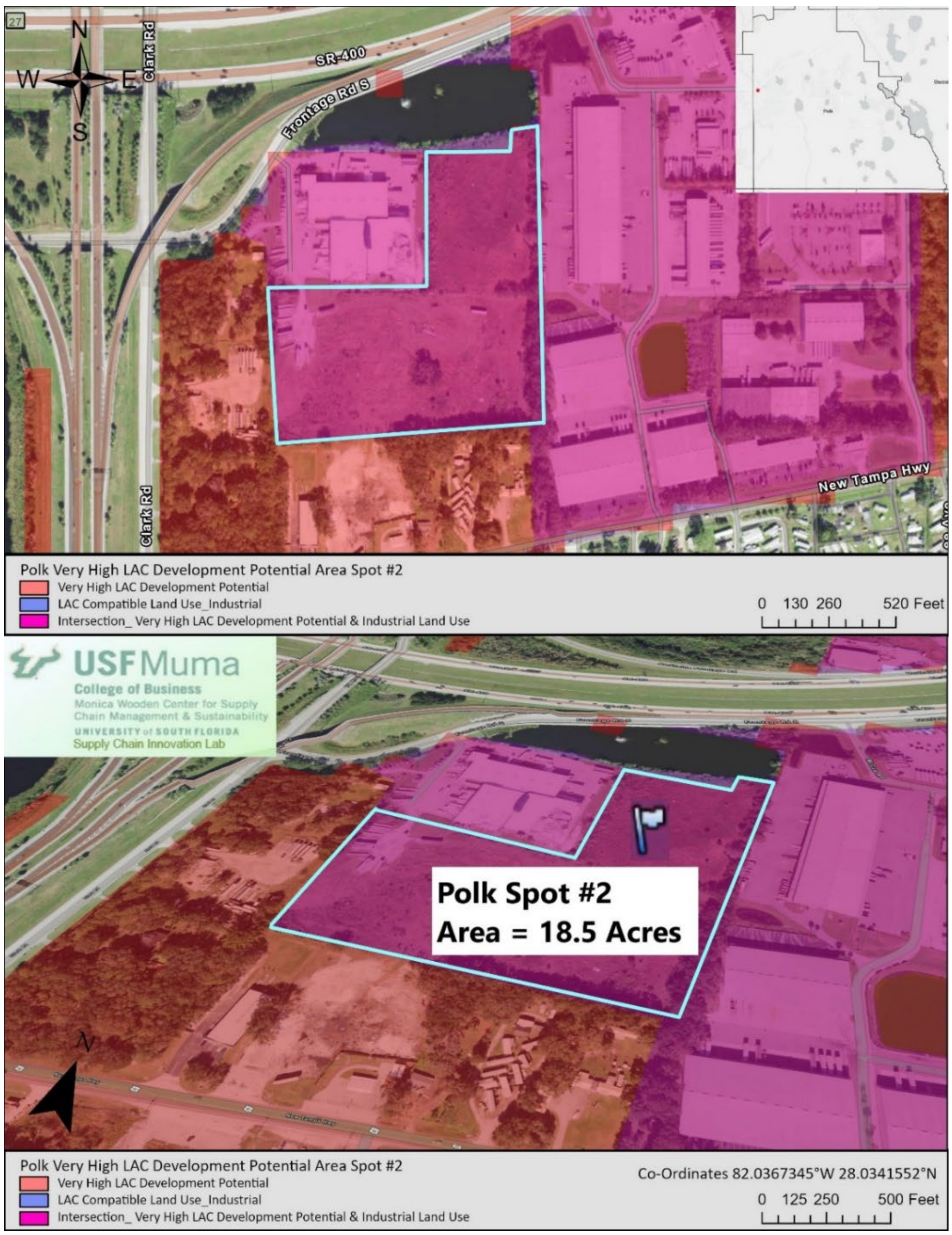

Figure B 209. Polk County Spot 2

POLK SPOT #3

As per the criteria developed in this study, this 15.5-acre land parcel in the below image (Figure B 210) located in Lakeland, FL at the intersection of State Road 60 W and Old Hwy 60 has very high LAC development potential in the Polk County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, around 12 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

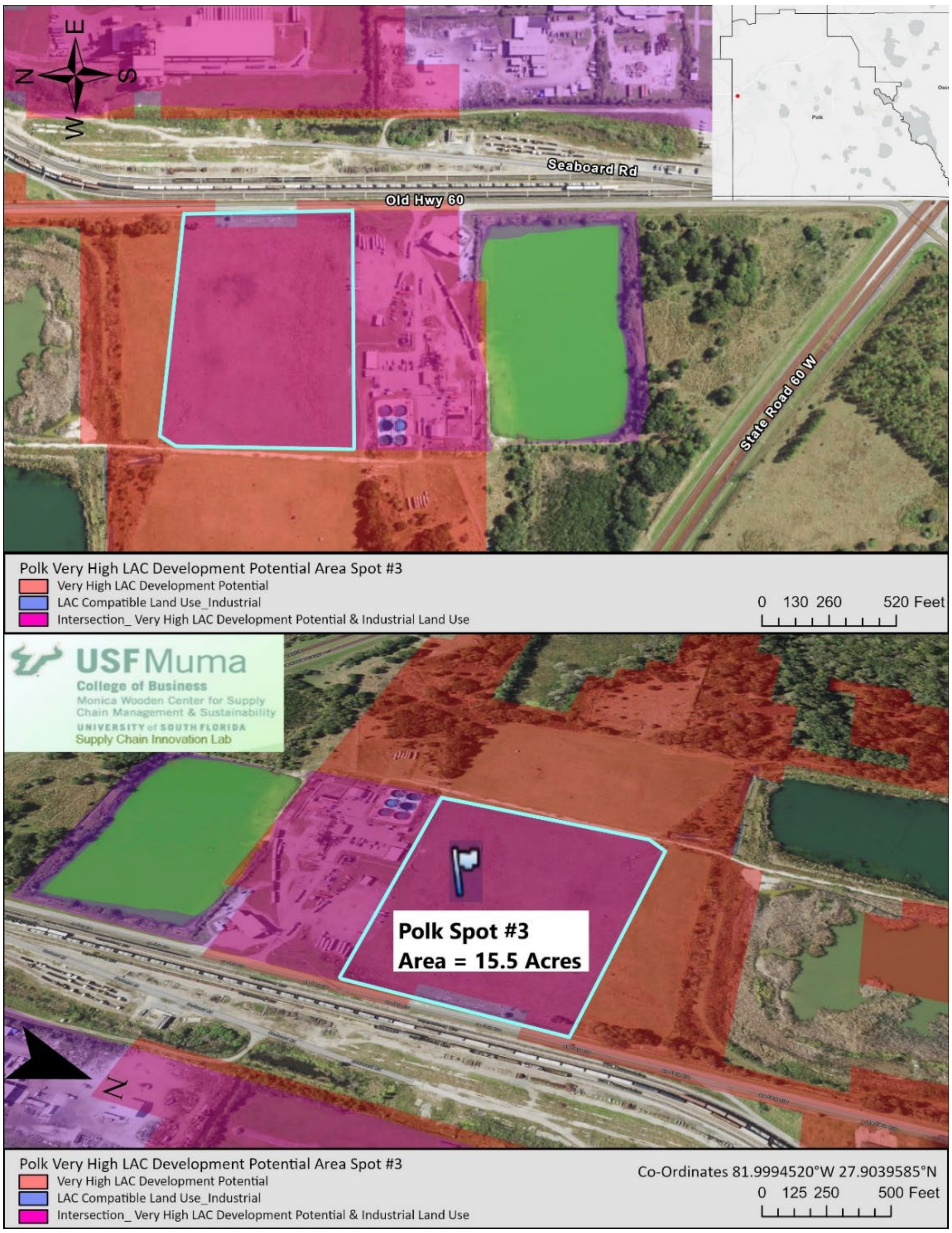

Figure B 210. Polk County Spot 3

POLK SPOT #4

As per the criteria developed in this study, this 120.5-acre land parcel in the below image (Figure B 211) located near Lake Wales, FL at the intersection of Bice Grove Rd and White Clay Pit Rd has very high LAC development potential in the Polk County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 211. Polk County Spot 4

POLK SPOT #5

As per the criteria developed in this study, this 21.4-acre land parcel in the below image (Figure B 212) located near the Bartow Executive Airport at the intersection of Spirit Lake Rd and Old Bartow Eagle Lake Rd has very high LAC development potential in the Polk County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

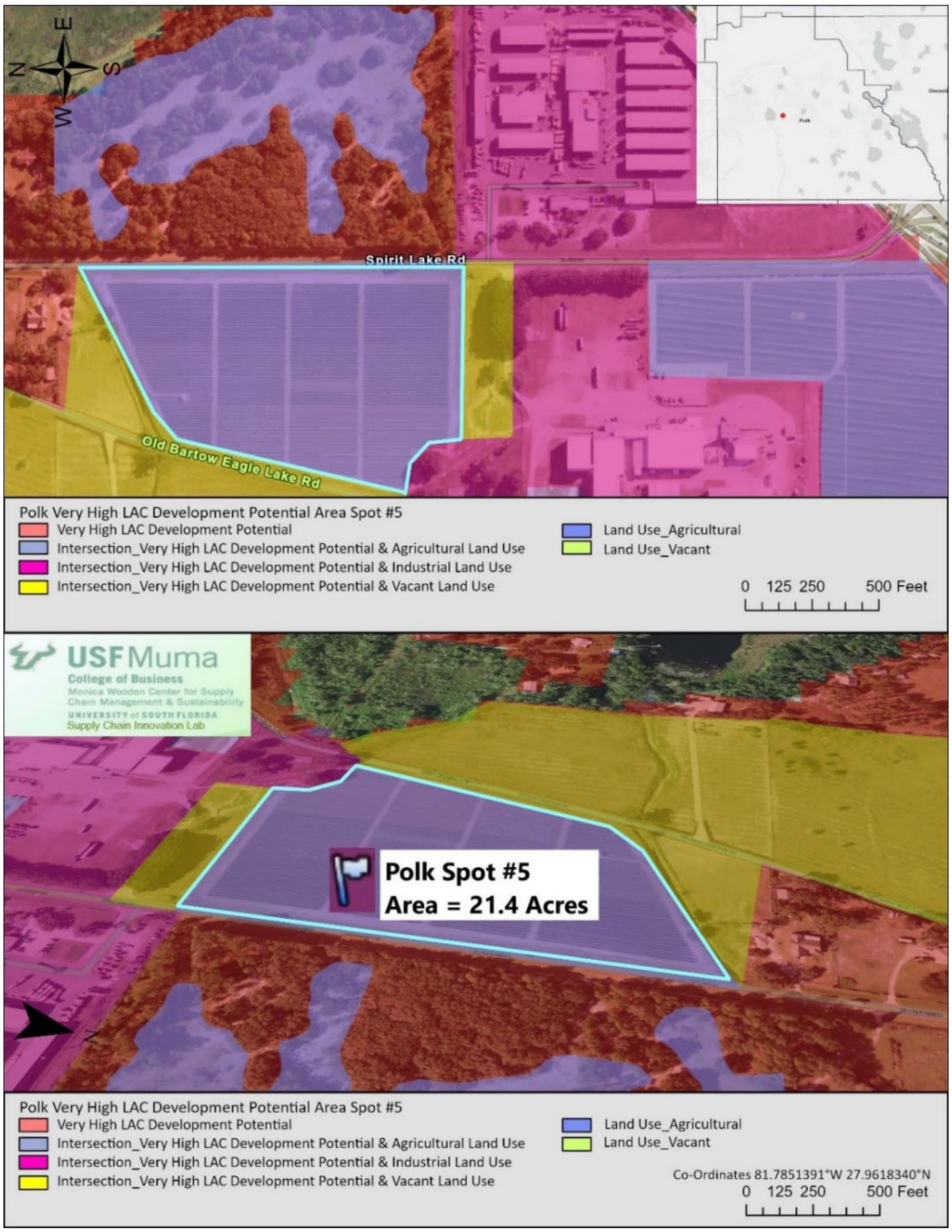

Figure B 212. Polk County Spot 5

Putnam County

PUTNAM SPOT #2

As per the criteria developed in this study, this 11.6-acre land parcel in the below image (Figure B 213) located in Palatka, FL industrial area at the intersection of Comfort Rd and Northpoint Rd has high LAC development potential in the Putnam County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from nearest airport and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

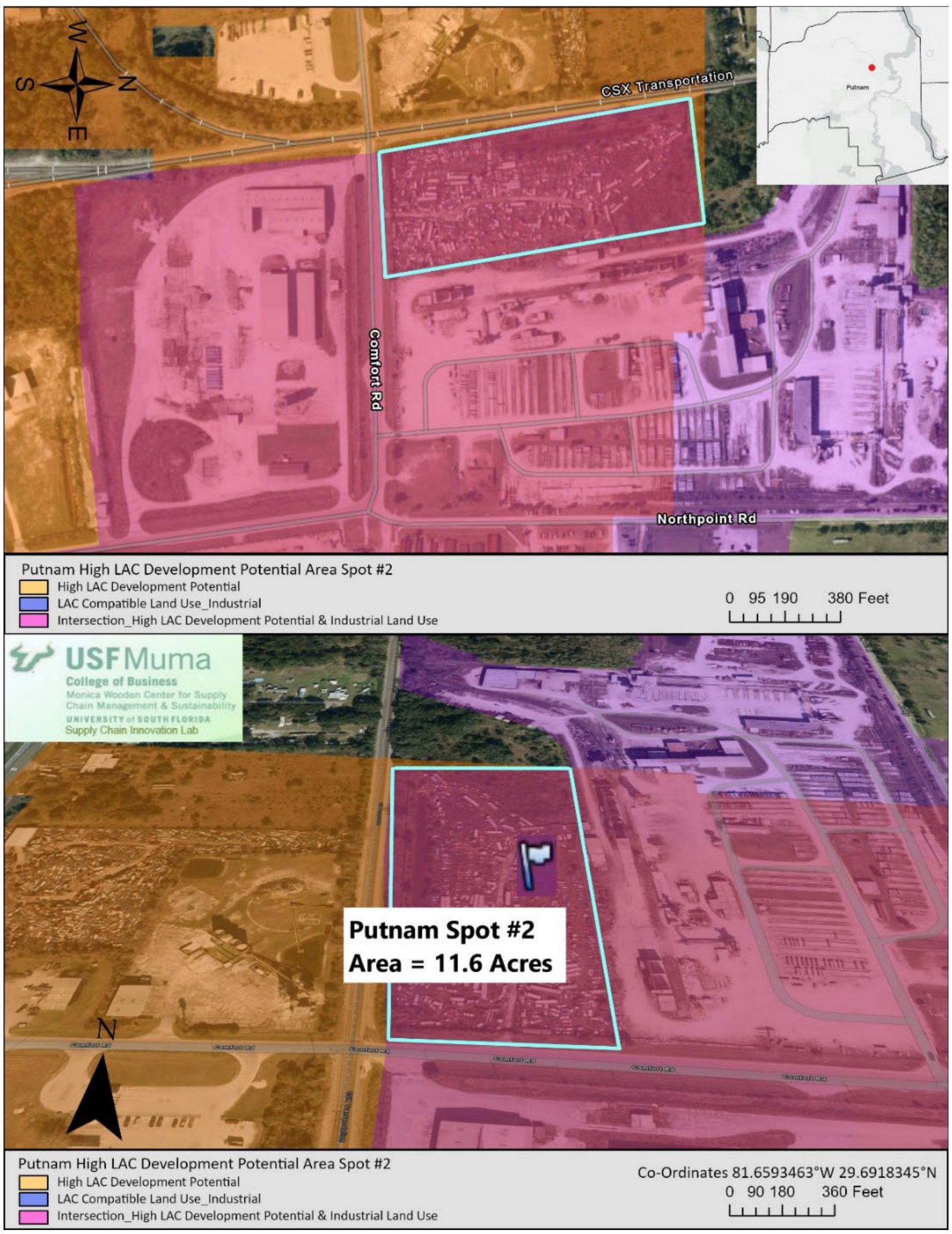

Figure B 213. Putnam County Spot 2

PUTNAM SPOT #3

As per the criteria developed in this study, this 16.5-acre land parcel in the below image (Figure B 214) located in Bostwick, FL at the intersection of Guthrie Rd and Highway 17 N has moderate LAC development potential in the Putnam County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

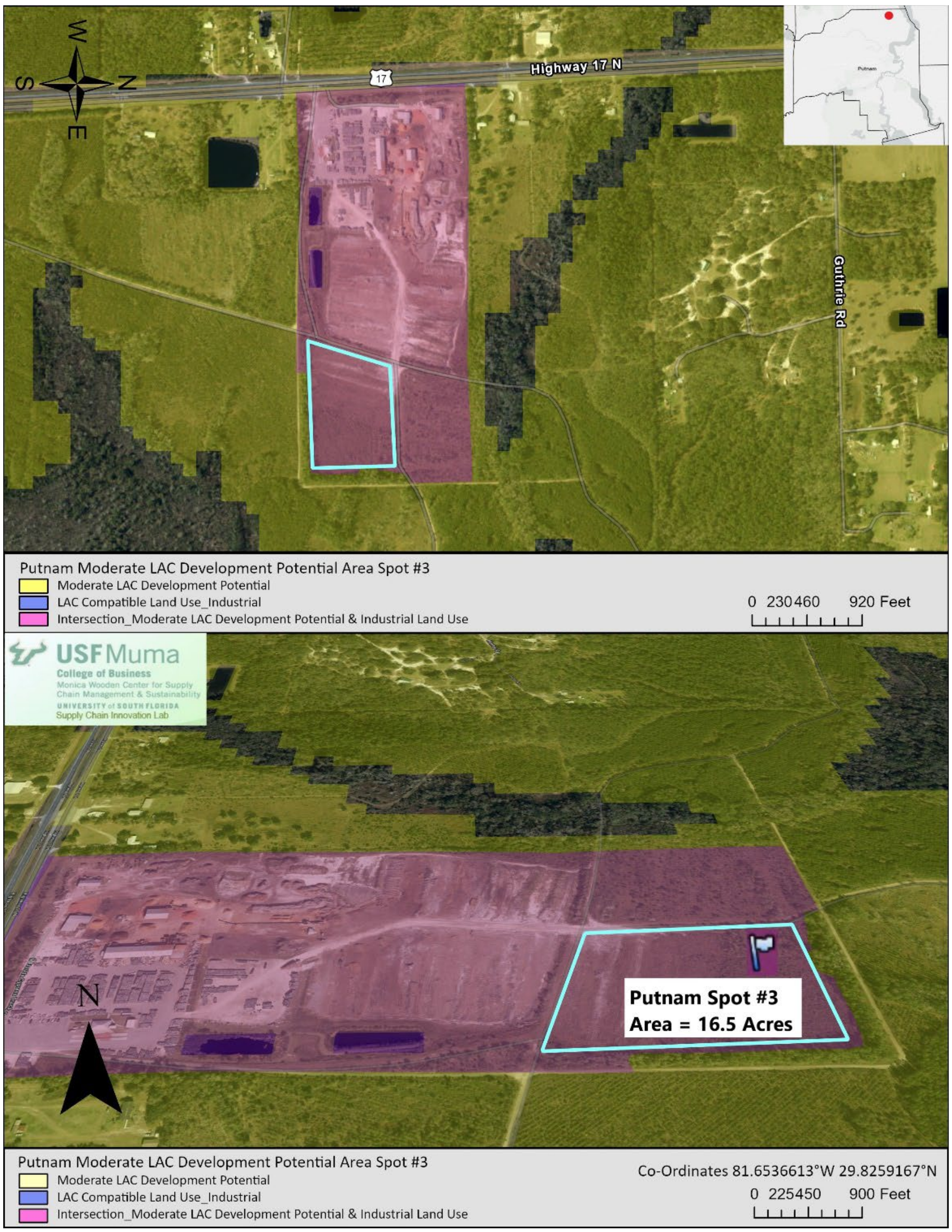

Figure B 214. Putnam County Spot 3

PUTNAM SPOT #4

As per the criteria developed in this study, this 29.8-acre land parcel in the below image (Figure B 215) located in Palatka, FL at the intersection of Old Pulp Mill Rd and McCullough Ln has high LAC development potential in the Putnam County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

Figure B 215. Putnam County Spot 4

PUTNAM SPOT #5

As per the criteria developed in this study, this 98-acre land parcel in the below image (Figure B 216) located in East Palatka, FL at the intersection of Alford Rd and State Road 207 has moderate LAC development potential in the Putnam County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

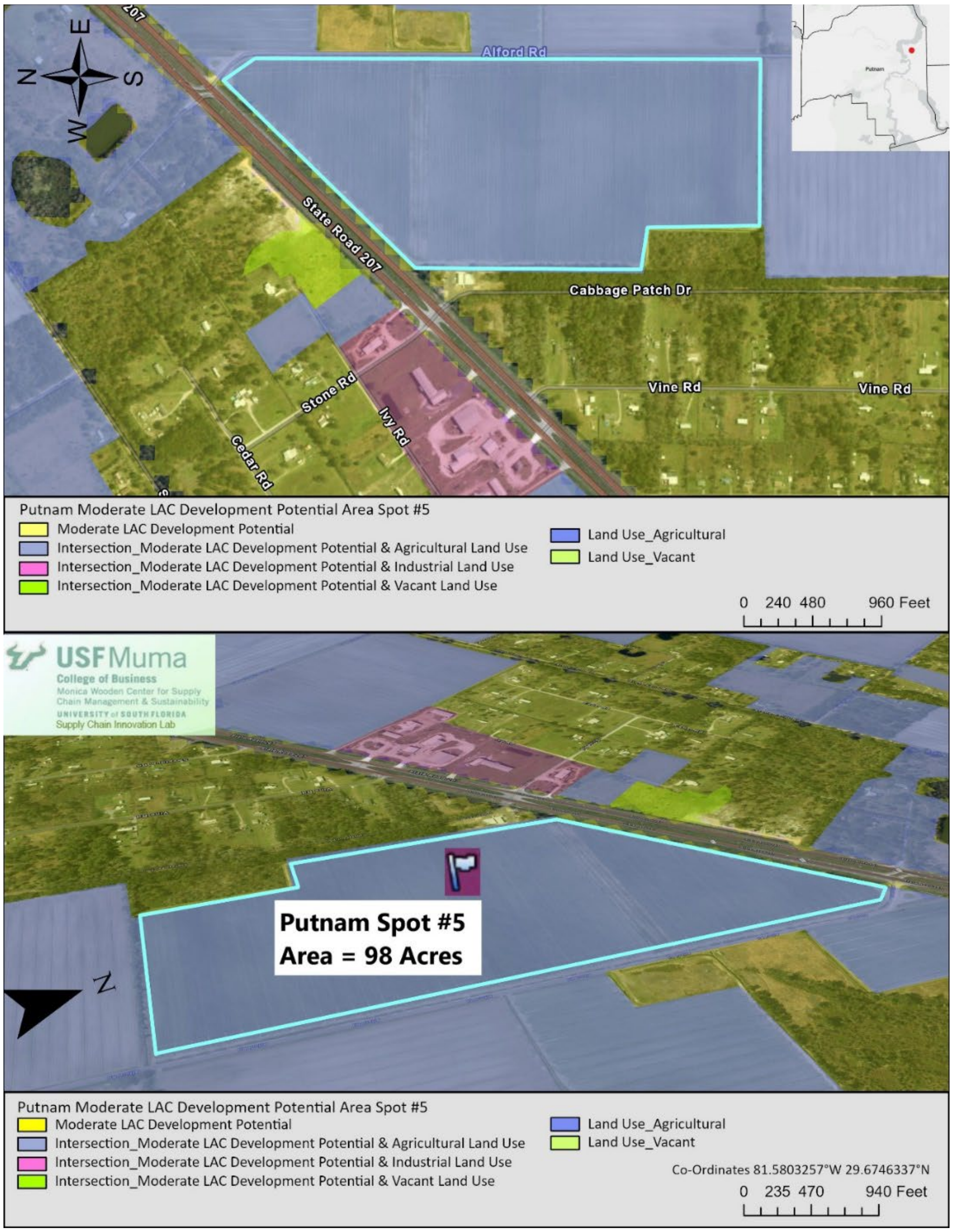

Figure B 216. Putnam County Spot 5

Santa Rosa County

SANTA ROSA SPOT #2

As per the criteria developed in this study, this 18.8-acre land parcel in the below image (Figure B 217) located at the intersection of Briarglen Rd and Da Lisa Rd has high LAC development potential in the Santa Rosa County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

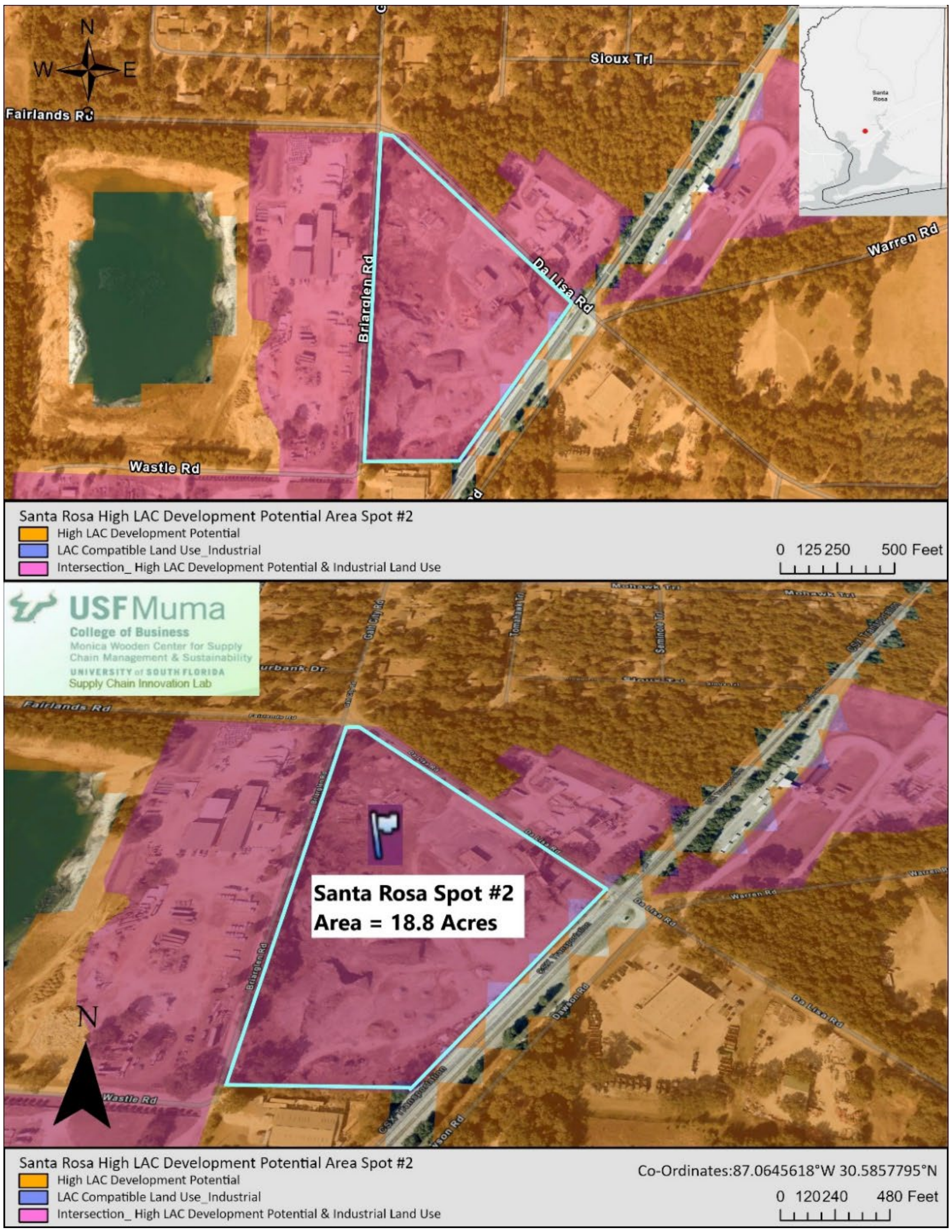

Figure B 217. Santa Rosa County Spot 2

SANTA ROSA SPOT #3

As per the criteria developed in this study, this 32.5-acre land parcel in the below image (Figure B 218) located at the intersection of Wastle Rd and Dawson Rd has high LAC development potential in the Santa Rosa County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

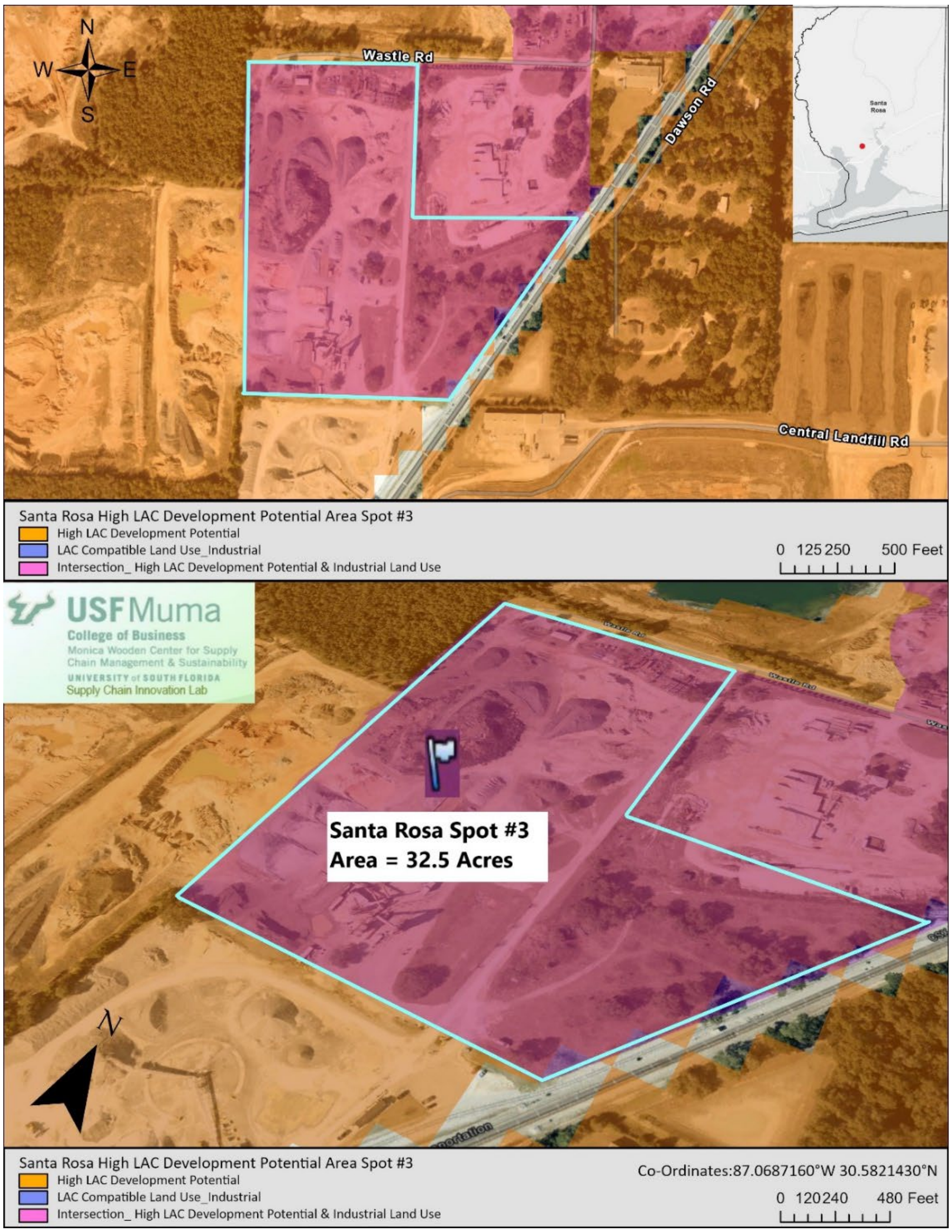

Figure B 218. Santa Rosa County Spot 3

SANTA ROSA SPOT #4

As per the criteria developed in this study, this 25.4-acre land parcel in the below image (Figure B 219) located at the intersection of Air Products Plant Rd and Williams Rd has high LAC development potential in the Santa Rosa County but is not compatible for LAC Development as the LAC Type is Recreational. It surrounds industrial lands around it which makes it suitable for re-zoning.

Figure B 219. Santa Rosa County Spot 4

SANTA ROSA SPOT #5

As per the criteria developed in this study, this 13.8-acre land parcel in the below image (Figure B 220) located in Milton, FL at the intersection of Warren Rd and Da Lisa Rd has high LAC development potential in the Santa Rosa County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

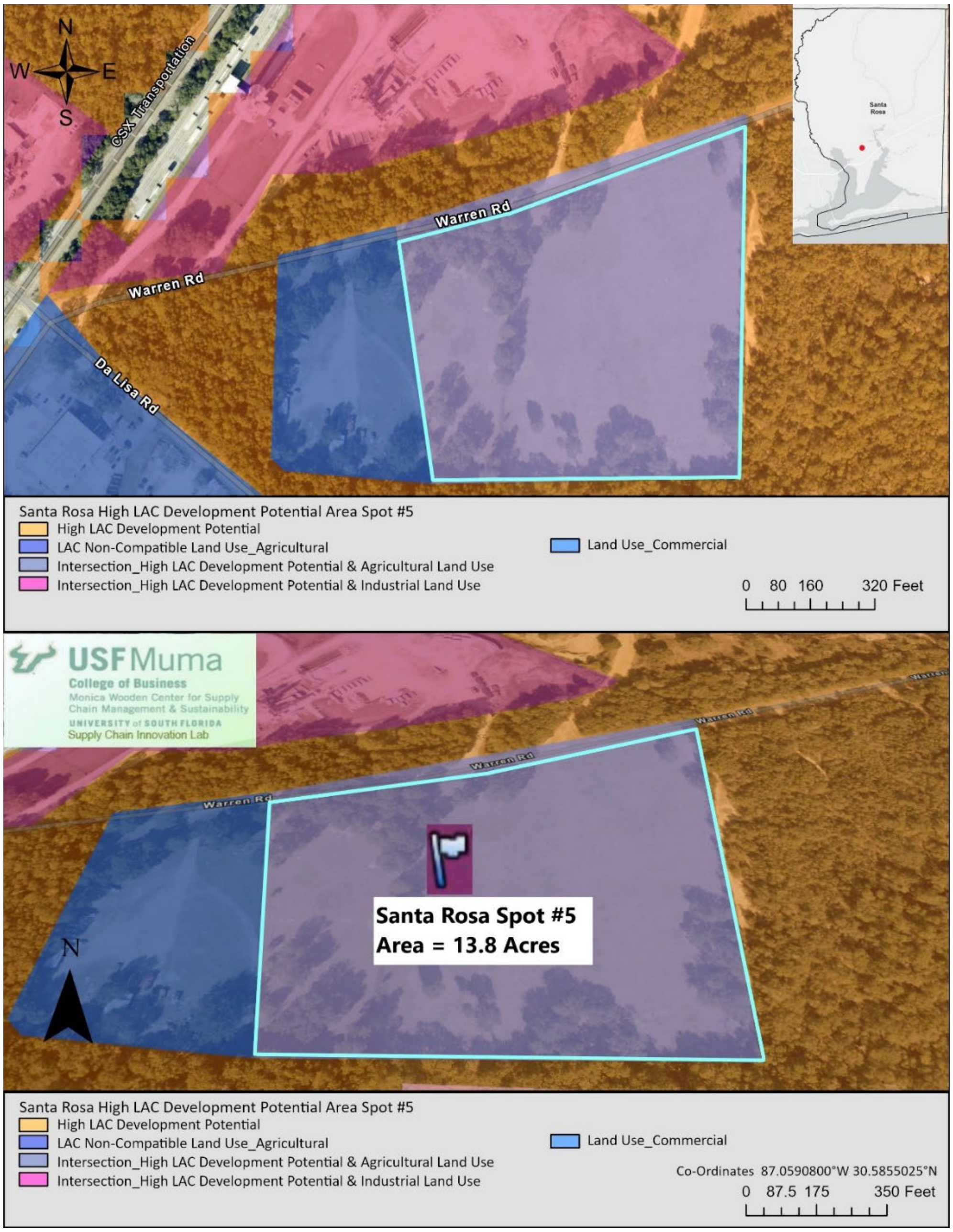

Figure B 220. Santa Rosa County Spot 5

Sarasota County

SARASOTA SPOT #2

As per the criteria developed in this study, this 12.2-acre land parcel in the below image (Figure B 221) located near the city of Sarasota utilities building office at the intersection of N Orange Ave and 11th St near the Seminole Gulf line has very high LAC development potential in the Sarasota County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from Air Cargo facilities and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

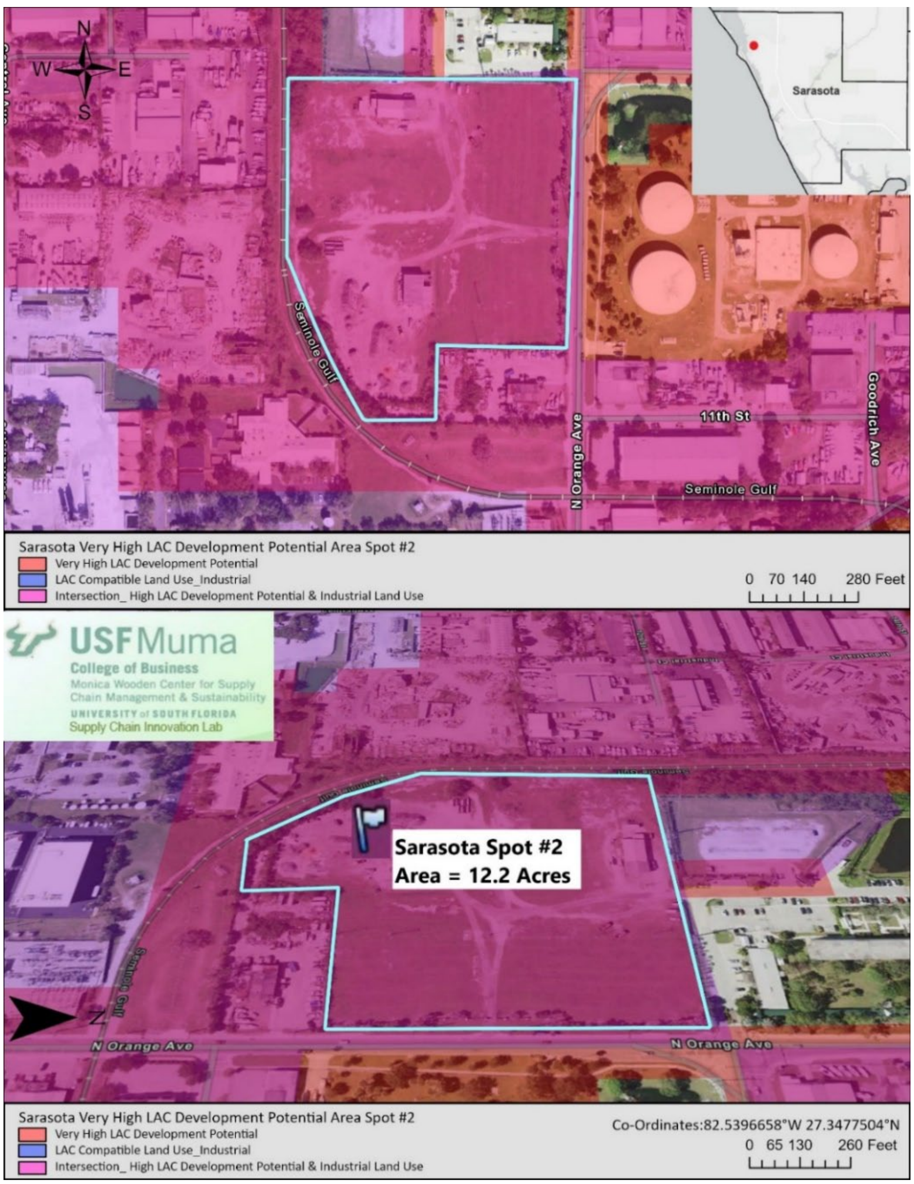

Figure B 221. Sarasota County Spot 2

SARASOTA SPOT #3

As per the criteria developed in this study, this 13.5-acre land parcel in the below image (Figure B 222) located at the intersection of Laurel Rd E and Linda Ln has very high LAC development potential in the Sarasota County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

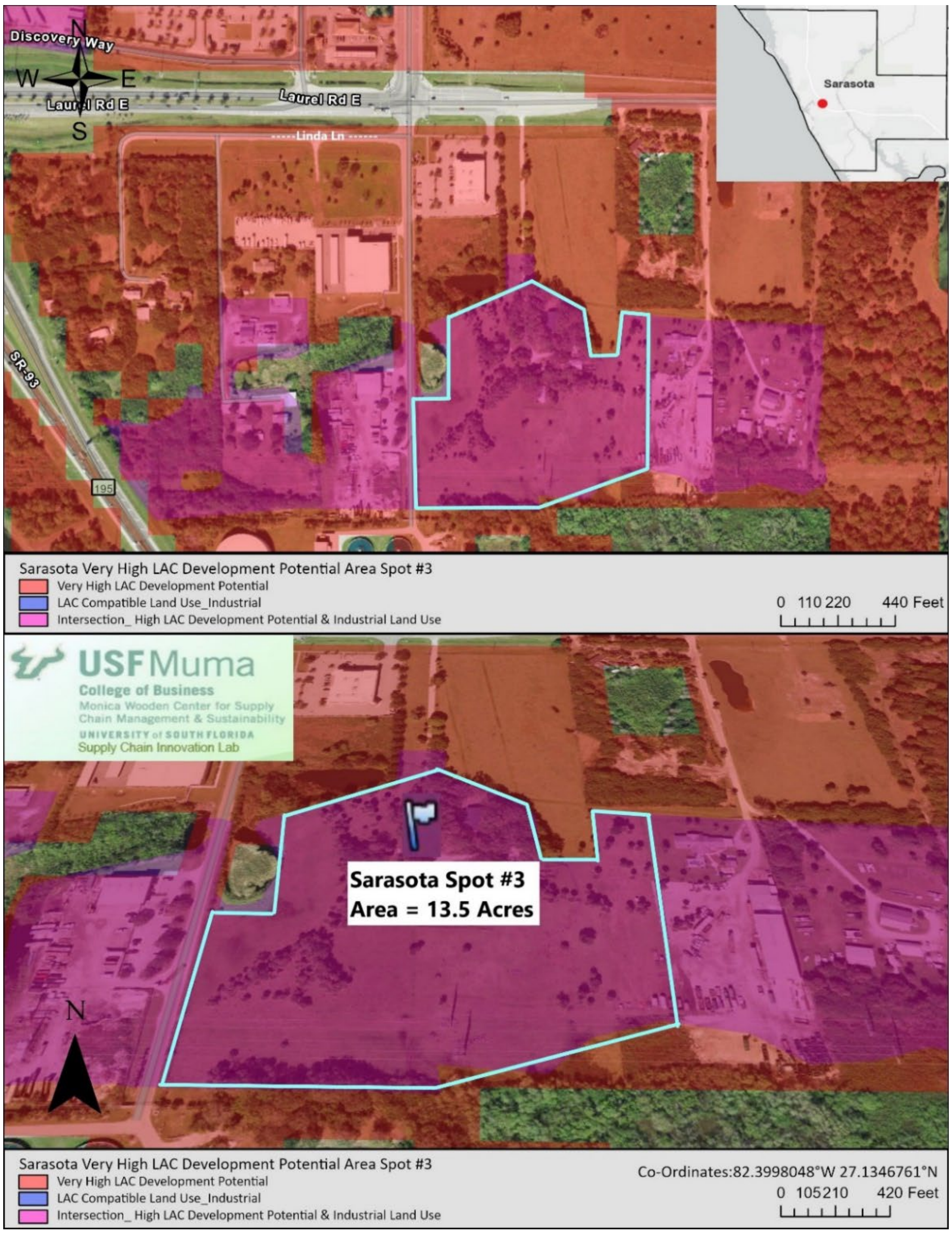

Figure B 222. Sarasota County Spot 3

SARASOTA SPOT #4

As per the criteria developed in this study, this 96-acre land parcel in the below image (Figure B 223) located near the Sarasota military academy prep school at the intersection of Sarasota Centre Blvd and Consumer Ct has high LAC development potential in the Sarasota County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

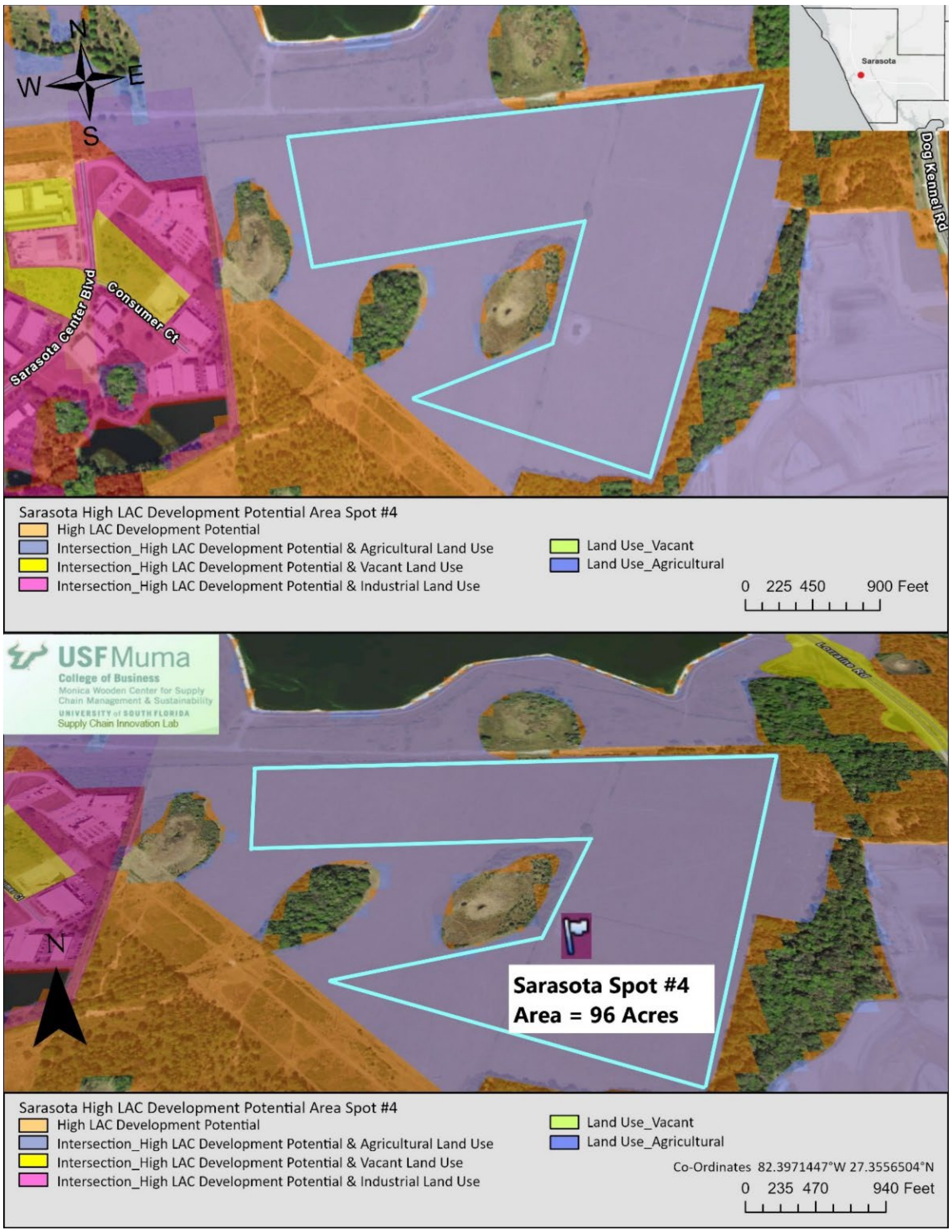

Figure B 223. Sarasota County Spot 4

SARASOTA SPOT #5

As per the criteria developed in this study, this 6.5-acre land parcel in the below image (Figure B 224) located at the intersection of Alafia Dr and Fruitville Rd has very high LAC development potential in the Sarasota County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

Figure B 224. Sarasota County Spot 5

Seminole County

SEMINOLE SPOT #2

As per the criteria developed in this study, this 20.3-acre land parcel in the below image (Figure B 225) located in Oviedo, FL industrial area at the intersection of Aulin Ave and W Broadway St has very high LAC development potential in the Seminole County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

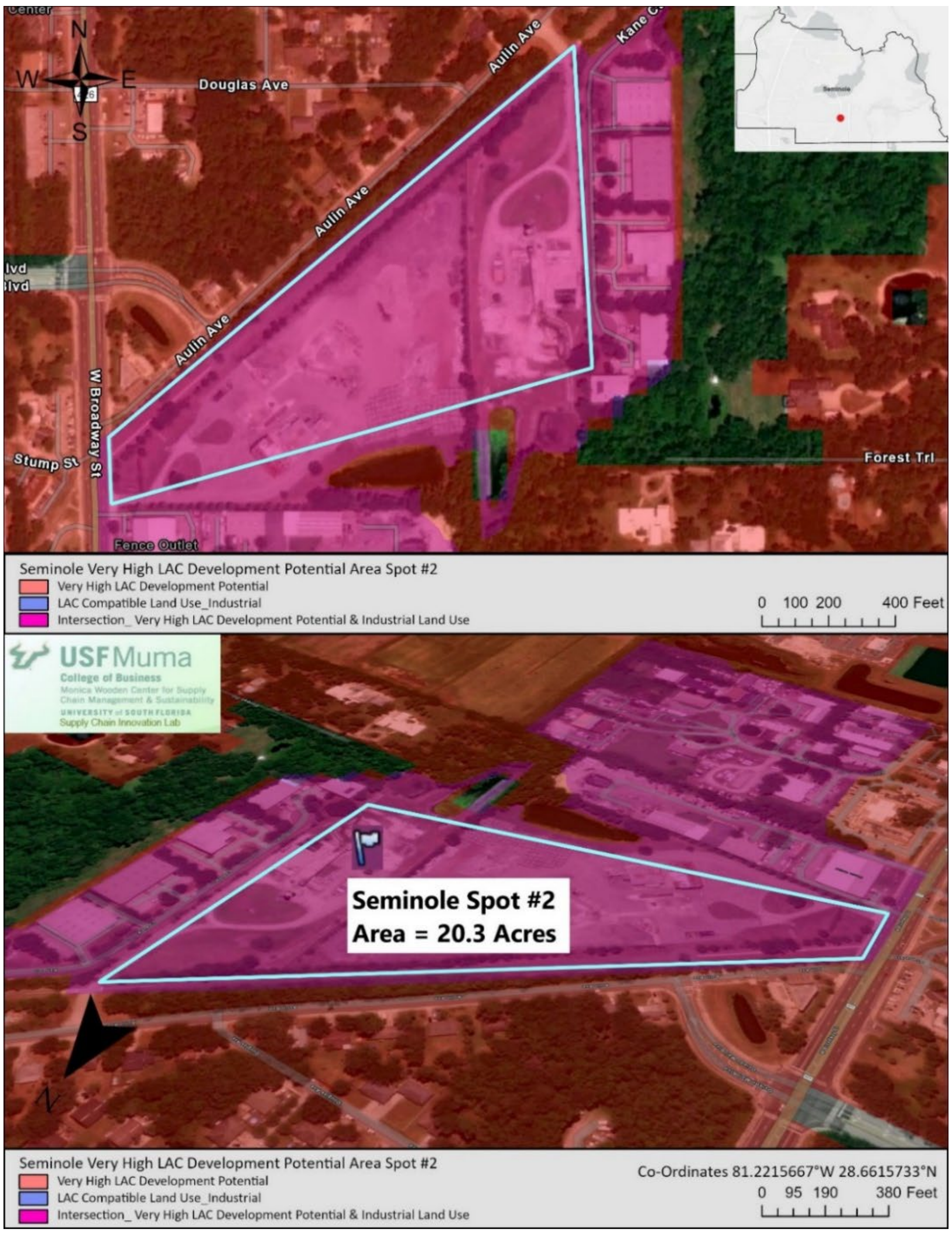

Figure B 225. Seminole County Spot 2

SEMINOLE SPOT #3

As per the criteria developed in this study, this 57-acre land parcel in the below image (Figure B 226) located in Lake Mary, FL industrial area at the intersection of Wallace Ct and Century Pt has very high LAC development potential in the Seminole County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

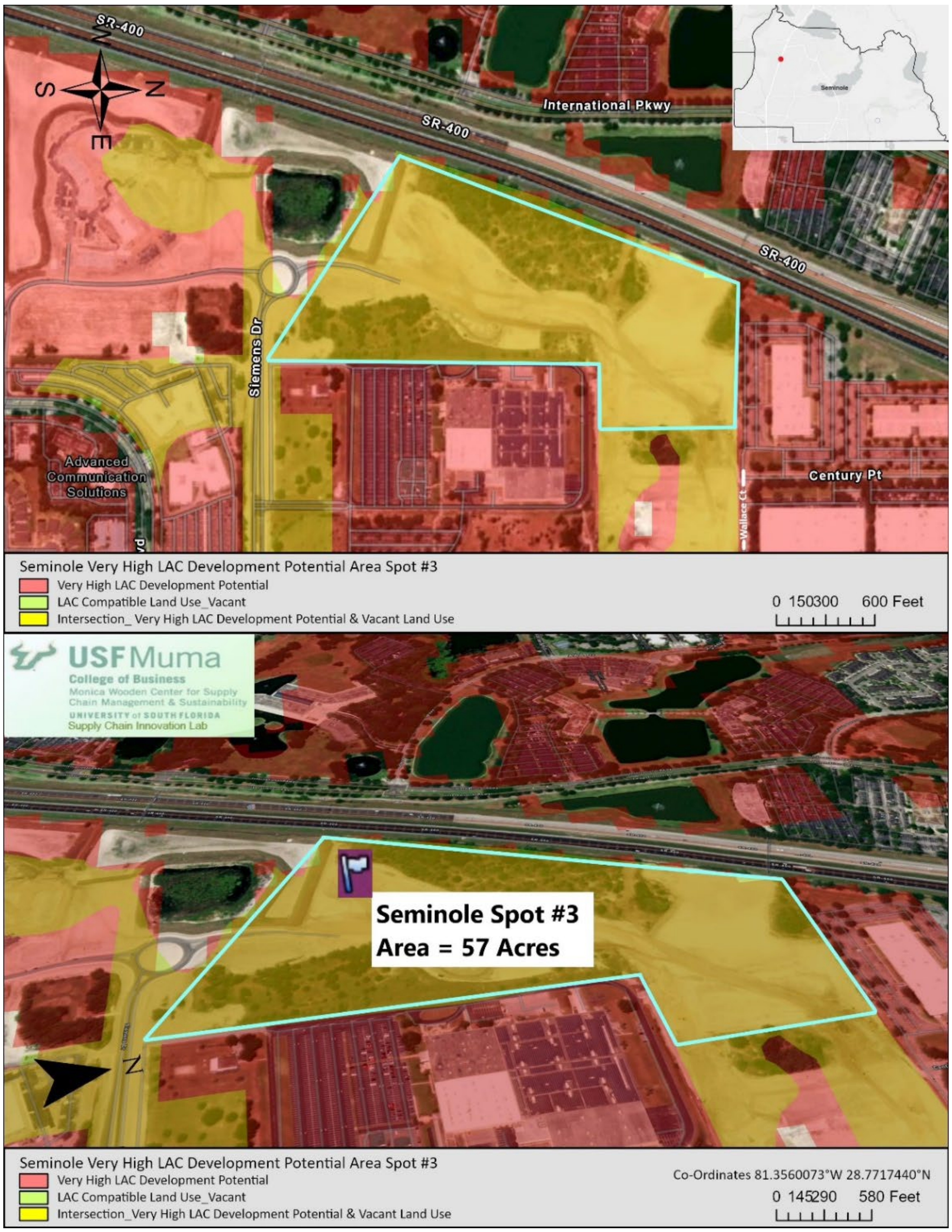

Figure B 226. Seminole County Spot 3

SEMINOLE SPOT #4

As per the criteria developed in this study, this 48-acre land parcel in the below image (Figure B 227) located next to the Orlando- Sanford Airport at the intersection of Moores Station Rd and S Beardall Ave has very high LAC development potential in the Seminole County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

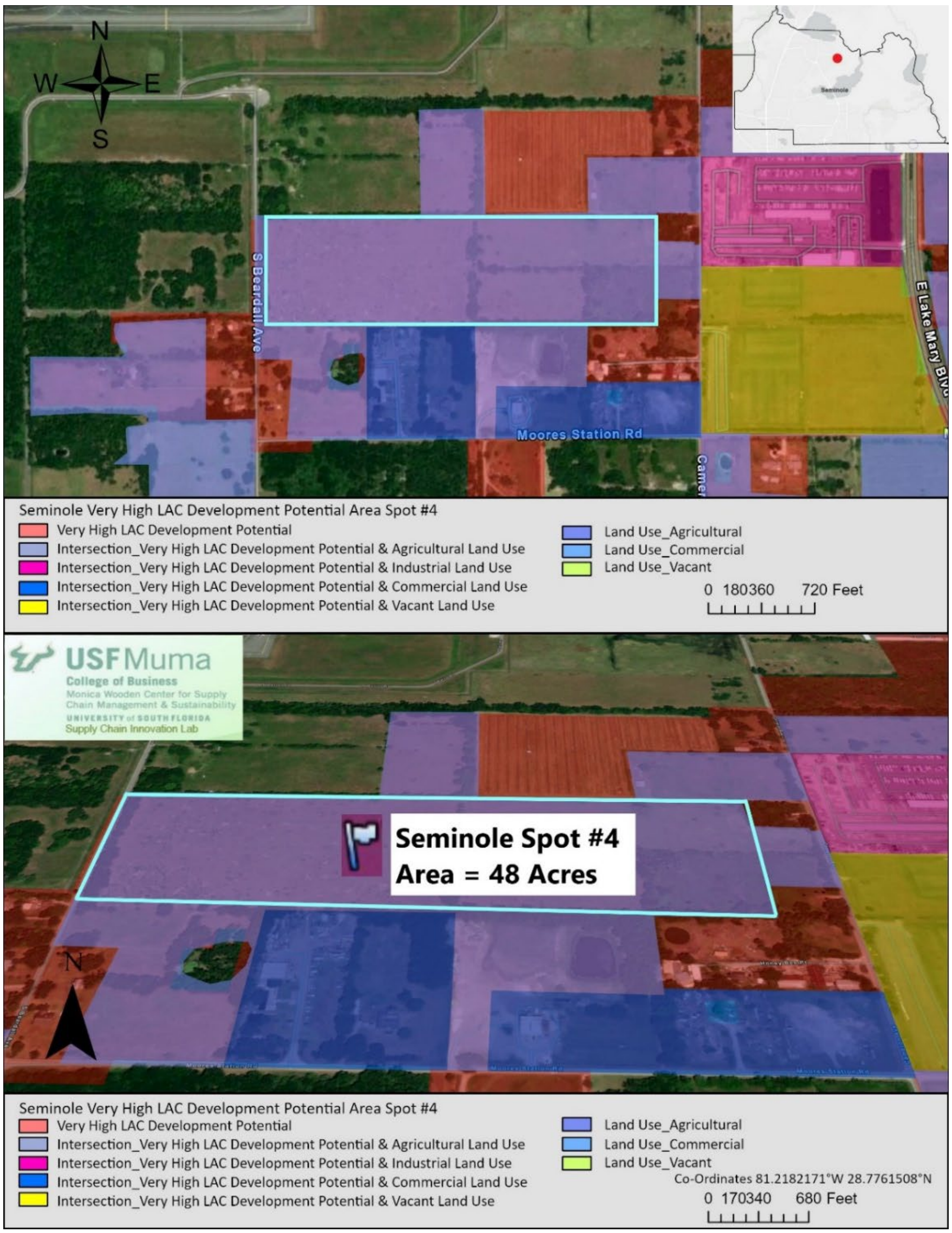

Figure B 227. Seminole County Spot 4

SEMINOLE SPOT #5

As per the criteria developed in this study, this 23-acre land parcel in the below image (Figure B 228) located in Sanford, FL industrial area at the intersection of Meisch Rd and St Johns Pkwy has very high LAC development potential in the Seminole County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

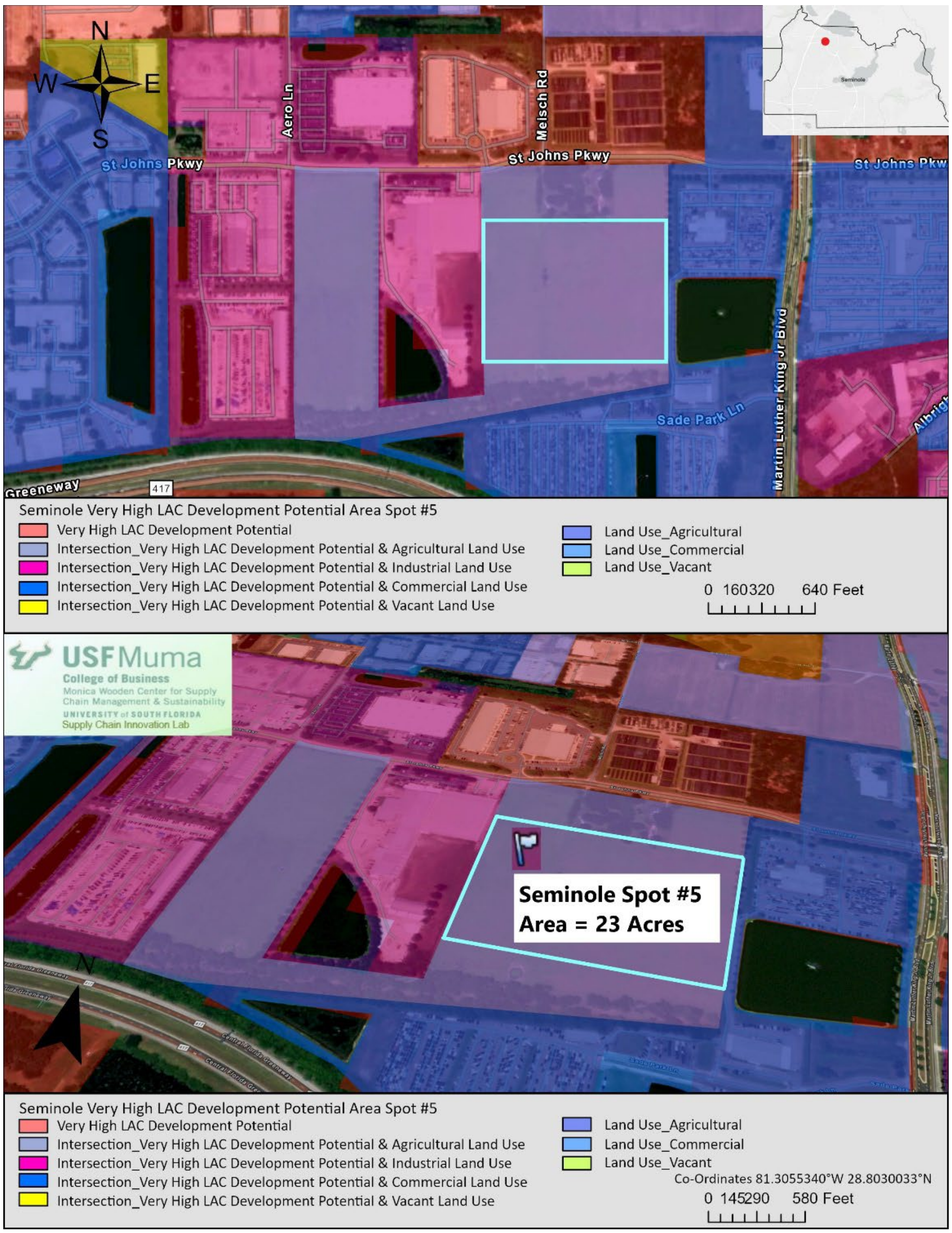

Figure B 228. Seminole County Spot 5

St. Johns County

ST JOHNS SPOT #2

As per the criteria developed in this study, this 12.2-acre land parcel in the below image (Figure B 229) located in St Augustine, FL at the intersection of Northwood Dr and S Holmes Blvd has very high LAC development potential in the St Johns County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

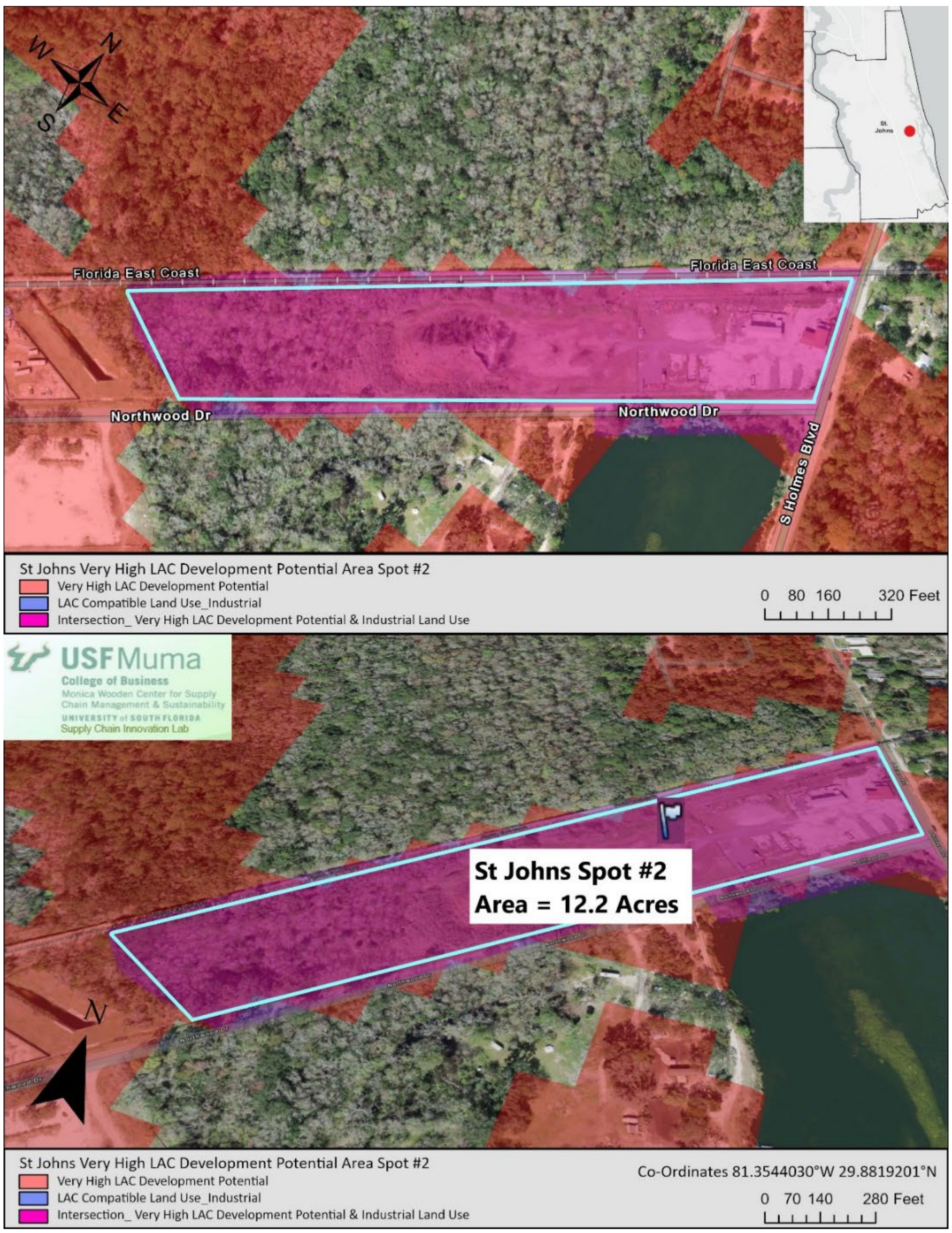

Figure B 229. St Johns County Spot 2

ST JOHNS SPOT #3

As per the criteria developed in this study, this 23-acre land parcel in the below image (Figure B 230) located in St Augustine, FL at the intersection of Wolfe Rd and S Francis Rd has high LAC development potential in the St Johns County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

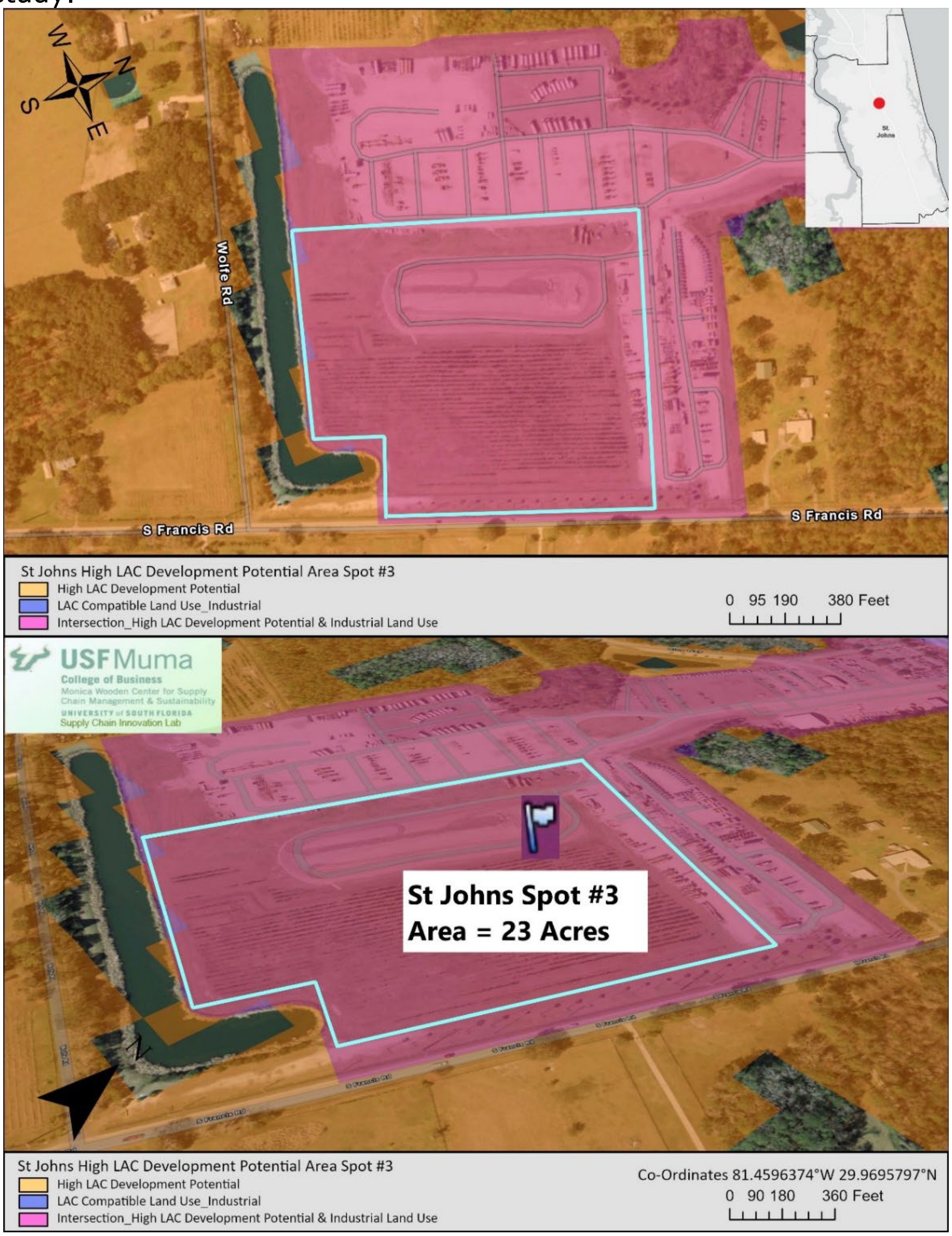

Figure B 230. St Johns County Spot 3

ST JOHNS SPOT #4

As per the criteria developed in this study, this 200-acre land parcel in the below image (Figure B 231) located in Hastings, FL at the intersection of State Road 206 W and Cowpen Branch Rd has high LAC development potential in the St Johns County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

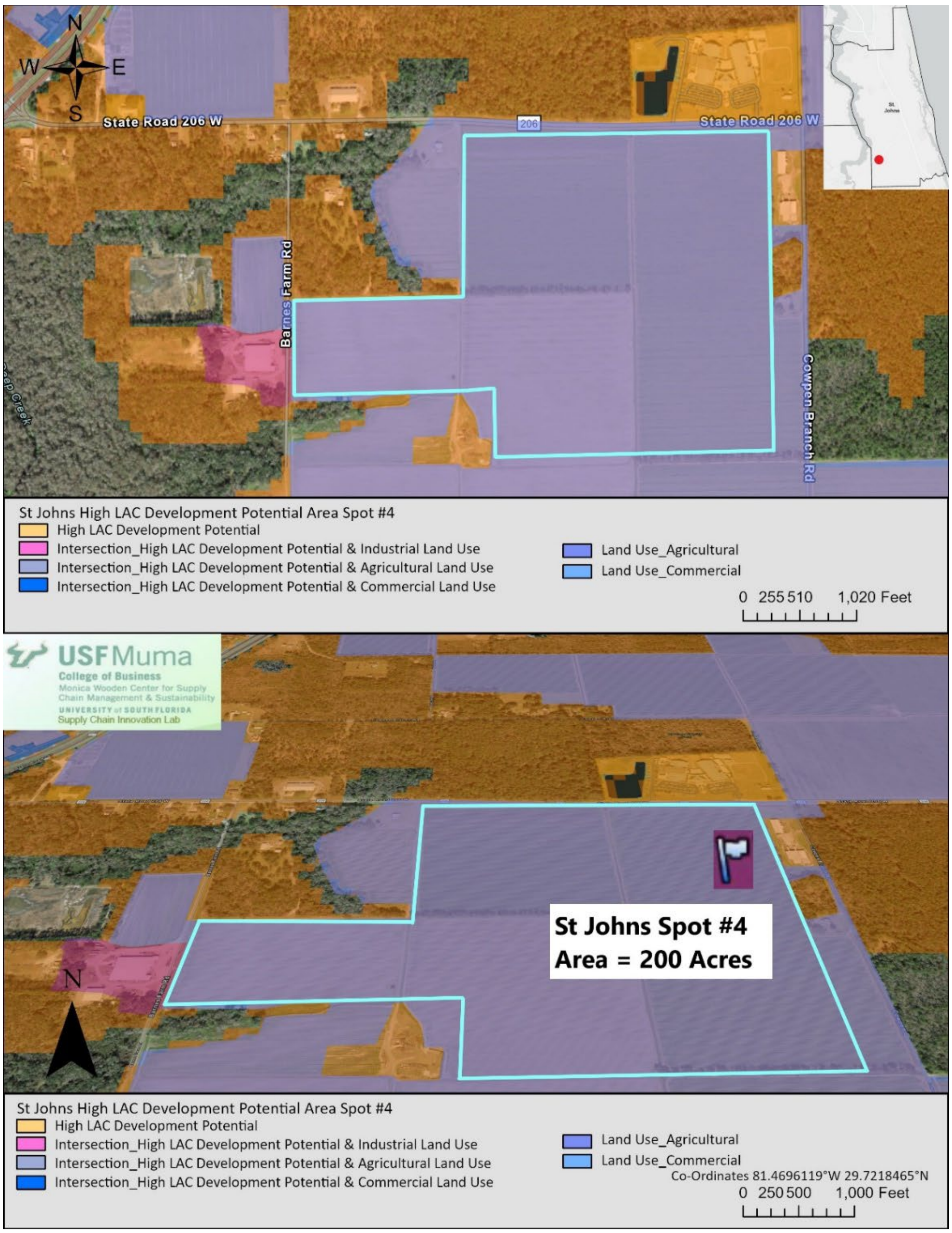

Figure B 231. St Johns County Spot 4

ST JOHNS SPOT #5

As per the criteria developed in this study, this 50-acre land parcel in the below image (Figure B 232) located in Hastings, FL at the intersection of Morrison Rd and State Road 207 has high LAC development potential in the St Johns County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and commercial lands around it which makes it suitable for re-zoning.

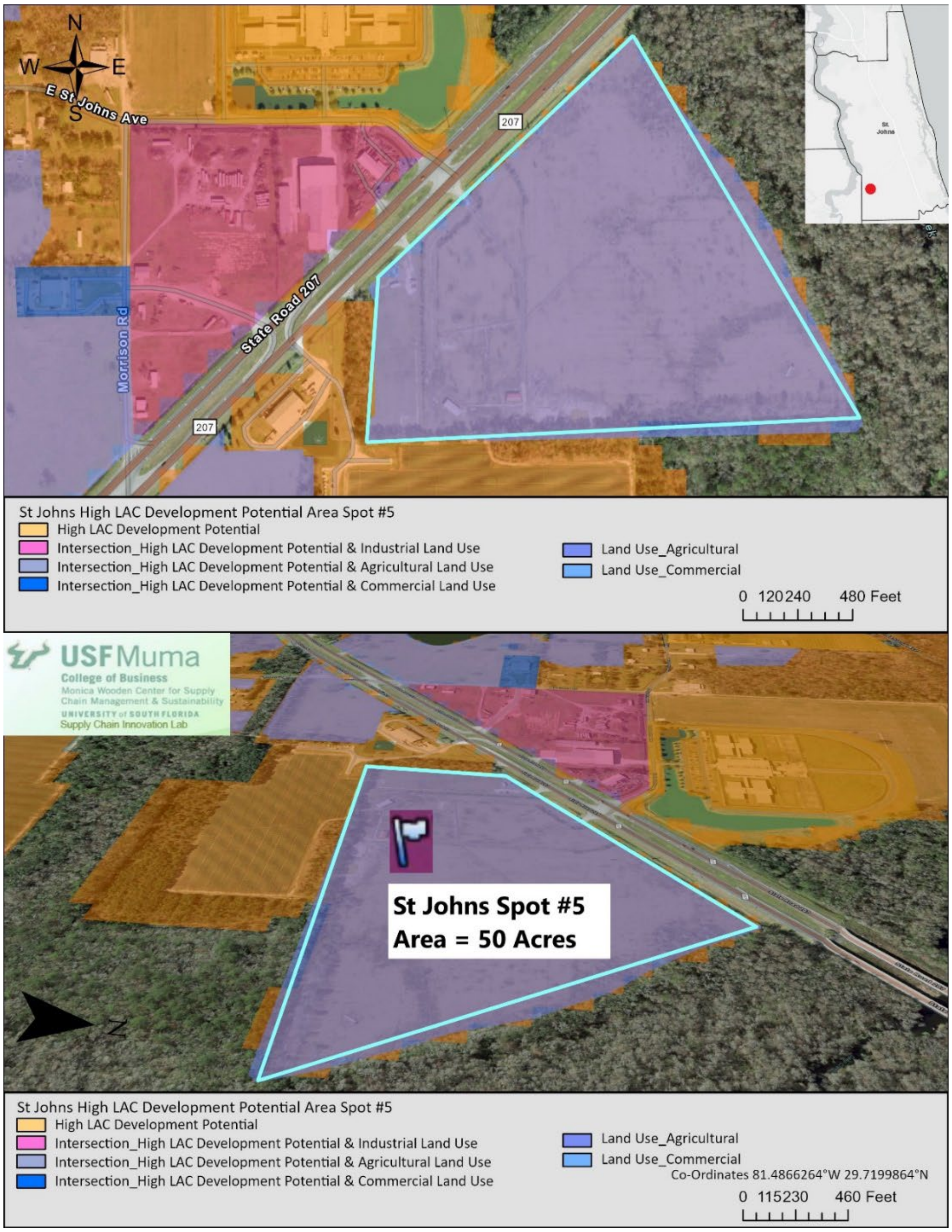

Figure B 232. St Johns County Spot 5

St. Lucie County

ST LUCIE SPOT #2

As per the criteria developed in this study, this 22.3-acre land parcel in the below image (Figure B 233) located near the St Lucie County Sheriff Department at the intersection of S Jenkins Rd and Post Office Rd has very high LAC development potential in the St Lucie County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from the nearest seaport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

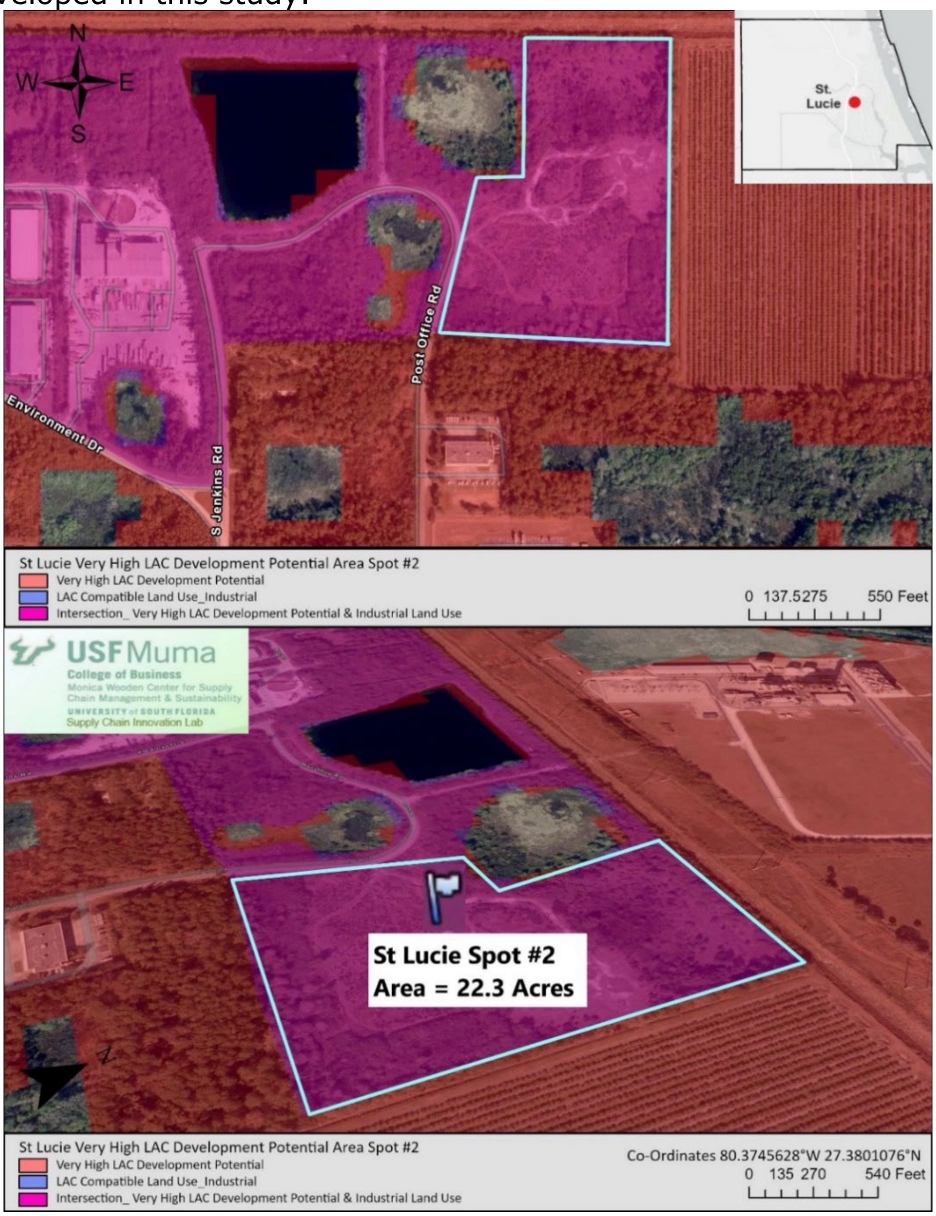

Figure B 233. St Lucie County Spot 2

ST LUCIE SPOT #3

As per the criteria developed in this study, this 12.6-acre land parcel in the below image (Figure B 234) located near the St Lucie County Health Department at the intersection of Magnum Dr and Environment Dr has very high LAC development potential in the St Lucie County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 10 miles from the nearest seaport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

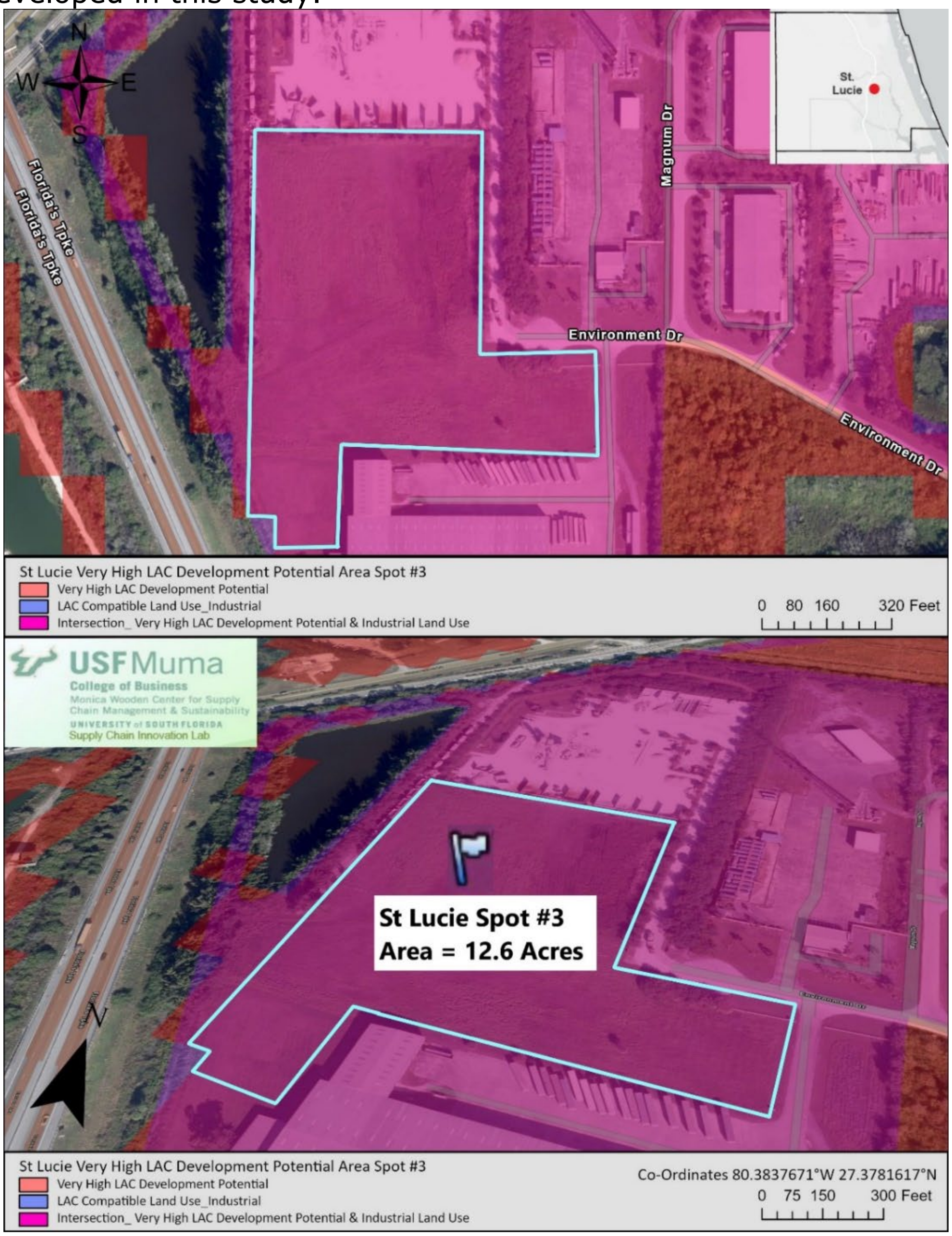

Figure B 234. St Lucie County Spot 3

ST LUCIE SPOT #4

As per the criteria developed in this study, this 78-acre land parcel in the below image (Figure B 235) located near the FPL Electric Sub-station at the intersection of W Midway Rd and Glades Cut Off Rd has very high LAC development potential in the St Lucie County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

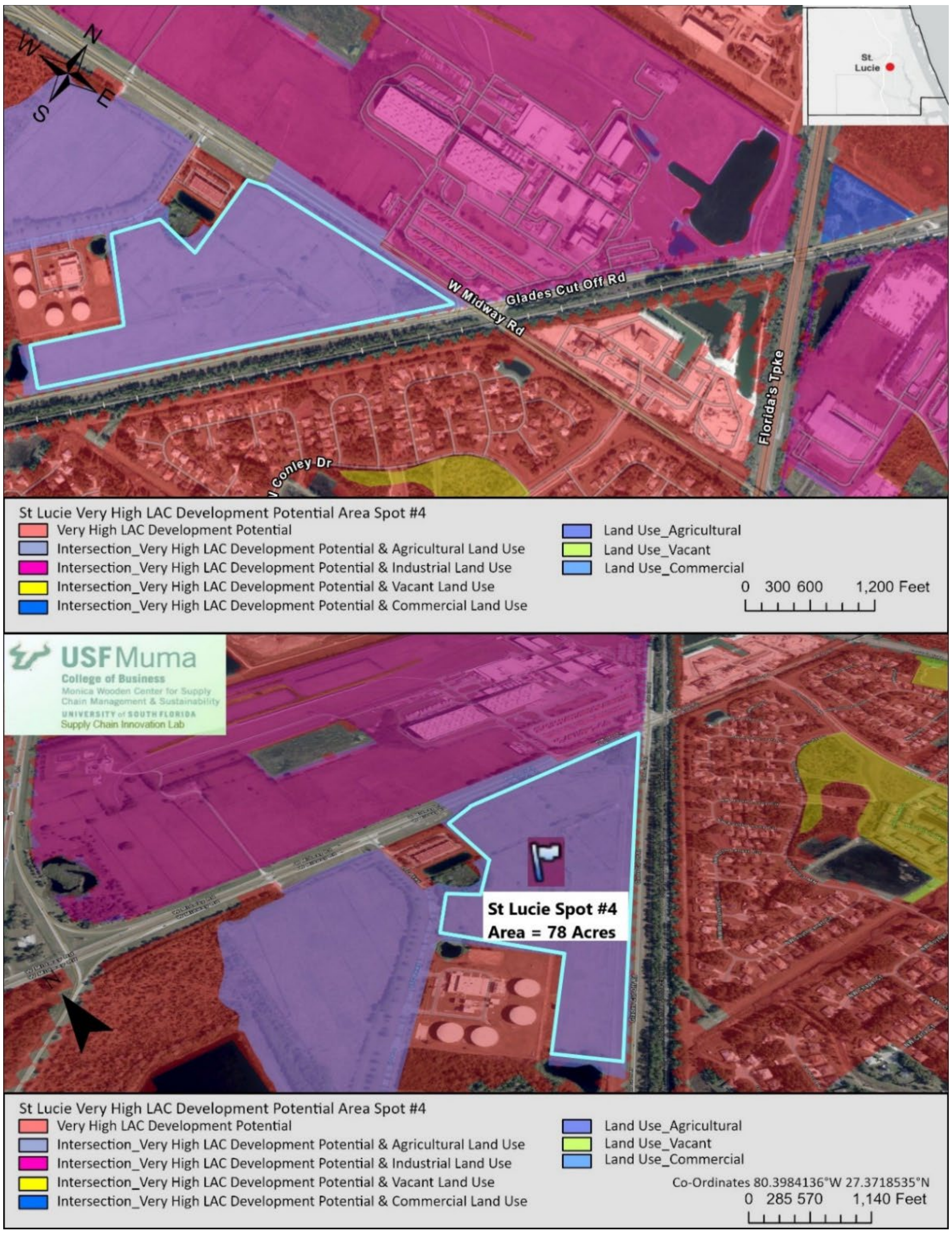

Figure B 235. St Lucie County Spot 4

ST LUCIE SPOT #5

As per the criteria developed in this study, this 38-acre land parcel in the below image (Figure B 236) located near the FPL Electric Sub-station at the intersection of Delcris Dr and Glades Cut Off Rd has very high LAC development potential in the St Lucie County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands around it which makes it suitable for re-zoning.

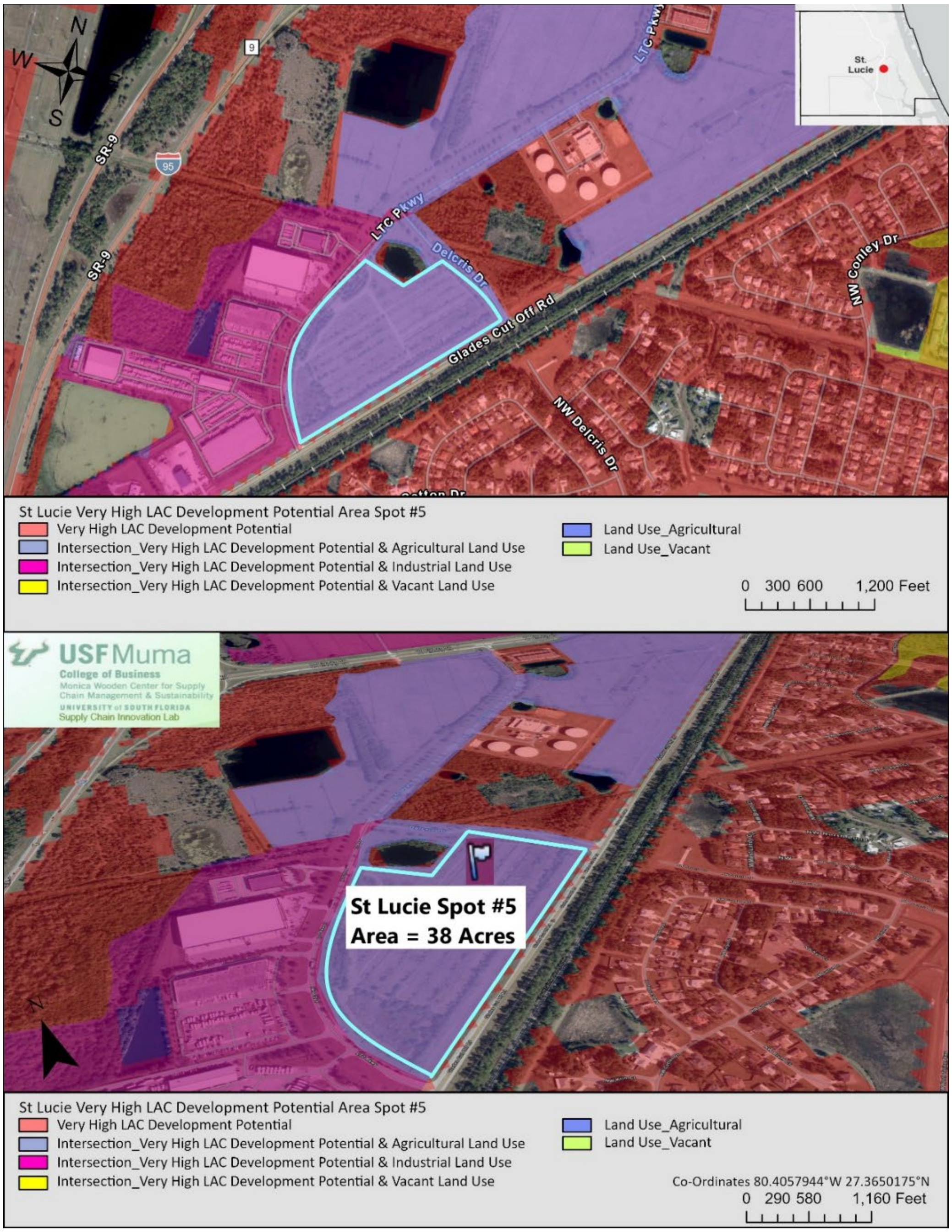

Figure B 236. St Lucie County Spot 5

Sumter County

SUMTER SPOT #2

As per the criteria developed in this study, this 16.7-acre land parcel in the below image (Figure B 237) located in Wildwood, FL at the intersection of County Road 124A and N US Highway 301 has high LAC development potential in the Sumter County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

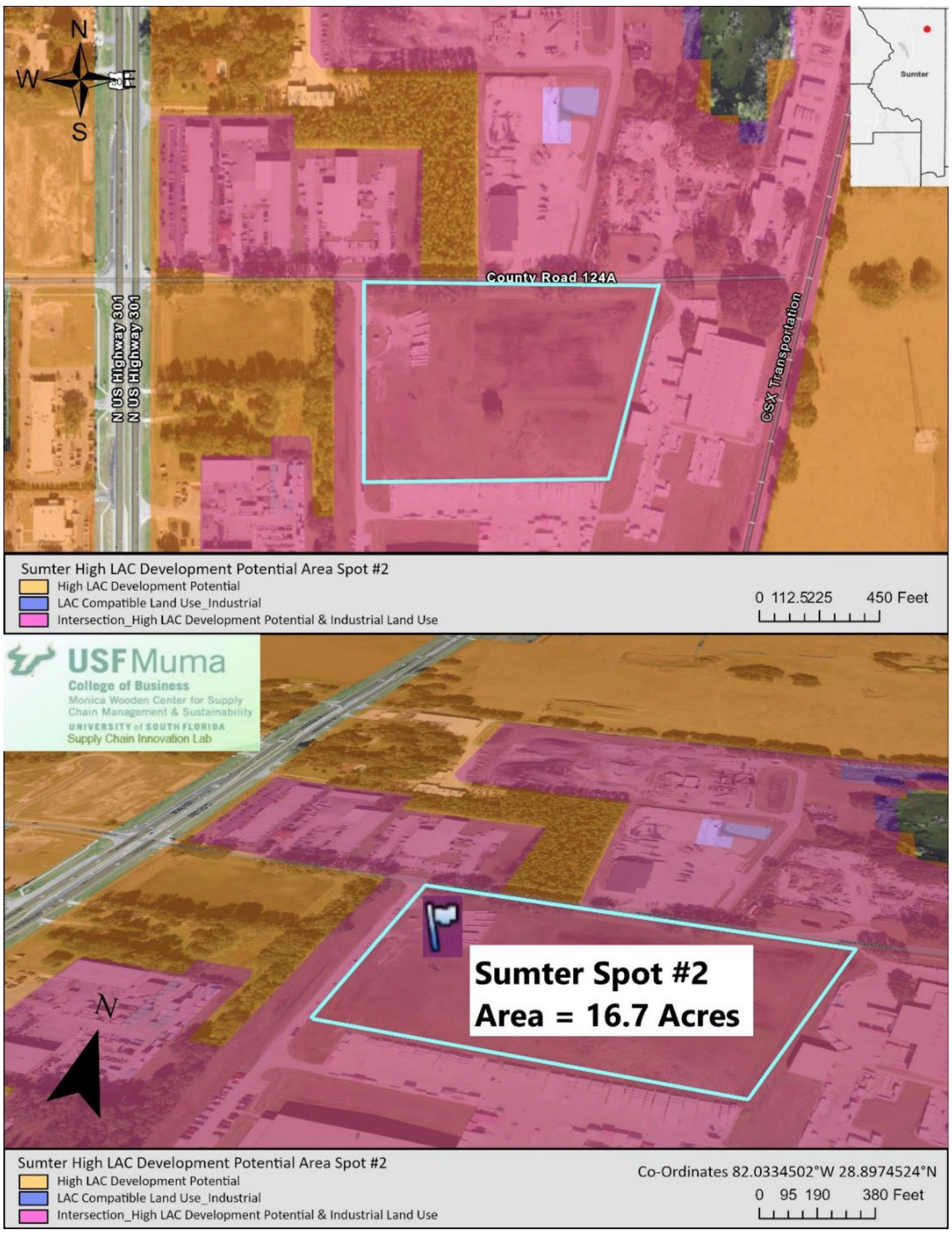

Figure B 237. Sumter County Spot 2

SUMTER SPOT #3

As per the criteria developed in this study, this 13.7-acre land parcel in the below image (Figure B 238) located in Wildwood, FL at the intersection of County Road 519A and NE 28th Ter has high LAC development potential in the Sumter County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

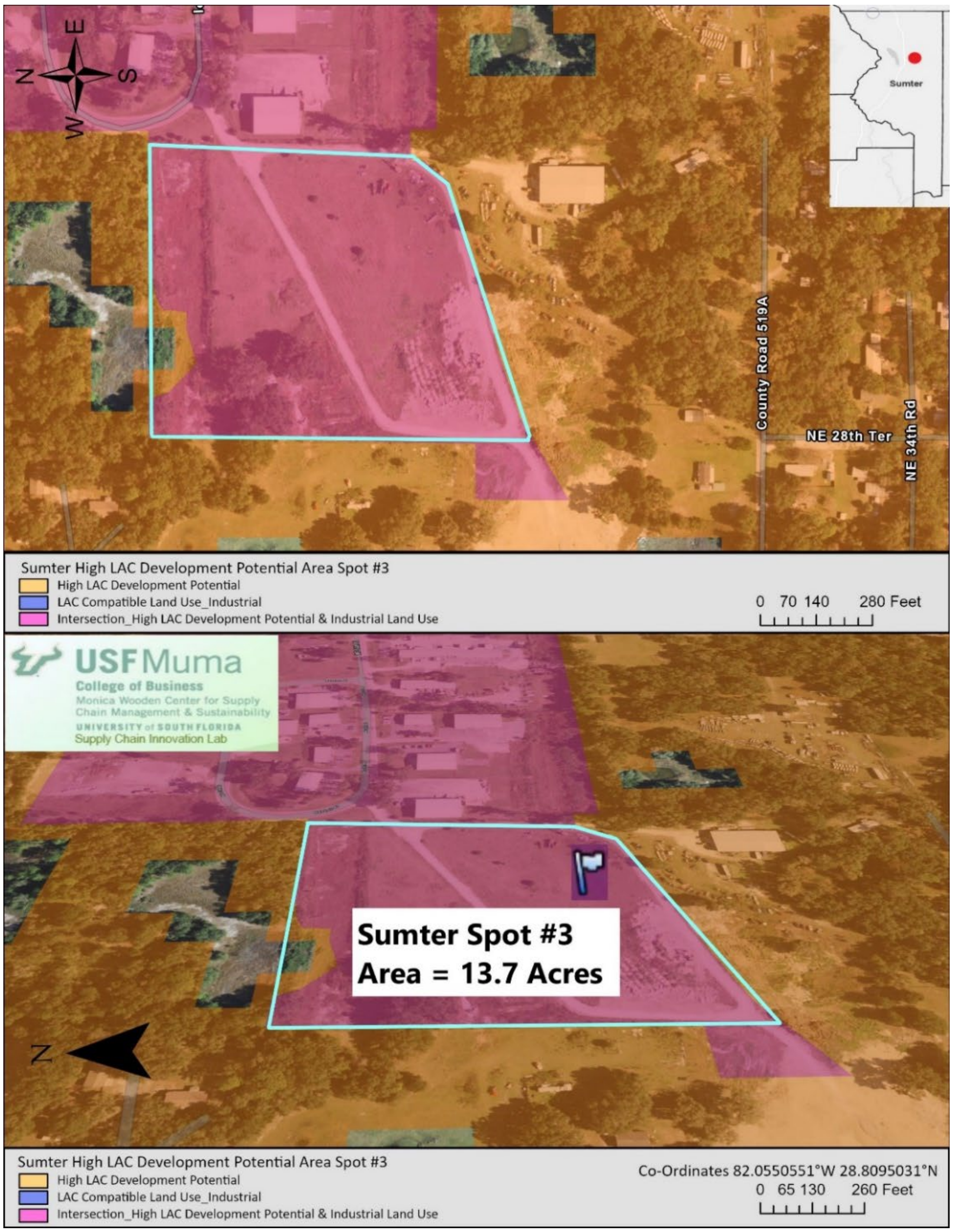

Figure B 238. Sumter County Spot 3

SUMTER SPOT #4

As per the criteria developed in this study, this 100-acre land parcel in the below image (Figure B 239) located in Bushnell, FL near the Kenny Dixon Sports Complex at the intersection of W C 48 and S W 12th Way has very high LAC development potential in the Sumter County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

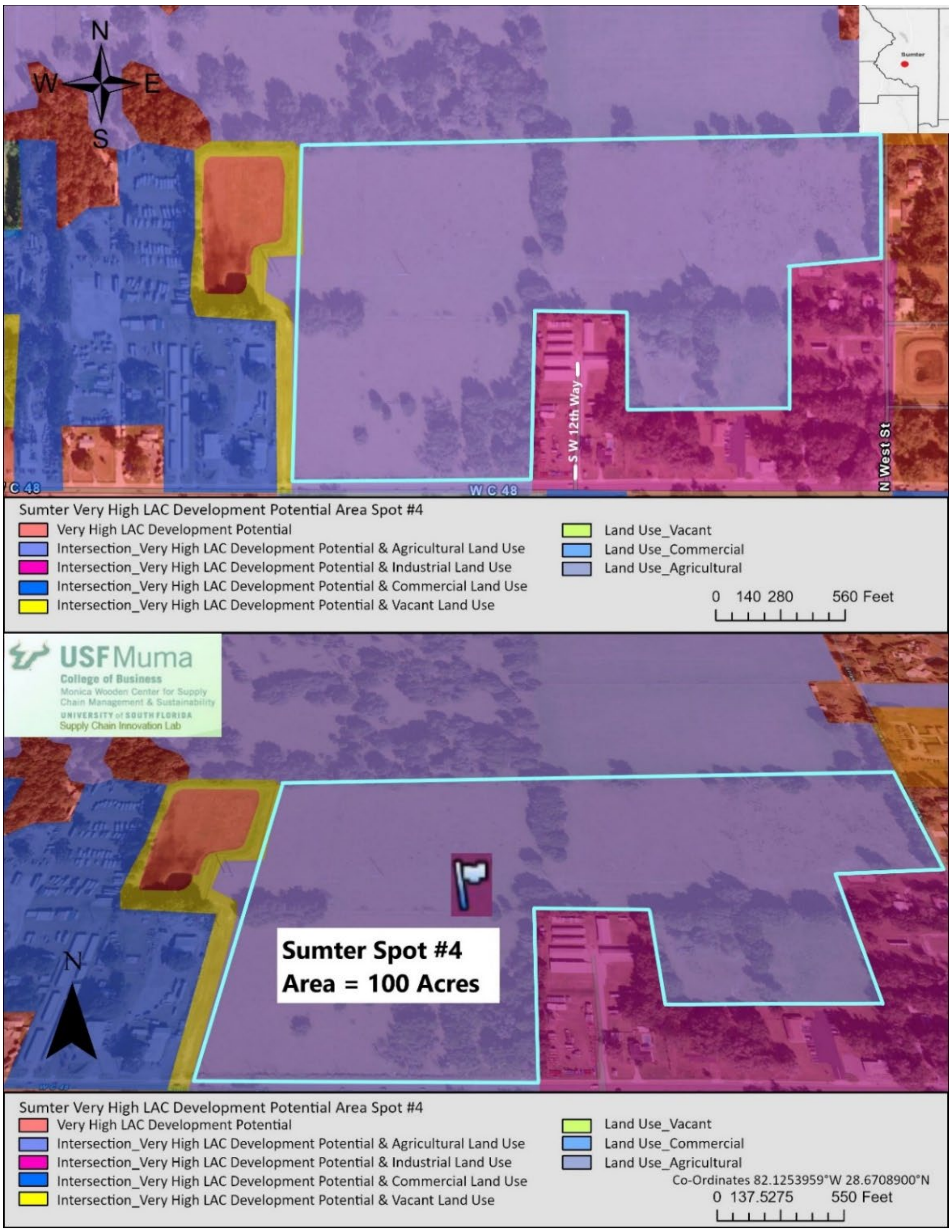

Figure B 239. Sumter County Spot 4

SUMTER SPOT #5

As per the criteria developed in this study, this massive 140-acre land parcel in the below image (Figure B 240) located in Sumterville, FL at the intersection of E C 470 and CR 529 E has high LAC development potential in the Sumter County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

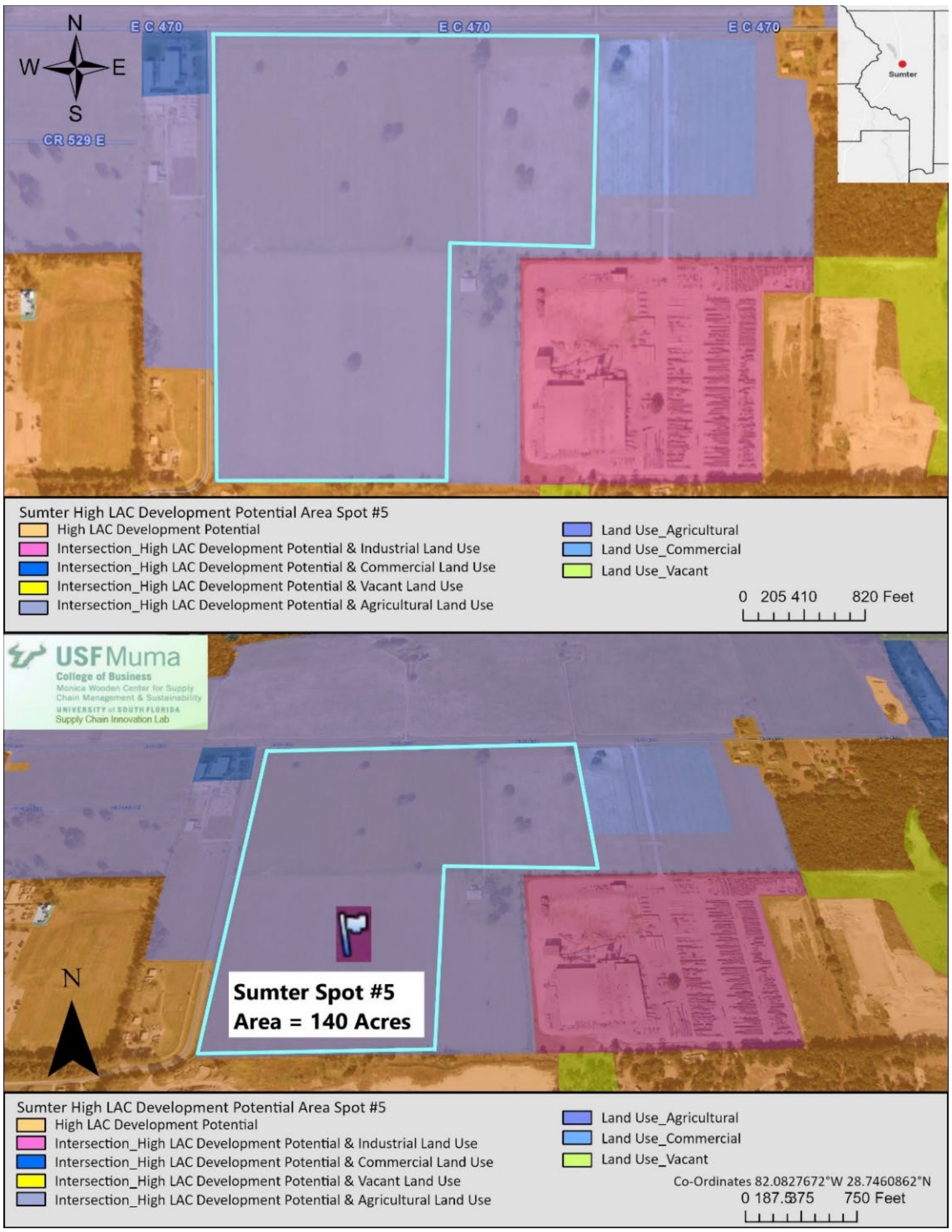

Figure B 240. Sumter County Spot 5

Suwannee County

SUWANNEE SPOT #2

As per the criteria developed in this study, this 21.8-acre land parcel in the below image (Figure B 241) located in Live Oak, FL at the intersection of 155th Rd and 76th St has very high LAC development potential in the Suwannee County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 mils from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

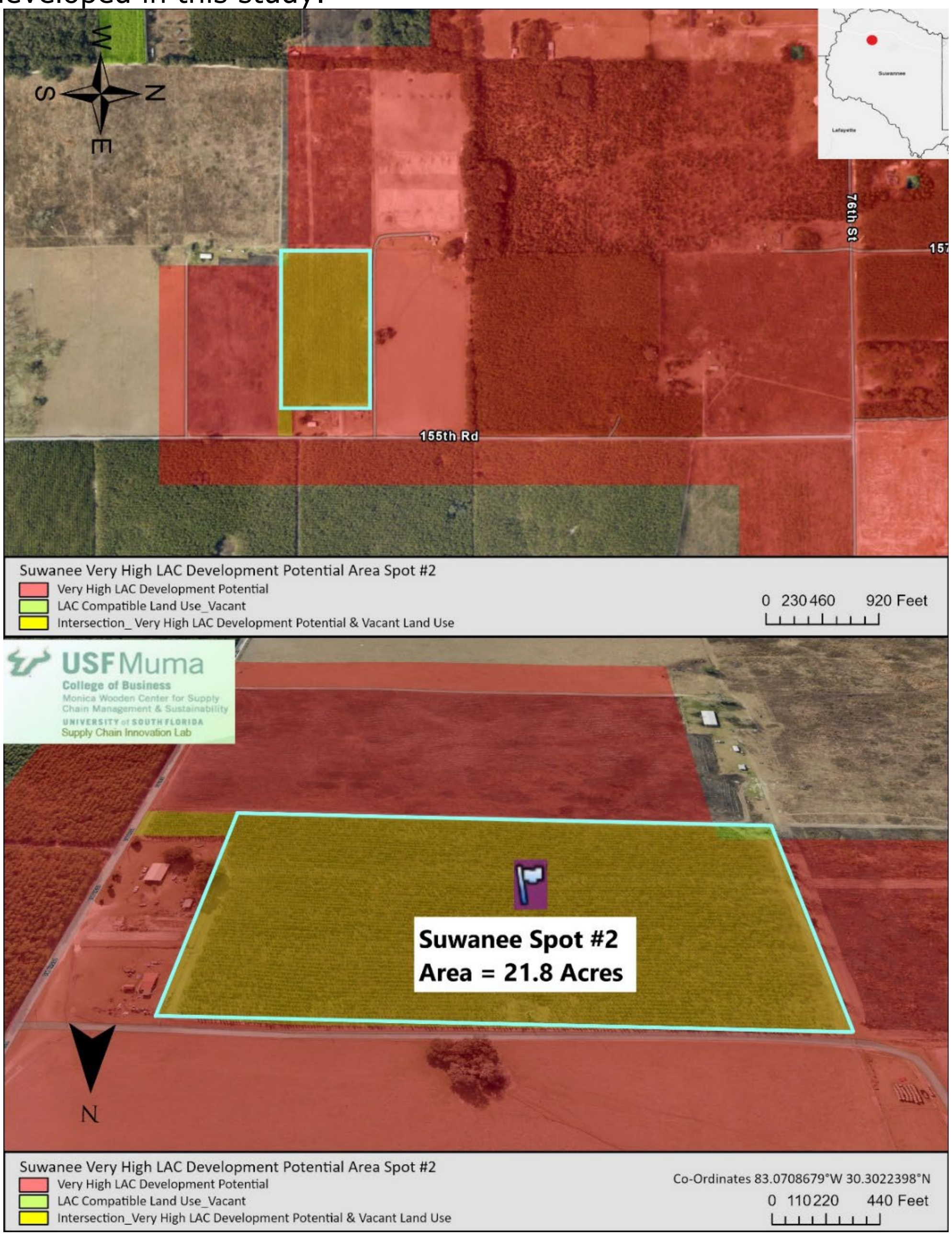

Figure B 241. Suwannee County Spot 2

SUWANNEE SPOT #3

As per the criteria developed in this study, this 10.7-acre land parcel in the below image (Figure B 242) located in Live Oak, FL at the intersection of US Highway 90 and 74th St has very high LAC development potential in the Suwannee County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 mils from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 242. Suwannee County Spot 3

SUWANNEE SPOT #4

As per the criteria developed in this study, this 291-acre land parcel in the below image (Figure B 243) located in Live Oak, FL at the intersection of 44th St and 167th Rd has high LAC development potential in the Suwannee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

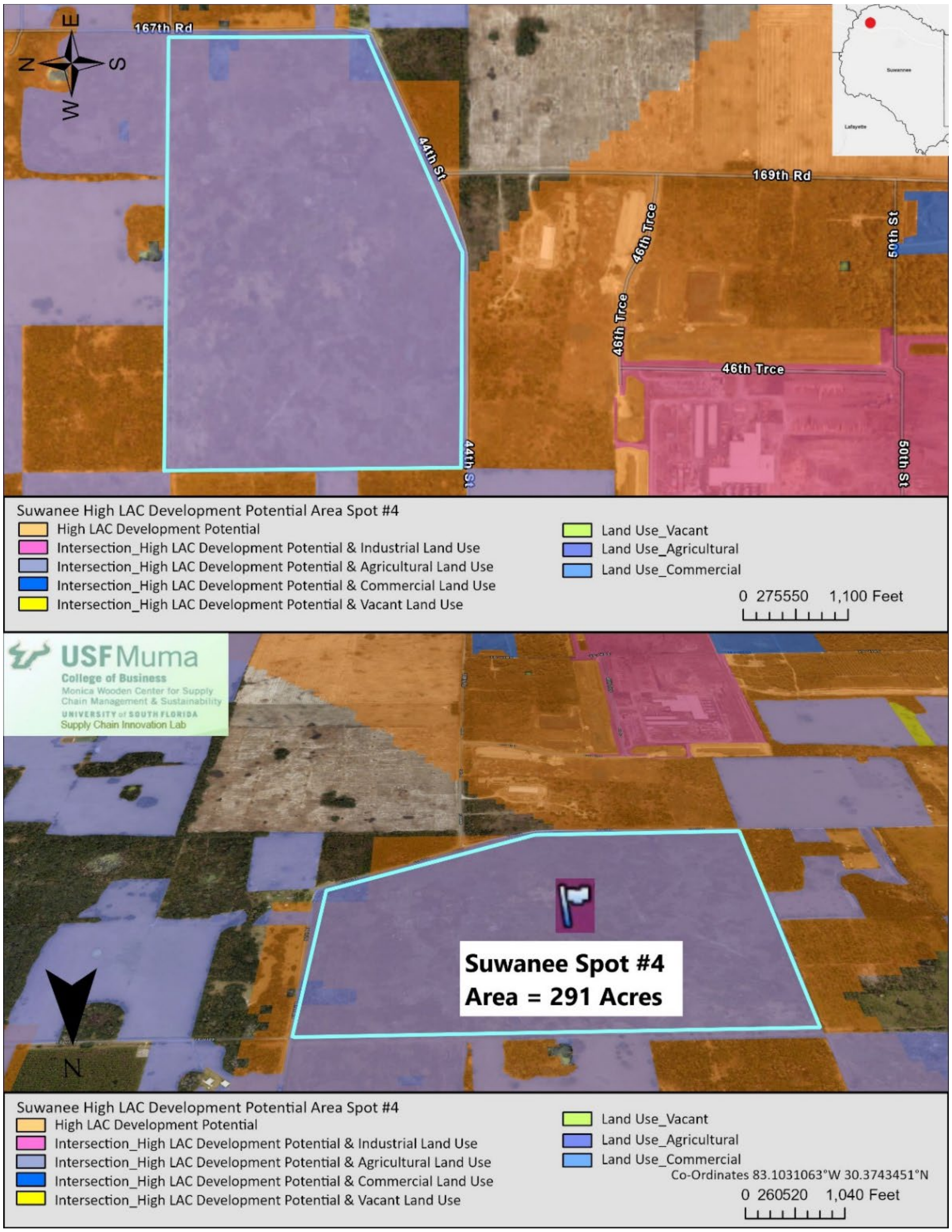

Figure B 243. Suwannee County Spot 4

SUWANNEE SPOT #5

As per the criteria developed in this study, this 120-acre land parcel in the below image (Figure B 244) located in Live Oak, FL at the intersection of Railroad St and 169th Rd has high LAC development potential in the Suwannee County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

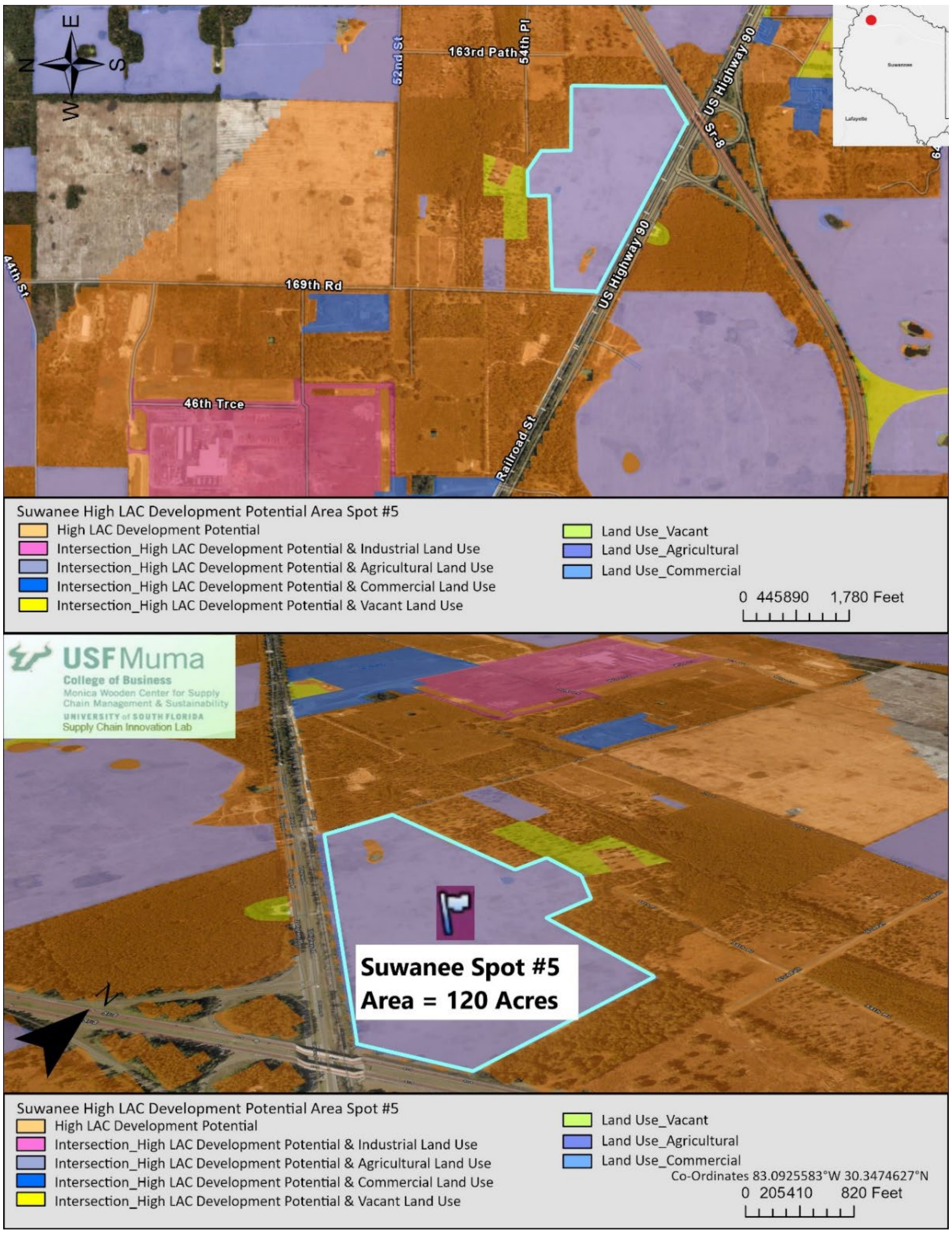

Figure B 244. Suwannee County Spot 5

Taylor County

TAYLOR SPOT #2

As per the criteria developed in this study, this 26-acre land parcel in the below image (Figure B 245) located in Perry, FL at the intersection of Stone Container Rd and Foley Rd has high LAC development potential in the Taylor County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest airport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

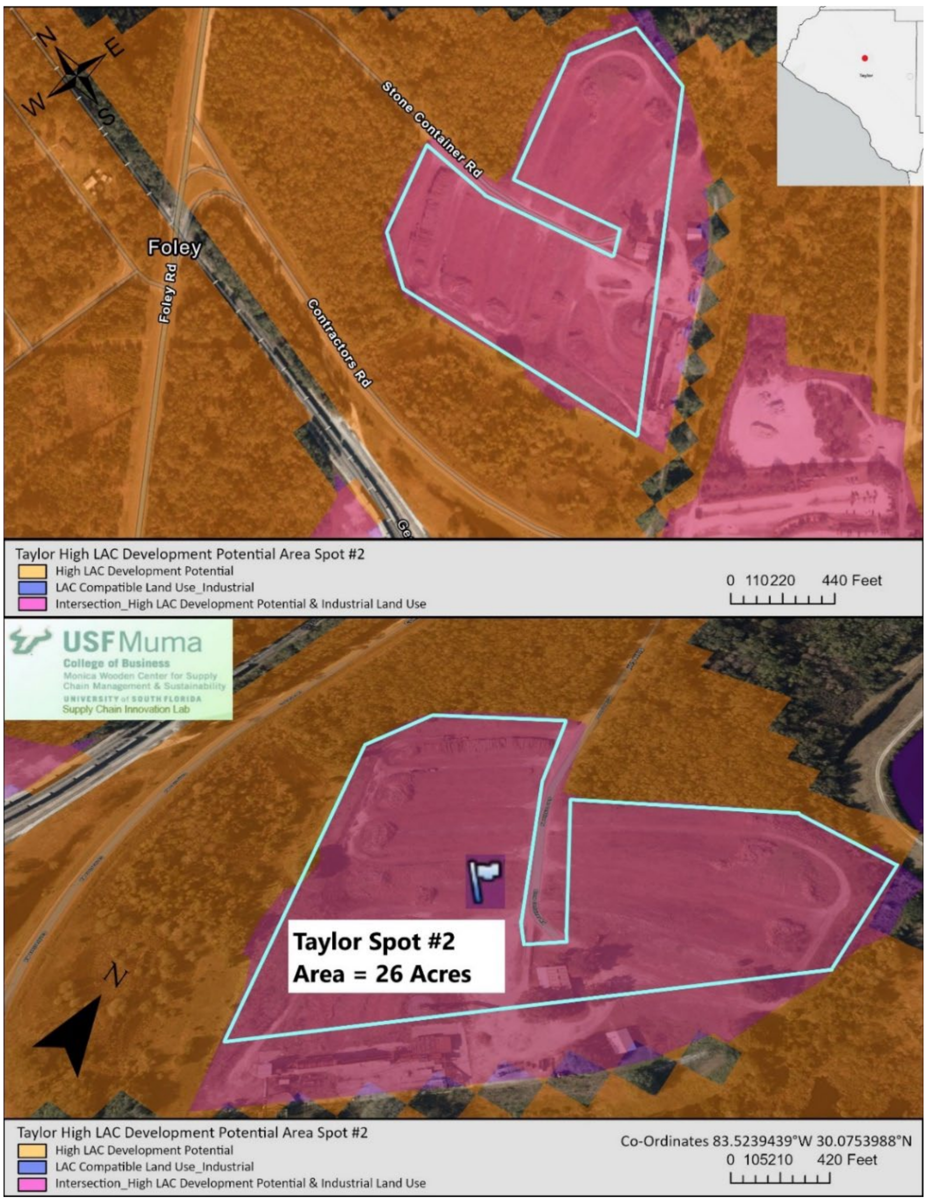

Figure B 245. Taylor County Spot 2

TAYLOR SPOT #3

As per the criteria developed in this study, this 33.5-acre land parcel in the below image (Figure B 246) located in Perry, FL at the intersection of E Ash St and Helen St has high LAC development potential in the Taylor County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 5 miles from the nearest airport, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

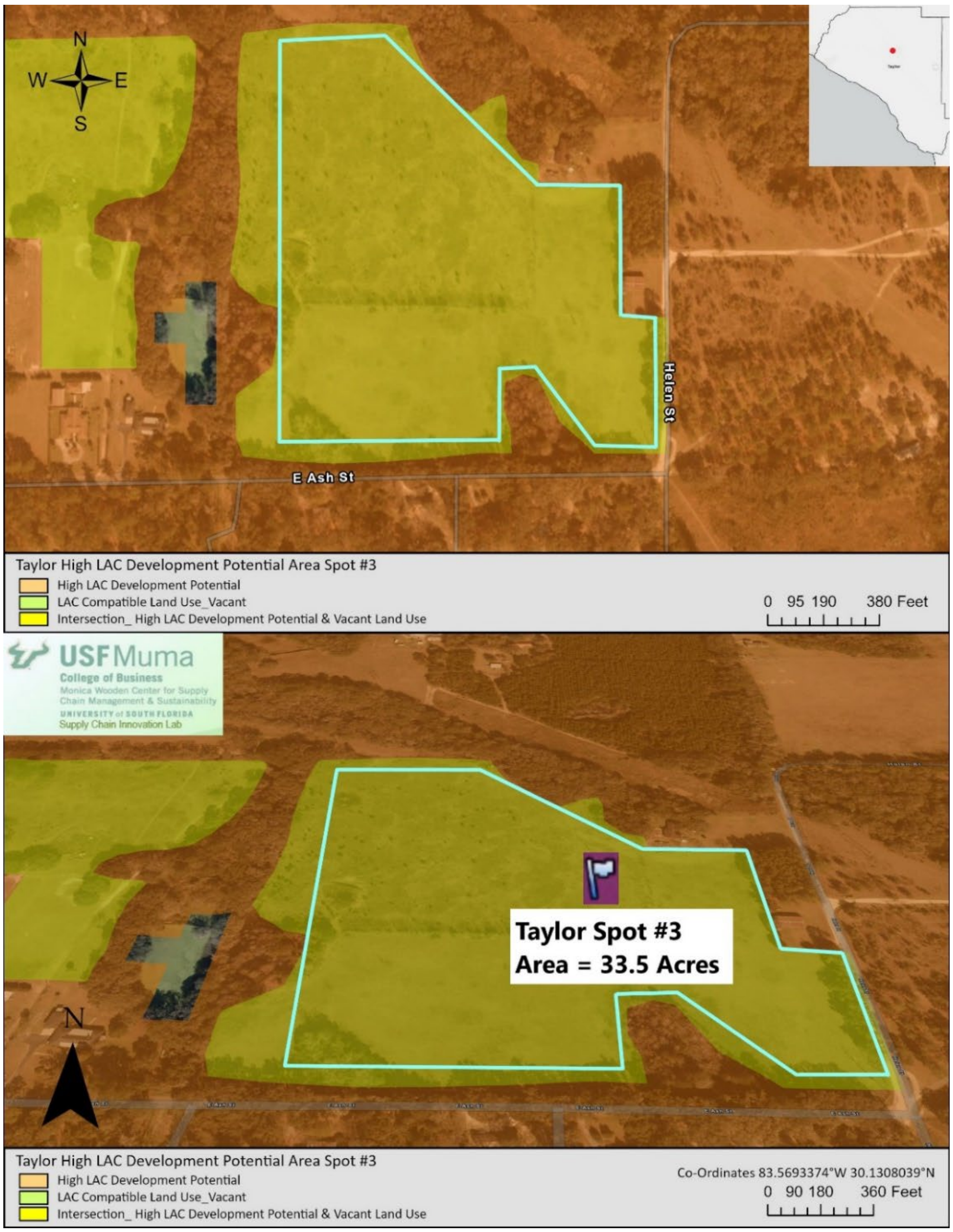

Figure B 246. Taylor County Spot 3

TAYLOR SPOT #4

As per the criteria developed in this study, this 41.3-acre land parcel in the below image (Figure B 247) located in Perry, FL at the intersection of Wash Davis Rd and Courtney Rd has high LAC development potential in the Taylor County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

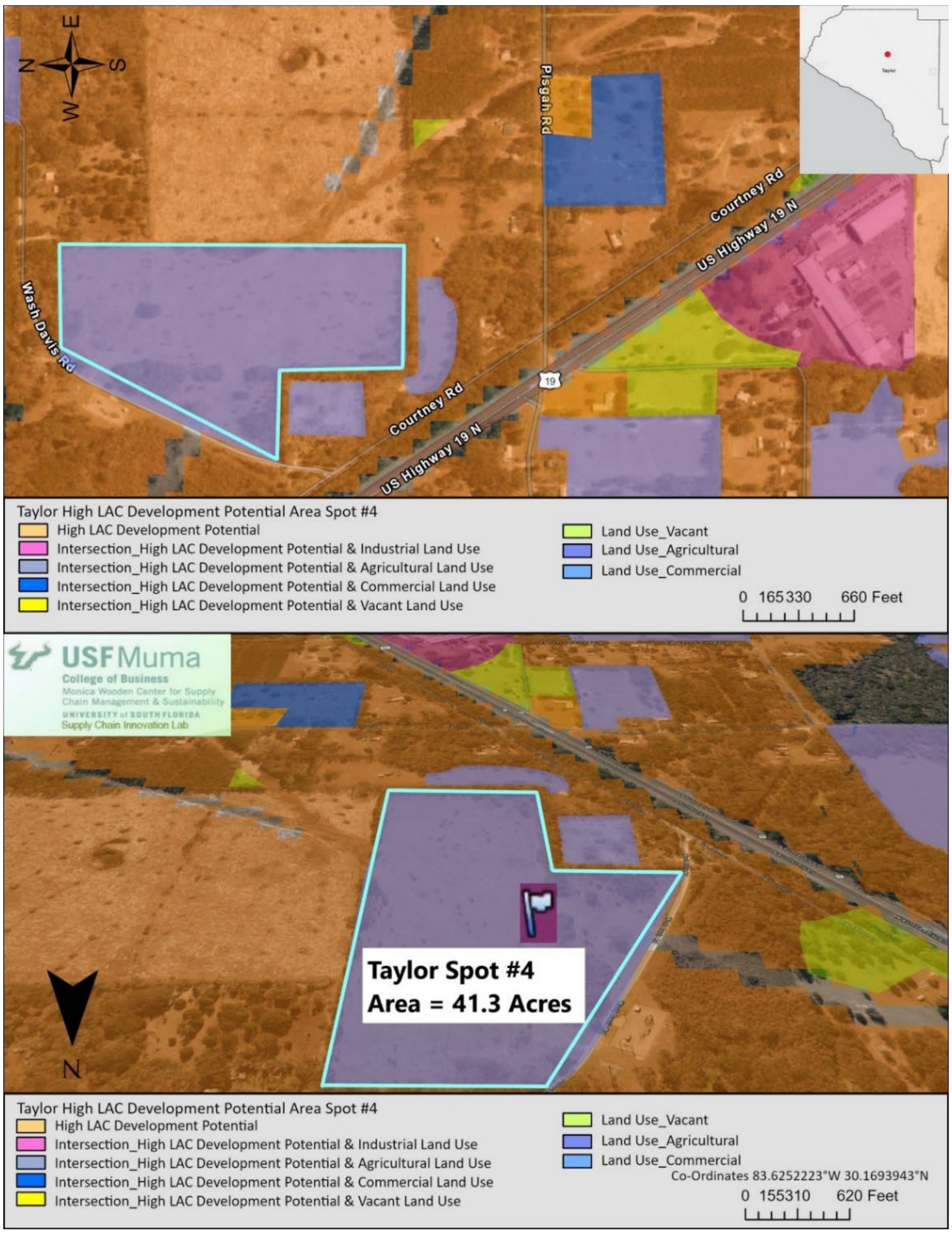

Figure B 247. Taylor County Spot 4

TAYLOR SPOT #5

As per the criteria developed in this study, this 45.2-acre land parcel in the below image (Figure B 248) located in Perry, FL at the intersection of Foley Rd and Raulerson Ln has high LAC development potential in the Taylor County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

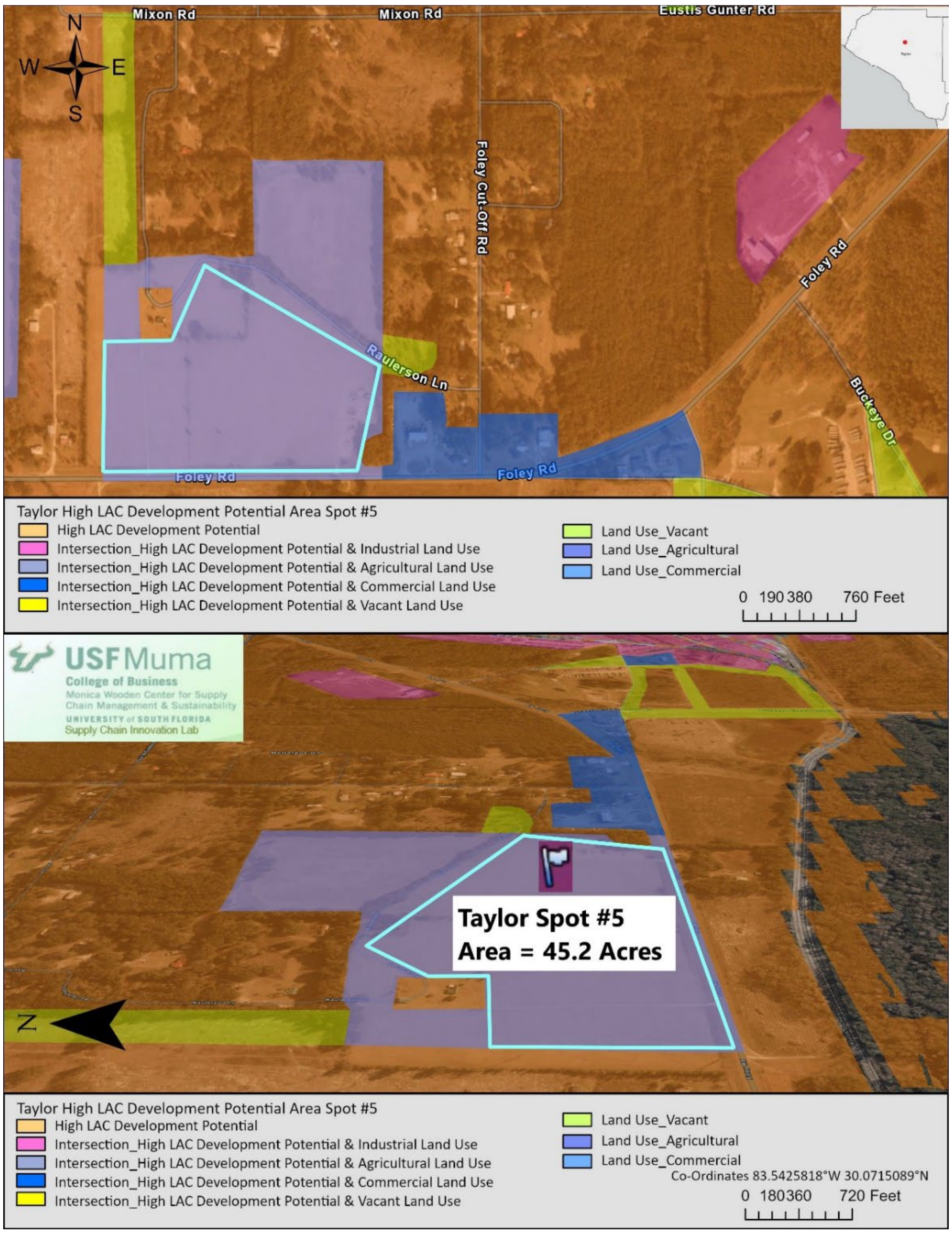

Figure B 248. Taylor County Spot 5

Union County

UNION SPOT #2

As per the criteria developed in this study, this 30-acre land parcel in the below image (Figure B 249) located in Lake Butler, FL near Flying Tiger Airport at the intersection of SW 139th Pl and SW County Road 18A has moderate LAC development potential in the Union County. It is less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

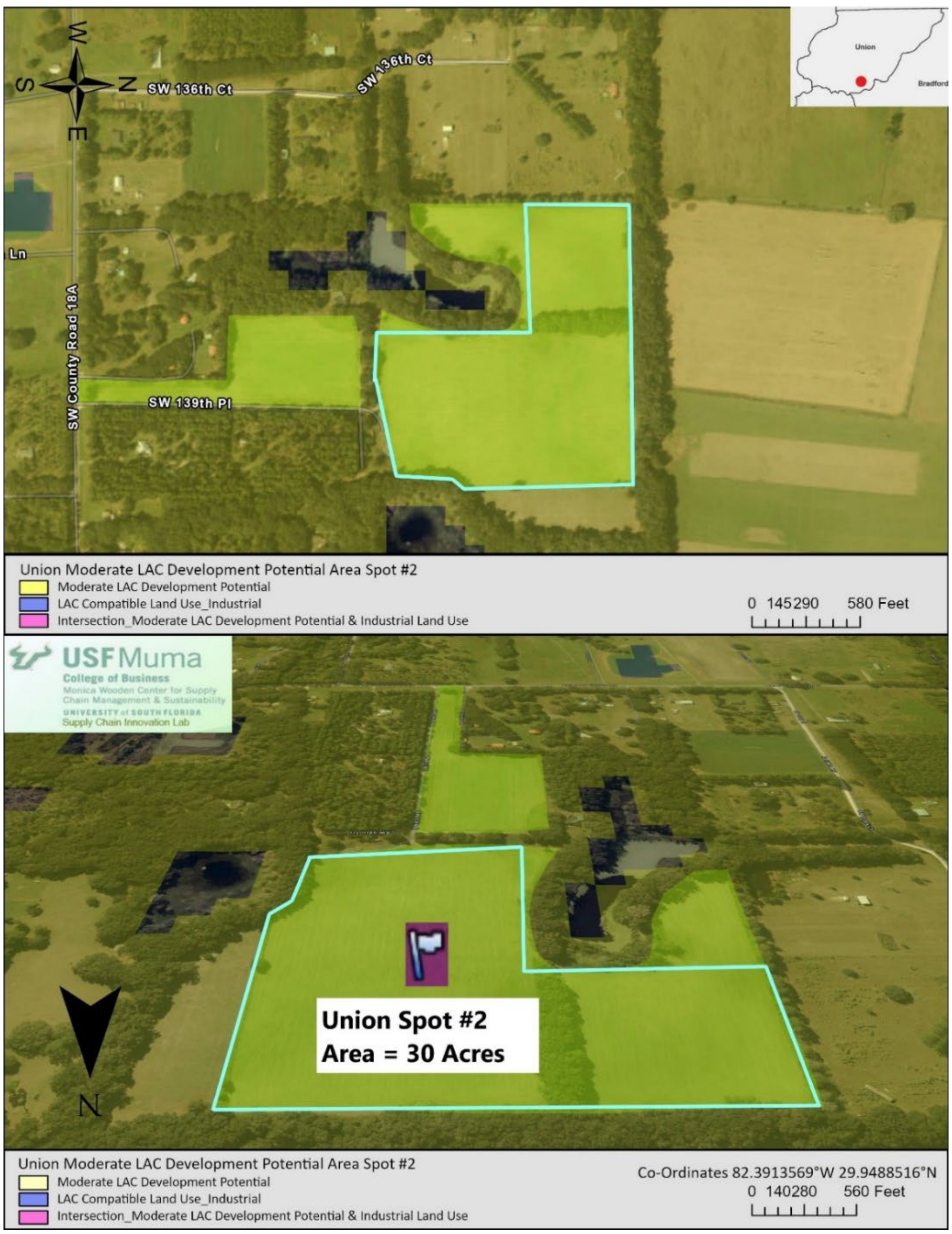

Figure B 249. Union County Spot 2

UNION SPOT #3

As per the criteria developed in this study, this 15.5-acre land parcel in the below image (Figure B 250) located in Lake Butler, FL at the intersection of NE 97th Dr and NE 194th Ln has moderate LAC development potential in the Union County. It is less than 2.5 miles from State roads, less than 10 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

Figure B 250. Union County Spot 3

UNION SPOT #4

As per the criteria developed in this study, this 92-acre land parcel in the below image (Figure B 251) located in Lake Butler, FL at the intersection of SW 155th Ln and W State Rd 238 has moderate LAC development potential in the Union County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

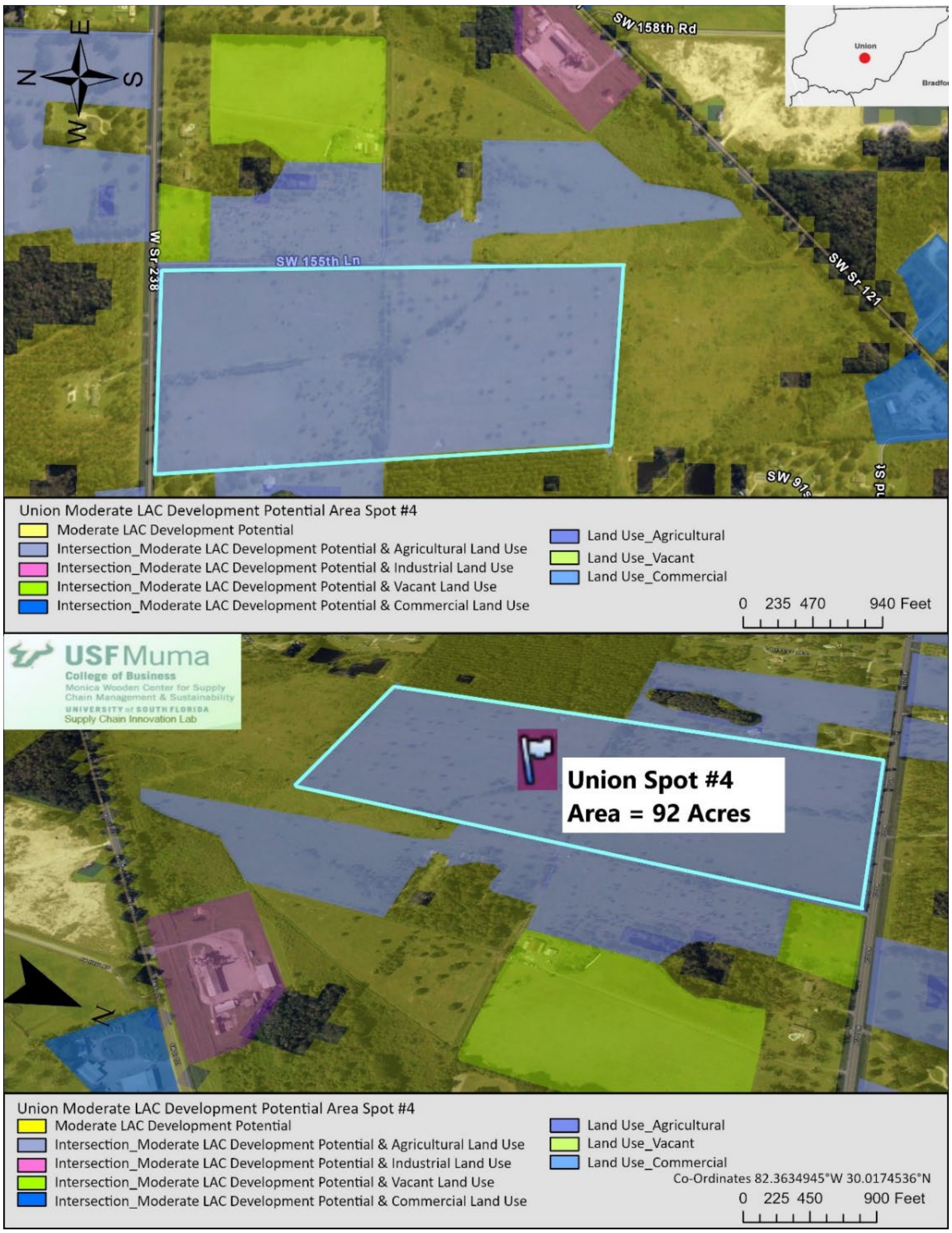

Figure B 251. Union County Spot 4

UNION SPOT #5

As per the criteria developed in this study, this 72-acre land parcel in the below image (Figure B 252) located in Raiford, FL at the intersection of NE 141st St and NE 256th Ave has moderate LAC development potential in the Union County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial, and vacant lands around it which makes it suitable for re-zoning.

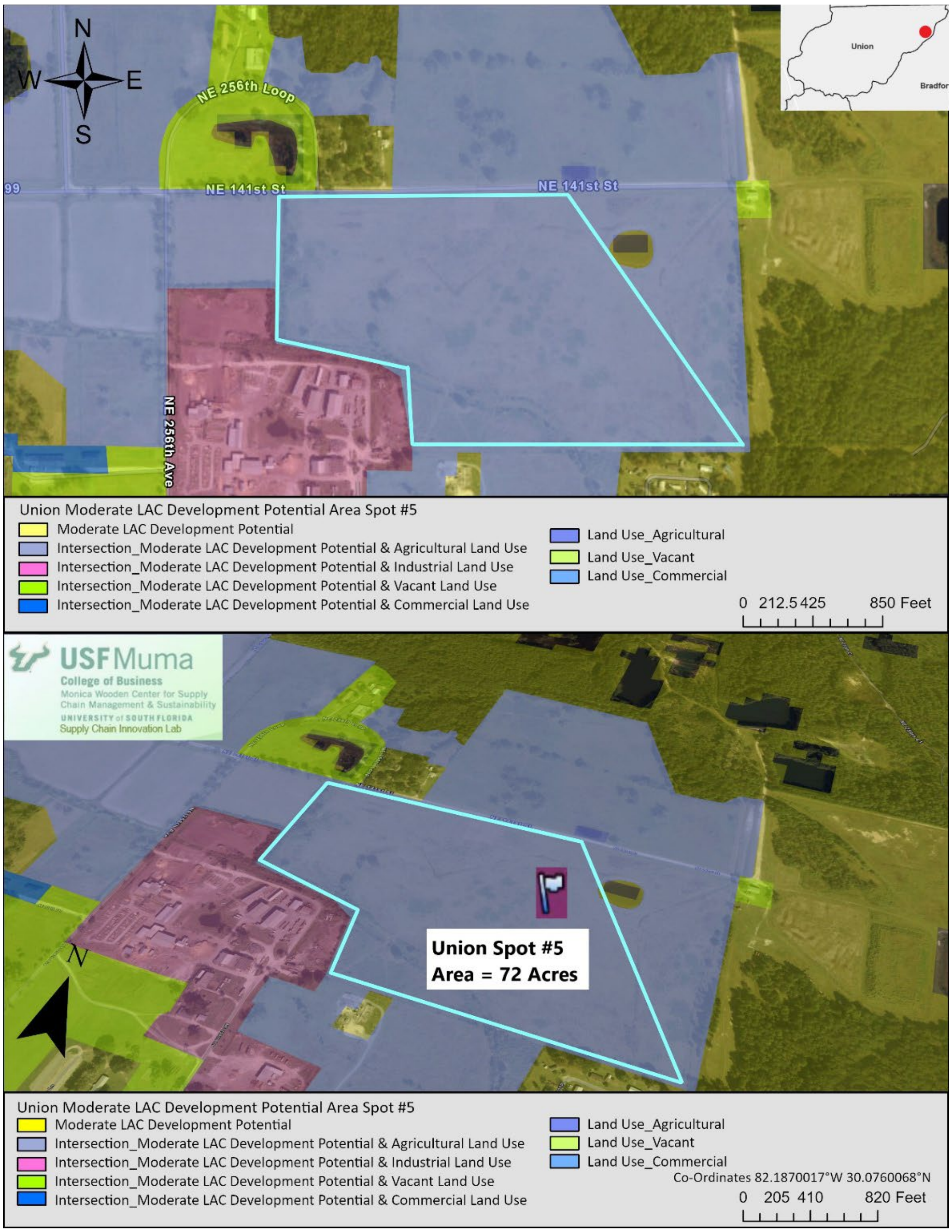

Figure B 252. Union County Spot 5

Volusia County

VOLUSIA SPOT #2

As per the criteria developed in this study, this 14.5-acre land parcel in the below image (Figure B 253) located near the Ormond Beach Municipal Airport and Airport Business Park at the intersection of Warden Trl and Leeway Trl has very high LAC development potential in the Volusia County. It is less than 5 miles from freeway intersections, less than 2.5 miles from State roads, less than 6.25 miles from direct rail access, less than 2.5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

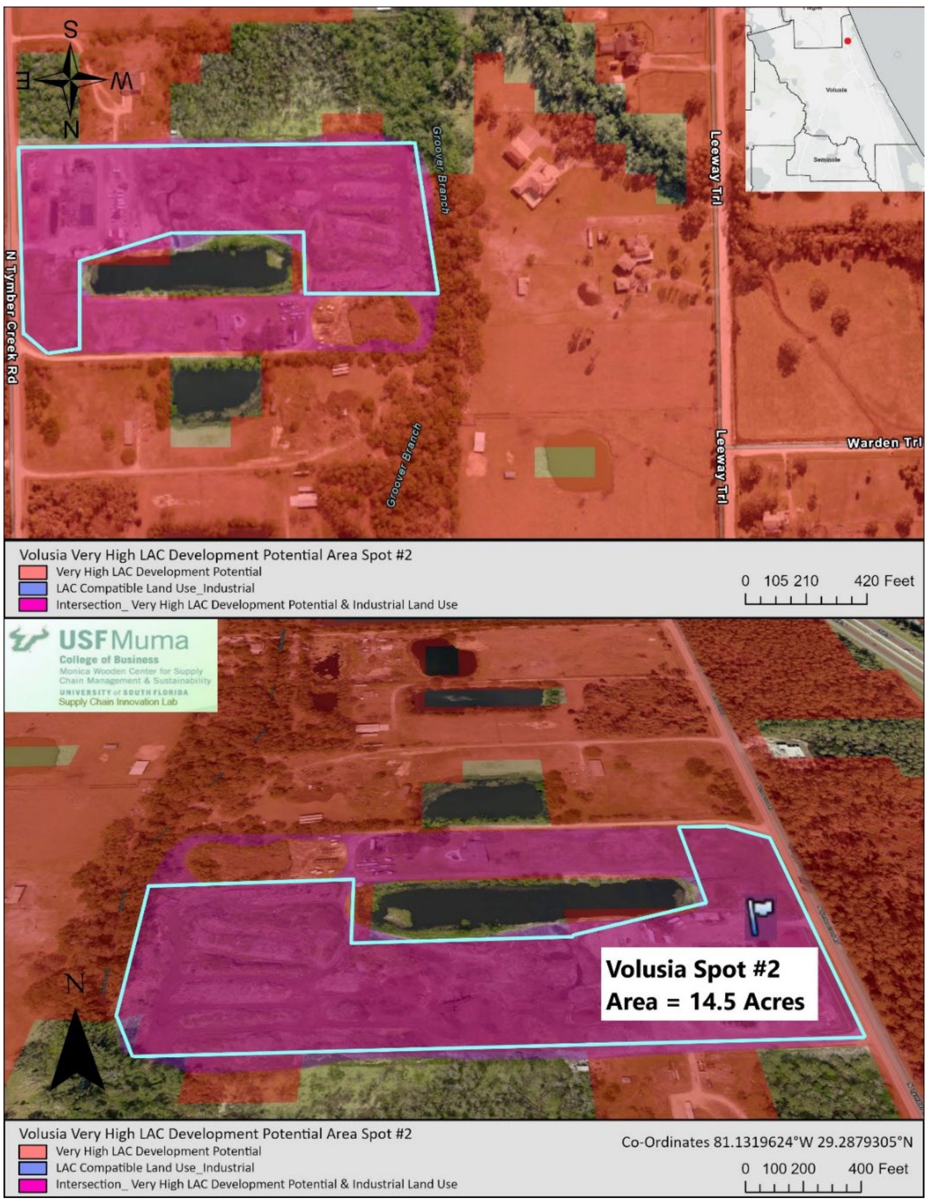

Figure B 253. Volusia County Spot 2

VOLUSIA SPOT #3

As per the criteria developed in this study, this 19.3-acre land parcel in the below image (Figure B 254) located in the DeLand Business and industrial area at the intersection of Hamilton Rd and Bennett Dr has very high LAC development potential in the Volusia County. It is less than 7.5 miles from freeway intersections, less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, less than 2.5 miles from the nearest airport and has a below $8 average land cost per square foot which confirms the very high LAC development potential as per the criteria developed in this study.

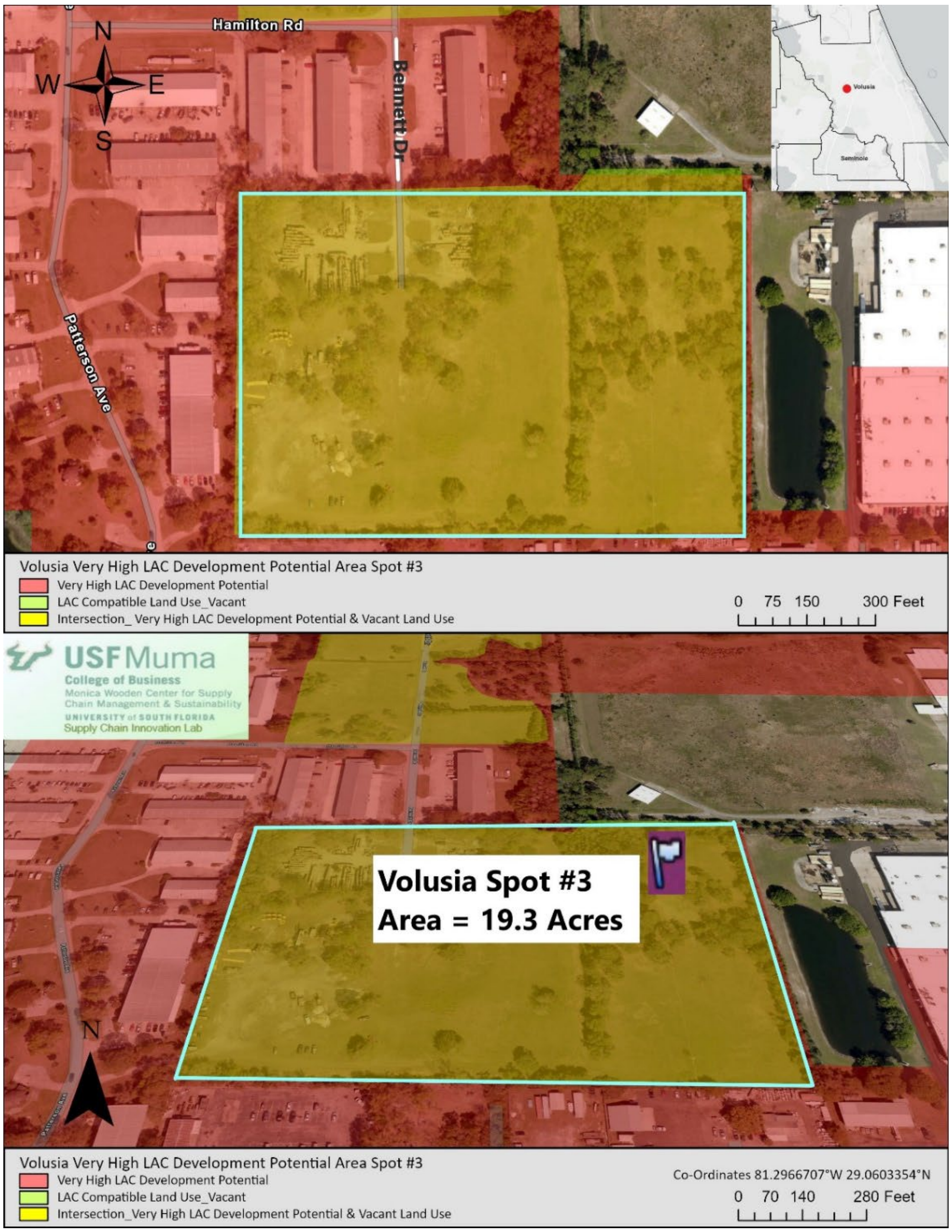

Figure B 254. Volusia County Spot 3

VOLUSIA SPOT #4

As per the criteria developed in this study, this 62-acre land parcel in the below image (Figure B 255) located next to the DeLand Municipal Airport at the intersection of Jacobs Rd and N Blue Lake Ave has very high LAC development potential in the Volusia County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

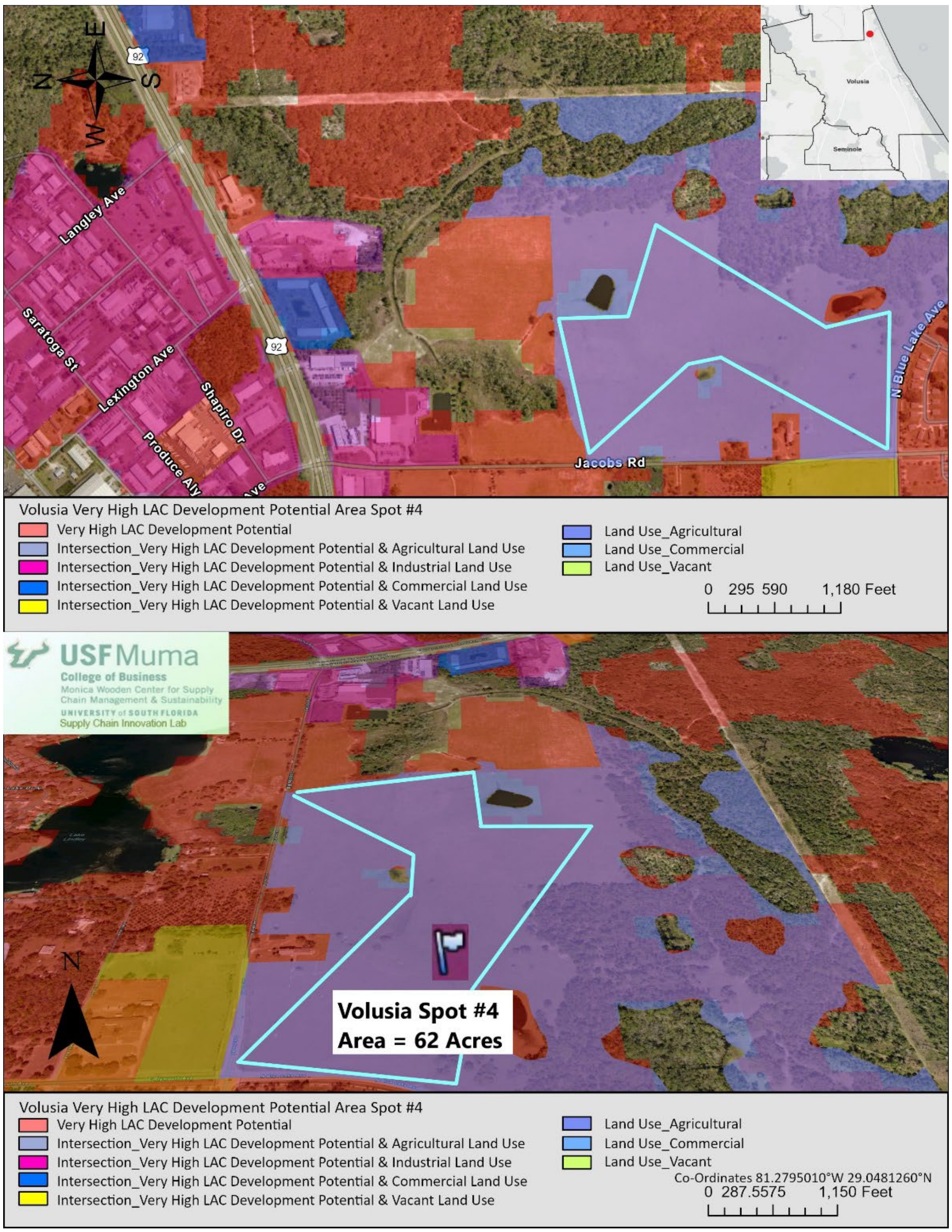

Figure B 255. Volusia County Spot 4

VOLUSIA SPOT #5

As per the criteria developed in this study, this 15.5-acre land parcel in the below image (Figure B 256) located in the Ormond Beach, FL industrial area at the intersection of Southland Rd and N US Highway 1 has very high LAC development potential in the Volusia County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

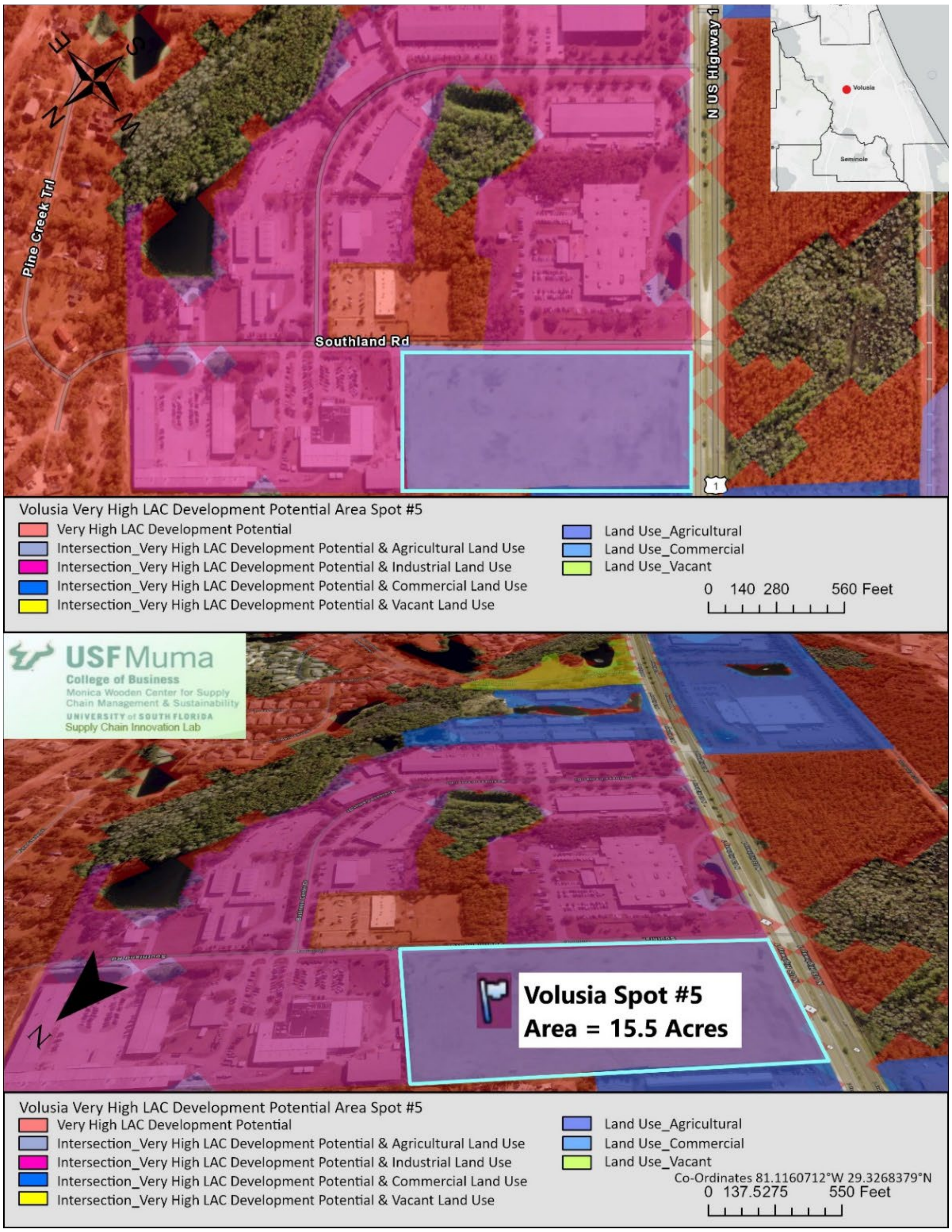

Figure B 256. Volusia County Spot 5

Wakulla County

WAKULLA SPOT #2

As per the criteria developed in this study, this 51.5-acre land parcel in the below image (Figure B 257) located in Crawfordville, FL at the intersection of St Frances St and Coville St has moderate LAC development potential in the Wakulla County. It is less than 2.5 miles from State roads, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

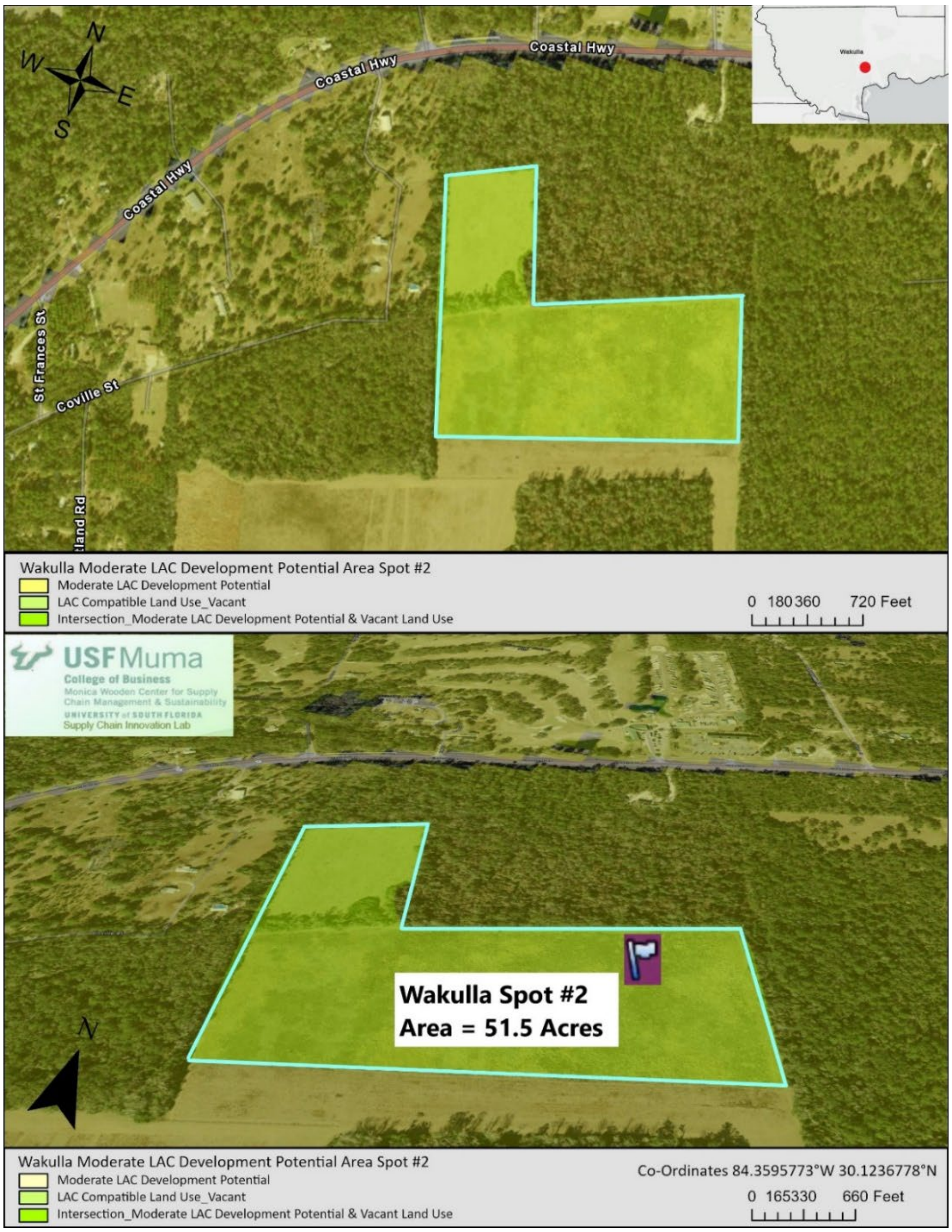

Figure B 257. Wakulla County Spot 2

WAKULLA SPOT #3

As per the criteria developed in this study, this 21.1-acre land parcel in the below image (Figure B 258) located in Crawfordville, FL at the intersection of Spring Creek Rd and James Rd has moderate LAC development potential in the Wakulla County. It is less than 3.75 miles from State roads, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

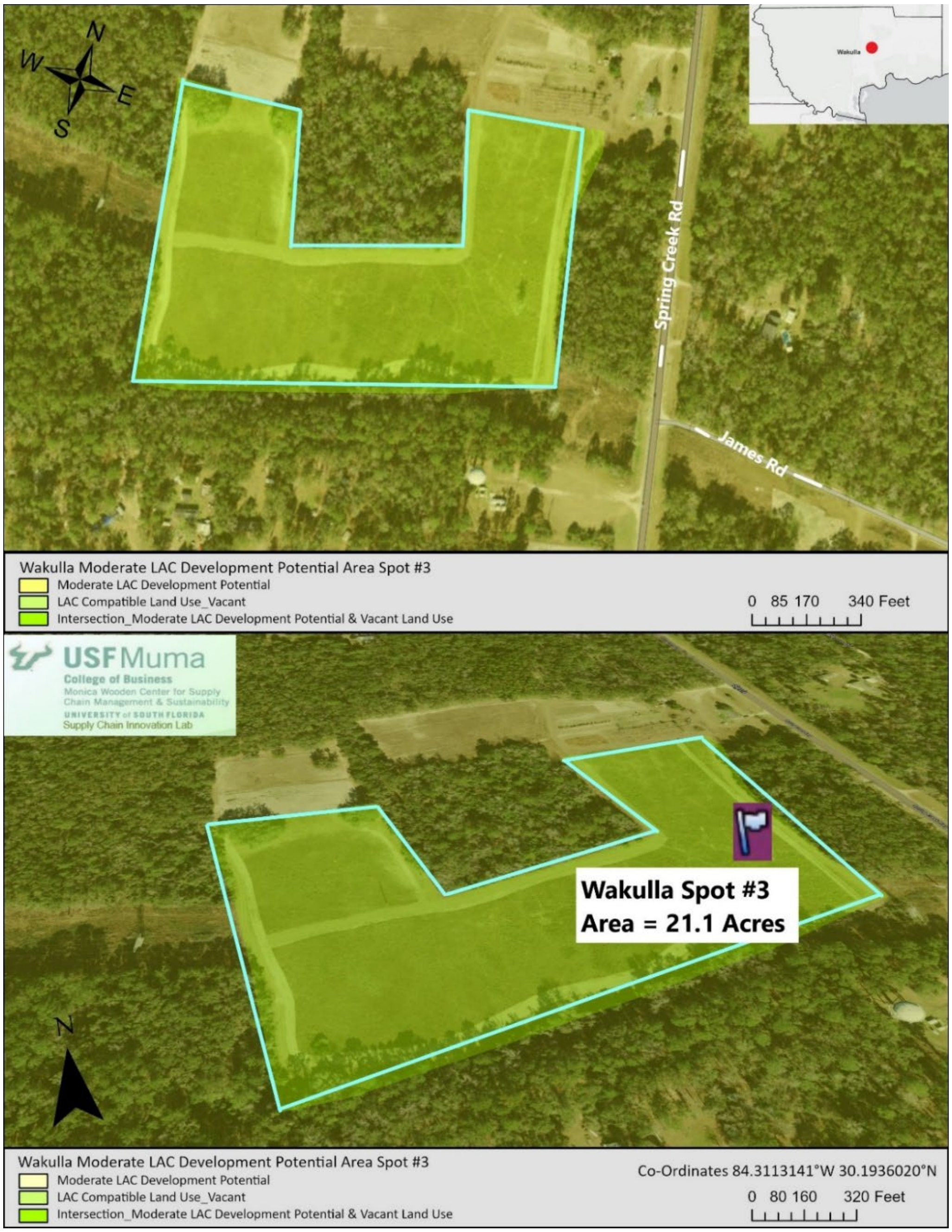

Figure B 258. Wakulla County Spot 3

WAKULLA SPOT #4

As per the criteria developed in this study, this 28.3-acre land parcel in the below image (Figure B 259) located in Crawfordville, FL at the intersection of Daisy Ln and Ace High Stables Rd has moderate LAC development potential in the Wakulla County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial and vacant lands in its vicinity which makes it suitable for re-zoning.

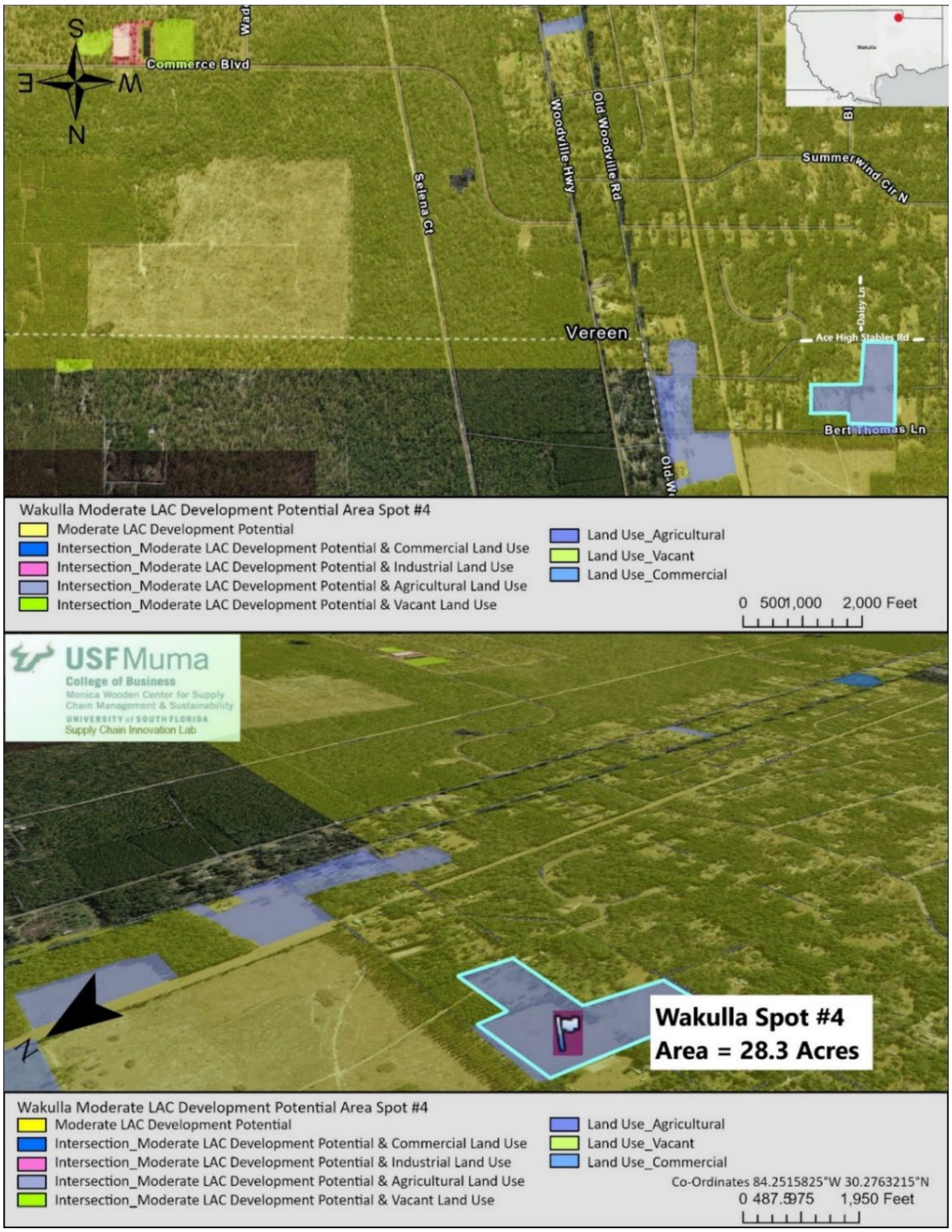

Figure B 259. Wakulla County Spot 4

WAKULLA SPOT #5

As per the criteria developed in this study, this 8.5-acre land parcel in the below image (Figure B 260) located in St Marks, FL at the intersection of Shell Island Rd and Port Leon Dr has moderate LAC development potential in the Wakulla County but is not compatible for LAC Development as the LAC Type is Commercial. It surrounds industrial lands around it which makes it suitable for re-zoning.

Figure B 260. Wakulla County Spot 5

Walton County

WALTON SPOT #2

As per the criteria developed in this study, this 68.5-acre land parcel in the below image (Figure B 261) located in Defuniak Springs, FL at the intersection of Old Spanish Trl E and Koerber Rd has high LAC development potential in the Walton County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has the lowest AADT in the country and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

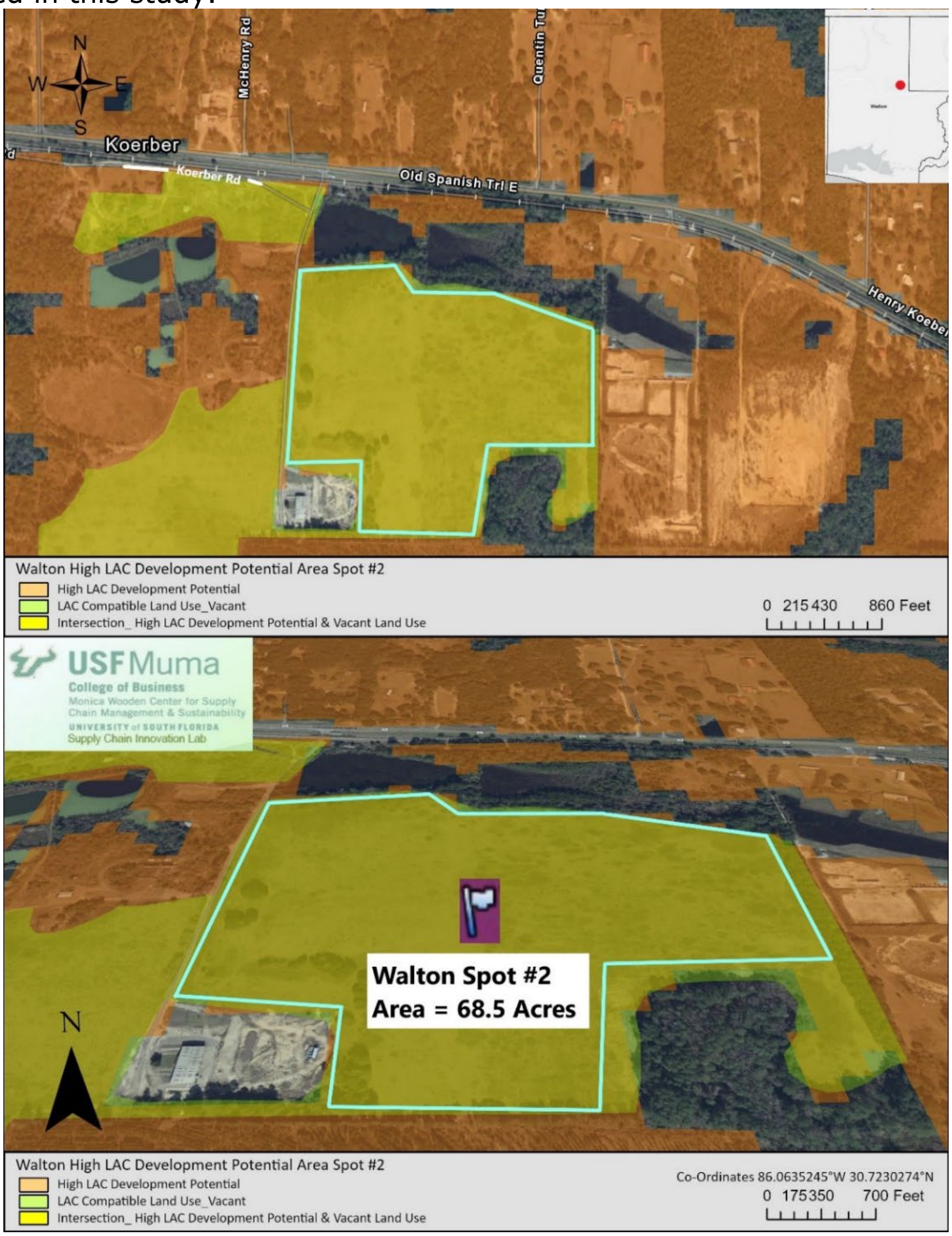

Figure B 261. Walton County Spot 2

WALTON SPOT #3

As per the criteria developed in this study, this 33.2-acre land parcel in the below image (Figure B 262) located in Defuniak Springs, FL at the intersection of US Highway 331 N and Andy Nowling Rd has moderate LAC development potential in the Walton County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access and has a below $8 average land cost per square foot which confirms the moderate LAC development potential as per the criteria developed in this study.

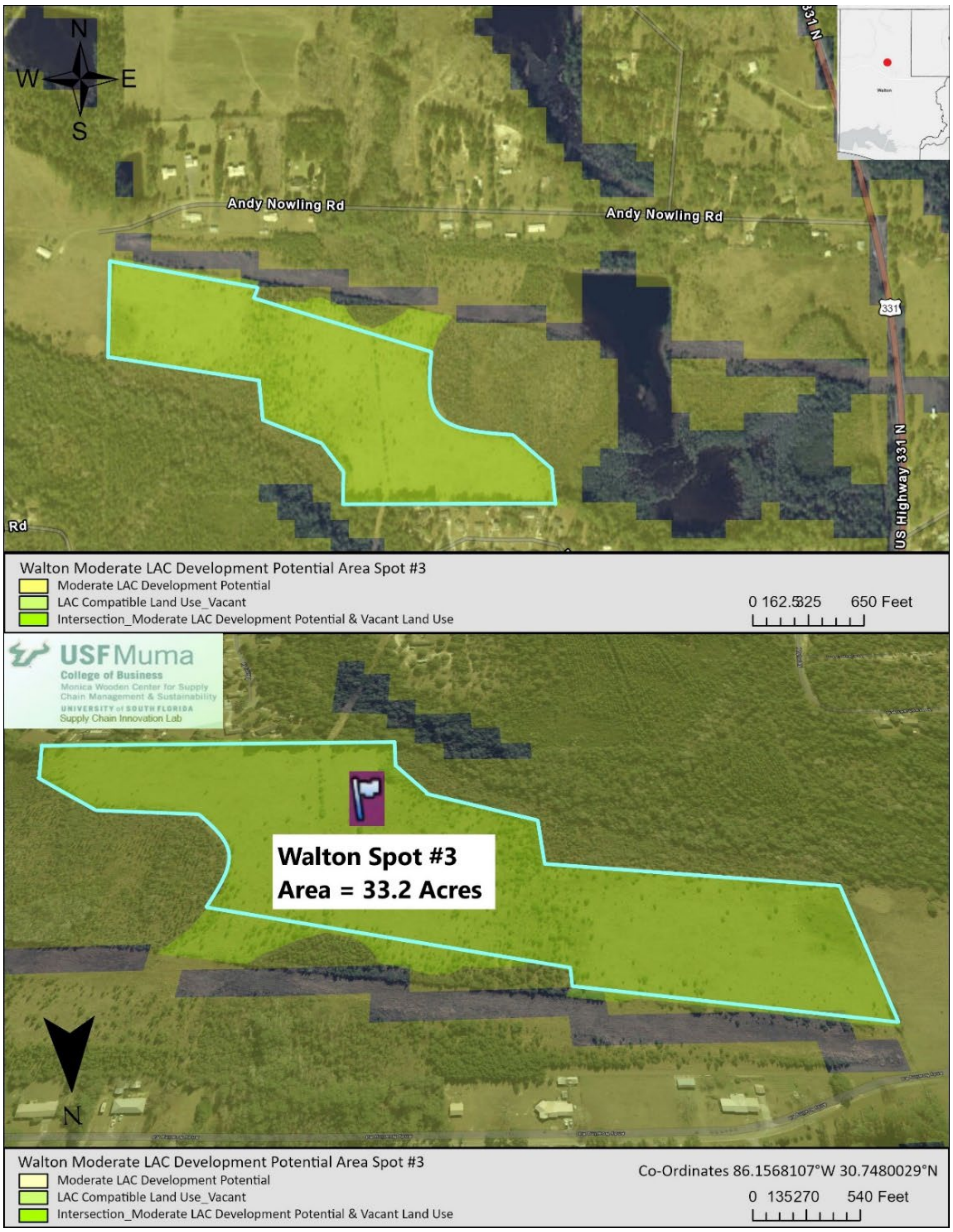

Figure B 262. Walton County Spot 3

WALTON SPOT #4

As per the criteria developed in this study, this 25.8-acre land parcel in the below image (Figure B 263) located in Defuniak Springs, FL at the intersection of State Highway 83 N and Sunrise Rd has moderate LAC development potential in the Walton County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

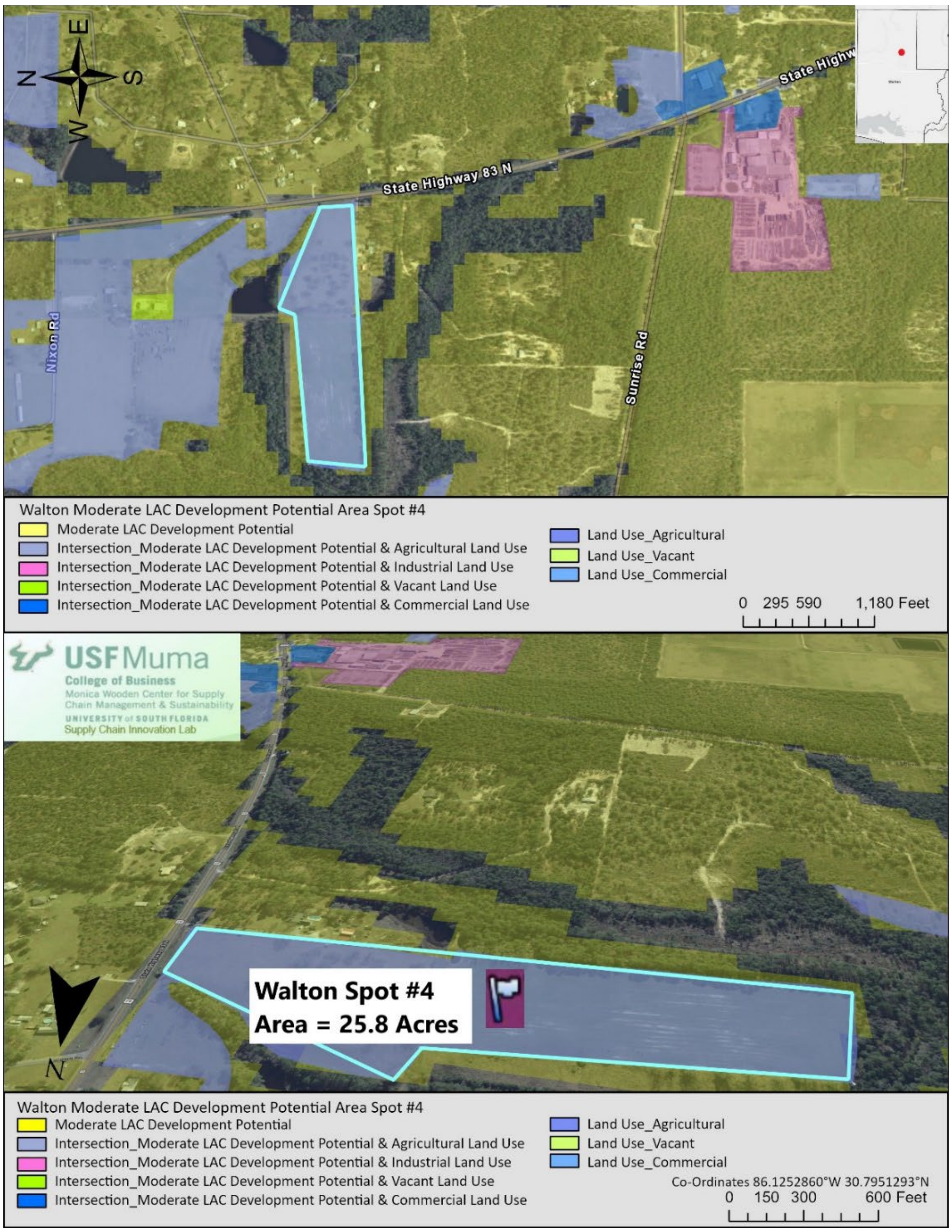

Figure B 263. Walton County Spot 4

WALTON SPOT #5

As per the criteria developed in this study, this 19.5-acre land parcel in the below image (Figure B 264) located in Defuniak Springs, FL at the intersection of Welch Dr and Peacock Rd has moderate LAC development potential in the Walton County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

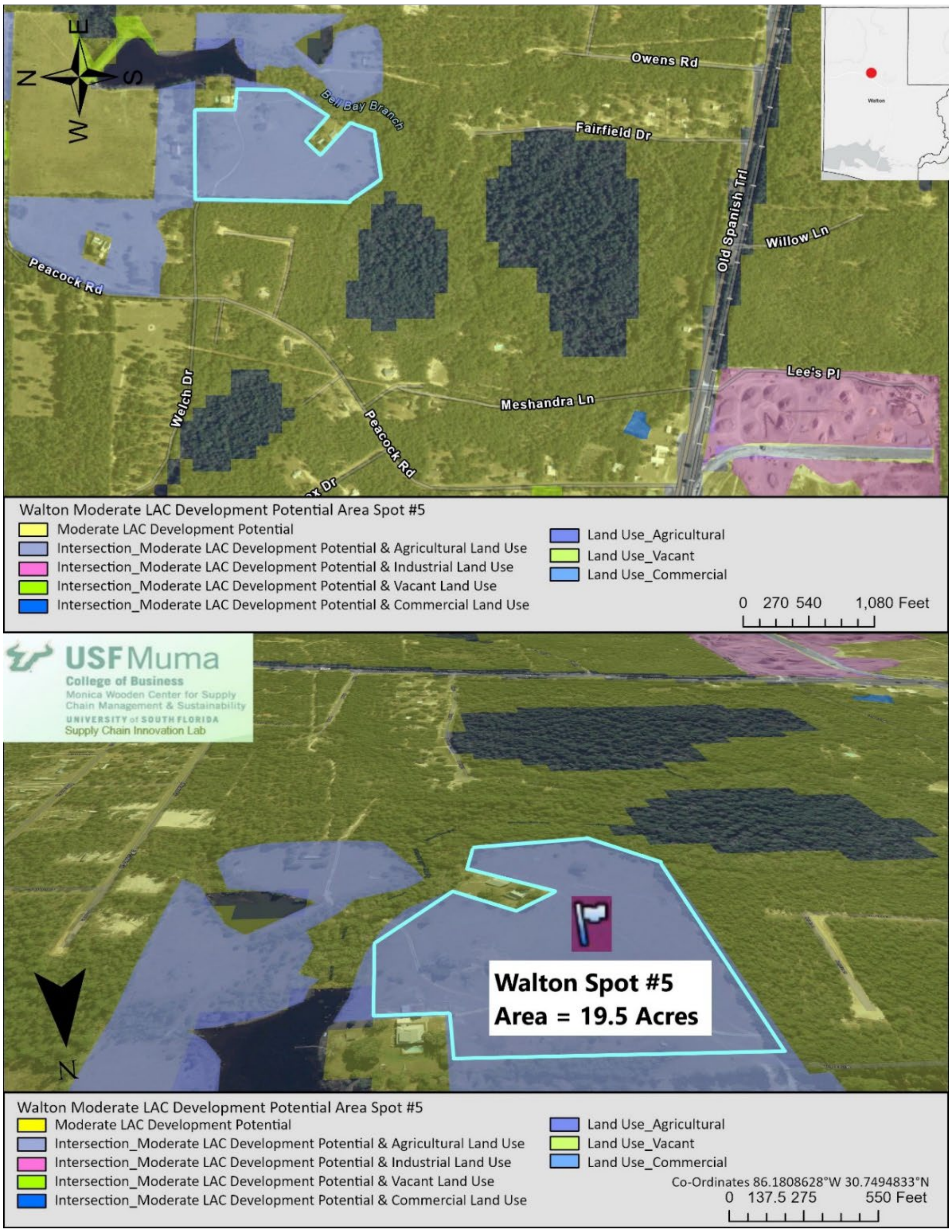

Figure B 264. Walton County Spot 5

Washington County

WASHINGTON SPOT #2

As per the criteria developed in this study, this 10.4-acre land parcel in the below image (Figure B 265) located in Chipley, FL at the intersection of Main St and Brickyard Rd has high LAC development potential in the Washington County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

Figure B 265. Washington County Spot 2

WASHINGTON SPOT #3

As per the criteria developed in this study, this 10.2-acre land parcel in the below image (Figure B 266) located in Chipley, FL at the intersection of Fowler Dr and Commerce Ave has high LAC development potential in the Washington County. It is less than 2.5 miles from State roads, less than 2.5 miles from direct rail access, has low AADT and has a below $8 average land cost per square foot which confirms the high LAC development potential as per the criteria developed in this study.

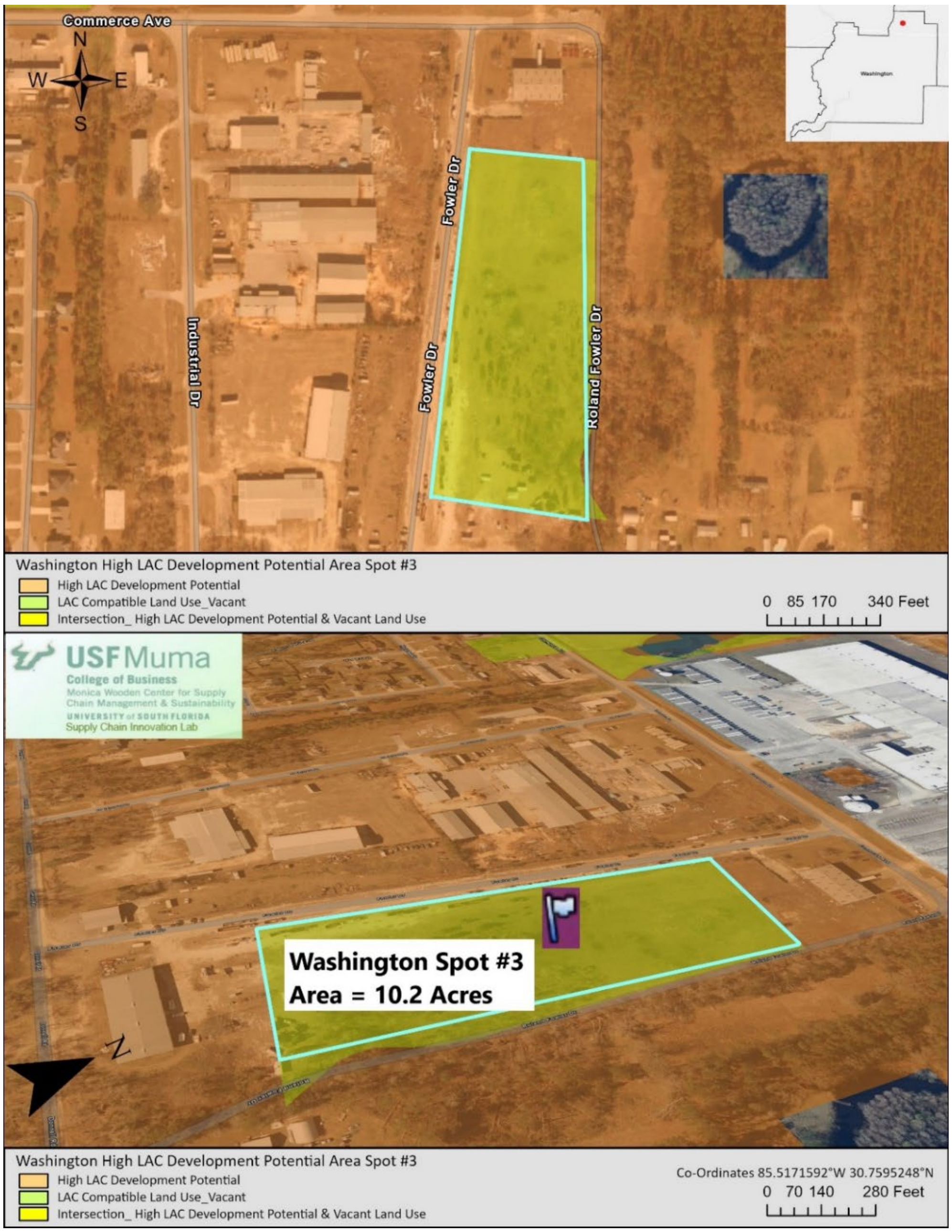

Figure B 266. Washington County Spot 3

WASHINGTON SPOT #4

As per the criteria developed in this study, this 14.8-acre land parcel in the below image (Figure B 267) located in Chipley, FL at the intersection of Highway 277 and Highway 90 has high LAC development potential in the Washington County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

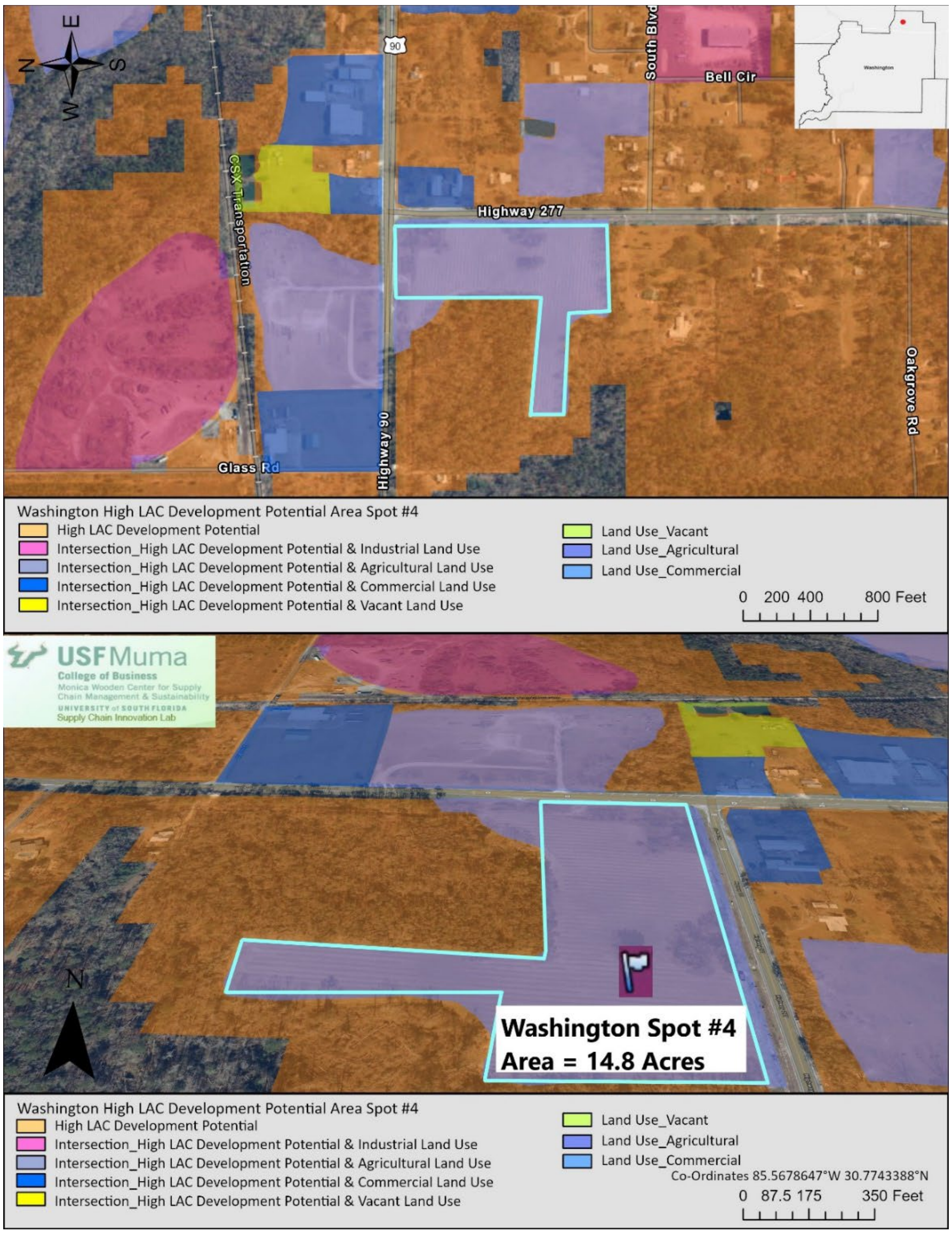

Figure B 267. Washington County Spot 4

WASHINGTON SPOT #5

As per the criteria developed in this study, this 27.5-acre land parcel in the below image (Figure B 268) located in Chipley, FL at the intersection of Dogwood Ln and Highway 90 has high LAC development potential in the Washington County but is not compatible for LAC Development as the LAC Type is Agricultural. It surrounds industrial, commercial and vacant lands around it which makes it suitable for re-zoning.

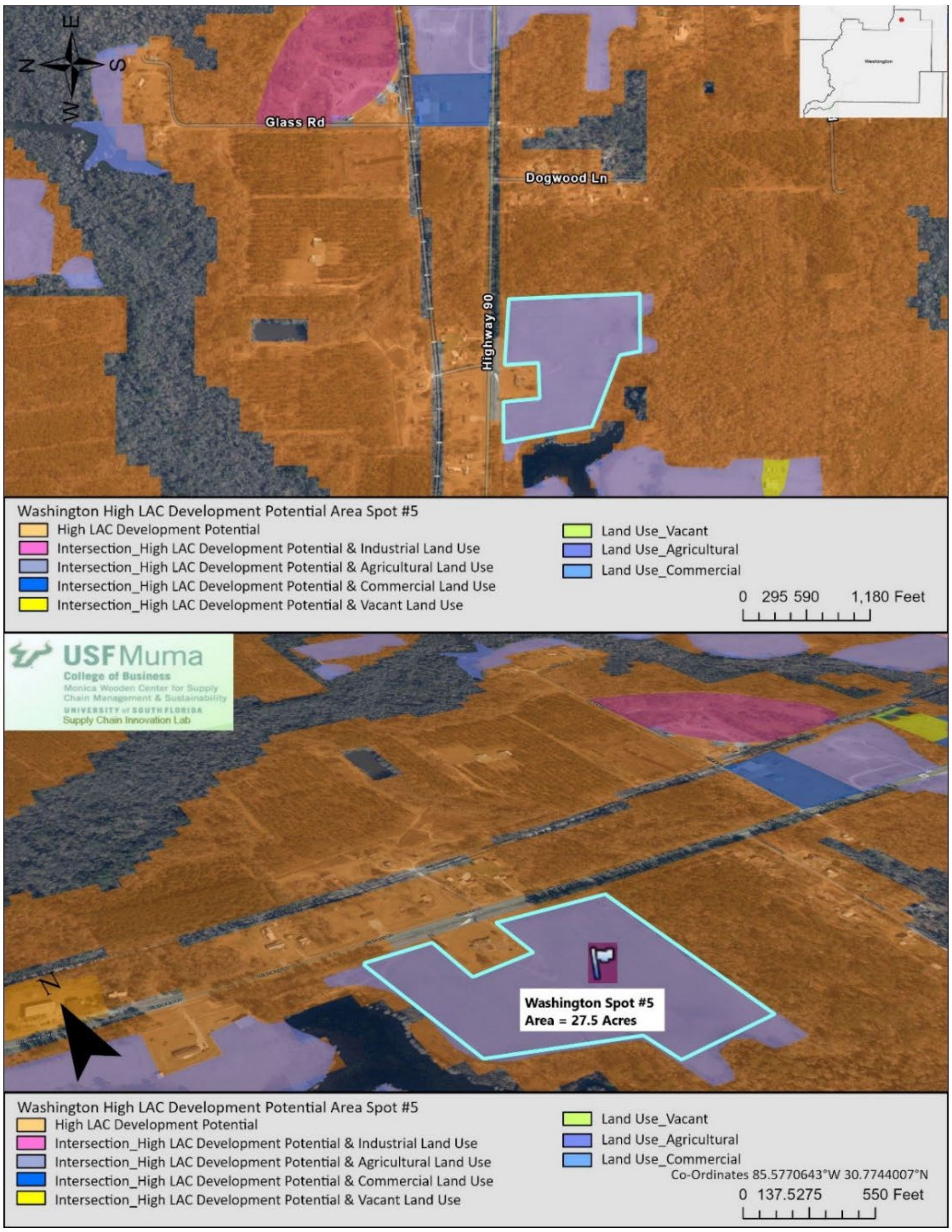

Figure B 268. Washington County Spot 5

Appendix C

Land Use and Logistics Activity Center Development Survey

The Supply Chain Innovation Lab at the Monica Wooden Center for Supply Chain Management & Sustainability at the University of South Florida is conducting research for the Florida Department of Transportation (FDOT) to enhance successful LAC development in Florida. A LAC is a defined area comprised of facilities and operations related to transportation, storage, and distribution of goods for domestic and international transit. The research objective is to identify the optimal areas that are most suitable for future LACs located within Florida. The survey will take 5-10 minutes to complete, and your contribution is greatly appreciated.

Participation in the Survey is completely voluntary. Survey responses will be retained for the life of the project and stored on password-protected computers. The results of this survey may be published; however, published results will be confidential and anonymized. Your name and your organization's name will not be associated in any publication of results. The data will be stored for up to five years after the results have been published. At that point, all data will be deleted.
If you have any questions about your rights as a research participant, please contact the USF IRB at (813) 974-5638 or contact by email at RSCH-IRB@usf.edu.

If you have questions regarding the research, please contact the researcher via email at robert75@usf.edu or by telephone at (813) 974-6178.

Consent to Take Part in This Survey

By clicking "Accept" below, I agree that:
(1) I have fully read or have had read and explained to me this informed consent form describing this project and associated survey; and
(2) I understand that I am being asked to participate in this survey. I understand the risks and benefits, and I freely give my consent to participate in the research outlined in this form under the conditions indicated.

○ Accept

○ Decline

Organization type

Select your organization type

- ○ Distributor
- ○ Freight carrier
- ○ Freight forwarder
- ○ Government agency
- ○ Manufacturer
- ○ Non-governmental organization (NGO)
- ○ Other
- ○ Retailer

If you selected "Other," please enter your organization type:

____

Please provide your contact information if you would like to receive a summary of the results of the survey.

- ◯ Name ____

- ◯ Organization name ____

- ◯ Email ____

- ◯ Phone ____

Definitions
Logistics Activity Centers (LACs) is the terminology adopted in this work to refer to larger warehouses, inland ports, Intermodal Logistics Centers (ILCs), etc. A LAC is a defined area comprised of facilities and operations related to transportation, storage, and distribution of goods for domestic and international transit. The reason for these multiple terminologies is partly because the logistics infrastructure has emerged in diverse geographical settings and serves a wide variety of functions, with various actors involved.

Instructions
Please answer the survey questions to the best of your abilities and complete the Survey by December 18, 2020.
Survey Length – The Survey will take approximately 10 minutes to complete and will be available online until December 18, 2020. Your progression through the survey will be tracked by a "progress bar" at the top of the screen indicating percent complete.
Required Responses – All items require a response. If you are unsure of a response to a particular item, please indicate N/A for "not applicable."
Moving Within the Survey – Where it is allowable, you will be able to move back and forth within the survey. Please use the "back" and "next" buttons within the survey itself to this purpose.
Saving the Survey – The Survey will automatically save any responses you make. When you get to the last page of the survey, do not click "Next" until you are completely finished with the survey. Once you click the "Next" button on the last page, you will be unable to change your responses.

1. Accessibility/Location Factors
What is the maximum distance that an optimal LAC location would be from each of

the facilities below?

	Less than 2.5 miles	Between 2.5 and 5 miles	Between 5 and 10 miles	More than 10 miles	Distance is not important
Freeways (interchange locations)	○	○	○	○	○
State and US roads (truck routes)	○	○	○	○	○
Intermodal logistics center (rail-truck)	○	○	○	○	○
Direct rail track access	○	○	○	○	○
Air cargo facility	○	○	○	○	○
Seaport facility	○	○	○	○	○

Please rank the following factors ("1" being the most important and "6" being the least important)
Please drag and drop each facility in ranking order

_______ Freeways (interchange locations)
_______ State and US roads (truck routes)
_______ Intermodal logistics center (rail-truck)
_______ Direct rail track access
_______ Seaport facility
_______ Air cargo facility

2. Land Use/Land Size Factors

Please rank the following factors ("1" being the most important and "4" being the least important)
Please drag and drop each factor in ranking order

_______ Suitable land use / zoning (industrial, commercial, etc.)
_______ Public opinion on the development of an LAC
_______ Appropriate land area/size/shape
_______ Possibility of expansion

3. Economic and Social Factors

Please rank the following factors ("1" being the most important and "5" being the least important)
Please drag and drop each factor in ranking order

_______ Land cost
_______ Proximity to a large market
_______ Proximity to production/manufacturing centers
_______ Workforce availability
_______ Labor cost

4. Environmental and Other Factors

Please rank the following factors ("1" being the most important and "4" being the least important)
Please drag and drop each factor in ranking order

_______ Low impact on natural environment
_______ Low impact on residential areas
_______ Low traffic congestion level
_______ Low traffic crash level

5. Please rank the following factor groups ("1" being the most important and "4" being the least important)
Please drag and drop each factor in ranking order

_______ Accessibility/Location Factors (e.g. proximity to freeways, State and US roads, intermodal logistics center, direct rail track access, air cargo facilities, and seaport facilities)
_______ Land Use/Land Size Factors (e.g. suitable land use/zoning, public opinion, appropriate land area/size/shape, and possibility of expansion)
_______ Economic and Social Factors (e.g. land cost, proximity to a large market, proximity to production centers, workforce availability, and labor cost)
_______ Environmental and Other Factors (e.g. low impact on natural environment, low impact on residential areas, low road congestion level, and low traffic crash level)

6. Presently, how important is it to choose an LAC location within a region with the required infrastructure to support autonomous/connected vehicles?

- ○ Extremely important
- ○ Very important
- ○ Moderately important
- ○ Slightly important
- ○ Not at all important

7. Within five to ten years from now, how important will it be to choose an LAC location within a region with the required infrastructure to support autonomous/connected vehicles?

- ○ Extremely important
- ○ Very important
- ○ Moderately important
- ○ Slightly important
- ○ Not at all important

Please provide any additional information or literature that may be useful to this research (optional).

____

____

____

This concludes the survey. Click the "Back" button to review or revise your responses. If you are satisfied with your responses click the "Next" button to submit your responses. Thank you for your participation in this survey. Your response is very important to this research.