CITY OF LIVE OAK

COMPREHENSIVE PLAN

EVALUATION AND APPRAISAL REPORT

Exhibit "A" to Resolution No. 11-04

Prepared for:

Live Oak City Council

Prepared by:

Live Oak Local Planning Agency

With assistance from:

City of Live Oak Planning Department
George Curtis, Development Manager
Mail: 101 White Avenue S.E.
Office: 416 Howard Street East
Live Oak, Florida 32064
(386) 362-2276

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INTRODUCTION

A. Community Profile

The City of Live Oak, Florida, which is the County Seat, is located in the north central part of Suwannee County, centered at the intersection of US Highways 129 and 90. Suwannee County is located in the north central portion of the State of Florida, and is bordered on the north by Hamilton County; on the east by Columbia County, on the south by Gilchrist and Lafayette Counties and on the west by Madison County (see Maps 1 and 2). The incorporated area of the City of Live Oak, Florida, is approximately 7.59 square miles, or 4,860 acres in area. The year 2000 Census data shows the population to have been 6,480, with 2,745 housing units, and an area of 6.96 square miles. While the 2010 data is not yet available, the most recent Bureau of Economic and Business Research data shows an estimated population of 6,669 persons in 2009, and 6,700 in 2010.

B. Purpose of the Evaluation and Appraisal Report

Pursuant to the Growth Management Act of 1985 found in Chapter 163, Part II, Florida Statutes, the Florida Legislature intended for the planning process to be a continuous and ongoing process. As part of this process, local governments must periodically access the effectiveness of their comprehensive plans in meeting local and state goals in planning and growth management. This assessment is achieved through the Evaluation and Appraisal Report (EAR) of the Comprehensive Plan. Specifically, the purpose of the Evaluation and Appraisal Report is to:

- Identify major issues for the community;
- Review past actions of the local government in implementing the plan since the last Evaluation and Appraisal Report;
- Assess the degree to which the Plan's objectives have been achieved;
- Assess both successes and shortcomings of the plan;
- Identify ways the plan should be modified;
- Respond to changing conditions and trends affecting the local community;
- Respond to the need for new data;
- Respond to changes in state requirements regarding growth management and development;
- Respond to changes in regional plans; and
- Ensure effective intergovernmental coordination.

On September 8, 1998, the City Council adopted its first Evaluation and Appraisal Report. The updates to the Comprehensive Plan based on the changes identified in the Evaluation and Appraisal Report, new statutory and rule requirements, and any new conditions or trends affecting the City, were adopted in 2007.

C. Process for Preparing and Adopting the Evaluation and Appraisal Report s. 163.3191,(2) (j), F.S.

This Evaluation and Appraisal Report of the Comprehensive Plan was prepared by the Local Planning Agency with assistance from the City of Live Oak Planning Department. Upon completion of the Evaluation and Appraisal Report, a Local Planning Agency public hearing and a City Council adoption public hearing were scheduled for the review and adoption of the Evaluation and Appraisal Report. At each required public hearing, public participation was made available and encouraged, to the fullest extent possible, with public participation procedures adopted by s. 163.3181. Pursuant to s. 163.3191 (9), data and analysis gathered by Suwannee County as found in their November 19, 2009 Evaluation and Appraisal Report, when applicable to the City of Live Oak, was utilized for this report.

I.
CITY-WIDE ASSESSMENT

I – 1 **Population Growth** s. 163.3191(2) (a), F.S.

From 1990 to 2000, the population grew from 6,332 to 6,480, or 148 persons; a 2.3 percent growth rate. From the year 2000 to 2010, the City experienced an increase in total population of 220 persons, from 6,480 to 6,700; a 3.4 percent growth rate. Current population projections for the City of Live Oak estimate an increase of 200 persons through the end of the planning horizon (see Table I-1), which equates to a 3.0 percent increase over 10 years. Total population growth for the City over the last 20 years was at a rate of 0.3 percent ***per year***, or approximately 19 persons per year.

Based on the 2000 Census, the median age in the City is 36.2 years, compared to the State of Florida median age which is 38.7.

The population projections provided in the 1998 Evaluation and Appraisal Report show:

At time of 1991 Plan Adoption: A projected population for 2011 of 6780
At time of 1998 Evaluation: A projected population for 2010 of 9,750

Based on this, the trends identified in 1991, a 4.6 percent growth rate over 11 years, were much more accurate than the over-estimation identified in 1998, which forecasted a 50 percent population growth over a 10 year period.

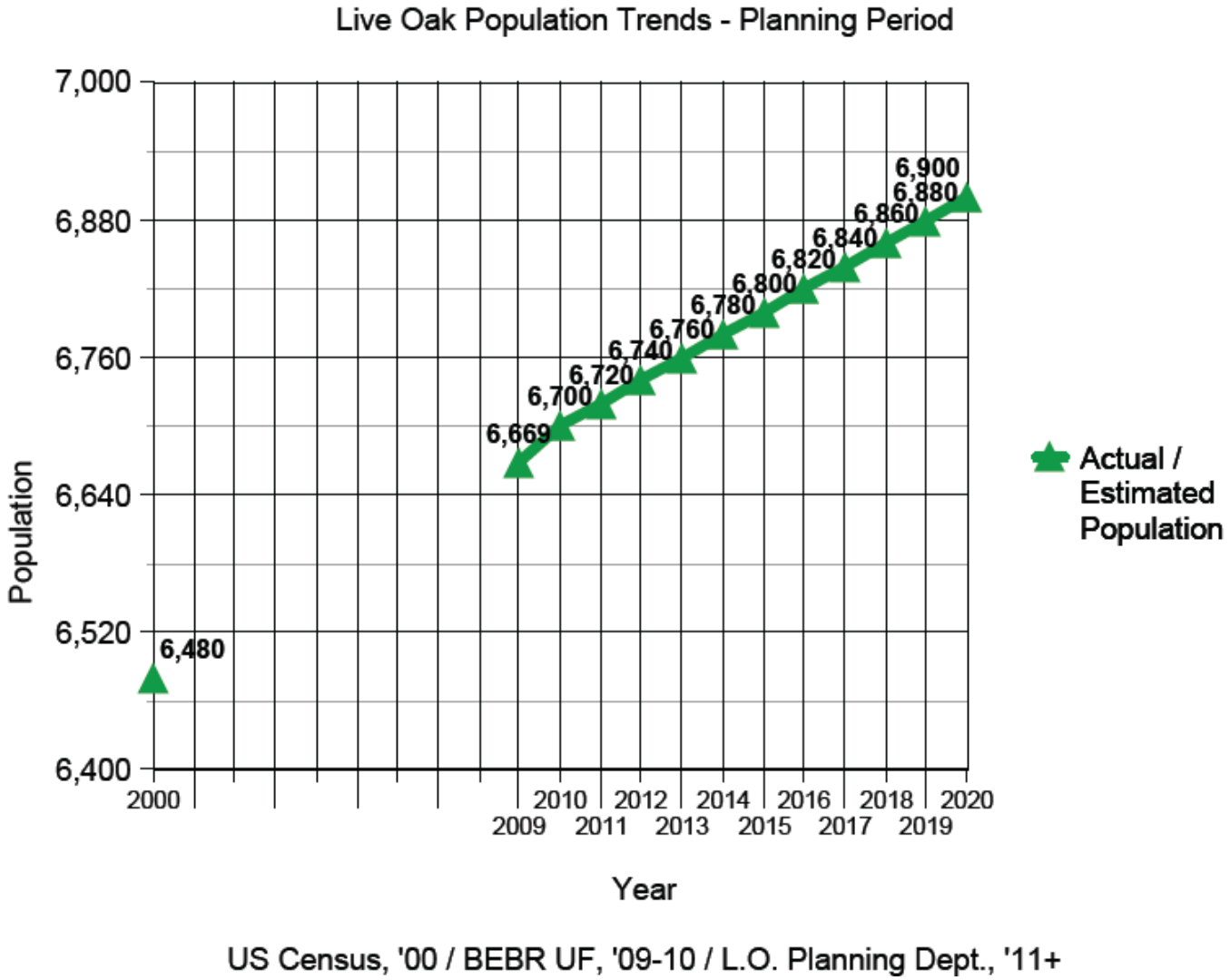
Suwannee County saw growth from 26,780 in 1990, to 34,844 in 2000, to an estimated amount of 41,600 in 2010. Total population growth for Suwannee County over the last 20 years was at a rate of 2.7 percent ***per year***, or approximately 741 persons per year. The percentage of growth for Suwannee County is nearly ***10 times*** the annual rate of that for the City.

Data shown in the 2009 Suwannee County Evaluation and Appraisal Report demonstrates that 98 percent of their population growth from 2001 to 2006 can be attributed to net migration, indicating that nearly all the growth has been caused by the relocation of persons from other areas. It can thus be deduced that trends for population growth in the areas surrounding the City of Live Oak vs. into the City itself were caused by a preference of persons seeking to locate to rural, unincorporated areas of North Central Florida vs. locating into an incorporated area, such as Live Oak. Live Oak as a City currently does not offer the amenities or economic vitality capable of attracting growth from other cities. Those leaving other areas of the state or country to come to this area have overwhelmingly chosen the rural areas over the incorporated City. Although fire and police protection are superior, as well as convenience to shopping, schools, parks, churches, and dependable public utilities; nonetheless, these advantages are not currently enough to attract the percentages of growth which have been achieved in the unincorporated areas surrounding the City. Suwannee County offers comparably lower taxes, lower land costs and low costs for utilizing water wells and septic systems. Additionally, ease and affordability of vehicular travel and little availability of local jobs all serve to work against population growth for Live Oak. It is therefore predictable that growth in the next five years will continue at a similar pace as has been demonstrated during the past twenty. The planning period from five to ten years is less predictable. The local, regional and world economies which may exist five years from now have the potential to change greatly, as does the affordability and accessibility for rural living. While the current Evaluation and Appraisal Report for Live Oak may not require sweeping changes, the next EAR cycle for 2017 most likely will be an entirely different situation.

TABLE / CHART I – 1
CURRENT AND PROJECTED POPULATION

	2000	2009	2010	2011	2012	2013	2014	2015	2020
Live Oak	6,480	6,669	6,700	6,720	6,740	6,760	6,780	6,800	6,900

Source: US Census Data
Bureau of Economic and Business Research, University of Florida, 2010
Live Oak Planning Department, 2010



I – 2 Changes in Land Area s. 163.3191(2) (a), F.S.

The Live Oak Comprehensive Plan adopted in 1991 identified the City as 6.4 square miles or 4,120 acres in area, as did the 1998 Evaluation and Appraisal Report (however, 6.4 square miles = 4,096 acres). The 2000 Census Data described the City as 6.96 square miles or 4,454.4 acres, indicating that the City annexed 334.4 acres during that time period, however no such record of any large scale annexations exist.

The current Planning Department GIS data on file indicates the current boundaries of the City to comprise 7.59 square miles or 4,859.69 acres (see Map 3 for current City boundary). This indicates that an additional 405.29 acres had been annexed into the City between 2000 and 2010, when comparing the 2000 area of 6.96 square miles and the current 7.59.

Planning Staff recently completed a compilation of all annexations which were on file. They are as follows, in order from oldest to most recent (see Map 4 for Annexations):

TABLE I – 2
ANNEXATION ORDINANCES

DATE	ORDINANCE	GENERAL LOCATION	ACREAGE AMOUNT	COUNTY LAND USE
3-14-1995	857	S.W. Corner	1.85	Residential
4-10-2001	955	E. Side	2.00	Residential
6-12-2001	965	N. Side	0.99	Commercial
6-12-2001	966	N. Side	18.64	Residential
6-12-2001	967	N. Side	0.10	Residential
7-13-2004	1054	E. Side	7.69	Residential
3-8-2005	1076	W. Side	0.35	Residential
5-10-2006(5?)	1085	W. Side	0.42	Residential
7-12-2005	1089	N. Side	37.72	Commercial
7-12-2005	1090	N. Side	46.27	Commercial
11-8-2005	1107	N. Side	9.91	Commercial
8-8-2006	1135	W. Side	50.2 +/-	Industrial
10-10-2006	1136	N. Side	54.12	Residential
11-14-2006	1137	N. Side	27.00 +/-	Agricultural
11-14-2006	1157	N. Side	47.64	Res./Agr./Comm.
3-27-2007	1173	N. Side	56.00	Res./Comm.
3-27-2007	1174	N. Side	0.35	Commercial
3-27-2007	1175	N. Side	4.00	Commercial
3-27-2007	1176	N. Side	29.66	Commercial
10-28-2008	1230	N. Side	1.52	Commercial
TOTAL			**396.45**	

Source: Live Oak Planning Department, 2010

The 1991/1998 data has been deemed as incorrect. There still stands an 8.84 acre (405.29 v. 396.45) discrepancy, which can be attributed to the fact that some annexation ordinances contained only a legal description with no specific acreage number listed, thus annexed acreage was based on property appraiser data. Within the 4,859.69 acres of incorporated area, there are 3,596 parcels. The land area of those parcels equals 4,188.35 acres, or approximately 86% of the total land area in the City limits. The remaining 14% or 671.34 acres can be attributed to rights-of-way and other non-parceled land areas.

I – 3 The Extent of Vacant and Developable Land s. 163.3191(2) (b), F.S.

A City-wide vacant property survey was conducted as part of the Evaluation and Appraisal Report. As referenced herein, certain lands were annexed into the City limits but have yet to be amended on the Future Land Use Plan Map to a City Land Use Classification. These lands are separated out for illustrative purposes; however, they will be proposed to be amended to an equivalent City-Classification as part of the EAR based amendments. Since only parcels can be developed, the percentages of total area are based on the total parcel area of 4,188.35 acres, which do not include rights-of-way. The following tables demonstrate the results of that survey; showing the number of parcels, land-use classifications and zoning districts for vacant properties which could be utilized to meet the future growth needs for the planning period for the City (see Maps 5 to 21 & Tables I-3 to I-8):

EXISTING VACANT PROPERTY INVENTORY

TABLE I – 3
EXISTING VACANT AGRICULTURAL

Land Use	Density	Zoning	Parcel Count	Parcel Acreage	Percent of Parcel Acreage	Percent of Total City Parcel Acreage
Agricultural (City)	(≤ 1 d.u. per 10 acres)	A-1 City	37	745.1	94%	17.7%
Agricultural (County)	(≤ 1 d.u. per 5 acres)	A-2 County	3	47.9	6%	1.1%
Totals			40	793	100%	18.9%

Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 4
EXISTING VACANT RESIDENTIAL

Residential Land Use	Density	Zoning	Parcel Count	Parcel Acreage	Percent of Parcel Acreage	Percent of Total City Parcel Acreage
Very Low	(≤ 1 d.u. per acre)	n/a	0	0	0%	0%
Low	(≤ 2 d.u. per acre)	RSF- Conventional	9	11	1.5%	<1%
"	"	RSF-1 County	4	100	14.1%	2.4%
"	"	RSF/MH – Mixed	145	187	26.3%	4.5%
"	"	RSF/MH-1 County	1	12	1.7%	<1%
Moderate	(≤ 4 d.u. per acre)	RSF- Conventional	132	104	14.6%	2.5%
"	"	RSF/MH – Mixed	37	46	6.5%	1.1%
Medium	(≤ 8 d.u. per acre)	RSF- Conventional	28	24	3.4%	<1%
		RSF/MH – Mixed	166	48	6.8%	1.1%
		RMH-P Mobile Home Park	5	21	3%	<1%
		RMF – Multi-Family	20	123	17.3%	2.9%
High	(≤ 20 d.u. per acre)	RMF – Multi-Family	5	34	4.8%	<1%
Totals			552	710	100%	17%

Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 5
EXISTING VACANT COMMERCIAL

Land Use	Zoning	Parcel Count	Parcel Acreage	Percent of Parcel Acreage	Percent of Total City Parcel Acreage
Commercial - Platted (City)	Note	81	52	22.7%	1.2%
Commercial – Platted (County)	Note	17	13.35	5.8%	<1%
Commercial – Un-platted (City)	Note	24	77.85	34%	1.9%
Commercial – Un-platted (County)	Note	12	85.4	37.4%	2%
Totals		134	228.6	100%	5.5%

Note: Commercial zoning considered is any zoning which allows for a variety of commercial uses including: Office, Retail, Service, and similar permitted uses.
Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 6
EXISTING VACANT INDUSTRIAL

Land Use	Zoning	Parcel Count	Parcel Acreage	Percent of Parcel Acreage	Percent of Total City Parcel Acreage
Industrial - Platted (City)	I & ILW	30	38.55	26.4%	<1%
Industrial - Platted (County)	n/a	0	0	0	0
Industrial – Un-platted (City)	I & ILW	9	64	44%	1.5%
Industrial – Un-platted (County)	I (County)	2	43.2	29.6%	1%
Totals		41	145.75	100%	3.5%

Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 7
EXISTING VACANT PUBLICALLY OWNED

Land Use	Zoning	Parcel Count	Parcel Acreage	Percent of Parcel Acreage	Percent of Total City Parcel Acreage
Various (Publically Owned)	Various	46	153	83.4%	3.7%
Various (Publically Owned Stormwater Areas)	Various	31	30.5	16.6%	<1%
Totals		76	183.5	100%	4.4%

Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 8
EXISTING VACANT PROPERTY TOTALS

Totals	Parcel Count	Parcel Acreage	Percent of Total City Parcel Acreage
Totals	844	2,060.85	49.2%

Source: Live Oak Planning Department GIS Data, 2010

I – 4 Demands of Growth on Infrastructure and Level of Service s. 163.3191(2) (c), F.S.

There has been adequate capacity to maintain the adopted Level of Service standards since the adoption of the last Evaluation and Appraisal Report in 1998, and the subsequent EAR based amendments to the Comprehensive Plan in 2007. Therefore, no capital improvement projects have been scheduled or adopted as a result of Level of Service deficiencies regarding development within the City.

While there were no identified deficiencies, certain growth and other opportunities has resulted in opportunities for construction to be completed which resulted in increased capacities for water and wastewater, and which have served to address existing issues pertaining to the sewer system and also stormwater and drainage issues.
Due to the fact that there was previously no in-house Planning Department for the City, these Capital Improvements were not identified or scheduled previously, nor added to the schedule as amendments.

A major portion of the improvements were in response to construction of a new State of Florida correctional facility, Suwannee County Correctional Institution (SCCI). This facility is located outside the City limits, however is served by City water and sewer. Major upgrades were completed to the existing water and wastewater systems as a result of this facility. These improvements were financially feasible because of the assertive negotiations by the City Administration conducted with the Florida Department of Corrections, with impact fees collected from the same, with grants acquired by the City, and with loans acquired by the City to be paid for by the projected revenue calculations provided by the Department of Corrections pertaining to the projected prison population. Statistics regarding this new facility are found under Sections I – 4.1 and I – 4.2, and Tables I – 9 and I – 10.

Through the diligent work of the City Administration to apply for and secure Federal Stimulus dollars authorized as part of The American Recovery and Reinvestment Act of 2009, the City also qualified for federal stimulus monies which facilitated the construction of new infrastructure as well as upgrades to existing infrastructure. Summaries of existing and newly constructed or rehabilitated infrastructure are listed under Section I – 4.3.

Lastly, several new subdivisions were platted, and new development parcels created, since the adoption of the Comprehensive Plan. Since the last Evaluation and Appraisal Report did not specifically reference these areas, they are being summarized here from 1991 to the present, in Table I-11(see Map 22). These subdivisions and developments, while privately funded, did result in additional infrastructure being built and subsequently dedicated to the City for public ownership. Table I-11 also summarizes the scope of the types of improvements which were constructed.

I – 4.1 Suwannee Correctional Institution: Main Unit and Work Camp

County: Suwannee

Directions: From Live Oak on US-90 go east 7 miles. From Lake City on US 90 go west 16 miles. Facility is 2 miles west of Wellborn.

Historical Information: Construction began on Main Unit/Annex and Work Camp in July 2007. The Main Unit and Annex is contractor constructed. The Work Camp is force account (inmate) constructed. The Work Camp became operational in March 2009. The Main Unit opened in December 2009. The Annex will open at a date yet to be determined.

Total Planned Staff: Approximately 800 including all Units; Main Unit, Annex and Work Camp

Table I – 9: SCCI FACILITY PROFILE INFORMATION – MAIN UNIT AND WORK CAMP

Type of Housing Units	Main Unit	Work Camp
Open Bay Housing Units	3	3
Cell Housing Units	5	0
Room Housing Units	0	0
Maximum Capacity	1,505	432
Other Information:		
Population Gender	Male	Male
Adult or Youthful	Adult	Adult
Facility Level	5	3
Self Contained Housing Units	Yes	Yes
Designated Confinement Space	Yes	No
Custody Grades	Close, Medium, Minimum, Community	Medium, Minimum, Community
Medical Grades	1,2,3,4,and 5	1 and 2
Psychological Grades	1,2,3,4,and 5	1 and 2
Wheelchair Capabilities	Yes	No
Hearing Impaired Capabilities	No	No

Academic Programs:

Adult Basic Education (Close Management)
General Educational Development (Close Management)
Special Education Services (Close Management)
Voluntary Literacy Program (Work Camp)

Vocational Programs: To Be Determined

Substance Abuse Programs: To Be Determined

Chaplaincy Services: To Be Determined

Institutional Betterment Programs:

100-hour Transition Program
Law Library Program
Library Program

P.R.I.D.E. Assignments: None at this time

Community Work Squads:

Dept. of Transportation	No
Public Work Squads	Yes (Work Camp)
Interagency Community Service Work Squads	Yes (Work Camp)
Contracted Work Squads	To Be Determined

I – 4.2 Suwannee Correctional Institution: Annex

County: Suwannee

Directions: From Live Oak on US-90 go east 7 miles. From Lake City on US 90 go west 16 miles. Facility is 2 miles west of Wellborn.

Historical Information: Construction began on Main Unit/Annex and Work Camp in July 2007. The Main Unit and Annex is contractor constructed. The Annex will open at a date yet to be determined.

Total Planned Staff: Approximately 800 including all Units; Main Unit, Annex and Work Camp

Table I – 10: SCCI FACILITY PROFILE INFORMATION – ANNEX

Type of Housing Units for the Annex:	
Open Bay Housing Units	6
Cell Housing Units	2
Room Housing Units	0
Maximum Capacity	1,349
Other Information:	
Population Gender	Male
Adult or Youthful	Adult
Facility Level	5
Self Contained Housing Units	Yes
Designated Confinement Space	Yes
Custody Grades	Close, Medium, Minimum, Community
Medical Grades	1 through 4
Psychological Grades	1 through 3
Wheelchair Capabilities	Yes
Hearing Impaired Capabilities	Yes

Academic Programs:

Adult Basic Education
General Educational Development (GED)

Vocational Programs: Plumbing Technology

Wellness Education Services: To Be Determined

Library Services:

Library Program
Law Library Program

Substance Abuse Programs: To Be Determined

Chaplaincy Services: To Be Determined

Institutional Betterment Programs: To Be Determined

Other Ongoing Programs: To Be Determined

P.R.I.D.E. Assignments: None at this time

Community Work Squads:

Dept. of Transportation	No
Public Work Squads	No
Interagency Community Service Work Squads	No
Contracted Work Squads	No

Note: According to the data above, the total inmate population capacity is thus 3,286.

Sources: http://www.dc.state.fl.us/facilities/region2/230.html and
http://www.dc.state.fl.us/facilities/region2/231.html, accessed 1-26-11.

I – 4.3 Infrastructure Upgrades

Following is a description of the existing City utility infrastructure, as well as summaries of the prison and stimulus funded construction which has taken place, or which is currently being completed, as well as other completed or ongoing infrastructure projects; source City of Live Oak Public Works Department, 2011.

POTABLE WATER

The City of Live Oak currently has 3 elevated water tanks online, in the City limits, which have the following capacities: 75,000, 250,000, and 500,000 gallons, for a total of 825,000 gallons of elevated tank storage. Also in the City limits there are currently two ground storage tanks online, of 125,000 and 175,000 gallons of water. This gives the City 300,000 gallons of ground storage. The total current storage capacity is thus 1,125,000 gallons of water.

After all the construction is complete, and the changeover is made, there will be the existing 500,000 gallon tank, and also a new 750,000 gallon elevated tank, located approximately 4,000 feet north of the existing City limits, along Interstate 10, near the US-129 exit. This will give the City a total of 1,250,000 gallons of elevated tank storage. The existing 75,000 and 250,000 elevated tanks will be decommissioned, as will the existing ground storage tanks. This will result in a net gain of 125,000 gallons of elevated tank storage. Construction is anticipated to be completed by February 2011.

The wells the City is presently using are wells 5, 6, and 7. They produce the following:

1. Well 5 = 650 GPM (gallons per minute);
2. Well 6 =750 GPM (gallons per minute); and
3. Well 7 = 1,000 GPM (gallons per minute).

The water system being constructed on the north side of town consists of:

1. (3) – 1,200 GPM (gallons per minute) wells, chlorine and fluoride injection.
2. Approximately 5 miles of 16” water main.

All three of the existing wells, which provide for a cumulative total of 2,400 GPM (gallons per minute), will be abandoned and replaced by the aforementioned (3) – 1,200 gallon per minute wells, which will provide for a total of 3,600 GPM (gallons per minute). This will result in a net gain of 1,200 GPM (gallons per minute) of supply capacity. Construction is anticipated to be completed by February 2011.

No existing water lines have been upgraded.

The Suwannee Correctional Institution water system, now owned by the City of Live Oak, has the following:

1. (1) 250,000 gallon elevated tank;
2. (2) – 750 GPM (gallons per minute) wells including chlorine and fluoride injection; and
3. Approximately 8.5 miles of 12” water main, valves, and fire hydrant valves every 1000’.

This system is connected to the existing City water system, however, it is intended to supply the needs of the correctional institution, and does not provide capacity to the City unless it were to be needed in case of failure of the existing City system.

WASTEWATER TREATMENT

The previous treatment system, which the City operated until 2009, was a trickle filter (attached growth) process. This process only allowed the City to treat 1.25 MGD (million gallons per day) of waste water. The new plant constructed in 2009 is an oxidation ditch (suspended growth) process, with reuse quality components (i.e. filters), which allows the City to treat 1.50 MGD (million gallons per day) of waste water per day.

Phase I construction, completed October 2007, consisted of a new head works structure that included a mechanical and manual bar screen, and a grit removal system. Next, the oxidation ditch was constructed, and then two circular Clarifiers were built. Next, two disk filters were constructed, and then an onsite reuse pump station was added.

Phase II of the construction, completed April 2010, and added a second oxidation ditch, sludge handling processors, a second digester, and offsite reuse pumping capabilities. These additions gave the City capabilities to treat 3.0 MGD (million gallons per day) of wastewater.

Due to the limiting factors of the spray field, the City is only allowed to dispose of 1.375 MGD (million gallons per day) of treated effluent.

The reuse pipe line is 13.5 miles in length of 12" PVC pipe. The reuse system is now off-line until a suitable discharge point is made available, however, a portion of the available reuse will be sent to the correctional facility for toilet and laundry use.

The prison construction for sewer added two lift stations to the City system. The City also added 13.5 miles of 12" PVC sewer force-main from the prison to the treatment plant.

SANITARY SEWER REHABILITATION

The existing sanitary sewer system in the City of Live Oak has also undergone, and continues to undergo, a very large-scale evaluation and rehabilitation process. The summary of the work which has been completed, and which is ongoing, is as follows:

1. A preliminary evaluation of the entire system has been accomplished. This was done between 2007 and 2008. The scope of this evaluation was to locate all existing buried lines and manhole structures. Some manhole covers were not even known, until discovered, as they had been covered by street resurfacing. After located, they were accessed via the manholes and: inspected, zoom-videoed, and graded on a scale to identify which ones were in the direst need of repair. Also at this time, GPS locations were done on all components and GIS layers were created for the Public Works Department GIS mapping system.
2. Phase I of the Sewer Rehabilitation began June 11, 2009 and was completed July 2, 2010. During this time, 52 manholes were repaired or re-built; 96,500 linear feet of pipe was filmed with robotic CCTV cameras and also cleaned with high pressure water. Repairs were done to approximately 40% of the system to include replacement to mains and laterals, and/or slip lining with new pipe.
3. Phase II of the Sewer Rehabilitation has a start date of January 24, 2011, and is anticipated to address an additional 50% of the system with the same scope as Phase I.

STORMWATER PROJECTS

Following is a summary of stormwater projects, underway or completed, within the City.

Stormwater Improvements – 2008 - 2009

The City of Live Oak initiated Phase I - Stormwater Improvements Project last year with a total cost of $1,578,646. The funding of this project was through the State Revolving Loan Program (SRF) and the Stormwater Utility Monthly Fee of $1.25 for residential and $12.79 for commercial customers. As part of this phase, the City acquired (at no cost) a pond located behind the old K-Mart building located on south US 129. Three major projects were completed during this time frame, including Sherwood Forest Subdivision ($269,708), Winderweedle / Walker ($25,000) and Walker St. ($235,214).

Another major project which is currently underway is Houston / US 90 intersection. The City, in cooperation with FDOT and SRWMD, continues to prepare design plans for drainage improvements at Houston St. and US 90. This area, due to pipe sizing and limited pond holding area, periodically floods during heavy rains and thereby requires the closing of US 90. Originally, major land acquisition by FDOT was required to complete this project; however, the City and Water Management District have worked on a solution that would eliminate this right-of-way purchase. The plan now is to take the drainage south to the City's Retention Pond on Church and Warren, thus eliminating the need for R/W acquisition. The City will ask FDOT to move the proposed funding of R/W acquisition into construction thus removing the construction cost burden from the citizens.

Stormwater Improvements – 2009 - 2010

A major project which was included in the 2005 Stormwater Improvement Project List (location number 18) was completed during this time frame at the Houston / US 90 intersection. The City, in cooperation with FDOT and SRWMD, prepared design plans for drainage improvements at Houston St. and US 90. This area, due to pipe sizing and limited pond holding area, periodically floods during heavy rains and thereby requires the closing of US 90. Originally, major land acquisition by FDOT was required to complete this project; however, the City and Water Management District have worked on a solution that would eliminate this Right-of-Way purchase. The completed project takes the drainage south to the City's Retention Pond on Church and Warren thus eliminating the need for R/W acquisition. The City received 100% of the construction funds from FDOT thus removing the construction cost burden from the citizens. Design costs were split 50/50 between the City and SRWMD. Total cost of this project was $ 351,649.

Also completed, was another critical drainage improvement project along South Walker Street, between Pinewood and the City Limits, which was also identified in the 2005 Stormwater Improvements Projects as location number 10. As part of the widening for Walker Street from this intersection to the southern city limits, major Stormwater upgrades were required, along with additional right-of-way acquisition, in order to provide suitable storm water drainage and storage within the drainage area. The city was required to obtain additional land from the School Board in order to provide adequate disposal facilities. Major pond work was performed in front of the school boards maintenance yard as well as the installation of inlets and piping along Walker Street. The total cost of this project was $ 278,963.

The city purchased property (lots 15 and 16) located in the Pine Forest Manor subdivision in order to provide additional Stormwater retention area and through the use of city forces, created a storm water retention pond and piping system, thus eliminating the flooding of Pineview Circle. Also, the city purchased to lots in the Goff's subdivision (lots 5 and 6) to be utilized in future drainage improvements within that drainage basin. All funding for these purchases and labor necessary to complete these improvements were funded through the Stormwater improvement funds.

Specifics regarding Level of Service Goals, Objectives and Policies can be found within the applicable sections later in this document.

I – 4.4 New Subdivisions and New Parcel Development

Since the adoption of the Comprehensive Plan in 1991, several new subdivisions have been accepted or new parcels have been created pertaining to development. The following table describes these:

Table I – 11
NEW SUBDIVISIONS AND NEW PARCEL DEVELOPMENTS

Subdivision or Development Name	Zoning	Acreage	Number of Lots	Types of Privately Financed Improvements Dedicated to City	Date Created
Harrell Heights Subdivision	RSF/ MH-2	4.88	13	Park	1995
Azalea Park Subdivision	R-O & RSF/ MH-3	7.26	41	Underground Electric, Water, Sewer, Stormwater, Reconfigured Road ROW, Sidewalks, Park.	1997
Overlook Professional Park	C-I (City/ County)	24.76	26	Underground Electric, Water, Sewer, Stormwater, Road ROW.	2002
Magnolia Walk Subdivision	RSF-2	5.03	11	Underground Electric, Water, Sewer, Stormwater, Road ROW, Sidewalks.	2005-2006
Lowes Highway 129 Plaza Subdivision	C-I	32.24	7	Underground Electric, Water, Sewer, Lift Station, Stormwater, Road ROW, Sidewalks.	2006
Silas Oaks Apartments	RMF-1	13.73	1	60’ ROW (no road), Sidewalks	2006
Mel-Margo Apartment Complex	RMF-2	18.58	1	(Improvements not yet dedicated)	2007
John’s Lawn Equipment	C-I (County)	1.55	1	n/a	2008
Vistas At Canyon Vistas – Residential Subdivision	RMF-1	7.34	35	Underground Electric Water, Re-Use Water, Sewer, Lift Station, Stormwater, Road ROW, Sidewalks & Street Lighting.	2008
Vistas At Canyon Vistas – Commercial Subdivision	C-I (County)	16.25	17	Underground Electric Water, Re-Use Water, Sewer, Lift Station, Stormwater, Road ROW, Sidewalks & Street Lighting.	2008
Genesis Subdivision	RSF/ MH-2	3.98	15	n/a	2010
Totals		**135.60**	**168**		

Source: Live Oak Planning Department GIS Data, 2010

I – 5 **Location of Development** s. 163.3191(2) (d), F.S.

One of the measures of the success or failure of a comprehensive plan is how well it encourages growth and development to occur in areas with adequate public facilities and services, and how it manages to discourage growth in areas with environmentally sensitive lands or other constraints to development. In the City of Live Oak, the entire incorporated limits are within the Designated Urban Development Area, thus all development has occurred within this designated area.

As such, the Future Land Use Plan Map, as well as other specific Goals, Objectives and Policies of the Comprehensive Plan, become the tools which have been used to guide development to appropriate areas ***within*** the Urban Development Area. These areas are appropriate as they have the infrastructure in place to provide the necessary levels of service, and they generally are consistent with surrounding uses. The net result is growth which benefits the community as a whole. Other tools utilized pertain to policies which limit the location of certain more intense uses to areas adjacent to certain designated road segments; the encouragement of the private sector to participate in programs to redevelop and renew any identified blighted areas; the establishment of policies that require all new development to maintain the natural functions of environmentally sensitive areas, including but not limited to wetlands and 100-year floodplains so that the long term environmental integrity, and economic and recreational value of these areas is maintained; and support for the acquisition of environmentally sensitive and flood prone lands.

Since the adoption of the last Evaluation and Appraisal Report, and subsequent amendments, development which has occurred has been consistent with, and located within, areas in which it was anticipated.

Specifics about how effective the existing Goals, Objectives and Policies have been, and what identified issues exist, can be found within the applicable sections later in this document.

I – 6 Brief Assessment of Successes and Shortcomings Related to Each Element of the Plan
s. 163.3191(2) (h), F.S.

(Note: Any incorrect reference to 'County' in the existing Plan which was done in error will be amended to reflect the term 'City'; other 'typos' will also be addressed and amended throughout.)

I – 6.1 Future Land Use Element

A. General Evaluation of the Element

The Future Land Use Element is the foundation upon which the rest of the Comprehensive Plan is built. The Future Land Use Element establishes the geographic framework for growth and development by providing the appropriate distribution of population densities, as well as, building and structural densities and intensities in the City. The focal point around which the Future Land Use Element is centered is the Future Land Use Plan Map, and intensity of such uses for each area depicted on the map (see Maps 23 to 32).

The Future Land Use Element consists of one goal, and thirteen objectives. The policies within each objective accommodate steady growth without compromising the quality of life.

Overall the City has been able to achieve the objectives; however there are some revisions which are needed to ensure future success with these objectives, as well as to bring the Plan into compliance with new local planning requirements.

B. Future Land Use Element – Issues s. 163.3191(2) (e) and (g), F.S.

Due to the changing weather pattern driven by climate change and an increase in development, areas that are generally most likely to experience floods and wildfires are expanding and threatening more areas. Therefore, in order to become more resilient and defensible to the effects of climate change, the City should continue to implement land use policies that encourage development in areas away from such hazards such as wildfires, land erosion and floods.[1] Additionally, the City should consider the many development and conservation strategies intended to protect the natural environment while simultaneously making the community more attractive, economically stronger, and more socially diverse. The use of smart growth principles will encourage development that serves the economy, the community, and the environment.

The smart growth principles as stated by the Smart Growth Network are as follows:

- Create Range of Housing Opportunities and Choices;
- Create Walkable Neighborhoods;
- Encourage Community and Stakeholder Collaboration;
- Foster Distinctive, Attractive Communities with a Strong Sense of Place;
- Make Development Decisions Predictable, Fair and Cost Effective;
- Mix Land Uses;
- Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas;
- Provide a Variety of Transportation Choices;
- Strengthen and Direct Development Toward Existing Communities; and
- Take Advantage of Compact Building Design.

When applying smart growth principles to residential and commercial development, green infrastructure practices can play a role in providing the community with a variety of aesthetic and environmental benefits, such as sequestering carbon dioxide, reducing pollutant loads, conserving natural areas and increasing property values. Through the use of smart growth principles, all new developments in the community should reduce the amount of impervious cover created; increase the amount of natural lands set aside for conservation, and; integrate stormwater treatment on-site using Low Impact Development (LID) practices.

To avoid the effects of urban sprawl, the City should explore additional strategies to continue developing in ways that preserve natural lands and critical environmental areas, protect water and air quality, reuse already-developed land, conserve resources by reinvesting in existing infrastructure, reclaiming historic buildings, and by designing neighborhoods that have shops, offices, schools, churches, parks, and other amenities within walking or biking-distance of residential areas. Growing in such a way that enables residents to drive less will substantially aid in reducing vehicle carbon emissions. Through the use of smart growth principles, the City will be able to enhance its neighborhoods and be a vibrant place to live, work and play.[2]

During the 2008 legislative session, the Florida Legislature enacted House Bill 697 which established new local planning requirements relating to energy efficient land use patterns to address greenhouse reduction and energy conservation through more compact mixed-use development, greater jobs-housing balance, and higher densities in appropriate places. The City will implement the requirements of House Bill 697.

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[1] American Planning Association Policy Guide on Planning & Climate Change, April 27, 2008.

[2] U.S. Environmental Protection Agency. Managing Wet Weather with Green Infrastructure. Accessed at http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm on 12/1/2010.

Furthermore, a survey of the existing Land Use Element resulted in the following issues being identified:

1. Policy I.1.1 – Future Traffic Circulation Map (see Map 33)
   The Future Traffic Circulation Map, which is based on functional classifications identified in the Florida Department of Transportation Handbook, as well as assigned by the applicable Federal Highway Administration federal functional classification designations, is inherently problematic. While roads assigned that of an Arterial Classification are appropriate, those assigned as Collector Roads in many cases are not appropriate for higher density development. While many of these roads serve an important function in providing for alternate traffic flow, many of them are within traditional neighborhood settings which are not appropriate for higher density development. Additionally, there are areas in close proximity to Arterial Roads which serve as a transitional area, with easy access to the arterial network, which may front roads other than those designated as Arterial or Collector Roads. These areas in some cases have the potential to allow establishment or expansion of more intense uses. Additionally, reference needs to be made to identified, existing, or proposed 'Perimeter' or 'By-pass' roads which will serve to allow traffic to by-pass the downtown areas going from US 129 North to US 90 and US 129 S to CR 49, and vice versa.

2. Policy I.1.2 – Future Land Use Plan Map
   The City of Live Oak is somewhat unique, regarding stormwater challenges, in that nearly all of the surrounding areas outside the City are a higher elevation and thus no creeks or

rivers function to discharge stormwater out of the City. Additionally, there are no major lake or pond features in the City. To address this ongoing issue, steps have been taken by various governmental entities over the last 45 years, since the City was inundated with floodwaters from Hurricane Dora, to acquire lands to function as retention areas. There is still a great need for additional lands for this purpose. A study was conducted and a report prepared in the year 2005 by The City of Live Oak and the Suwannee River Water Management District which identified 28 areas in the City which had stormwater issues. One major other area has also since been identified which was not part of the 28. Of these, 5 have been 100% resolved to date, and 4 more are currently under design.

3. Policy I.1.2 – Future Land Use Plan Map
   The City Planning Department, upon being established in March of 2008, determined soon after being established, that the paper version of the Future Land Use Plan Map, which had been adopted and was being utilized, had many errors or omissions on it. These errors or omissions included: roads which were never constructed, roads with wrong names, roads shown with incorrect pathways, incorrect City boundaries, parcels boundaries which do not match surveys of record, land use boundaries which were incorrectly drawn according to the uses in existence at that time, land use boundaries for adjacent lands in the County which were incorrectly shown as being in the City limits, and publically owned lands which were assigned classifications other than public and Public Land Uses under private ownership. The City now utilizes in-house GIS servers and software to manage and record all classifications shown on the Future Land Use Plan Map, however, many of these errors are still in need of formal correction through amendment and adoption. Additionally, much of the annexed land areas were never amended to be classified a City Land Use Classification, and thus still remain under the County Land Use Classifications and Comprehensive Plan, which has no level of service standards for water and sewer, as well as many other different development criteria, when compared to the City. Furthermore, there is land which fronts the US-129, US-90 and CR-136 corridors which are currently used commercially or would be best served as commercial, which is currently classified as Residential Land Use.

4. Policy I.1.2.5, .6, and .8
   Floor area ratio is the ratio of the total floor area of ***buildings*** on a certain location in relation to the size of the land of that location, or the limit imposed on such a ratio. While this serves as an important standard for development, it does not address impervious lot coverage by parking spaces, driveways, sidewalks, accessory structures, etc. Preserving open green space is not only important aesthetically, but also to provide areas for open space and stormwater recharge, besides the traditional retention area.

5. Policy I.1.2.5
   Recent upgrades to the capacities for water and sewer within the City provide for the possibility of a higher density of residential usage. While much of the Medium and High Density Land Use areas are already platted, there are vacant lands which are zoned for multi-family which could be developed to a higher density than what is currently allowed with no adverse affects on services. Since these areas are in close proximity to shopping and schools, this will allow for the location of a higher percentage of population within walking and biking distance to these areas.

6. Policy I.1.2.6
   Commercial land uses currently allow for the following zoning districts in the Land Development Regulations: Commercial General (CG), Commercial Intensive (CI), Commercial Central Business District (Central Downtown)(C-CBD/CD), and Commercial Shopping Center (CSC). Of these, CSC comprises approximately 60 acres of land. Most of these areas are blighted with defunct 1960's to 1980's era structures and expanses of unattractive parking which are only minimally used. There are also many vacant storefronts in these centers. These areas need redevelopment and revitalization to turn them into positively contributing assets for the community. This zoning district is outdated and it is very unlikely that any zoning changes to this district would occur in the future. Additionally and related is the fact that there are certain areas in the City in the future which would benefit from a mixed use land use classification, which includes these shopping center locations.

7. Policy I.1.2.7
   While our Comprehensive Plan has policy regarding the Central Downtown area, the Land Use for this area is still classified as Commercial on the FLUPM map. A new Land Use classification named CD is needed. Also, to achieve the intent of the Smart Growth Principles, this area should allow for mixed uses.

8. Policy I.1.3 and I.1.4
   With the creation of new classifications, language in these sections will need to be updated.

9. Policy I.1.5
   The language in this Policy is somewhat outdated and missing some important language.

10. Policy I.1.6
    So that land can be more appropriately designated for future school locations, criteria to be followed should include that said land be designated on the Future Land Use Plan Map for Public uses.

11. Policy I.2.1
    Language in this policy does not contribute positively to development standards which are appropriate for the City of Live Oak.

12. Objective I.4
    This is really a policy and not an objective. The language needs to also reflect Planned Mixed Use developments. A reworded Objective I.4 should reference what the City's LDR's are to accomplish. Existing Objective should be Policy I.4.1

13. Policy I.4.1
    Should be renamed Policy I.4.2 with revisions / updates to numbers 6 and 8.

14. Objective I.5
    Language in this Objective is confusing and needs rewording.

15. Objective I.6
    This objective needs revision to be more specific and associated Policies need to be adopted which are specific to this objective.

16. Policy I.6.1 and .2
    This language does not pertain to Objective I.6., should be under Objective I.4.

17. Policy I.6.3
    This requirement is contrary to accommodating higher densities of development and needs to be less restrictive. Also does not pertain to Objective I.6., should be under Objective I.4.

18. Policy I.6.4 and I.6.5
    These policies should be located under Objective I.4 as Policies I.4.3.4 and I.4.3.5, and the current: I.6.4 should state "(2) feet" and I.6.5 which will be I.4.3.5 lacks the specific language needed to describe what is sought.

19. Objective I.8
    Objective does not clearly state what is being sought regarding nonconformities and makes no mention of vested rights which are within a subsequent policy.

20. Policy I.8.1
    Policy needs to refer back to Land Development Regulations for specific criteria.

21. Policy I.9.1
    The list should also be based on staff recommendations and local evaluation and analysis of potential historical sites and resources.

22. Policy I.10.1 Needs to be updated and be amended to reflect a 500 foot protection radius.

C. Proposed Changes s. 163.3191(2) (i), F.S.

During the Evaluation and Appraisal Report based amendment process, the Future Land Use Element should be revised to reflect goals, objectives, and policies that comply with House Bill 697 to reduce greenhouse gasses through more compact mixed-use development; the discouragement of urban sprawl; energy efficient land use patterns that account for existing and future electric power generation and transmission systems; greenhouse gas reduction strategies; and depiction of energy conservation areas on the Future Land Use Map. Additionally, the element should be revised to reflect the new planning period.

Furthermore, based on the survey of the existing Land Use Element and the issues identified, the flowing changes will be proposed:

1. Policy I.1.1 – Future Traffic Circulation Map
   To avoid the potential for higher intensity uses being directed to traditional neighborhood settings, all references to Collector Roads, pertaining to certain land uses, within the element should be removed. To give staff, elected officials and the development community a clearer picture of where future development may be directed to, a Roadway Development Classification System, specific to certain segments of roads within the City, should be instituted. The classification system would be created through the establishment of a numbering system for certain road segments from 1-3. Since Arterial Roads and some Collector Roads are appropriately located for more intense development, certain segments of those roads would receive an appropriate classification number, as would other identified roads in the City's road network. The scale would be graduated in that a proposed Land Use Map Amendment or associated proposed Zoning District would necessitate the road frontage having been assigned the appropriate road classification

number in the Comprehensive Plan. This would serve to eliminate proposed Land Use Map Amendments and Zoning Amendments in areas which are inappropriate. Additionally, all Perimeter or By-pass roads will be identified as such and that the LDR will contain specific development standards as an overlay corridor along these roadways.

2. Policy I.1.2 – Future Land Use Plan Map
   So that the distribution and quantity of existing stormwater facilities can be studied and referenced, a new Land Use classification named Stormwater (SW) will be adopted. The revised Future Land Use Plan Map proposed with the EAR based amendments will assign this classification to all existing locations, as well as any properties owned by the City which are designated to be utilized in this manner in the future. As lands are acquired by any governmental entities in the future which are to be utilized in this manner, the City will take action to amend the map accordingly.

3. Policy I.1.2 – Future Land Use Plan Map
   The City shall propose an amended Future Land Use Plan Map which will address and serve to correct all errors discovered to date as well as coding all governmentally owned areas, except for stormwater facilities, as Public, with stormwater areas having their own assigned classification. Additionally, all previously annexed land which are still classified under the County Land Use Classifications will be proposed to be re-classified to an equivalent City Land Use Classification, in order to be developed consistent with the City Comprehensive Plan, which the Land Development Regulations require. Lastly, lands which front commercial corridors will be proposed to be amended to Commercial Land Use from the existing Residential and existing Public land uses under private ownership will be amended to either Commercial or Residential, depending on the most appropriate classification.

4. Policy I.1.2.5, .6, and .8
   All references to floor area ratio limitations for commercial uses, which include multi-family uses, shall also include language which furthers the criteria by limiting impervious lot coverage to .80 or eighty percent.

5. Policy I.1.2.5
   Residential Medium Density will be proposed to have an increased density to 15 units per acre with a floor area ratio of 2.0; and Residential High Density will be proposed to have an increased density to 30 units per acre, with a floor area ratio of 3.0.

6. Policy I.1.2.6
   A new land use classification will be adopted into the Plan which will be defined as Commercial Mixed Use (CMU). Commercial Land Use for areas zoned Commercial Shopping Center will be amended to this classification as part of the EAR amendments. The residential density for this classification will be 30 units per acre with a Floor Area Ratio of 3.0. The maximum percent of land of a parcel with this classification shall be limited to 50% residential, with the remainder Commercial/Office uses. Future proposed land use amendments, as found appropriate, may be proposed to be amended to this new classification. This will result in a new Policy I.1.2.7 with all subsequent Policies being renumbered (7 to 8 and 8 to 9).

7. Policy I.1.2.7
   The all areas identified in the Plan as Central Downtown, and as shown on Map 30 as proposed, will be amended on the Future Land Use Plan Map from Commercial to Central Downtown, abbreviated as CD. The Language in the Plan pertaining to this area will allow for mixed uses with a residential density of up to 30 units per acre.

8. Policy I.1.3 and I.1.4
   The new CD and CMU classifications will be added to these Policies.

9. Policy I.1.5
   Revisions to language will detail more about the appropriate location for such zoning and on what land use classifications it may be proposed. There will not only be a maximum square footage for each establishment but also a maximum lot size and maximum building size by changing the floor area ratio from 1.0 to .50.

10. Policy I.1.6
    An 8th criterion will be added to state that the land use must reflect a Public classification.

11. Policy I.2.1
    Number 2 will be amended to remove reference to discouraging through traffic. Number 3 will be amended to reflect that the rigid rectangular pattern with interconnectivity to multiple roads is the most safe, efficient and desirable layout for residential areas. Number 4 will be amended to require the extension of streets as well as driveways and parking areas to provide interconnectivity with existing and future abutting development.

12. Objective I.4
    This will be renumbered as Policy I.4.1 with all subsequent polices being renumbered. Language will be amended to include Planned Mixed Use Development standards. A reworded Objective I.4 will pertain to LDR in their entirety.

13. Policy I.4.1
    Shall be renumbered Policy I.4.2 and number 6 language will be amended to state that signage be regulated according to the zoning district in which it is proposed to be located, and number 8 will be reworded to be more readable.

14. Objective I.5
    Language will be amended to clarify this Objective.

15. Objective I.6 and Policies I.6.1, I.6.2 and I.6.3
    Language will be amended to clarify that reports are filed by the City Planning Office, the Planning and Zoning Board as well as the Local Planning Agency pertaining to the following amendment types: Text Amendments to the Comprehensive Plan, Map Amendments to the Future Land Use Plan Map of the Comprehensive Plan, Text Amendments to the Land Development Regulations and Map Amendments to the Official Zoning Atlas of the Land Development Regulations. Specific criteria to be considered for each amendment type will be described.

16. Policy I.6.1 and .2
    These 2 sections will be renumbered as I.4.3.1 and I.4.3.2, and located under a new Policy I.4.3.

17. Policy I.6.3
    Language will be amended to allow for a 1 to 4 ratio of with compared to length and will be renumbered Policy I.4.3.3.

18. Policy I.6.4 and I.6.5
    These will be renumbered Policies I.4.3.4 and I.4.3.5. I.4.3.4 will be revised to reflect 2 feet and I.4.3.5 language will be amended to specify more about the purpose and methods of required buffering.

19. Objective I.8
    Language will be amended to clarify the objectives sought and to reference all policies.

20. Policy I.8.1
    Language will be amended to refer back to Land Development Regulations for specific criteria.

21. Policy I.9.1
    Language will be amended to state the list will also be based on staff recommendations and local evaluation and analysis of potential historical sites and resources.

22. Policy I.10.1
    Language will be amended to also reference the Land Development Regulation criteria, and the 300 changed to 500.

I – 6.2 Traffic Circulation Element

A. General Evaluation of the Element s. 163.3191(2) (h), F.S.

The Traffic Circulation Element of the Comprehensive Plan seeks to provide safe and efficient movement of people and goods to support existing and future development. The purpose of the element is to identify the types, locations and extent of existing and proposed major thoroughfares and transportation routes in the City, and to establish a framework for making policy decisions in planning for future transportation needs (see Map 33).

The Transportation Element is, in many cases, related to the Future Land Use Element. This is due to the inherent two-way relationship between land use and transportation. Land use patterns directly affect the demand for transportation facilities, with more intensive land uses generating more traffic and requiring greater degrees of accessibility. Conversely, the transportation network affects land use in that access provided by transportation facilities (existing or proposed) influences the use of land located adjacent to these facilities. In addition to the Future Land Use Element, the Traffic Circulation Element is coordinated and consistent with the remaining elements of the Comprehensive Plan. Furthermore, the City coordinates with the County in order to promote and maintain a functional traffic circulation system because the system does not stop at political boundaries.

The Traffic Circulation Element consists of one goal and four objectives. The objectives address issues such as maintaining safe, convenient, and efficient level of service standards; requiring all traffic circulation system improvements to be consistent with the Future Land Use Map; coordinating with Florida Department of Transportation for consistency with their 5-Year Work Plan; and providing protection of rights-of-way from building encroachment.

The City continues to work with the Florida Department of Transportation to encourage the development of alignment and realignment of existing highways in a manner which will encourage investments to be made within the existing urban development area. Since the last update to the Comprehensive Plan, there have been no changes to the functional classification of roads. There has, however, been construction of a new roadway to the City traffic circulation system. Additionally, road segments which were previously designated as Collector Roads have been found to be more that of a local road. Lastly, some street segments contain either the wrong name or number, or need additional clarification pertaining to local names assigned to them. The level of service standards adopted by the City are those established by the Florida Department of Transportation in the 2009 Quality / Level of Service Handbook; and based upon the Florida Department of Transportation's Florida State Highway Level of Service Report. Roadways in the City are anticipated to continue to meet or exceed adopted levels of service standards.

The traffic circulation needs summary identifies both existing and projected traffic circulation level of service and the City's transportation system needs. Existing traffic circulation levels of service were based upon existing design capacity, average daily trips and the need for new or expansion of existing facilities. Projected traffic circulation levels were based upon the distribution of future land uses. In addition, the analysis considered the adopted level of service standards, improvements, expansions and new facilities planned for in the Florida Department of Transportation's Five Year Plan within this planning period. The analysis of the traffic circulation levels of service and system needs indicate the following:

TABLE I – 12

TRAFFIC LEVELS OF SERVICE

(All standards are local[1])

Plan Roadway Segment Number	Roadway Segment Location	DOT Map ID[1]	Local Lanes [1]	Facility Type[1]	System Status[1]	AADT: / Peak Hr:	MIN LOS STD [1]	Maximum Service Volume[1]	EXISTING 2009 Count[1]	EXISTING LOS [1]	EXISTING Growth Rate[1]	Meets Or Exceeds LOS[1]	PROJECTIONS 2015[1]	PROJECTIONS LOS[1]	PROJECTIONS 2020[1]	PROJECTIONS LOS[2]	PROJECTIONS 2025	PROJECTIONS LOS[1]	Meets Or Exceeds LOS[1]
1	SR 10/ US 90: W. City Limits to SR 51/ US 129	9	2/U	Arterial II	SHS	AADT:	D	13,700	7,725	C	1%	YES	8,500	C	8,900	C	9,300	C	YES
				Transition		Peak Hr:	D	1,330	710	C		YES	781	C	818	C	855	C	YES
2	SR 10/ US 90: SR 51/ US 129 to E. City Limits	10	2/U	Arterial I	SHS	AADT:	D	15,200	7,200	B	1%	YES	7,800	B	8,200	B	8,500	B	YES
				Transition		Peak Hr:	D	1,480	662	B		YES	717	B	754	B	781	B	YES
6	SR 51: W. City Limits to SR 249/ US 129	16	2/U	Arterial I	SHS	AADT:	D	15,200	7,450	B	1%	YES	8,700	B	9,100	C	9,500	C	YES
				Transition		Peak Hr:	D	1,480	685	B		YES	800	B	836	B	873	C	YES
3 (Portions)	SR 51: SR 10/ US 90 to N. City Limits	17	4/D	Arterial I	SHS	AADT:	D	33,800	11,650	B	1%	YES	13,300	B	13,900	B	14,500	B	YES
				Transition		Peak Hr:	D	3,280	1,071	B		YES	1,222	B	1,277	B	1,333	B	YES
4	SR 249: S. City Limits to SR 51	27	2/D	Arterial II	SHS	AADT:	D	14,385	9,250	C	1%	YES	10,800	D	11,300	D	11,900	D	YES
				Transition		Peak Hr:	D	1,396	850	C		YES	993	D	1,038	D	1,094	D	YES
3 (Portions)	SR 51: 11th Street to SR 10/ US 90	28	4/D	Arterial II	SHS	AADT:	D	31,500	13,350	C	1%	YES	15,600	C	16,300	C	17,000	C	YES
				Transition		Peak Hr:	D	3,056	1,227	C		YES	1,434	C	1,498	C	1,562	C	YES

[1] Source: Level of Service Report, Florida Department of Transportation, 2009

LOS = Level of Service

B. Traffic Circulation – Issues s. 163.3191(2) (e) and (g), F.S.

Because the built environment has become dependent upon the automobile, people are driving longer distances and are relying less on alternative modes of transportation. The more automobiles are driven, the more energy is consumed and the more carbon is emitted into the earth's atmosphere. Currently, transportation accounts for one third of all carbon emissions in the United States.

During the 2008 legislative session, the Florida Legislature enacted House Bill 697 which established new local planning requirements relating to transportation strategies to address greenhouse gas reduction and energy conservation. Since transportation is a major source of greenhouse gas emissions, vehicle miles traveled must be reduced in order to decrease greenhouse gas emissions from the transportation sector. Reduction in vehicle miles traveled will require new and enhanced transportation and land use planning strategies, including planning for alternative modes of travel, more compact mixed-use development and a greater jobs-housing balance.

Furthermore, a survey of the existing Traffic Circulation Element resulted in the following issues being identified:

1. Policy II.1.1:
   a. All segments need clarification as to what local road names apply.
   b. All segments need to be renumbered in order of classification and then geographically from quadrant to quadrant, with segments of the same road one right after the other.
   c. Segment 3 is shown on the FDOT charts as 2 distinct segments.
   d. Segment 5 has the wrong street name referenced.
   e. Segment 6 should reference that it continues through the round-a-bout.
   f. Segment 7 has the wrong road name referenced.
   g. Segment 8 – Duval Street should continue west to Houston Avenue.
   h. Segment 13 describes roads, Georgia Ave. and Fir Street, which currently is in an established residential area, which has 5 mph speed control devices installed, as a Collector.
   i. Segment 15 describes parts of Parshley Street and all of Woods Avenue as a collector when they enter traditional neighborhood areas, and do not generally function as Collector Roads. Parshley should end at Walker Avenue as a Collector.
   j. Segment 16 – Walker Avenue should continue south to City limits.
   k. Segment 17 has the wrong road name referenced.
   l. A new segment to replace portions of Parshley Street and Woods Avenue as Collector Roads should be 5th Street from Houston Avenue west to SR 10 / Highway 90 west.
   m. A new segment should be added as a Collector: Goldkist Blvd. from CR 136 north to Voyles Street, then east on Voyles Street to SR 10 / US 90 west.
   n. A new segment should be added as a Collector: 72nd Trace west from SR 51 / US 129 north to CR 795 / Houston Avenue and also the planned perimeter road – 72nd Trace east from SR 51/ US 129 north to SR 10 / US 90 east.
   o. Statement needed to specify that all roads not designated as Arterial or Collector as thereby to be considered local roads.

2. Policy II.1.2
   Needs to also reference non-residential uses on local roads.

3. Policy II.1.2 (1)
   Should reflect that one access point is allowed per street frontage for corner properties.

4. Policy II.1.2 (2)
   20 feet is deemed to be too congested – should be 50 feet, unless is a combined right-in/right-out ingress/egress point.

5. Policy II.1.2 (5)
   A new # 5 is needed to state that new developments integrate interconnectivity with existing or future abutting developments as part of their parking lot design to facilitate traffic flow between non-residential uses.

6. Policy II.1.2 (6)
   A new # 6 is needed to reference a Perimeter Road overlay district, as found in the Land Development Regulations.

7. Policy II.1.3
   Should allow for a certain percentage of compact parking spaces which are smaller than the standard size, as provided for in the Land Development Regulations.

8. Policy II.1.4
   Should reference non-residential development proposed on any road, not just Arterial or Collectors. Should also require installation of sidewalks along existing or said new ROW frontage from property line to property line.

9. Objective II.2
   Language pertaining to limiting higher density and higher intensity land use locations is not supported by a Policy, and is already stated in Land Use Element and needs to be struck.

C. Proposed Changes s. 163.3191(2) (i), F.S.

The City should amend the Traffic Circulation Element of the Comprehensive Plan to integrate spatial planning and planning for bicycle, and pedestrian networks so that development patterns support mobility choices and reduce trip lengths for meeting basic needs. Neighborhoods with an equal proportion of homes and jobs can provide the ability to both live and work in the area and reduce commutes. A diversity of uses located closer to residences allows people to drive shorter distances or even walk or bike to their destinations. Additionally, the element should be revised to reflect the new planning period.

The Traffic Circulation Element should be amended to identify potential future networks connected to land use and comprehensive planning projects to preserve the opportunity to create alternative travel options in the future. Planning for such facilities will establish policy basis to require their extension during the review of new development.[3]

During the Evaluation and Appraisal Report based amendment process, the City should implement the requirements of House Bill 697 by amending the Traffic Circulation Element to reflect goals, objectives, and policies that reduce greenhouse gases through transportation strategies; more compact mixed-use development the discouragement of urban sprawl; energy efficient land use patterns that account for existing and future electric power generation and transmission systems; greenhouse gas reduction strategies; and depiction of energy conservation areas on the Future Land Use Plan Map. Additionally, the element should be amended to adopt the Florida Department of Transportation 2009 Quality/Level of Service Handbook and the element should be revised to reflect the new planning period.

[3] American Planning Association Policy Guide on Planning & Climate Change, April 27, 2008.

Furthermore, based on the survey of the existing Land Use Element and the issues identified, the flowing changes will be proposed:

1. Policy II.1.1:
   a. All segment descriptions will be updated.
   b. All segments will be renumbered/re-ordered in order of classification and then geographically from quadrant to quadrant, with segments of the same road one right after the other.
   c. Segment 3 will be split into 2 segments as shown on the FDOT charts.
   d. Segment 5 street name will be corrected.
   e. Segment 6 will be updated to reference that it continues through the round-a-bout.
   f. Segment 7 street name will be corrected.
   g. Segment 8 – Duval Street will continue west to Houston Avenue.
   h. Segment 13 regarding Georgia Ave. and Fir Street will be struck.
   i. Segment 15 - parts of Parshley Street and all of Woods Avenue will be struck as a collector. Parshley should end at Walker Avenue as a Collector.
   j. Segment 16 – Walker Avenue will continue as a Collector Road south to City limits.
   k. Segment 17 street name will be corrected.
   l. A new segment to replace portions of Parshley Street and Woods Avenue as Collector Roads will be added as 5th Street from Houston Avenue west to SR 10 / Highway 90 west, with a LOS D.
   m. A new segment will be added as a Collector: Goldkist Blvd. from CR 136 north to Voyles Street, then east on Voyles Street to SR 10 / US 90 west as a LOS D.
   n. A new segment will be added as a Collector: 72nd Trace west from SR 51 / US 129 north to CR 795 / Houston Avenue and also the planned perimeter road – 72nd Trace east from SR 51/ US 129 north to SR 10 / US 90 east, as a LOS D.
   o. Statement will be added to specify that all roads not designated as Arterial or Collector as thereby to be considered local roads.

2. Policy II.1.2
   Will also reference non-residential uses on local roads.

3. Policy II.1.2 (1)
   Will reflect that one access point is allowed per street frontage for corner properties.

4. Policy II.1.2 (2)
   20 will be changed to 50 feet, unless is a combined right-in/right-out ingress/egress point.

5. Policy II.1.2 (5)
   A new # 5 will be added to state that new developments will be required to provide for interconnectivity with existing or future abutting developments as part of their parking lot design to facilitate off-street traffic flow between abutting non-residential uses.

6. A new # 6 will be added to reference a Perimeter Road overlay district, as found in the Land Development Regulations.

7. Policy II.1.3

   Will be amended to allow for a certain percentage of compact parking spaces which are smaller than the standard size, as provided for in the Land Development Regulations.

8. Policy II.1.4
   Will be amended to reference non-residential development proposed on any road, not just Arterial or Collectors. Will be amended to also require installation of sidewalks along existing or said new ROW frontage from property line to property line.

9. Objective II.2 Language pertaining to limiting higher density and higher intensity land use locations will be struck.

I – 6.3 Housing Element

A. Summary of Housing Data and Analysis

This section consists of a summary of the data and analysis for the housing element of the adopted Comprehensive Plan with revisions at the time of this Evaluation and Appraisal Report, with comparisons shown from the last EAR.

B. General Evaluation of the Element s. 163.3191(2) (h), F.S.

The Housing Element establishes a guide for the City to make provisions for the ability for decent, safe and sanitary housing at affordable costs and appropriate land uses in sufficient quantities to meet the needs of both existing and future City residents, including those residents with special needs. The Housing Elements consists of one goal and eight objectives. The objectives address issues such as providing land use for affordable housing; promoting the maintenance of a safe and sanitary housing stock and elimination and rehabilitation of substandard dwelling units, as well as the establishment of provisions to the structural and aesthetic improvement of housing through the adoption of minimum housing standards; making available site opportunities for low and moderate income families, and for manufactured (mobile) homes in residential future land use categories, when appropriately zoned; making provisions for group homes to be located within residential areas or areas of residential character; improving programs for the removal of blight and unsafe structures through the implementation of hazardous building regulations; continued restoration or rehabilitation for adaptive reuse of historically significant housing; implementing uniform and equitable relocation provisions; and assisting in the planning of housing assistance programs of the Housing Authority.

The following table shows past, current and projected units for the five-year and long-term planning periods. According to the table, by the end of the five-year planning period the City is projected to have an additional 150 housing units; and by the end of the planning horizon, the City is projected to have a total of 400 additional housing units.

TABLE I – 13
HOUSING UNIT PROJECTIONS

	Past	**Current**	**FIVE YEAR PLANNING PERIOD**					**LONG-RANGE PLANNING PERIOD**
Year	*2000*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2020*
Housing Units	2745	3000	3015	3035	3060	3100	3150	3400

Source: U.S. Census, 2000.
Live Oak Planning Department, 2010

The following table shows the total parcel count and acreage for each residential land use classification located within the City.

TABLE I – 14
TOTAL RESIDENTIAL PARCEL COUNTS BY LAND USE CLASSIFICATION

Residential Land Use Classification	Parcel Count	Acreage
Very Low (≤ 1 d.u. per acre)	0	0
Low (≤ 2 d.u. per acre)	400	411
Moderate (≤ 4 d.u. per acre)	1,090	634
Medium (≤ 8 d.u. per acre)	1,284	690
High (≤ 20 d.u. per acre)	9	78
Totals	2,783	1,813

Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 15
EXISTING SINGLE FAMILY RESIDENTIAL LAND

	Parcel Count	Acreage	Percent of Total S-F Acreage
Conventional Single Family (RSF)	1,250	985	56.72
Mobile Home (RMH)	0	0	0
Mixed Conventional + Mobile Home (RSF/MH)	1,348	749	43.13
Planned Residential Development	42	2.6	.14
Totals	2,640	1,736.6	100%

Source: Live Oak Planning Department GIS Data, 2010

TABLE I – 16
EXISTING MULTI-FAMILY RESIDENTIAL LAND

	Parcel Count	Acreage	Percent of Total M-F Acreage
Multi-Family (RMF)	86	260	81%
Mobile Home Park (RMH-P)	14	61	19%
Totals	100	321	100%

Source: Live Oak Planning Department GIS Data, 2010

VACANT PROPERTY INVENTORY

The following chart indicates the number of parcels, land use classifications and zoning districts for vacant properties which could be utilized to meet the housing needs for the planning period for the City.

TABLE I – 17
RESIDENTIAL HOUSING NEEDS – VACANT PROPERTIES

Residential Land Use	**Density**	**Zoning**	**Parcel Count**	**Parcel Acreage**	**Maximum # Dwelling Units**	**Dwellings Percent of Total**
Very Low	**(**≤ 1 d.u. per acre)	n/a	0	0	n/a	0
Low	**(**≤ 2 d.u. per acre)	RSF- Conventional	9	11	22	<1%
“	“	RSF-1 County	4	100	200	5.5%
“	“	RSF/MH – Mixed	145	187	374	10%
“	“	RSF/MH-1 County	1	12	24	<1%
Moderate	**(**≤ 4 d.u. per acre)	RSF- Conventional	132	104	416	11%
“	“	RSF/MH – Mixed	37	46	184	5%
Medium	**(**≤ 8 d.u. per acre)	RSF- Conventional	28	24	192	5%
		RSF/MH – Mixed	166	48	384	10.5%
		RMF – Multi-Family	20	123	984	27%
		RMH-P Mobile Home Park	5	21	168	4.6%
High	**(**≤ 20 d.u. per acre)	RMF – Multi-Family	5	34	680	18.7%
Totals			552	710	3,628	100%

Source: Live Oak Planning Department GIS Data, 2010

HOUSING INVENTORY

The purpose of this section is to summarize the housing inventory present in the City. Summary analyses for the following characteristics are presented below in Tables 15 through 21:

1. Number of units by type.
2. Vacant and occupied housing units.
3. Housing units by tenure
4. Housing units by the year the structure was built, and
5. Cost burden by tenure.
6. Inventory of multi-family housing complexes.

According to the Florida Housing Data Clearinghouse data, the housing inventory within the City is comprised of approximately: 71.3 percent single family homes, approximately 10.4 percent multi-family homes, approximately 18.4 percent mobile homes, and 0 percent other types of homes.

TABLE I – 18
NUMBER OF UNITS BY TYPE - SUMMARY
(1990 v. 2000)

	Single Family (1, att. Detach.)	Multi-family (2 or more)	Mobile Home	Other	Total
Number 1990	1961	289	377	12	2639
2000	1949	284	502	0	2735
Percentage (%) 1990	74.3	11	14.3	0.4	100%
2000	71.3	10.4	18.4	0	100%

Source: 1998 EAR, Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 19
NUMBER OF UNITS BY TYPE - DETAIL
(2000)

1, detached	1, attached	2	3 or 4	5 to 9	10 to 19	20 or more	Mobile Home or Trailer	Other	Total
1,854	95	128	48	34	8	66	502	0	2735

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 20
VACANT AND OCCUPIED HOUSING UNITS
(2000)

Occupied	Vacant	Total	Vacancy Rate (%)	Vacant Seasonal, etc. Units	Total Units	Vacancy Rate Total Units (%)
2,344	173	2,517	6.9	218	2,735	14.3

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 21
HOUSING UNITS BY TENURE
(2000 and 2009)

	Owner	Renter	Total
2000	1554	829	2383
2009	1636	863	2499

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 22
HOUSING UNITS BY YEAR STRUCTURE BUILT
(2000)

NUMBER									Percent (%) Share by Decade				
1939 or Earlier	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1994	1995-1998	1999-March 2000	Before 1960's	1960s	1970s	1980s	1990s
276	248	493	380	528	433	137	195	45	37.2	13.9	19.3	15.8	13.8

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 23
COST BURDEN BY TENURE
(2000)

	COST BURDEN CATEGORIES						
	Less than 20%	20%-24%	25%-29%	30%-34%	35 or More %	Not Computed	Toral Cost Burden 30% or More
Owner Occupied	777	94	71	66	189	22	255
Renter Occupied	250	117	83	56	217	54	279

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 24
EXISTING MULTI-FAMILY COMPLEXES
(2010)

Name	Address	Number of Units
Meadows Phase I	1600 SE Helvenston St.	51
Meadows Phase II	1600 SE Helvenston St.	36
Silas Oaks	1120 Silas Dr SW	110
Village Oaks I	705 Northwest Dr.	32
Village Oaks II	705 Northwest Dr.	24
Mel-Margo Apartments	2231 Mel-Margo Avenue	70
Housing Authority – McMullen Heights	Webb Dr.	50
Housing Authority – Harmony Triangle	Bryson St. NE	28
Housing Authority – Phillips Pines	Maple Street SW	26
Horizon Circle	Madison St.	32
Anna's Village	McGee St. NW	18
Village Inn Apartments	2nd St. NW	27
TOTALS		**504**

Source: Live Oak Planning Department, 2010.

HOUSING CONDITION

The following two tables describe the housing conditions at the time of this Evaluation and Appraisal Report using U.S. Census Bureau Indicators.

TABLE I – 25
HOUSING CONDITION CHARACTERISTICS
(2000)

Persons Per Room			House Heating Fuel		Kitchen Facilities		Plumbing Facilities	
1.01 or More Persons per Room		Percent (%) Share of Occupied Units	No Fuel Used	Percent (%) Share of Occupied Units	Lacking Complete Facilities	Percent (%) Share of Occupied Units	Lacking Complete Facilities	Percent (%) Share of Occupied Units
1990	184	n/a	41	n/a	144	n/a	164	n/a
2000	226	9.6	22	0.9	11	0.4	16	0.6

Notes: A single housing unit may fall into more than one category.
Source: 1998 EAR, Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 26
TOTAL SUBSTANDARD UNITS
(1990)

OCCUPIED UNITS
201

Notes: Occupied housing units exhibiting one or more of the following characteristics: Lacking complete plumbing or kitchen facilities, 1.01+ person per room, no heating fuel
Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

ASSISTED HOUSING

A variety of housing assistance programs are available through several federal, state and local agencies to aid families and individuals. At the time of this EAR, there were 256 assisted renter-occupied housing units in the City. The following two tables list the number of assisted renter-occupied housing developments, and corresponding number of units which were available for rental assistance to eligible persons at the time of this EAR. The second table provides the number of housing vouchers distributed by the Housing Authority.

TABLE I – 27
INVENTORY OF FEDERAL, STATE AND LOCAL – ASSISTED RENTAL HOUSING

Development Name	Street Address	Total Units	Assisted Units	Occupancy Status	Housing Program(s)	Population or Targeted Area
Meadows Phase I	1600 SE Helvenston St.	51	51	Ready for Occupancy	Rental Assistance/RD Section 515	Family
Meadows Phase II	1600 SE Helvenston St.	36	36	Ready for Occupancy	Rental Assistance/RD Section 515	Elderly
Silas Oaks	1120 Silas Dr SW	110	110	Ready for Occupancy	Housing Credits 9%	Family
Village Oaks I	705 Northwest Dr.	32	32	Ready for Occupancy	Rental Assistance/RD Section 515	Family
Village Oaks II	705 Northwest Dr.	24	24	Ready for Occupancy	Rental Assistance/RD Section 515	Family
Anna's Village	McGee St. NW	18	3	Ready for Occupancy	HUD Rental Assistance	Family

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html; Mark Horman, Anna's Owner, (386)-365-0697.

TABLE I – 28
INVENTORY OF PUBLIC HOUSING – UNITS AND VOUCHERS

PHA NAME	AGENCY STREET ADDRESS	AGENCY PHONE #	PUBLIC HOUSING UNITS	HOUSING CHOICE VOUCHER (SECTION 8) UNITS	UNITS + VOUCHERS
Live Oak – McMullen Heights	406 Webb Dr. NE	386-362-2123	50	0	50
Live Oak – Harmony Triangle	406 Webb Dr. NE	386-362-2123	28	0	28
Live Oak – Phillips Pines	406 Webb Dr. NE	386-362-2123	26	0	26

Source: Florida Housing Data Clearinghouse, http://flhousingdata.shimberg.ufl.edu/index.html; 2010 & Live Oak Planning Department, 2010.

HOUSEHOLD PROJECTIONS

The following table provides an analysis of housing projections at the time of this EAR based on Owners and Renters, in regards to the need for affordable housing. Projections are analyzed according to the percentage of the average median income (AMI) earned by households.

TABLE I – 29
AFFORDABLE HOUSING NEED DETAIL – **OWNER**
Number of severely cost burdened (50%+)
households with income less than 80% AMI
by tenure and income level
2009-2030

Household Income as % of AMI	2009	2010	2015	2020	2025	2030
0-30 % AMI	92	90	92	96	100	102
30.1-50 % AMI	42	41	43	45	47	48
50.1-80 % AMI	36	37	37	38	40	40
Total	170	168	172	179	187	190

Source: Florida Housing Data Clearinghouse, 2010,
http://flhousingdata.shimberg.ufl.edu/index.html.

TABLE I – 30
AFFORDABLE HOUSING NEED DETAIL – **RENTER**
Number of severely cost burdened (50%+)
households with income less than 80% AMI
by tenure and income level
2009-2030

Household Income as % of AMI	2009	2010	2015	2020	2025	2030
0-30 % AMI	80	79	78	77	77	75
30.1-50 % AMI	20	21	21	21	22	22
50.1-80 % AMI	11	11	12	12	13	13
Total	111	111	111	110	112	110

Source: Florida Housing Data Clearinghouse, 2010,
http://flhousingdata.shimberg.ufl.edu/index.html.

AFFORDABLE HOUSING NEEDS

"Cost-burdened" households pay more than 30 percent of income for rent of mortgage costs.

TABLE I – 31
HOUSING UNITS BY COST BURDEN
Amount of Income Paid for Housing
(2000)

0-30%	30% or More	Not Computed
1,392	528	76

Source: Florida Housing Data Clearinghouse, 2010, http://flhousingdata.shimberg.ufl.edu/index.html.

C. Housing Issues s. 163.3191(2) (e) and (g), F.S.

Residential and commercial buildings make up about 39 percent of all carbon emissions in the United States. Single family homes, apartments, manufactured housing and other residential buildings account for slightly more than one-half of these emissions.[4] Consequently, green buildings can potentially be a significant source of energy savings.

During the 2008 legislative session, the Florida Legislature enacted House Bill 697 which established new local planning requirements relating to energy efficient land use patterns to address greenhouse gas reduction and energy conservation through more compact mixed-use development, greater jobs-housing balance and higher densities in appropriate places. The City will implement the requirements of House Bill 697.

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[4] Brown, Marilyn A., Frank Southworth, Andrea Sarzynski; "Blueprint for American Prosperity: Unleashing the Potential of a Metropolitan Nation – Shrinking the Carbon Footprint of Metropolitan America", Metropolitan Policy at Brookings, 2008.

Furthermore, a survey of the existing Housing Element resulted in the following issues being identified:

1. Objective III.6 and Policy III.6.1
   Reference the City Council when Objective I.9 references a designated Historic Preservation Agency.

2. Policy III.6.1 and 6.2
   Are redundant in that this language is or should be included in the Land Use Element of the Plan under I.9.

D. Proposed Changes s. 163.3191(2) (i), F.S.

During the Evaluation and Appraisal Report based amendment process, the Housing Element should be revised to reflect goals, objectives, and policies that comply with House Bill 697 to reduce greenhouse gases through more energy efficiency in the design and construction of new housing and the use of renewable energy resources. The Housing Element should also address providing for a range of housing opportunities in order to decrease commuting and its associated greenhouse gas emissions.[5] Additionally, the element should be revised to reflect the new planning period.

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[5] American Planning Association Policy Guide on Planning & Climate Change, April 27, 2008.

Furthermore, based on the survey of the existing Housing Element and the issues identified, the flowing changes will be proposed:

1. Objective III.6 and subsequent Policies
   Will reference historic housing as is found under Objective I.9.

2. Policies III.6.1 and 6.2
   Will be revised to reference Policies under Objective I.9.

I – 6.4 Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element

A. General Evaluation of the Element s. 163.3191(2) (h), F.S.

The Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element provides direction for the use, maintenance and location of public facilities in a timely, logical, economically feasible fashion and that is in conformance with the Future Land Use Element of the Comprehensive Plan. The Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element consist of six goals and nine objectives. The objectives in each element address issues such as undertaking capital improvement projects in accordance with the capital improvements schedule to correct existing deficiencies; coordinating the scheduling of the extensions, or expansions of: sewer, solid waste, drainage, and potable water facilities and requiring them to be concurrent with projected demand; requiring that certain densities of dwellings be directed to areas which are served by centralized potable water systems and sanitary sewer systems; coordinating with the Water Management District for the protection of recharge areas; assisting the Water Management District with the implementation of its water conservations rule, when water shortages are declared by the District and requiring construction activity to protect the functions of natural drainage features.

All level of service standards for services provided by the City continue to be met with available capacity to facilitate future development. All adopted standards have been determined to be sufficient and appropriate.

B. Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Issues s. 163.3191(2) (e) and (g), F.S.

Impervious surfaces are responsible for more stormwater runoff than any other type of land use. Paved surfaces that often replace vegetated areas increase the volume and frequency of rainfall runoff.[6] The addition of impervious surfaces, soil compaction, and tree and vegetation removal result in alterations to the movement of water through the environment, As interception, evapotranspiration, and infiltration are reduced and precipitation is converted to overland flow, these modifications affect not only the characteristics of the developed site but also the watershed in which the development is located.

Stormwater is one of the leading sources of pollution for all water-body types in the United States.[7] The impacts of stormwater pollution are not static but are instead fluid, and increase with more development and urbanization. Many smart growth approaches can decrease the overall amount of impervious cover associated with a development's footprint. These approaches include directing development to already degraded land; using narrower roads; designing smaller parking lots; integrating retail, commercial, and residential uses; and designing more compact residential lots. These development approaches, combined with other techniques aimed at reducing the impact of development, can offer communities superior stormwater management.[8]

Low Impact Development (LID) is a stormwater management approach and a set of practices designed to reduce runoff and pollutant loadings by using natural systems – or engineered systems that mimic natural processes such as infiltration, evapotranspiration, and reuse of rainwater – to enhance overall environmental quality and provide utility services.[9] Low Impact Development techniques manage water and water pollutants from the site at which they are generated and thereby prevent or reduce the impact of development on rivers, streams, lakes, coastal waters, and ground water. By mimicking the natural water cycle, Low Impact Development practices protect downstream resources from adverse pollutant and hydrologic impacts that can degrade stream channels and harm aquatic life.[10] In addition to effectively

retaining and infiltrating rainfall, this green infrastructure approach can simultaneously help filter air pollutants, reduce energy demands and sequester carbon while also providing communities with aesthetic and natural resource benefits.

Low Impact Development designs usually incorporate more than one type of practice or technique linked together on the site to provide integrated treatment of runoff form a site. Integrating small practices throughout a site such as a bioretention area in each yard, disconnect downspouts from driveway surfaces, remove curbs and install grassed swales in common areas instead of using extended detention wet ponds to control runoff from a subdivision is the basis for the Low Impact Development approach.[11] Implementing integrated Low Impact Development practices can result in enhanced environmental performance while at the same time reducing development costs when compared to traditional stormwater management approaches. Cost savings are typically seen in reduced infrastructure because the total volume of runoff to be managed is minimized through infiltration and evapotranspiration.[12]

The Florida Legislature enacted House Bill 697 during the 2008 session which established new local planning requirements relating to energy efficient land use patterns to address greenhouse gas reduction and energy conservation through more compact mixed-use development and higher densities in appropriate places.

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[6] U.S. Department of Environmental Protection. Low Impact Development (LID) A Literature Review. EPA 841-B-00-005.

[7] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

[8] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

[9] U.S. Environmental Protection Agency. Managing Wet Weather with Green Infrastructure. Accessed at http://cfpub.eda.gov/npdes/greeninfrastructure/information.cfm on 12/1/2010.

[10] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

[11] U.S. Environmental Protection Agency. Managing Wet Weather with Green Infrastructure. Accessed at http://cfpub.eda.gov/npdes/greeninfrastructure/information.cfm on 12/1/2010.

[12] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

Furthermore, a survey of the existing Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element resulted in the following issues being identified:

1. Objective IV.2 / Policy IV.2.1
   Needs to be renumbered to Objective IV.2.1 and Policy IV.2.1.1 respectively.

2. Objective IV.2.2
   A new objective is needed regarding sanitary sewer facilities and septic systems and to reflect areas which are designated as high aquifer recharge areas.
3. Policy IV.2.2
   Needs to be renumbered to IV.2.2.1 and should state required standards for development pertaining to the location of septic systems in these areas.

4. A new policy under IV.2.2 (IV.2.2.2)
   Is needed which addresses parcels which may be located in a high risk flood area according to the FEMA Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map.

5. A new policy under IV.2.2 (IV.2.2.3)
   Is needed, similar to existing Policy IV.5.2 pertaining residential development on a particular parcel size.

6. A new policy is needed under IV.2.2 (IV.2.2.4)
   To reflect required connection when sewer is available as defined in the LDR.

7. A new policy is needed under IV.2.2 (IV.2.2.5)
   Regarding extension, alteration or repair of any septic tank system when sewer is available.

8. Policy IV.2.3
   Should reference systems which are also proposed to be installed.

9. It would be in the best interests of the City to also reference Commercial Zoning under Policy IV.2.3 (1).

10. A new policy is needed under IV.3
    Pertaining to non-residential locations being required to utilize the City's solid waste services and facilities.

11. A new policy is needed under IV.4
    Regarding development being prohibited from creating, or being required to remedy, any stormwater drainage which at any point enters an improved street right-of-way as sheet flow.

12. A new policy is needed under IV.5
    Pertaining to mandatory new or ongoing connection to potable water when is available as defined in LDR.

13. Policy IV.5.2
    Needs to be amended to reflect residential densities and construction on parcels less than one acre pertaining to potable water. References to sanitary sewer should be under IV.2.

14. Objective IV.6
    Language pertaining to discharge of sanitary sewer facilities should be relocated under Objective IV.2.2 in the Sanitary Sewer Facility Element and this objective should pertain to the overall protection of surface and groundwater quality and quantity.

C. Proposed Changes s. 163.3191(2) (i), F.S.

The City should amend the Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Elements of the Comprehensive Plan to adopt policies concerning Low Impact Development practices, such as:

1. Conservation designs which allow for cluster development, open space preservation reduced pavement widths of streets and sidewalks, shared driveways, reduced setbacks for shorter driveways;

2. Infiltration basins and trenches, porous pavement, disconnected downspouts, rain gardens and other vegetated treatment systems;

3. Runoff storage to capture and store stormwater runoff for reuse or gradually infiltrated, evaporated, or used to irrigate plants. Parking lot, street and sidewalk storage; rain barrels and cisterns; depressional storage in landscape islands and in tree, shrub, or turf depressions; green roofs;
4. Runoff conveyance to route excess runoff though and off the site. Such systems can be used to slow flow velocities, lengthen the runoff time of concentration, and delay peak flows that are discharged off-site. Low Impact Development conveyance practices can be used as an alternative to curb-and-gutter systems, typically have rough surfaces which slow runoff and increase evaporation and settling of solids. Additionally they are permeable and vegetated, which promotes infiltration, filtration and some biological uptake of pollutants;
5. Filtration is used to treat runoff by filtering it through media that are designed to capture pollutants through the processes of physical filtration of solids and/or cation exchange of dissolved pollutants. Examples are bioretention/rain gardens, vegetated swales, vegetated filter strips/buffers; and
6. Low impact landscaping includes planting native, drought tolerant, converting turf areas to shrubs and trees, reforestation, encouraging longer grass length, planting wildflower meadows rather than turf along medians and in open space, amending soil to improve infiltration.[13]

As a result of implementing Low Impact Development practices, the City should experience benefit such as: reduction in both the volume of runoff and the pollutant loadings discharged into receiving waters; better protection of water resources that are downstream in the watershed; infiltration of runoff to recharge groundwater and increase stream base-flow; reduction in water supply treatment costs when there is a high percentage of forest cover in the watershed improve natural resources and wildlife habitat, maintain or increase land value, or avoid expensive mitigation costs; reduced downstream flooding through the reduction of peak flows and the total amount or volume of runoff; aesthetically pleasing amenities like water features, open space, and trails.[14] Designs that enhance the aesthetics of a property using trees, shrubs, and flowering plants that complement other landscaping features can also be selected.[15]

Therefore, during the EAR based amendments process, the City should implement the requirements of House Bill 697 by amending the Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Elements of the Comprehensive Plan to reflect goals, objectives, and policies that reduce greenhouse gasses by ensuring the availability of public facilities and services in the designated urban development areas to support more compact mixed-use development, discourage urban sprawl and implement Low Impact Development practices. Additionally, the element should be revised to reflect the new planning period.

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[13] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

[14] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

[15] U.S. Department of Environmental Protection. Low Impact Development (LID) A Literature Review. EPA 841-B-00-005.

Furthermore, based on the survey of the existing Sanitary Sewer, Solid Waste, Drainage, Potable Water and Natural Groundwater Aquifer Recharge Element and the issues identified, the flowing changes will be proposed:

1. Objective IV.2 / Policy IV.2.1
   Will be renumbered to Objective IV.2.1 and Policy IV.2.1.1 respectively.

2. Objective IV.2.2
   A new objective will be proposed concerning allowances for sanitary sewer facilities and septic systems in areas which are designated as high aquifer recharge areas.

3. Policy IV.2.2
   Will be renumbered to IV.2.2.1 and will state required standards for development pertaining to the location of septic systems in these areas.

4. A new policy under IV.2 (IV.2.2.2)
   Will be added which addresses parcels which may be located in a high risk flood area according to the FEMA Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map.

5. A new policy under IV.2 (IV.2.2.3)
   Similar to existing Policy IV.5.2 will be added pertaining residential development on a particular parcel size.

6. A new policy is needed under IV.2 (IV.2.2.4)
   To reflect required connection when sewer is available as defined in the LDR.

7. A new policy under IV.2 (IV.2.2.5)
   Will be added regarding extension, alteration or repair of any septic tank system when sewer is available.

8. Policy IV.2.3
   Will be amended to reference systems which are also proposed to be installed.

9. Commercial Zoning will be added under Policy IV.2.3 (1).

10. A new policy under IV.3
    Will be added pertaining to non-residential locations being required to utilize the City's solid waste services and facilities.

11. A new policy under IV.4
    Will be added regarding development being prohibited from creating, or being required to remedy, any stormwater drainage which at any point enters an improved street right-of-way as sheet flow.

12. A new policy under IV.5
    Will be added pertaining to mandatory new or ongoing connection to potable water when is available as defined in LDR.

13. Policy IV.5.2
    Will be amended to reflect residential densities and construction on parcels less than one acre pertaining to potable water. All references to sanitary sewer will be under IV.2.

14. Objective IV.6
    Language pertaining to discharge of sanitary sewer facilities will be relocated under Objective IV.2.2 in the Sanitary Sewer Facility Element and this objective will be reworded to pertain to the overall protection of surface and groundwater quality and quantity.

I – 6.5 Conservation Element

A. General Evaluation of the Element s. 163.3191(2) (h), F.S.

The Conservation Element establishes a guide for the conservation, use, and protection of the City's natural resources. The City has developed a series of maps which indentify flood prone areas, wetlands, existing and planned water-wells, rivers, bays, lakes, minerals and soils. The Future Land Use Plan Map addresses conservation future land use, which are lands within the City that are anticipated to have planned management of a natural resource to prevent exploitation, destruction or neglect of natural resources.

The Conservation Element consists of one goal and five objectives. The objectives address issues such as: enforcing provisions within the site plan review process to protect air quality; protecting the quality and quantity of current and projected water sources; providing for the conservation, appropriate use and protection of soils, minerals, and native vegetative communities; the protection of native wildlife and their habitats; and the adoption of maps in order to protect significant natural resources.

A. Conservation Issues s. 163.3191(2) (e) and (g), F.S.

Climate change could pose a major threat to functioning ecosystems in the area. Both rising temperatures and more extreme rainfall could lead to increased water runoff, flooding, greater water turbidity, nutrient loading and poor water quality, all of which could cause negative impacts.

To mitigate for those impacts and enable the ecosystems to be more resilient, the City should establish an integrated land-use planning and natural resource management system which is flexible, adaptive and based on monitoring. This system can be used to develop a protected and connected green infrastructure network, linking to nodes of carefully planned developments interconnected by a multi-modal transportation network. Without such a natural resource management system, habitats may be reduced, fragment and degraded, thus limiting the ability of wildlife to adapt to the impacts of climate change.[16]

Therefore, the City should coordinate with other appropriate agencies and organizations to plan for conservation corridors that will provide the connected, functional migratory wildlife corridors that may be needed as climate change occurs. The City should coordinate with the appropriate agencies and organizations to identify the critical corridors that exist within the City boundaries in order to protect them, before development can occur. If those critical areas are not identified and preserved, then the result will be fragmented instead of connected, wildlife corridors and inefficient, sprawling developments.[17]

To avoid the wildlife habitat from becoming increasingly isolated from one another by development which often dissect the landscape with new roads and leaves behind habitats that resemble islands within an urban sea that result in deduced populations of animals and plants more vulnerable to extinction. The intent should be to prevent land use decisions that will fragment or block corridors that are vital for enabling wildlife to migrate.[18]

By integrating wildlife conservation issues into current land-use planning, plans can be developed to show what lands need to be conserved and how they should be preserved in order to provide the necessary wildlife habitat in the future. As a result, future development can be planned to be compatible with the protected habitat.

Since there are not sufficient public funds to buy enough land to provide the habitat that will be needed, as an important part of addressing climate change, private landowners with important wildlife habitat will need to be provided conservation incentives.

Green infrastructure can be defined as "an interconnected network of protected land and water that supports native species, maintains natural ecological processes, sustains air and water resources and contributes to the health and quality of life for America's communities and people".[19] Green infrastructure can include greenways, parks, wetlands, forests, and other natural areas that help manage stormwater, reduce the risk of flooding, improve water quality, provide natural "air conditioning", offer pollution control and provide other ecological and recreational services.[20]

Some of the major stressors to wildlife include, but are not limited to: the removal of native vegetation and alteration of micro-climates supportive of local species; suburban and urban development that fragment habitats and isolate plant and wildlife populations; the addition of nighttime lighting and noise which disrupts normal behavior, disorients animal functions and reduces ranging areas; global climate change, causing changes in natural processes faster than many species can respond.[21]

Thoughtful planning at the community level can lessen the impacts from these stressors. Many smaller creatures can find sufficient habitat to survive in suburban and urban environments if their basic needs are recognized and integrated into the developed landscape. To promote sustained biodiversity, a community first must identify local wildlife and habitats, and then ensure that basic necessities for survival are sustained, including food, cover, water, living and reproductive space, and limits on disturbances. Fortunately, more and more communities, landowners and developers are beginning to integrate wildlife features into their local landscapes.[22]

As the City works to create wildlife-friendly communities, it is important to understand more about the key concepts of patches, corridors, and edge effects. Patches are discrete landscape areas which offer better survival prospects for wildlife and including food, cover, water living space, and limits on disturbances. The size, shape, and spatial relationships of habitat patches on the landscape affect the structure and function of ecosystems. Human impacts tend to lead to smaller and smaller patches – or islands – of living space. Settlement patterns and land use decisions that fragment the landscape and alter natural land cover patterns lead to changes in physical factors, shifts in habitat use, altered population dynamics, and changes in species composition. Patches are further fragmented by development impacts including roads and subdivisions. Habitat fragmentation decreases in the size or wholeness of habitat patches and causes increases in the distance between habitat patches of the same type. This can greatly reduce or eliminate populations of organisms, as well as alter local ecosystem processes.[23]

A corridor can be defined as a strip of land that aids in the movement of species between disconnected patches of their natural habitat. This habitat typically includes areas that provide food, breeding ground, shelter, and other functions necessary to thrive. Not only can human impact affect the size of patches, as described earlier, but it can also cause animals to lose the ability to move between patches. Through careful planning and design, wildlife corridors can lessen the negative effects of habitat fragmentation by linking patches of remaining habitat. Corridors can be incorporated into the design of a development project either by conserving an existing landscape linkage, or by restoring habitat to function as a connection between protected areas onsite, off-site and through-site.[24]

The environmental impacts of development can pose challenges for communities striving to protect their natural resources. Development that uses land efficiently and protects undisturbed natural land allows a community to grow and still protect its water resources. Low Impact Development (LID) techniques promote the use of natural systems, which can effectively remove nutrients, pathogens, and metals from

stormwater. Through the use of Low Impact Development practices the City should experience many amenities and associated economic benefits that go beyond cost savings. These include enhanced property values, improved habitat, aesthetic amenities, and improved quality of life.[25] Additional wildlife habitat and recreational space such as greenways, parks, urban forests, wetlands, and vegetated swales are all forms of green infrastructure that provide increased access to recreational space and wildlife habitat.[26]

During the 2008 session the Florida Legislature enacted House Bill 697 which established new local planning requirements relating to energy efficient land use patterns to address greenhouse gas reduction and energy conservation through more compact mixed-use development and higher densities in appropriate places.

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[16] Scott, Jean. "Florida's Wildlife: On the Frontline of Climate Change" Florida Fish and Wildlife Conservation Commission – Climate Change Summit Report 2009.

[17] Scott, Jean. "Florida's Wildlife: On the Frontline of Climate Change" Florida Fish and Wildlife Conservation Commission – Climate Change Summit Report 2009.

[18] Cerulean, Susan. "Wildlife 2060: What's at stake for Florida?" Florida Fish and Wildlife Conservation Commission, August 2008.

[19] Wildlife Habitat Planning Strategies, Design Features and Best Management Practices for Florida Communities and Land owners, 1000 Friends of Florida, 2007.

[20] Scott, Jean. "Florida's Wildlife: On the Frontline of Climate Change" Florida Fish and Wildlife Conservation Commission – Climate Change Summit Report 2009.

[21] Wildlife Habitat Planning Strategies, Design Features and Best Management Practices for Florida Communities and Land owners, 1000 Friends of Florida, 2007.

[22] Wildlife Habitat Planning Strategies, Design Features and Best Management Practices for Florida Communities and Land owners, 1000 Friends of Florida, 2007.

[23] Wildlife Habitat Planning Strategies, Design Features and Best Management Practices for Florida Communities and Land owners, 1000 Friends of Florida, 2007.

[24] Wildlife Habitat Planning Strategies, Design Features and Best Management Practices for Florida Communities and Land owners, 1000 Friends of Florida, 2007.

[25] U.S. Department of Environmental Protection. Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices. EPA 841-F07-006.

[26] U.S. Environmental Protection Agency. Managing Wet Weather with Green Infrastructure. Accessed at http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm on 12/1/2010.

Furthermore, a survey of the existing Conservation Element resulted in the following issues being identified:

1. Introduction currently states there are no Conservation areas in the City, however, there currently is one small 0.26 acres parcel which was amended to Conservation in 2001 as

part of actions taken pertaining to the El Nino event of 1998 which heavily flooded many areas in the City and County.

2. Introduction states the "Future Land Use Plan Map may identify flood prone areas"...and later states the FLUPM series. 'Series' should be used in all instances with additional reference to other published applicable data from official sources, IE Suwannee River Water Management District, FEMA, DEP, EPA, etc.

3. Policy V.2.5
   This language should also be reflected under IV.4 of the Drainage Sub Element.

4. Policy V.2.7 and Policy V.2.8 (1)
   Needs to state 'sufficient height to exceed by two feet' and 'the greater of two feet above base flood elevation or highest adjacent grade'.

5. Policy V.2.8
   Needs to also reference prevention of clearing or removal of native vegetation.

6. Policy V.2.8 (4)
   Reference to drain fields and septic tanks should state a certain distance outside the wetlands.

C. Proposed Changes s. 163.3191 (2) (i), F.S.

The City should promote green infrastructure by supporting the protection, design, development and management of natural systems such as urban forests, parks and open spaces, green roofs, and natural drainage systems for green infrastructure. Natural assets such as plants and soils that are a part of the green infrastructure serve as sources of carbon sequestration, also known as 'carbon sinks', where carbon dioxide is captured and removed from the atmosphere via photosynthesis and other natural processes.[27]

The City should indentify and map the nature preserves and other areas that remain in a natural state – such as grasslands, wetlands or forests serving as carbon sinks to trap carbon from the atmosphere. These natural systems form an important part of the infrastructure framework upon which the City's climate change planning should be based. Disturbance of these areas releases carbon into the atmosphere; protecting them prevents this release and additional plantings in these areas may trap additional carbon and reduce its level in the atmosphere.

Green infrastructure facilitates the incorporation of trees and vegetation in urban landscapes, which can contribute to improved air quality. Trees and vegetation absorb certain pollutants from the air through leaf uptake and contact removal.

The City should use and enhance its natural environmental assets as an integral part of the infrastructure in an effort to reduce the City's impact on climate change and increase its ability to adapt to changes that may occur. For instance, shade from the urban forest reduces the need for air conditioning in the summer, thus reducing electrical demand and the greenhouse gas emissions caused by electrical generation and transmission. Preservation of urban forests found in floodplain or other low-lying areas also enables the community to adapt should future changes in global climate increase the intensity of flooding.

Due to the changing weather pattern driven by climate change and the growth of new sprawling development, areas likely to experience floods and wildfires are expanding and threatening more

populations. Therefore, the City should be made more resilient and defensible to the effects of climate change through the implementation of conservation policies that encourage development in areas away from hazards such as wildfires, land erosion and floods.[28] Green infrastructure provides a framework for implementing adaptive ecosystem management and flood hazard mitigation strategies, the City should amend the Conservation Element of the Comprehensive Plan to include policies regarding green infrastructure.

Therefore, during the Evaluation and Appraisal Report based amendment process, the City should implement the requirements of House Bill 697 by amending the Conservation Element of the Comprehensive Plan to reflect goals, objectives, and policies that reduce greenhouse gasses through more compact mixed-use development; the discouragement of urban sprawl; energy efficient land use patterns that account for existing and future electric power generation and transmission systems; greenhouse gas reduction strategies; promote Low Impact Development and green infrastructure; depiction of energy conservation areas on the Future Land Use Plan Map, and addressing factors that affect energy conservation. Additionally, the element should be revised to reflect the new planning period.

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[27] U.S. Environmental Protection Agency. Managing Wet Weather with Green Infrastructure. Accessed at http://cfpub.epa.gov/npdes/greeninfrastructure/information.cfm on 12/1/2010.

[28] American Planning Association Policy Guide on Planning & Climate Change, April 27, 2008.

Furthermore, based on the survey of the existing Conservation Element and the issues identified, the flowing changes will be proposed:

1. Introduction will be revised to reference the one small 0.26 acres parcel which was amended to Conservation in 2001 as part of actions taken pertaining to the El Nino event of 1998 which heavily flooded many areas in the City and County.

2. Introduction will be revised to reflect 'Series' in all instances with additional reference to other published applicable data from official sources, IE Suwannee River Water Management District, FEMA, DEP, EPA, etc.

3. Policy V.2.5
   This language will also be reflected under IV.4 of the Drainage Sub Element.

4. Policy V.2.7 and Policy V.2.8 (1)
   Will be revised to state 'sufficient height to exceed by two feet' and 'the greater of two feet above base flood elevation or highest adjacent grade'.

5. Policy V.2.8
   Will be revised to state a reference to prevention of clearing or removal of native vegetation.

6. Policy V.2.8 (4)
   Will be revised with requirement for drain fields to be located no closer than 500 feet to designated wetlands.

I – 6.6 Recreation and Open-Space Element

A. General Evaluation of the Element s. 163.3191 (2) (h), F.S.

The Recreation and Open Space Element establishes guidelines for the proper relationship in size and type of different parks and recreation areas, and open space buffer areas, in order to achieve a well balanced recreation and open space system for the City. The Recreation and Open Space Element consists of one Goal and seven Objectives. The objectives address: the assessment of the needs for certain acreage; providing vehicular and pedestrian access; maintaining accurate recreation and open space inventories; policy regarding new development to contribute as a funding source for recreation and open-space facilities; a Master Greenway Trail Map; scheduling acquisition of lands so that the inventory is concurrent with level of service standards; and establishing requirements for open space buffer areas on private development between differing classifications of uses. The level of service standards within the policies of the Recreation and Open Space Element provide the guidelines for determining the acceptable quantities for recreational and open space lands for the City's population.

B. Summary of Recreation and Open Space Analysis

The entire element was evaluated and updated in May of 2010. The level of service standards and inventory is reviewed on an annual basis with new data and analysis as part of the annual Capital Improvements Element update.

C. Recreation and Open Space Issues s. 163.3191 (2) (e) and (g), F.S.

House Bill 697 enacted during the 2008 legislative session establishes new local planning requirements relating to energy efficient land use patterns and transportation strategies to address greenhouse gas reduction and energy conservation. Since transportation is a major source of greenhouse gas emissions, planning for fewer and shorter automobile trips and alternative modes of travel such as walking and bicycling within more compact mixed-use urban areas would help reduce greenhouse emissions from the transportation sector. Providing recreational uses in close proximity to residential , commercial, and employment centers would encourage walking and bicycling and reduces the number and length of automobile trips.

A survey of the existing Recreation and Open Space Element resulted in the following issues being identified:

1. Objective VI.6
   Should also reference that the City shall continue to establish certain level of service standards for various facilities or area designations in relation to population, to coincide with the subsequent policy.

2. Objective VI.7
   Should reference that these open-space buffer areas are to be located on private development.

D. Proposed Changes s. 163.3191 (2) (i), F.S.

During the Evaluation and Appraisal Report based amendment process, the City will implement the requirements of House Bill 697 by amending the Recreation and Open Space Element to reflect goals, objectives, and policies that reduce greenhouse gases through the proximate location of recreational facilities to residential, commercial, and employment centers, and which would encourage walking and bicycling to reduce the number and length of automobile trips. Additionally, the element should be revised to reflect the new planning period.

Furthermore, based on the survey of the existing Conservation Element and the issues identified, the flowing changes will be proposed:

1. Objective VI.6
   Will be revised to reference that the City shall continue to establish certain level of service standards for various facilities or area designations in relation to population, to coincide with the subsequent policy.

2. Objective VI.7
   Will be revised to reference that these open-space buffer areas are to be located on private development.

I – 6.7 Intergovernmental Coordination Element

A. General Evaluation of the Element s. 163.3191 (2) (h), F.S.

The purpose of the Intergovernmental Coordination Element is to establish processes and procedures among the City and the various governmental, public, and private entities to coordinate development, preserve and improve quality of life, and efficiently use available resources. The element outlines intergovernmental coordination instruments which are used to implement agreements for services between the City and its governmental counterparts.

The Intergovernmental Coordination Element consists of one goal and nine objectives.

B. Intergovernmental Coordination Element Issues s. 163.3191 (2) (e) and (g), F.S.

Natural systems which provide green infrastructure to the community often extend beyond the City boundaries. Therefore, coordination with appropriate entities and agencies is necessary to ensure such systems are functioning at an optimal level.

The Florida Legislature enacted Senate Bill 360 during the 2009 session which makes it mandatory for local governments to use the regional planning council dispute resolution process for addressing intergovernmental disputes. The Intergovernmental Coordination Element of the Comprehensive Plan currently includes a policy stating that the City shall use the dispute resolution process of the regional planning council to address intergovernmental disputes.

A survey of the existing Recreation and Open Space Element resulted in the following issues being identified:

1. Policy VII.2.3
   Should state within 500 feet, not 2 miles.

2. Objective VII.4
   Should reflect both development/redevelopment and subdivision.

3. A new policy VII.4.2
   Is needed regarding development.

4. Policy VII.6.4
   Should reflect ongoing annual meetings with the School Board.

C. Proposed Changes s. 163.3191 (2) (i), F.S.

Based on the survey of the existing Conservation Element and the issues identified, the flowing changes will be proposed:

1. Policy VIII.2.3
   Will be revised to state within 500 feet, not 2 miles.

2. Objective VII.4
   Will be revised to reflect both development/redevelopment and subdivision.

3. A new Policy, VII.4.2
   Will be added regarding development or redevelopment proposals.

4. Policy VII.6.4
   Will be revised to reflect ongoing annual meetings with the School Board.

Additionally, the element should be revised to reflect the new planning period.

I – 6.8 Capital Improvement Element

A. General Evaluation of the Element s. 163.3191 (2) (h), F.S.

The purpose of this element is to adequately provide needed public facilities to all residents within the City's jurisdiction in a manner which protects investment in existing facilities, maximizes the use of existing facilities, and promotes orderly compact urban growth. The Capital Improvements Element provides a strategic plan for the financing and construction of improvements addressed within other elements of the Comprehensive Plan.

The Capital Improvements Element consists of one goal and four objectives.

B. Financial Feasibility s 163.3191 (2) (c), F.S.

No capital improvements are needed. Therefore, funding sources do not need to be identified.

C. Capital Improvement Issues s. 163.3191 (2) (e) and (g), F.S.

A survey of the existing Capital Improvements Element resulted in the following issues being identified:

1. Objective VIII.2
   Still has a reference to the 1991 adoption of the Plan and needs updating.

2. Policy VIII.2.1, Traffic Circulation
   Should reference the 2009 handbook, not the 2002 version.

3. All roadway segment references should be revised to reflect the changes proposed in the Traffic Circulation Element section of this EAR.

D. Proposed Changes s 163.3191 (2) (i), F.S.

Based on the survey of the existing Capital Improvements Element and the issues identified, the flowing changes will be proposed:

1. Objective VIII.2
   Will be revised to reflect current policy and procedure.

2. Policy VIII.2.1, Traffic Circulation
   Will be revised to reference the 2009 handbook, not the 2002 version.

3. All roadway segment references will be revised to reflect the changes proposed in the Traffic Circulation Element section of this EAR.

Additionally, the element should be revised to reflect the new planning period.

I – 6.9 Public School Facilities Element and School Facility Planning

An assessment of the success or failure of coordinating future land uses and residential development with the capacity of existing and planned schools; establishing with the school board appropriate population projections and coordinating the planning and siting of new schools, evaluating exempt status. s. 163.3191 (2) (k), F.S.

A. General Evaluation of the Element s. 163.3191 (2) (h), F.S.

The passage of Senate Bill 360 in 2005 required that a public school facilities element and school concurrency become mandatory parts of comprehensive plans. In conformance with this new law, the City Council has entered into an interlocal agreement for public school facility planning in 2006 and adopted such an element into the Comprehensive Plan in 2008. The interlocal agreement was amended in 2009.

Through this interlocal agreement, which is in place and functioning, the City, the County, other Municipalities, and the School Board intends to closely coordinate their comprehensive land use and school facilities planning programs, namely:

1. Better coordination of new schools in time and place with land development;
2. Greater efficiency for the School Board and local governments by placing schools to take advantage of existing and planned roads, water, sewer and parks;
3. Improved student access and safety by coordinating the construction of new and expanded schools with the road and sidewalk construction programs of the local governments;
4. Better defined urban form by locating and designing schools to serve as community focal points;
5. Greater efficiency and convenience by co-locating schools with parks, ball-fields, libraries and other community facilities to take advantage of joint use opportunities; and
6. Reduction of pressures contributing to urban sprawl and support of existing neighborhoods by appropriately locating new schools and expanding and renovating existing schools, and jointly establishing ways in which the plans and processes of the District School Board and the local governments are to be coordinated, and implementation of school concurrency.

B. Public School Facilities Issues s. 163.3191 (2) (e) and (g), F.S.

There are no issues which have been identified.

C. Proposed Changes s 163.3191 (2) (i), F.S.

There are no proposed changes to the coordination of public school facilities and land use planning at this time. As stated above, the City, the County, the other Municipalities and the School Board have entered into an interlocal agreement, and the City of Live Oak has adopted a Public School Facilities Element, as required by statute. Additionally, the element should be revised to reflect the new planning period.

I – 6.10 Appendix A – List of Illustrations

A. General Evaluation of the Appendix A – List of Illustrations of the Comprehensive Plan.

The list of illustrations serves to provide visual map representations and charts pertaining to language found in the Plan.

B. List of Illustrations Issues.

1. A-I Future Land Use Plan Map - Outdated and needs updating.
2. A-II Historic Resources Map and Legend - Outdated and needs updating.
3. A-III Water-wells Map and Legend - Outdated and needs updating.
4. A-IV Rivers and Lakes Map - No issues identified.
5. A-V Flood Prone Areas Map - Outdated and needs updating.
6. A-VI Wetlands Map - Outdated and needs updating.
7. A-VII Minerals Map - No issues identified.
8. A-VIII Soil Associations Map and Legend - Outdated and needs updating.
9. A-IX Future Traffic Circulation Map - Outdated and needs updating.
10. A-IXa Emergency Evacuation Routes Map - No issues identified.
11. A-X Prime Natural Groundwater Aquifer Recharge Area Map - No issues identified.
12. A-Xia Regionally Significant Natural Resources Ground Water Resources Map - No issues identified.
13. A-XIb Regionally Significant Natural Resources Natural Systems Map - No issues identified.
14. A-XIc Regionally Significant Natural Resources Planning and Resource Management Areas 1 Map - No issues identified.
15. A-XId Regionally Significant Natural Resources Planning and Resource Management Areas 2 Map - No issues identified.
16. A-XId Regionally Significant Natural Resources Surface Water Resources Map - No issues identified.
17. A-XII Designated Urban Development Area Map - No issues identified.
18. A-XIII Live Oak Multi-Use Greenway Trail System Map - No issues identified.
19. A-XIV – A-XVII Public School Facilities Map Series - No issues identified.

Additionally, the Maps and Legends should be revised to reflect the new planning period and the current city boundary line.

C. Proposed Changes

1. A-I Future Land Use Plan Map – Will be updated.
2. A-II Historic Resources Map and Legend - Will be updated.
3. A-III Water-wells Map and Legend - Will be updated.
4. A-IV Rivers and Lakes Map - No issues identified.
5. A-V Flood Prone Areas Map - Will be updated.
6. A-VI Wetlands Map - Will be updated.
7. A-VII Minerals Map - No issues identified.
8. A-VIII Soil Associations Map and Legend - Will be updated.
9. A-IX Future Traffic Circulation Map - Will be updated.
10. A-IXa Emergency Evacuation Routes Map - No issues identified.
11. A-X Prime Natural Groundwater Aquifer Recharge Area Map - No issues identified.
12. A-Xia Regionally Significant Natural Resources Ground Water Resources Map - No issues identified.
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14. A-XIc Regionally Significant Natural Resources Planning and Resource Management Areas 1 Map - No issues identified.
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16. A-XId Regionally Significant Natural Resources Surface Water Resources Map - No issues identified.
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18. A-XIII Live Oak Multi-Use Greenway Trail System Map - No issues identified.
19. A-XIV – A-XVII Public School Facilities Map Series - No issues identified.

Additionally, the Maps and Legends will be revised to reflect the new planning period and the current city boundary line.

II.
EVALUATION OF MAJOR ISSUES

During the Evaluation and Appraisal Report based amendment process, changes to the goals, objectives, and policies of the Comprehensive Plan should be made to address the following two major issues identified in this Evaluation and Appraisal Report:

1. Economic Development; and
2. Climate Change.

II – 1 Economic Development

1. An assessment of the success or failure of coordinating future land uses and development to promote balanced and orderly economic growth;
2. Amending the Comprehensive Plan to include an economic development element; and
3. Coordinating and unifying economic development efforts with the County and other municipalities within the County.

II – 1.1 Community Development Needs

On November 30, 2010, City Staff completed a Small Cities CDBG Community Development Needs Survey, which was submitted to the Florida Department of Community Affairs. The purpose of this survey was to help the Florida Department of Community Affairs (DCA) determine the Small Cities Community Development Block Grant Program priority community development needs for the State of Florida Consolidated Plan.

The greatest program area need for the City of Live Oak was identified as economic development. Within the survey were sections pertaining to specific community development needs as follows:

1. Public Facilities;
2. Infrastructure Improvements;
3. Economic Development;
4. Other Community Development Needs – Housing Rehabilitation; and
5. Other Community Development Needs – Planning/Assistance

Within these classifications, the following needs were indicated as ‘high priority’.

Public Facilities

1. Parks and/or Recreation Facilities
2. Parking Facilities

Infrastructure Improvements

1. Flood and Drainage Improvements/Stormwater
2. Street Improvements/Road Paving
3. Sidewalk Improvements
4. Sewer Line Improvements
5. Sewer/Water Hookups
6. Water Line Improvements

Economic Development

1. Commercial-Industrial Rehabilitation
2. Commercial-Industrial Infrastructure
3. Job Creation

Other Community Development Needs – Housing Rehabilitation

1. Bringing LMI Homes Up to Code
2. Energy Efficient Improvements
3. Lead-Based Paint/Asbestos Removal

Other Community Development Needs – Planning/Assistance

1. Engineering for Sewer/Water Projects
2. Engineering for Sidewalk, Street, and Drainage Projects

The total estimated dollars needed for all these areas was estimated to be $29,200,000.

Additionally, within the survey, the ***lack of*** economic growth was attributed as the greatest factor in the following:

1. Need for expansion or improvements to the local infrastructure;
2. Need for additional units of affordable housing;
3. Need for rehabilitation of substandard housing in the community; and
4. Negative impact to the unemployment rate.

II – 1.2 Proposed Changes

The proposed changes to the Comprehensive Plan to further address economic development include creating an economic development element that will enhance economic prosperity for all citizens in the City. The element should consist of the following five objectives, under one goal of improving the economic development climate:

1. The City will further identify, classify, prioritize and seek financial feasible funding sources to address and improve the 16 identified needs as stated in the Small Cities CDBG Community Development Needs Survey which was completed in November of 2010;
2. The City will identify and track unemployment rates within the City, and will implement policies which serve to stimulate job creation, thus positively impacting the unemployment rate;
3. The City will achieve a diverse economic base to minimize the vulnerability of the local economy to economic fluctuations;
4. The City will support green technology establishments and business practices and centers, such as multi-use planned office parks, remote health care evaluation and monitoring, wireless communications and video conferencing, home offices, which encourage telecommunications and lower greenhouse gas emissions by enabling people to reduce vehicle miles traveled from home to work, or for a higher density of employees to occupy a structure which can connectivity to serve an international customer base. Included in this will be the support of businesses which use green practices;
5. The City will streamline the format of the Land Development Regulations, and retain the one-stop-shopping approach to developmental review and permitting.

II – 2 Climate Change

An assessment of the success or failure of coordinating future land uses and development to promote reduced carbon emissions; amending the Comprehensive Plan to include policies regarding climate change; and coordinating efforts within the County and Region.

At the time of this Evaluation and Appraisal Report, a cause of climate change is the accumulation of greenhouse gasses in the atmosphere die to human activity.

In 2005, carbon dioxide accounted for approximately 84 percent of all U.S. greenhouse gas emissions.[1] Carbon dioxide is formed by the burning of fossil fuels for energy. According to the U.S. Department of Energy, about 29 percent of all carbon dioxide emissions in the United States are from the transportation sector, 32 percent are from the industry sector, and 39 percent are from residential and commercial buildings.[2]

Residential and commercial projects that are built in an energy efficient manner have less building-related energy demands. Therefore, the Future Land Use Element and Housing Element of the Comprehensive Plan should be revised to reflect goals, objectives, and policies that reduce carbon emissions through more energy efficiency in the design and construction of new residential and commercial buildings, and to encourage the use of renewable energy resources.

In the transportation sector, carbon dioxide can be reduced in three different ways: first, through the use of fuel efficient vehicles such as hybrids; second, through the use of lower carbon fuels such as biodiesel; and third, through the reduction of vehicle miles traveled.[3] Unfortunately, however, despite the technological advances made in improving vehicle efficiency and fuel carbon content, carbon emissions will continue to increase if vehicle miles traveled are not reduced. Therefore, communities should begin to grow in ways that will make it easier to drive less.

The spatial arrangement of buildings and transportation infrastructure in a community can play a major role in carbon reduction because urban form links the energy consumed in different building designs, densities, and land-use configurations to the energy required to support daily travel and provide freight pickups and deliveries.[4] However, because much of the built environment has become automobile oriented, automobile trips and distances have increased, and alternative forms of transportation are rarely used.[5]

As a result, sprawling development patterns counterbalance the gains attributable to fuel efficiency and the use of alternative fuels.[6]

Therefore, it is important to have Comprehensive Plan policies that address where and how the community grows and develops, especially pertaining to the annexation of additional land, and in providing City utilities to new development in areas outside the Incorporated City Limits and/or Designated Urban Development Area, except to serve essential services. When there exists sufficient developable vacant property, or re-developable parcels, already within the existing boundaries, when those areas provide for more compact development and mixed-uses resulting in less vehicle miles traveled by employees and patrons, and when those areas are more accessible to be served by existing infrastructure, or by minimal expansions and extensions to the existing infrastructure, goals, objectives, and policies of the Comprehensive Plan should facilitate that growth and limit growth until those existing areas are built-out to a certain percentage. The reduction in vehicle miles traveled will require new and enhanced transportation and land use planning strategies, which will include planning for alternative modes of travel, more compact mixed-use development and greater jobs-housing balance. Because where

people live, work, and play are important issues for the community's sustainability and energy efficiency. Therefore, the City will amend the Comprehensive Plan to reflect goals, objectives, and policies that reduce greenhouse gases through transportation strategies; more compact mixed-use development; the discouragement and limitation of urban sprawl; energy efficient land use patterns that account for existing and future electric power generation and transmission systems; greenhouse gas reduction strategies; and depiction of energy conservation areas on the Future Land Use Plan Map.

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[1] Brown, Marilyn A., Frank Southworth, Andrea Sarzynski; "Blueprint for American Prosperity: Unleashing the Potential of a Metropolitan Nation – Shrinking the Carbon Footprint of Metropolitan America", Metropolitan Policy at Brookings, 2008.

[2] "Sustainable Urban Redevelopment and Climate Change: The Dual Benefits of Energy-Efficient Buildings in Energy Efficient Locations" For the Congressional Briefing Hosted by the Northeast-Midwest Institute Congressional Coalition, July 2008.

[3] Ewing, Reid, Keith Bartholomew, Steve Winkelman; "Growing Cooler: The Evidence on Urban Development and Climate Change" Urban Land Institute, Washington, D.C., 2007.

[4] Brown, Marilyn A., Frank Southworth, Andrea Sarzynski; "Blueprint for American Prosperity: Unleashing the Potential of a Metropolitan Nation – Shrinking the Carbon Footprint of Metropolitan America", Metropolitan Policy at Brookings, 2008.

[5] Ewing, Reid, Keith Bartholomew, Steve Winkelman; "Growing Cooler: The Evidence on Urban Development and Climate Change" Urban Land Institute, Washington, D.C., 2007.

[6] "Sustainable Urban Redevelopment and Climate Change: The Dual Benefits of Energy-Efficient Buildings in Energy Efficient Locations" For the Congressional Briefing Hosted by the Northeast-Midwest Institute Congressional Coalition, July 2008.

III.
SPECIAL TOPICS

This chapter of the Evaluation and Appraisal Report highlights two special topics:

1. The coordination of water supply planning with land use planning;
2. Strategies for addressing land uses within coastal high-hazard areas;
3. Compatibility with military installations; and
4. Concurrency exception areas, concurrency management areas, or multi-modal transportation districts; and

III – 1 **Water Supply Planning** s. 163.3191 (2) (l), F.S.

An assessment to the extent to which the City has identified water supply projects necessary to meet the needs identified in the water management district's regional water supply plan, and the degree to which the water supply facilities work plan has been implemented.

A. General Evaluation of Water Supply Planning and Land Use Planning Coordination

The Water management District has determined that the current water supply sources in its region are sufficient to meet projected needs for the next 20 years. As a result, the Water Management District has not identified any areas for which a regional water supply plan is needed. Therefore, there is no need for a water supply plan.

B. Proposed Changes

There are no proposed changes concerning water supply planning because the Water Management District has determined that there is sufficient water in the region and has not designated any water supply caution areas in the City.

III – 2 **Coastal High-Hazard Areas** s. 163.3191 (2) (m), F.S.

There are no areas within the City which are Coastal High-Hazard Areas, therefore, this requirement is not applicable to this Evaluation and Appraisal Report.

III – 3 **Military Installations** s. 163.3191 (2) (n), F.S.

There are no military installations within the City, therefore, this requirement is not applicable to this Evaluation and Appraisal Report.

III – 4 **Concurrency exception areas, concurrency management areas, or multi-modal transportation districts** s. 163.3191 (2) (o), F.S.

There are no concurrency exception areas, concurrency management areas, or multi-modal transportation districts within the City, therefore, this requirement is not applicable to this Evaluation and Appraisal Report.

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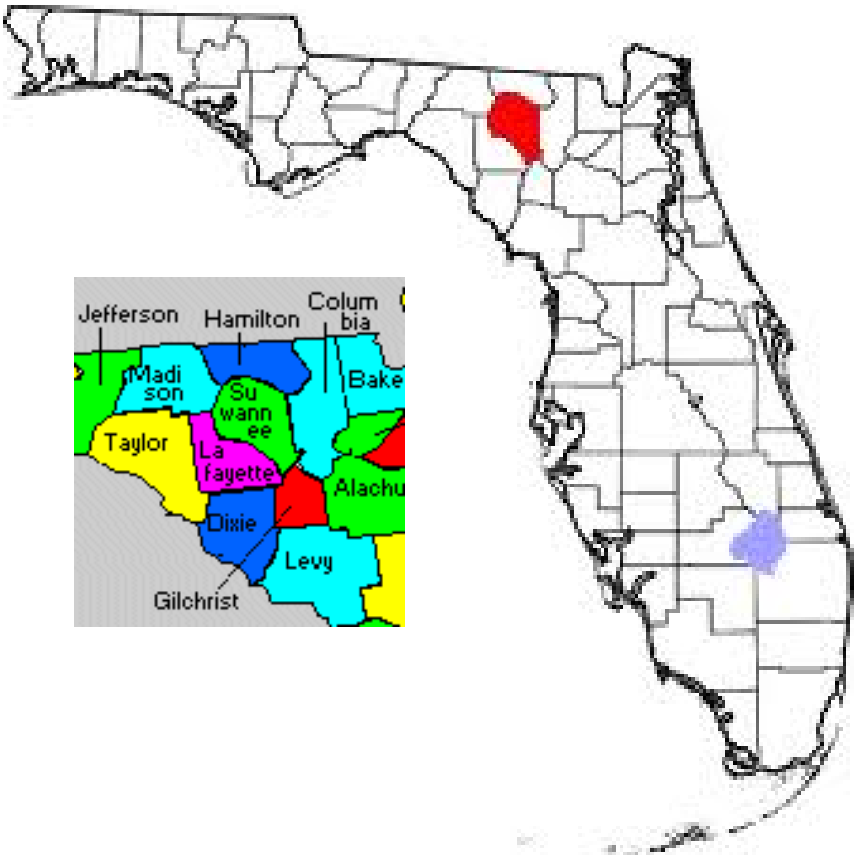
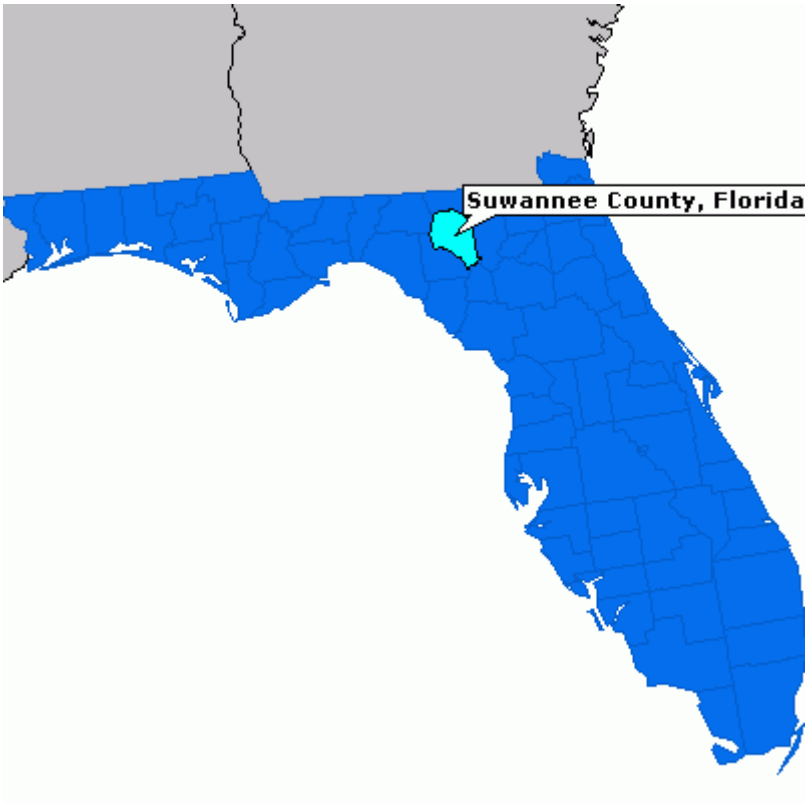
MAP – 1
Location of Suwannee County in the State of Florida
2011





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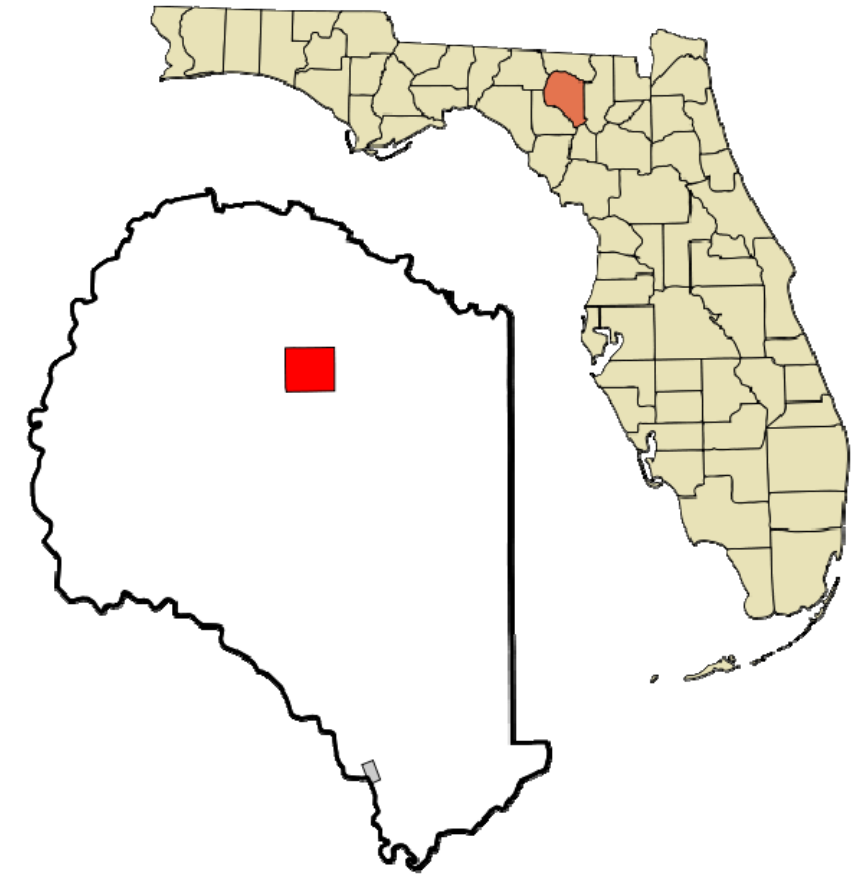
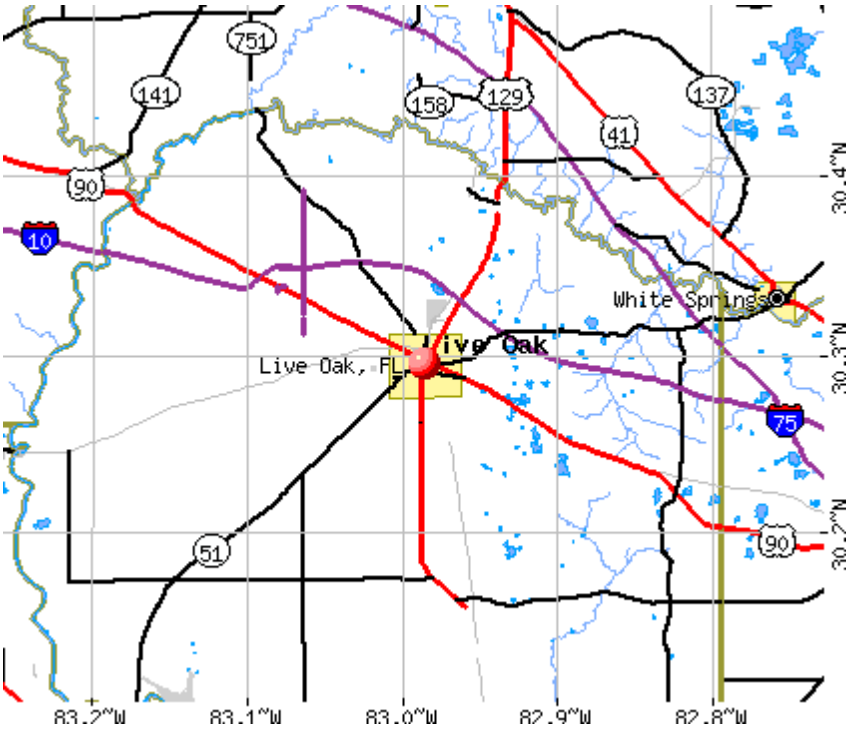
MAP – 2
Location of the City of Live Oak in Suwannee County
2011





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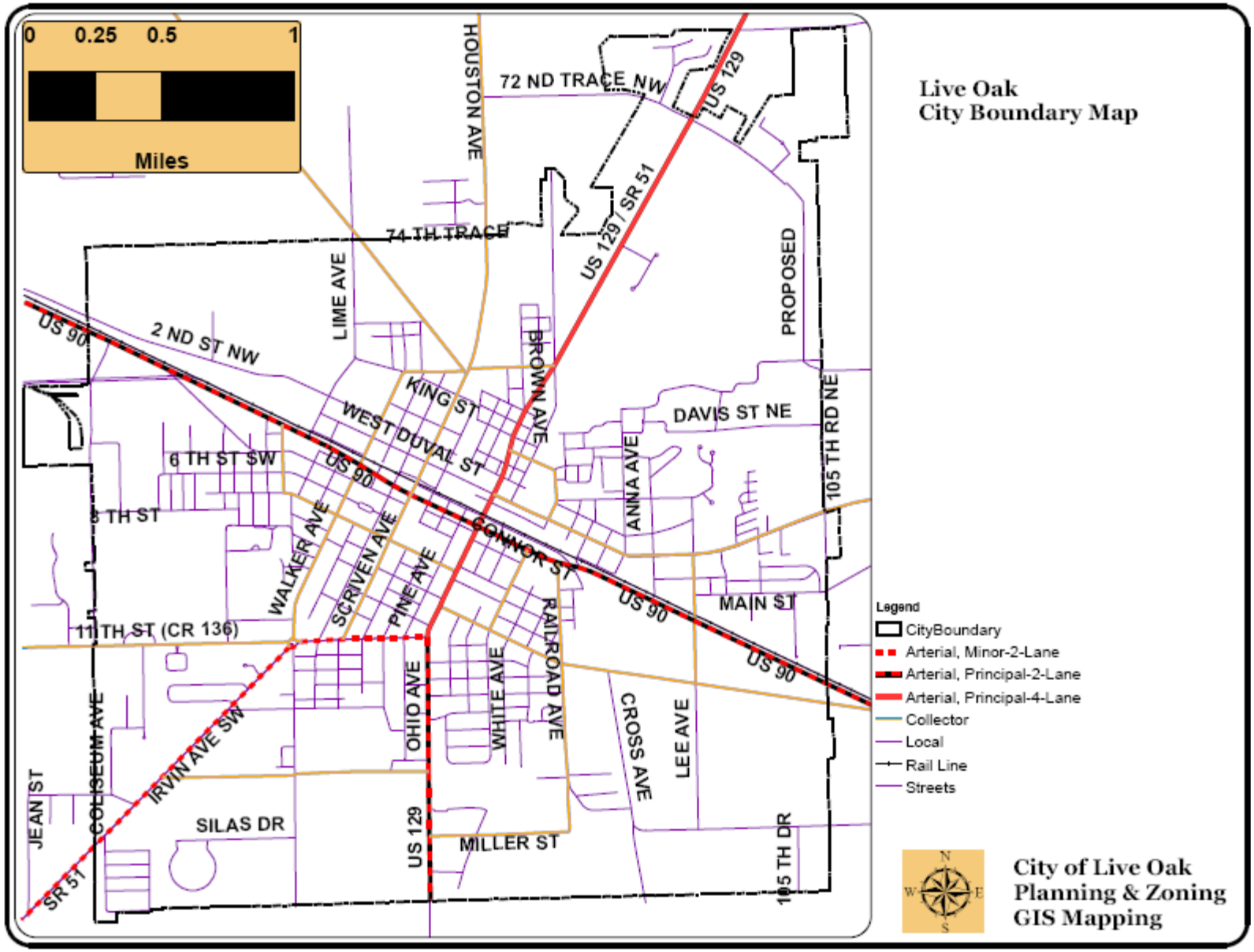
MAP – 3
City Boundary Map
2011



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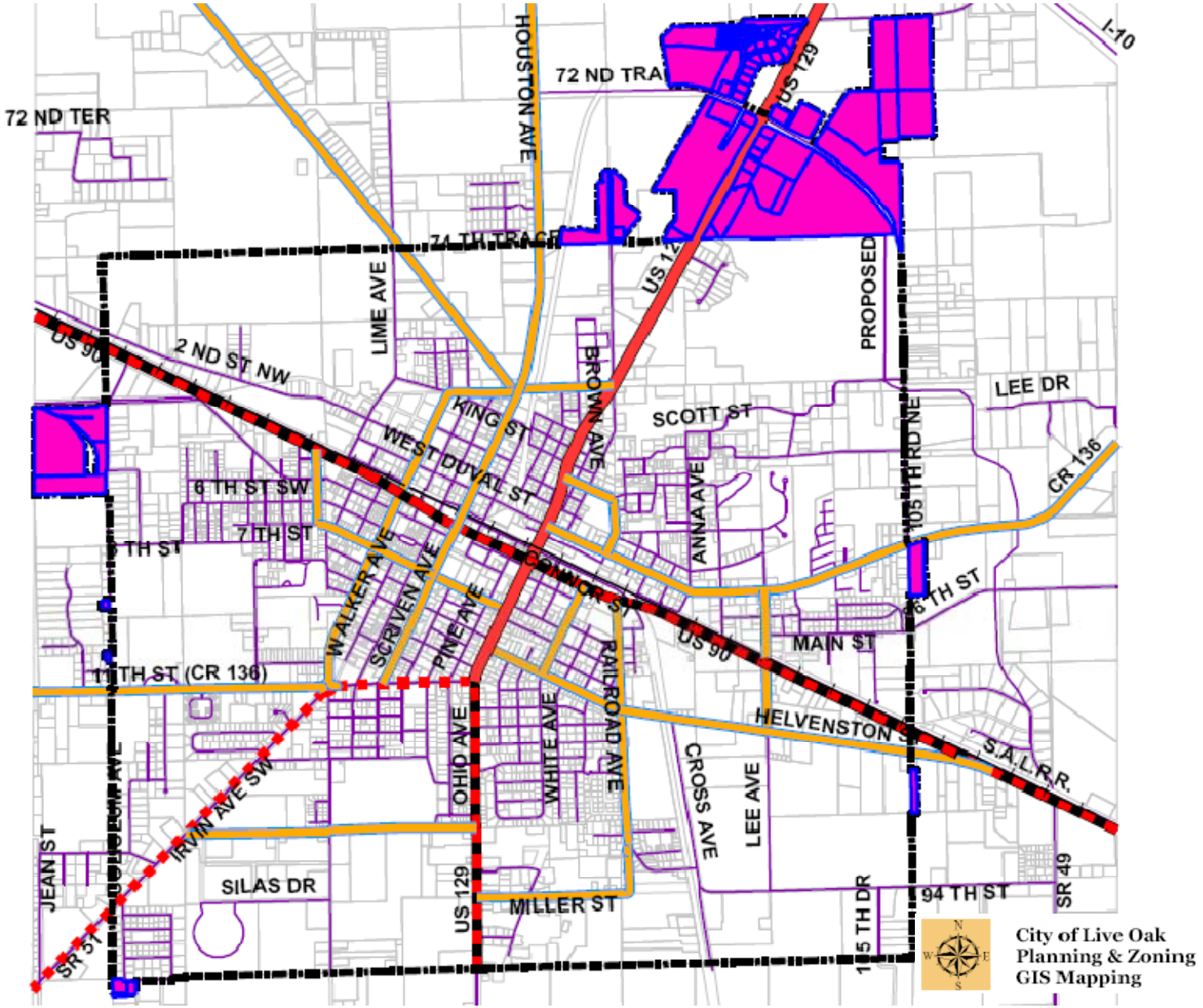
MAP – 4
Land Areas Annexed Into City
2011



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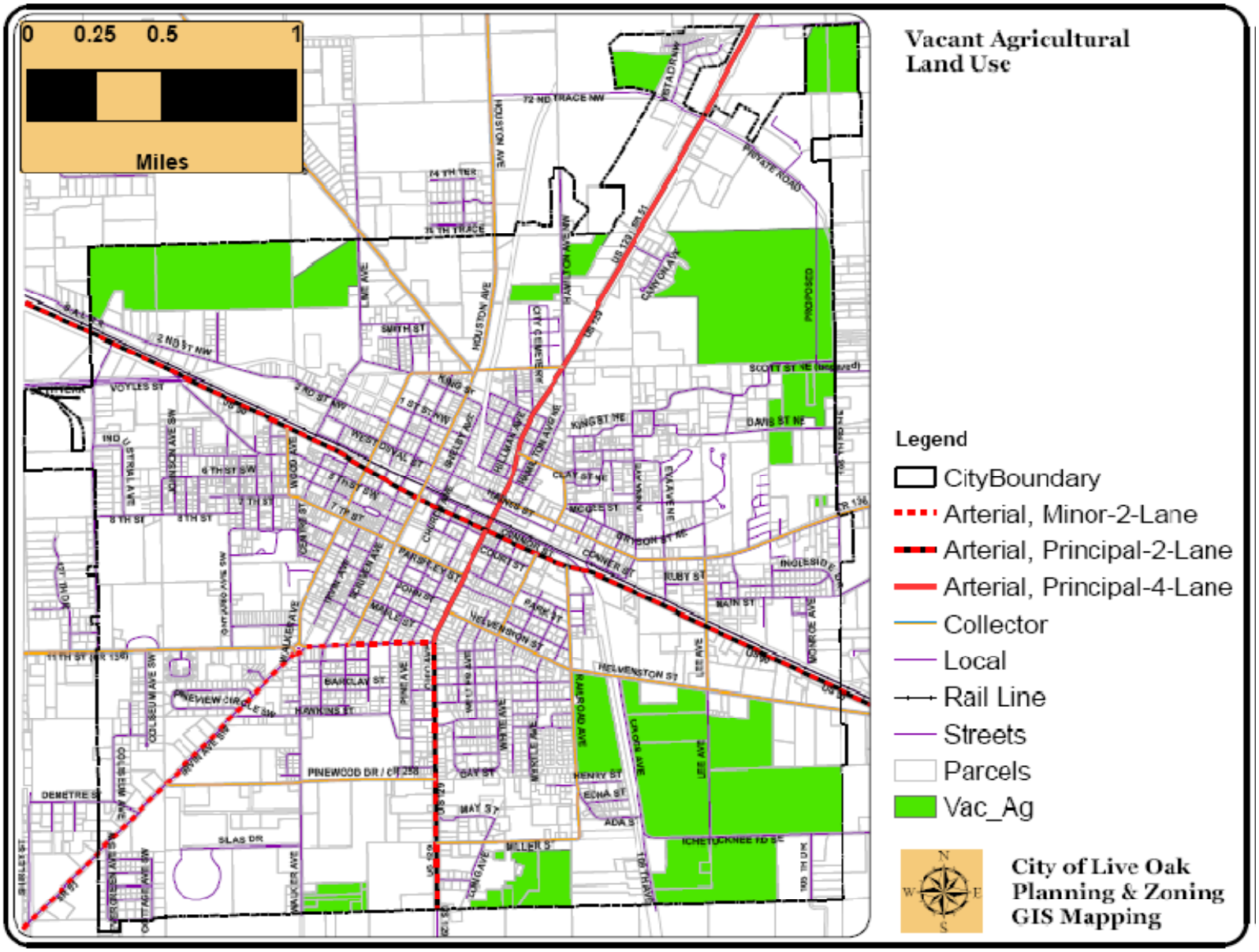
MAP – 5
Existing Vacant – Agricultural
2011



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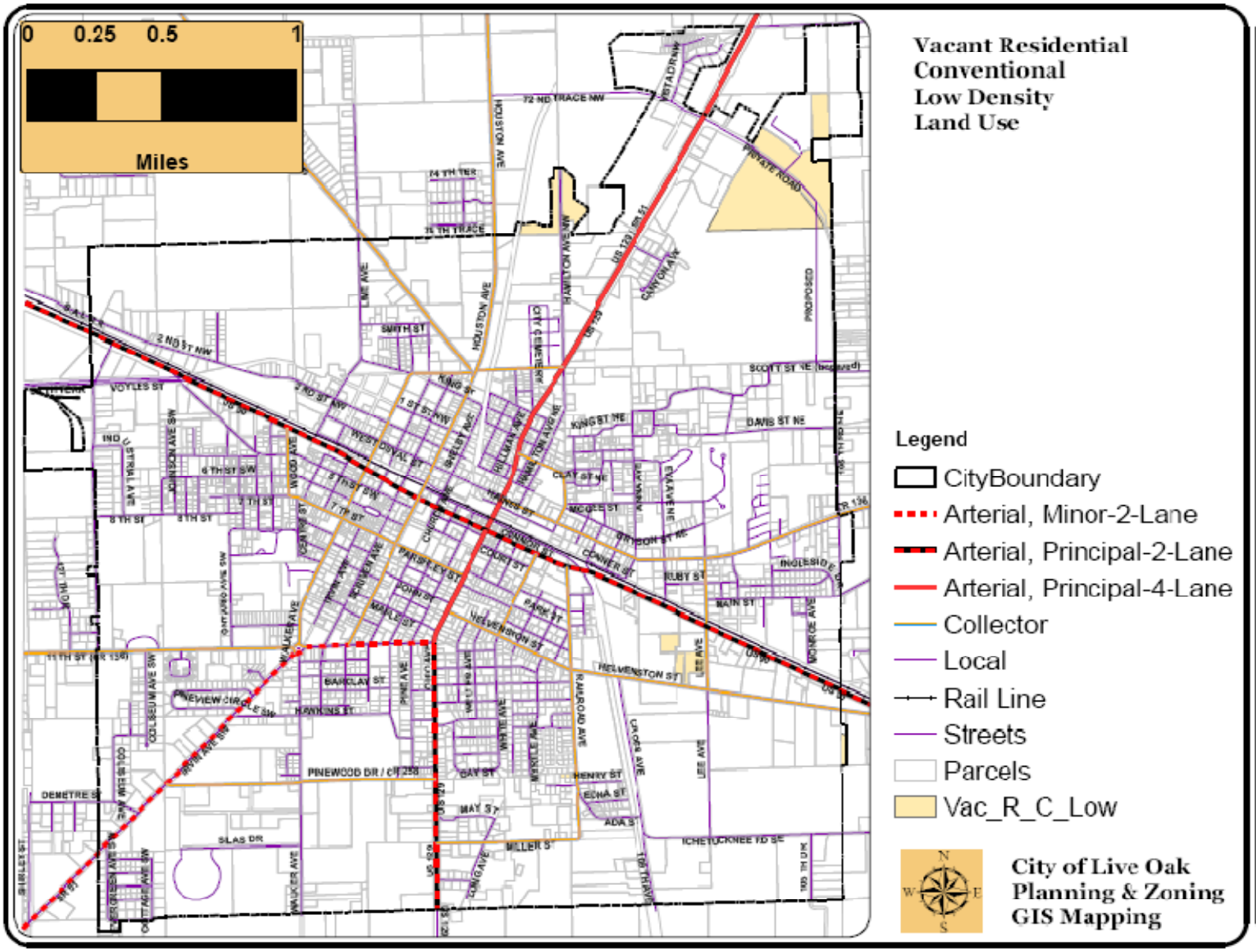
MAP – 6
Existing Vacant – Residential (Conventional), Low Density; ≤ 2 d.u. per acre
2011



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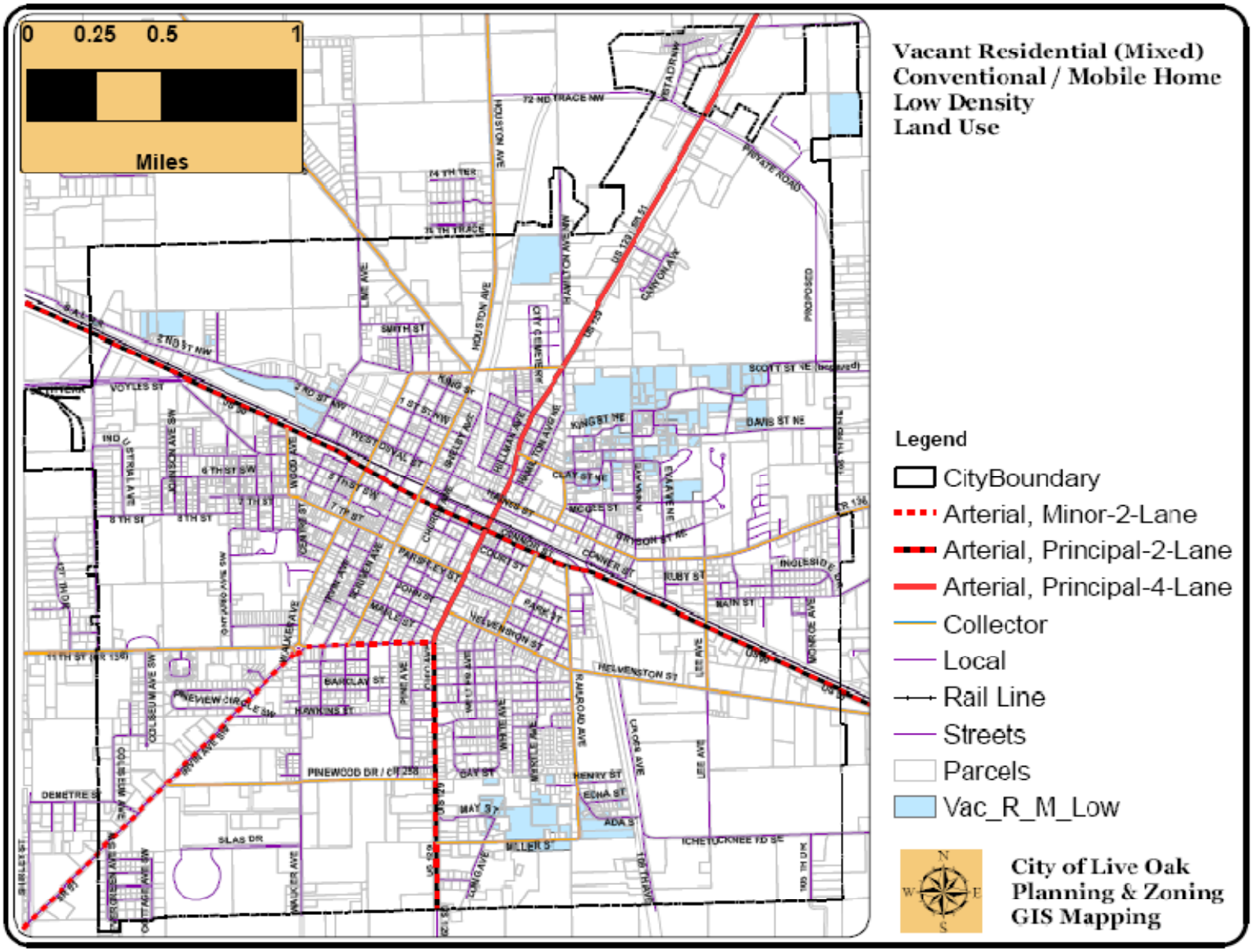
MAP – 7
Existing Vacant – Residential (Mixed), Low Density; ≤ 2 d.u. per acre
2011



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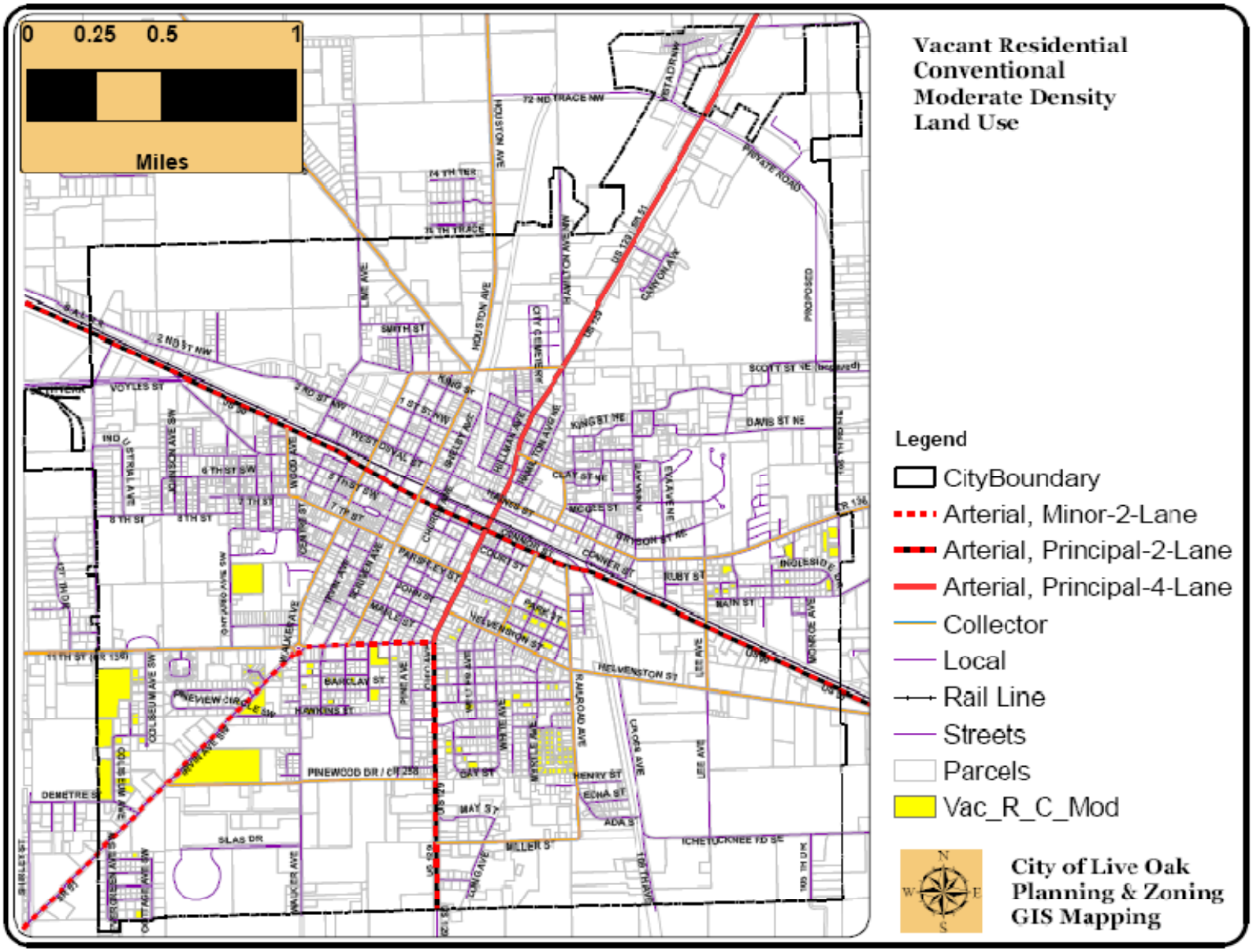
MAP – 8
Existing Vacant – Residential (Conventional), Moderate Density; ≤ 4 d.u. per acre
2011



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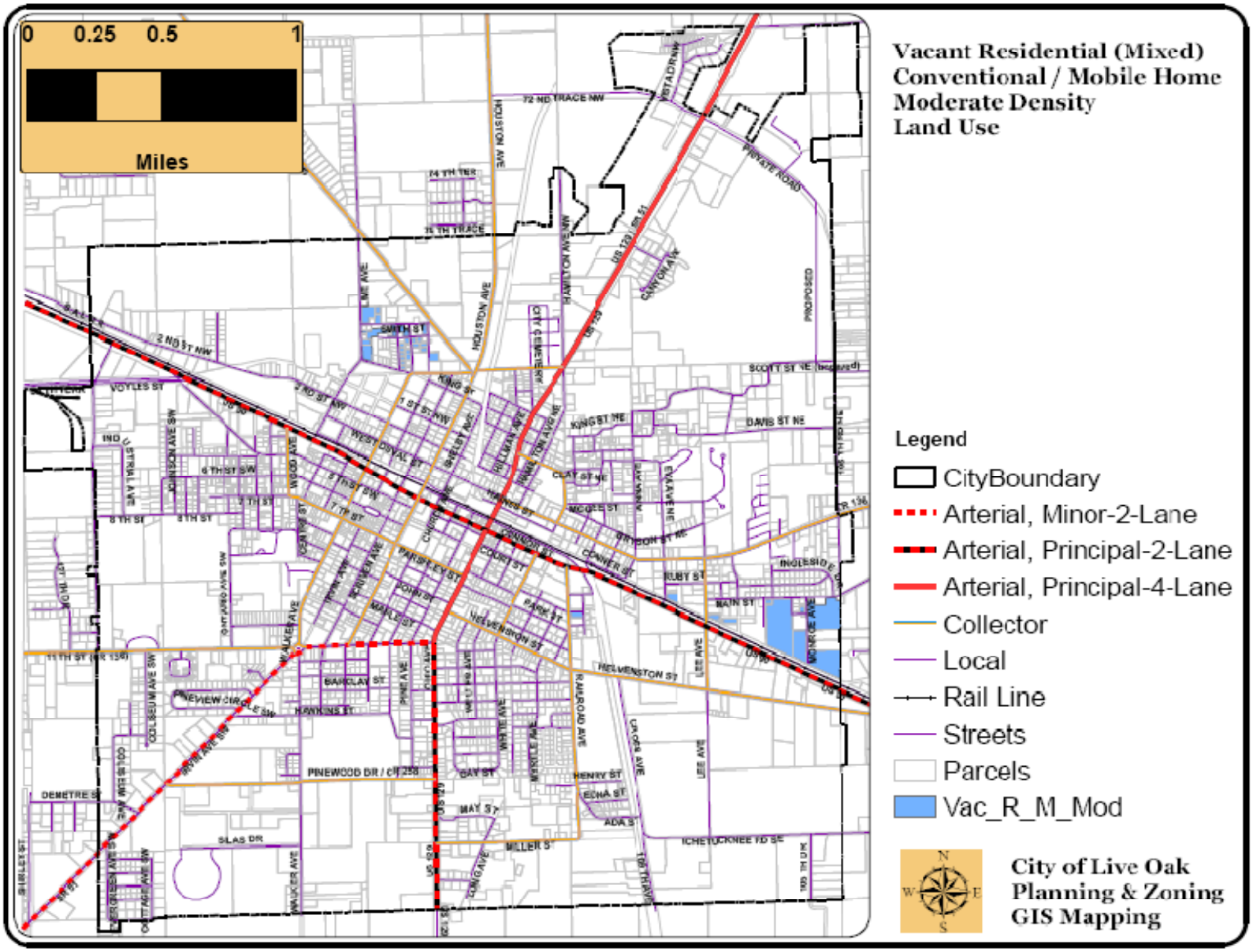
MAP – 9
Existing Vacant – Residential (Mixed), Moderate Density; ≤ 4 d.u. per acre
2011



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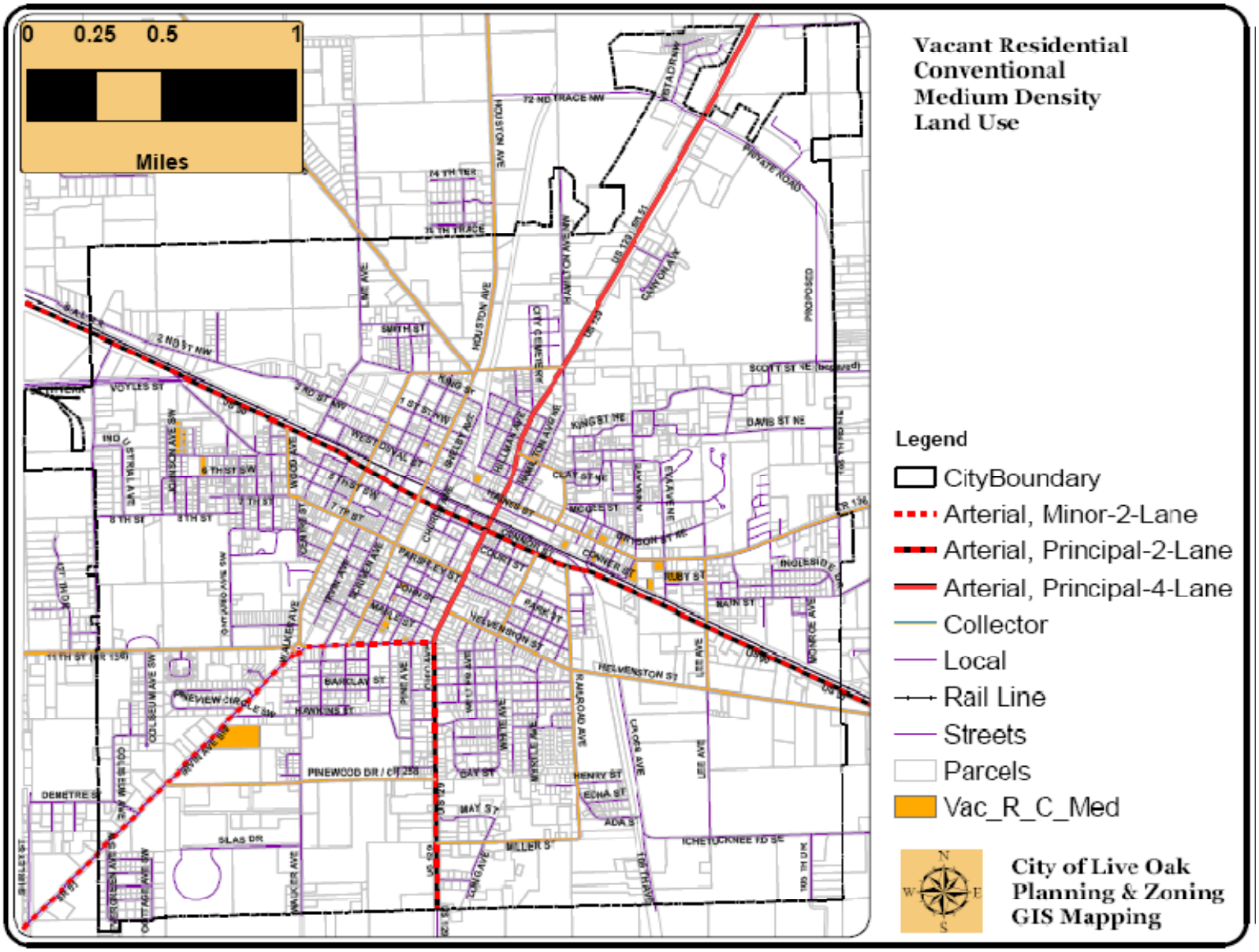
MAP – 10
Existing Vacant – Residential (Conventional), Medium Density; ≤ 8 d.u. per acre
2011



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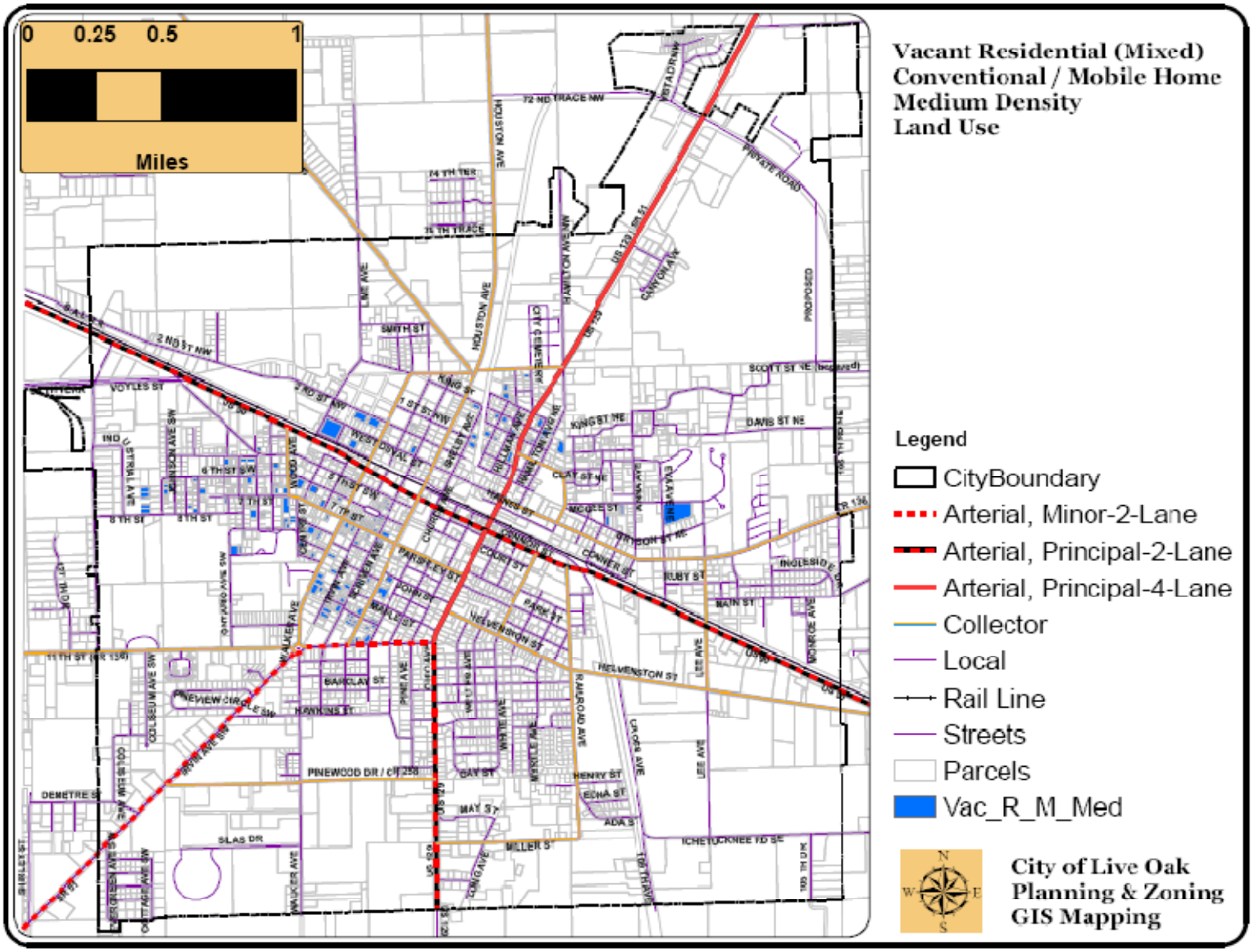
MAP – 11
Existing Vacant – Residential (Mixed), Medium Density; ≤ 8 d.u. per acre
2011



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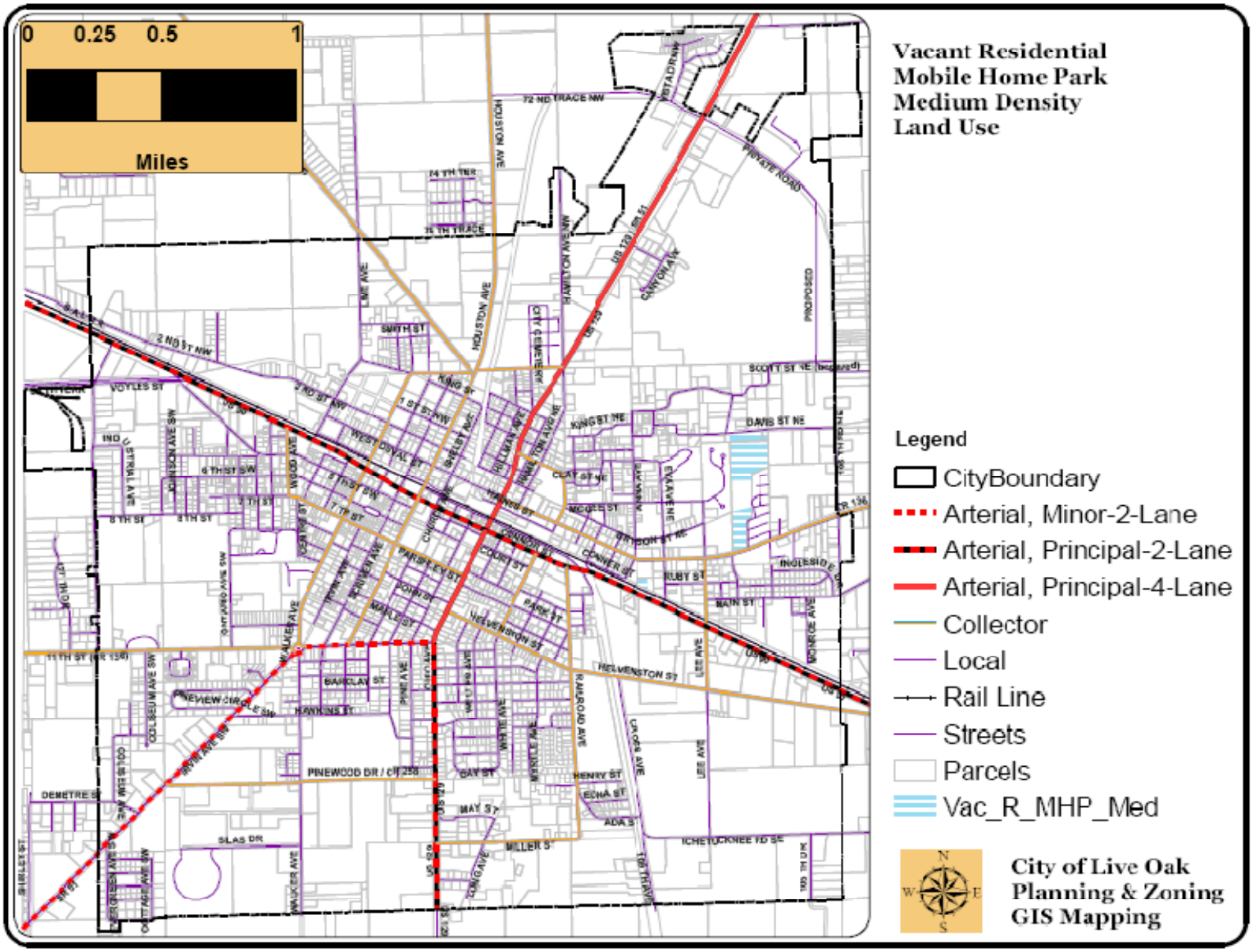
MAP – 12
Existing Vacant – Residential (Mobile Home Park), Medium Density; ≤ 8 d.u. per acre
2011



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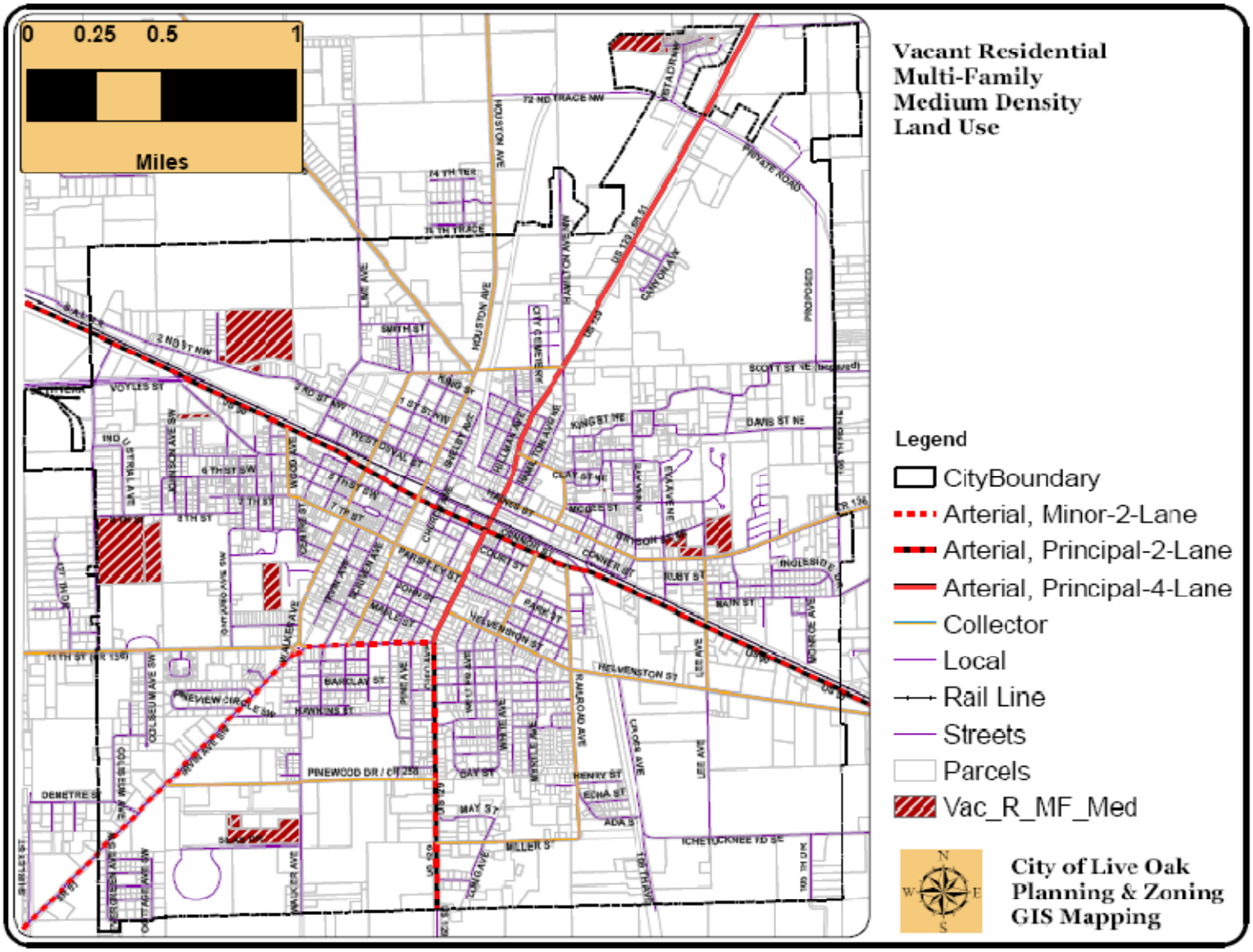
MAP – 13
Existing Vacant – Residential (Multi-Family), Medium Density; ≤ 8 d.u. per acre
2011



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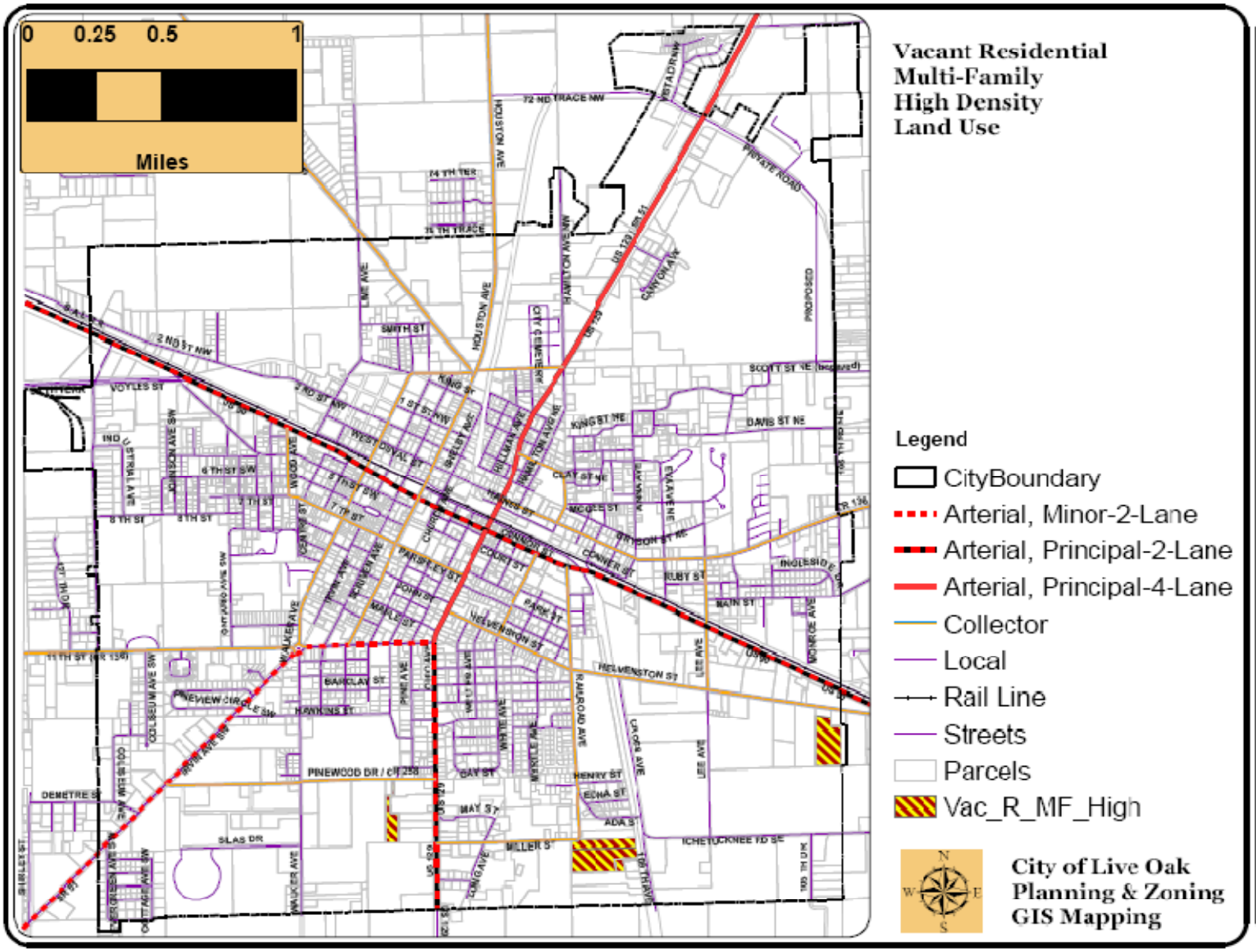
MAP – 14
Existing Vacant – Residential (Multi-Family), High Density; ≤ 20 d.u. per acre
2011



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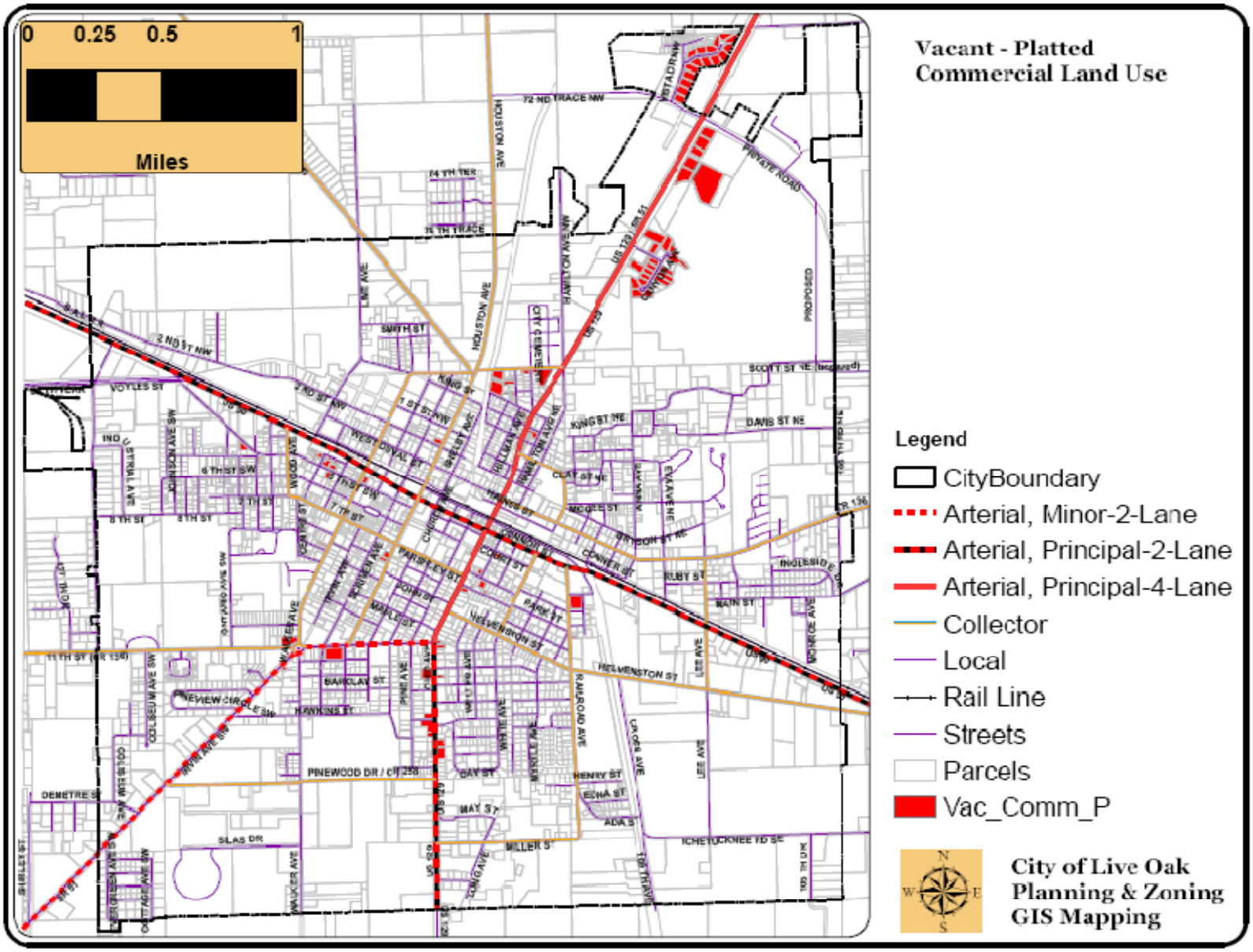
MAP – 15
Existing Vacant – Commercial (Platted)
2011



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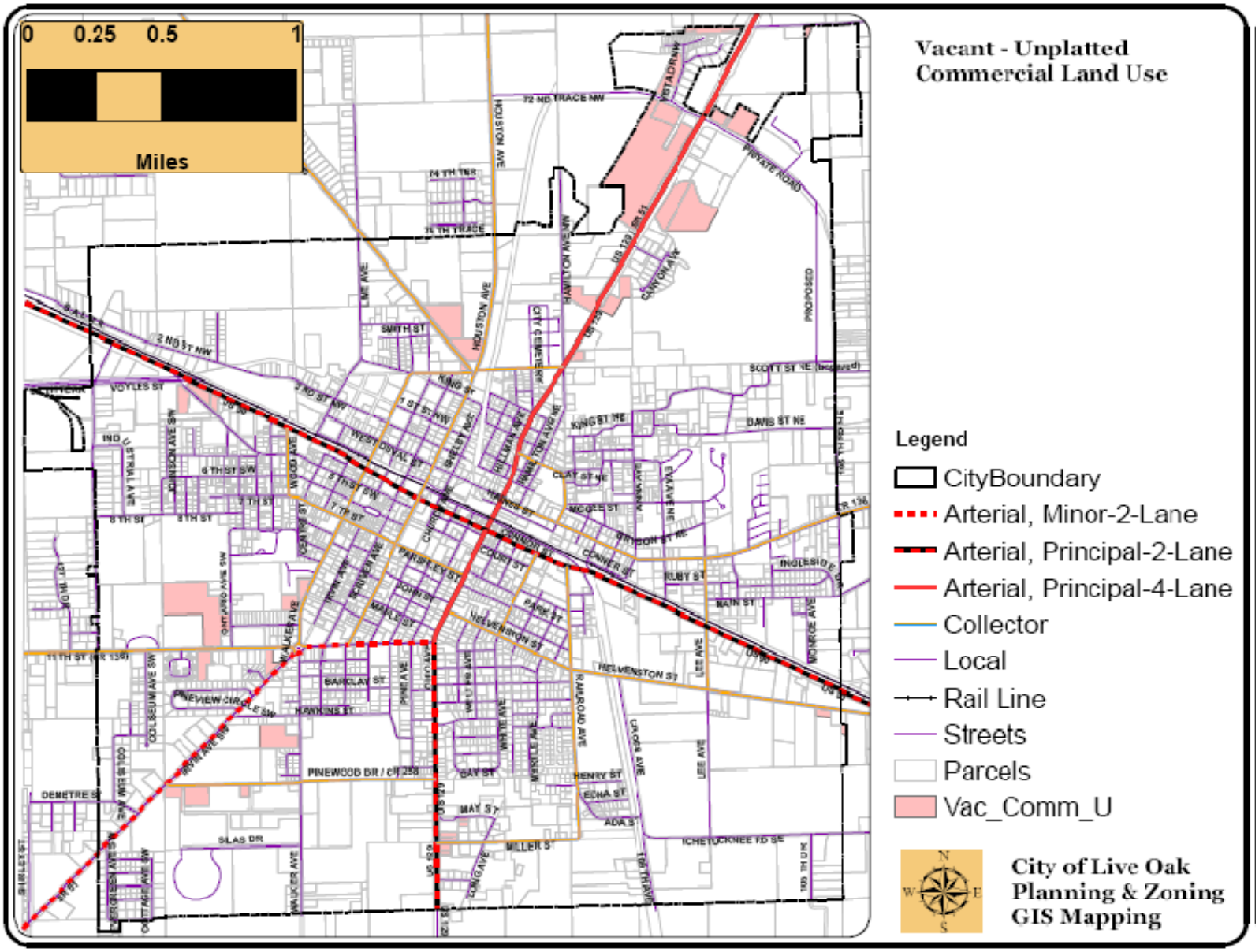
MAP – 16
Existing Vacant – Commercial (Un-Platted)
2011



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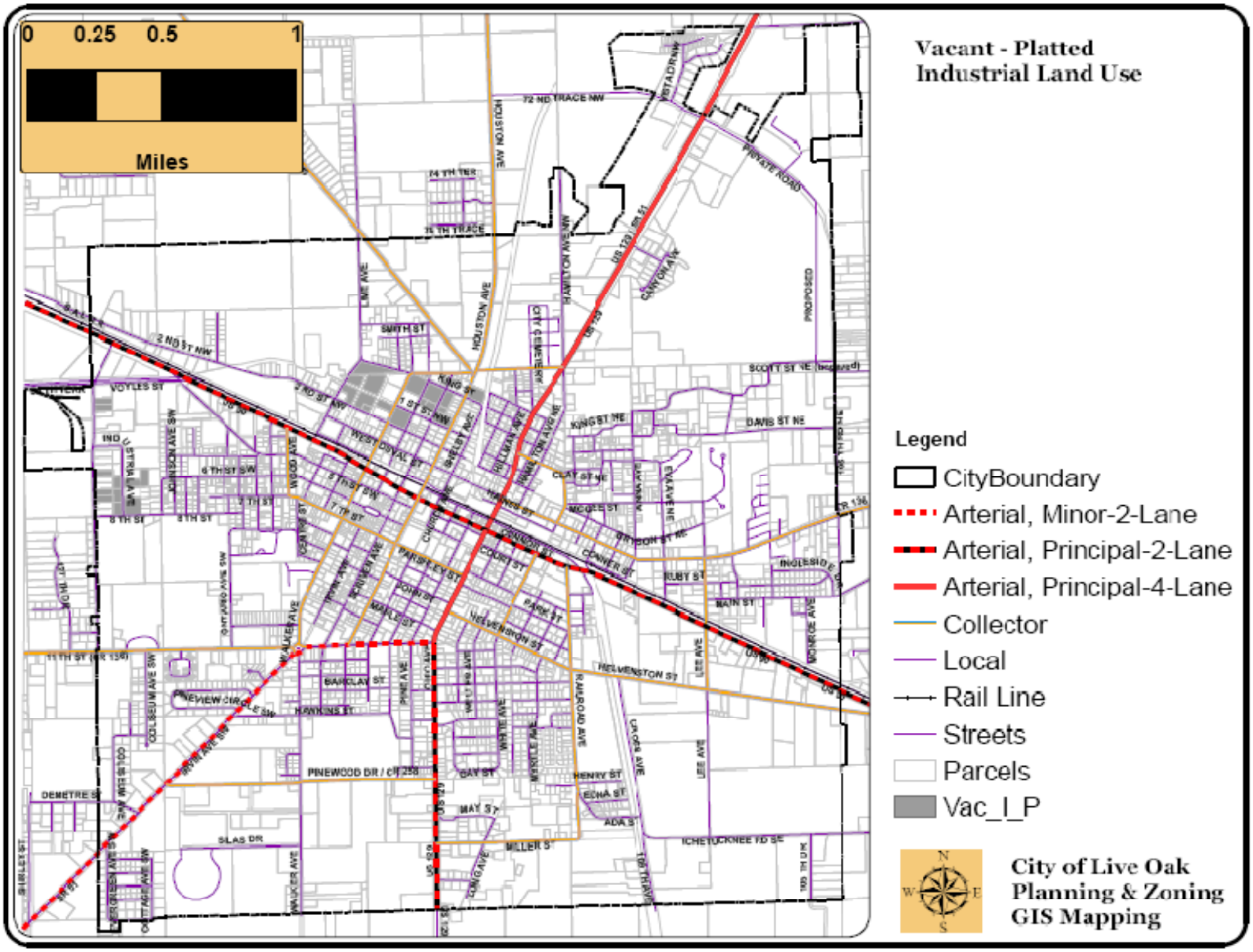
MAP – 17
Existing Vacant – Industrial (Platted)
2011



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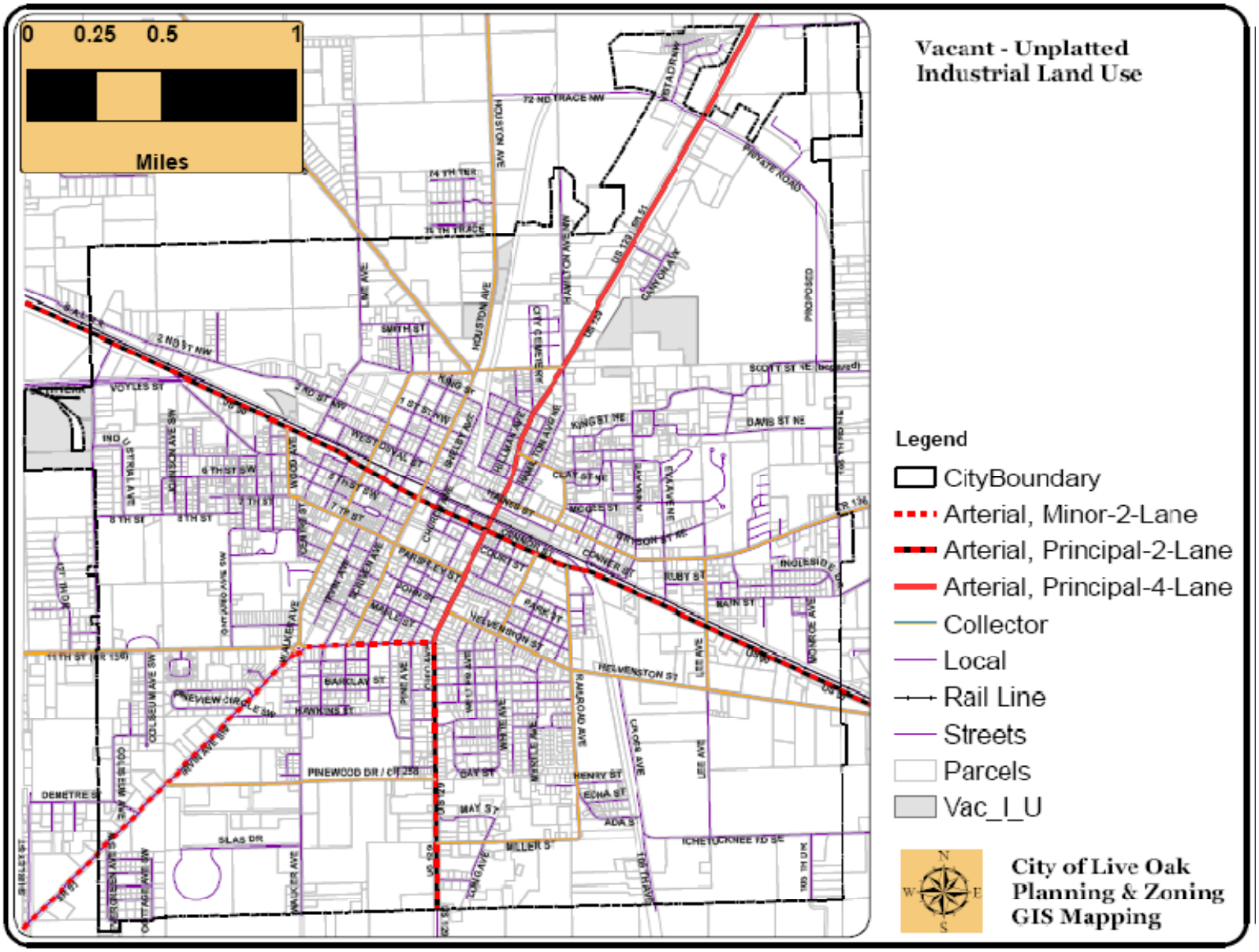
MAP – 18
Existing Vacant – Industrial (Un-Platted)
2011



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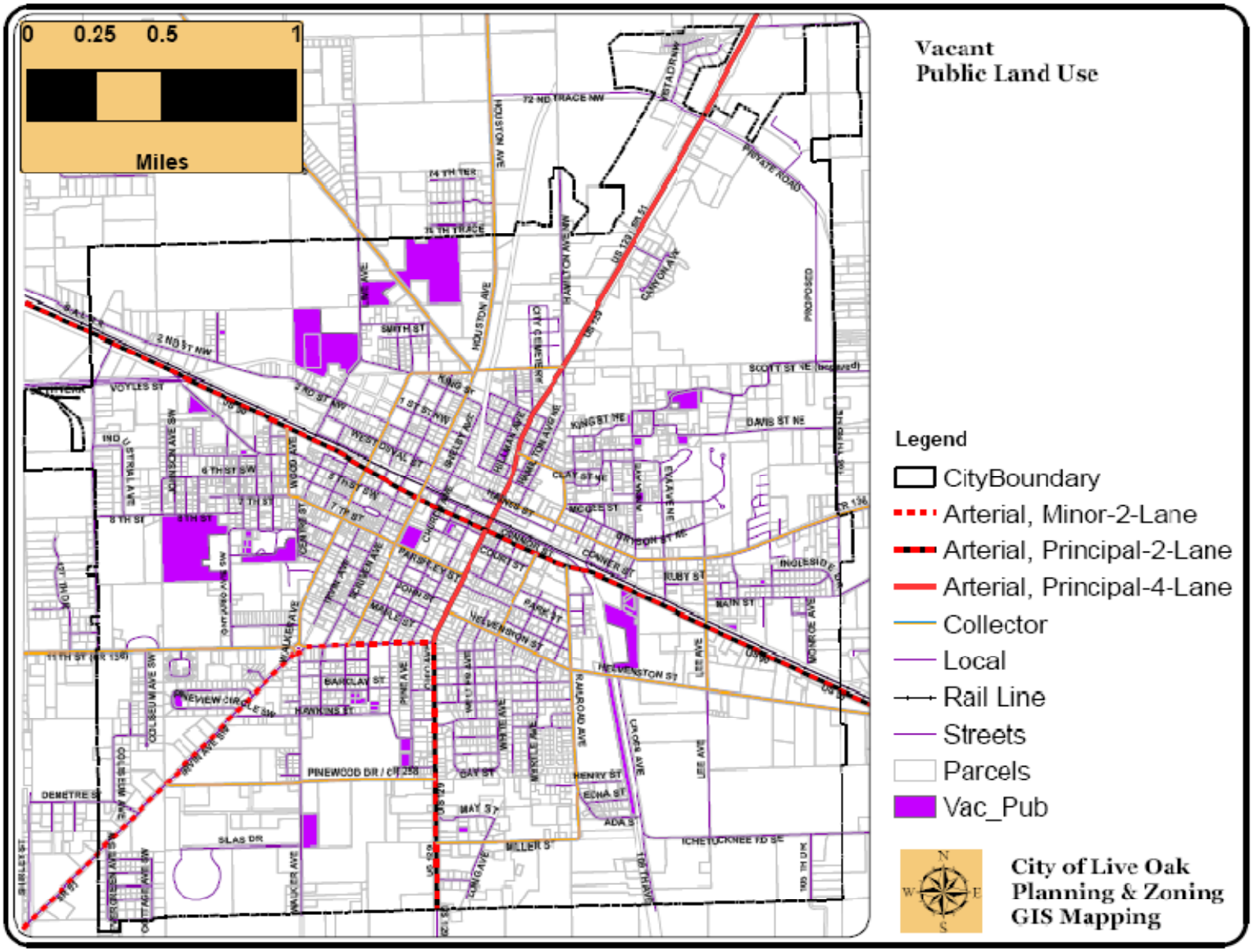
MAP – 19
Existing Vacant – Public
2011



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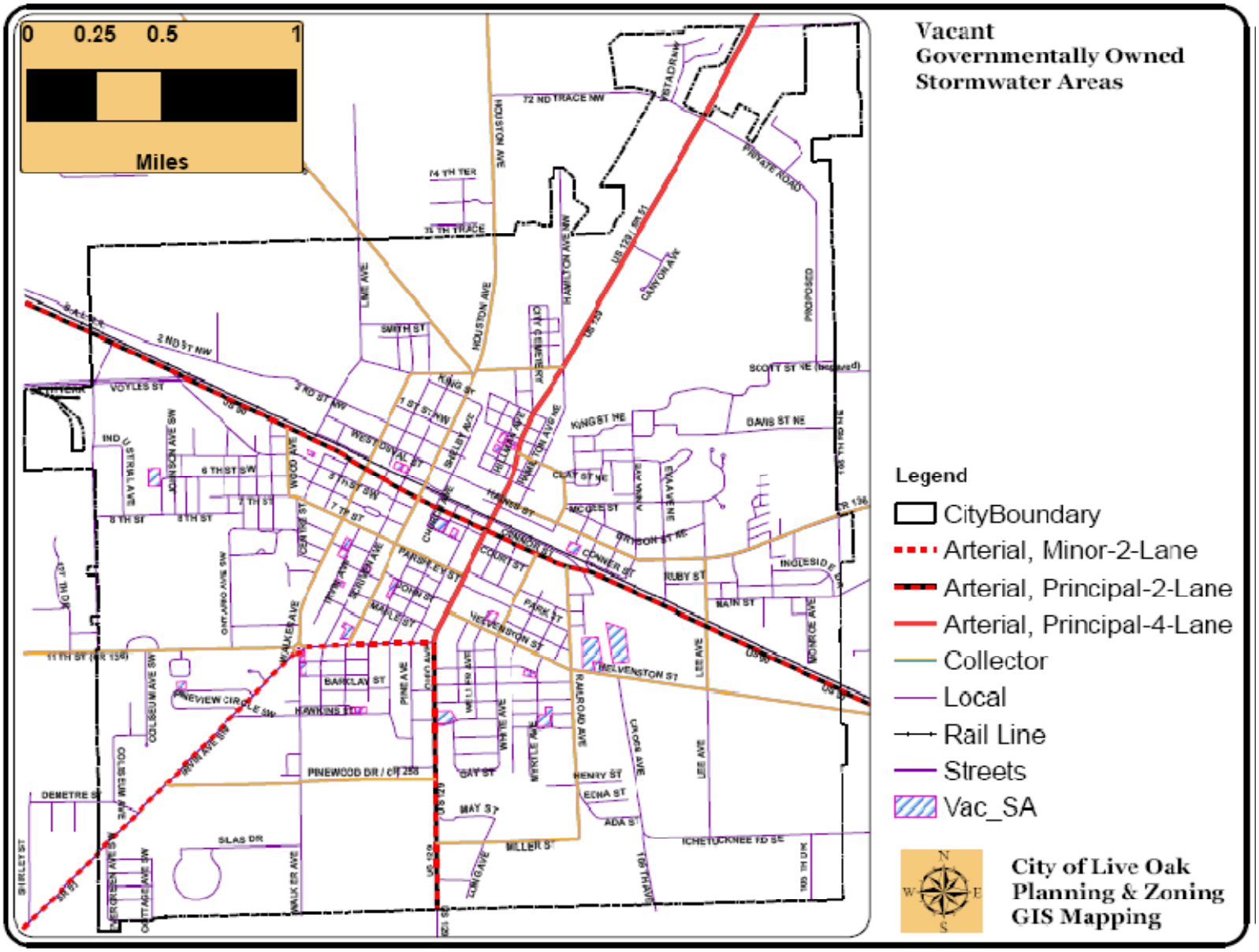
MAP – 20
Existing Vacant – Governmentally Owned Stormwater Areas
2011



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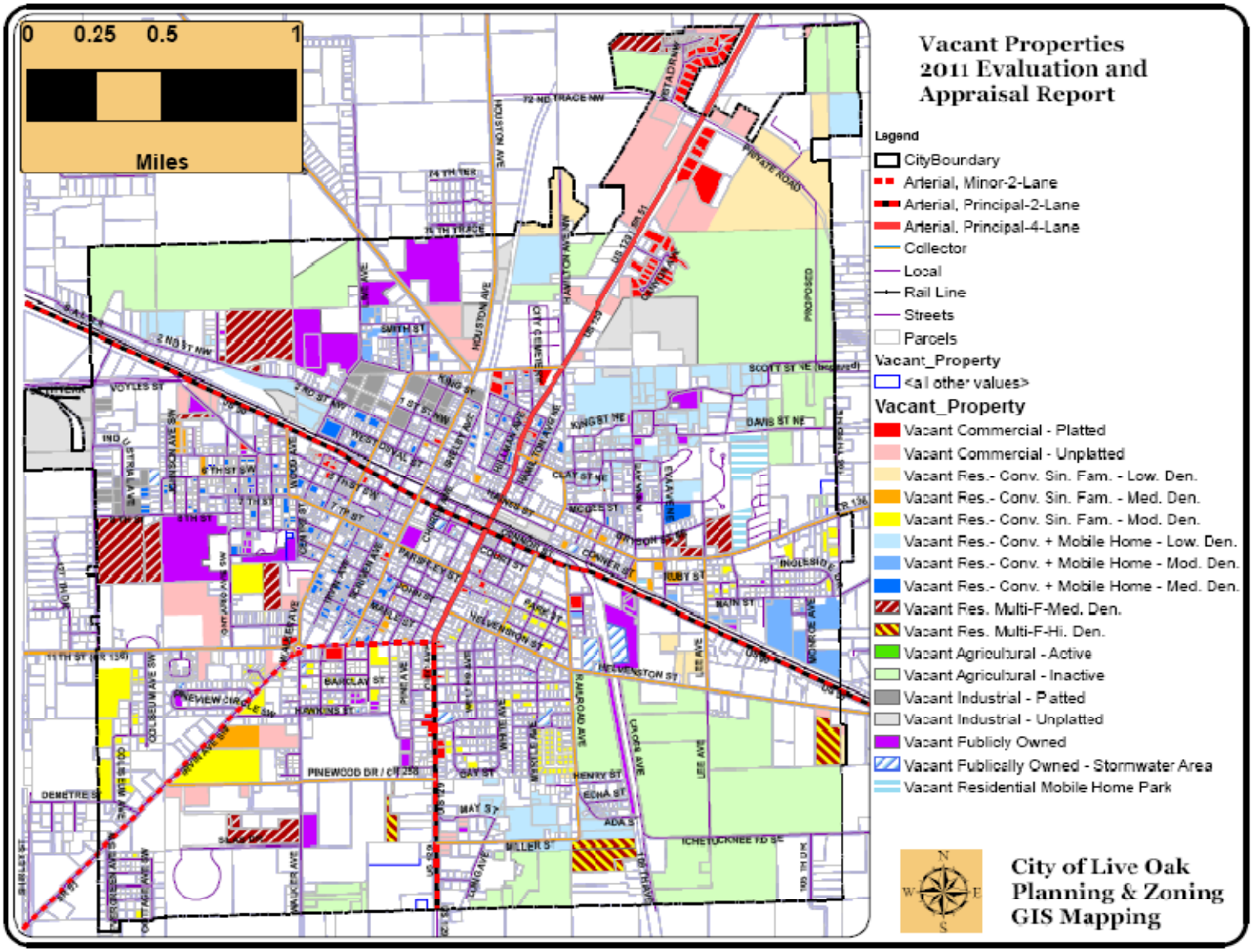
MAP – 21
Existing Vacant – Compilation
2011



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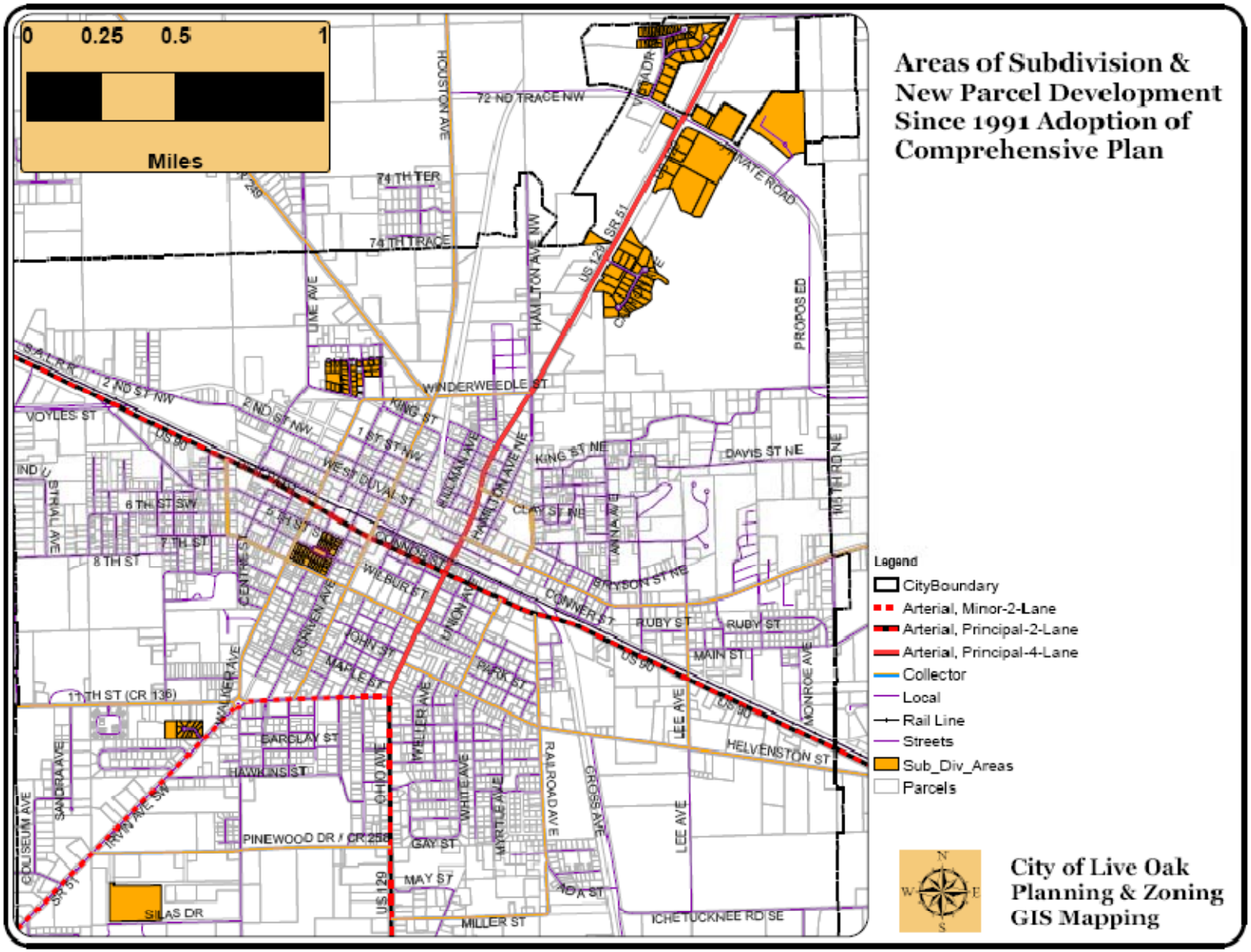
MAP – 22
New Subdivisions and New Development Parcels 1991-2010
2011



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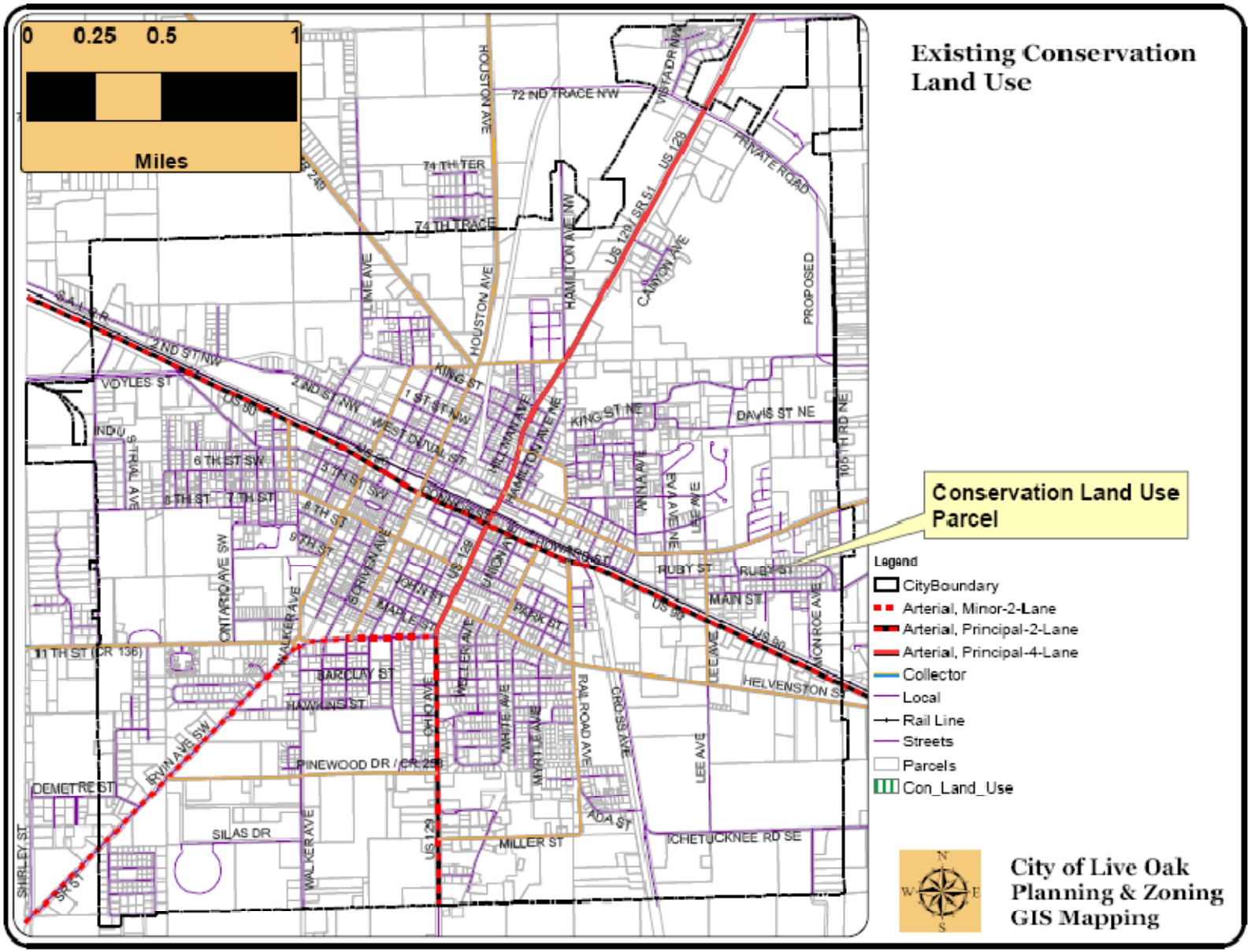
MAP – 23
Future Land Use Plan Map – Conservation
2011



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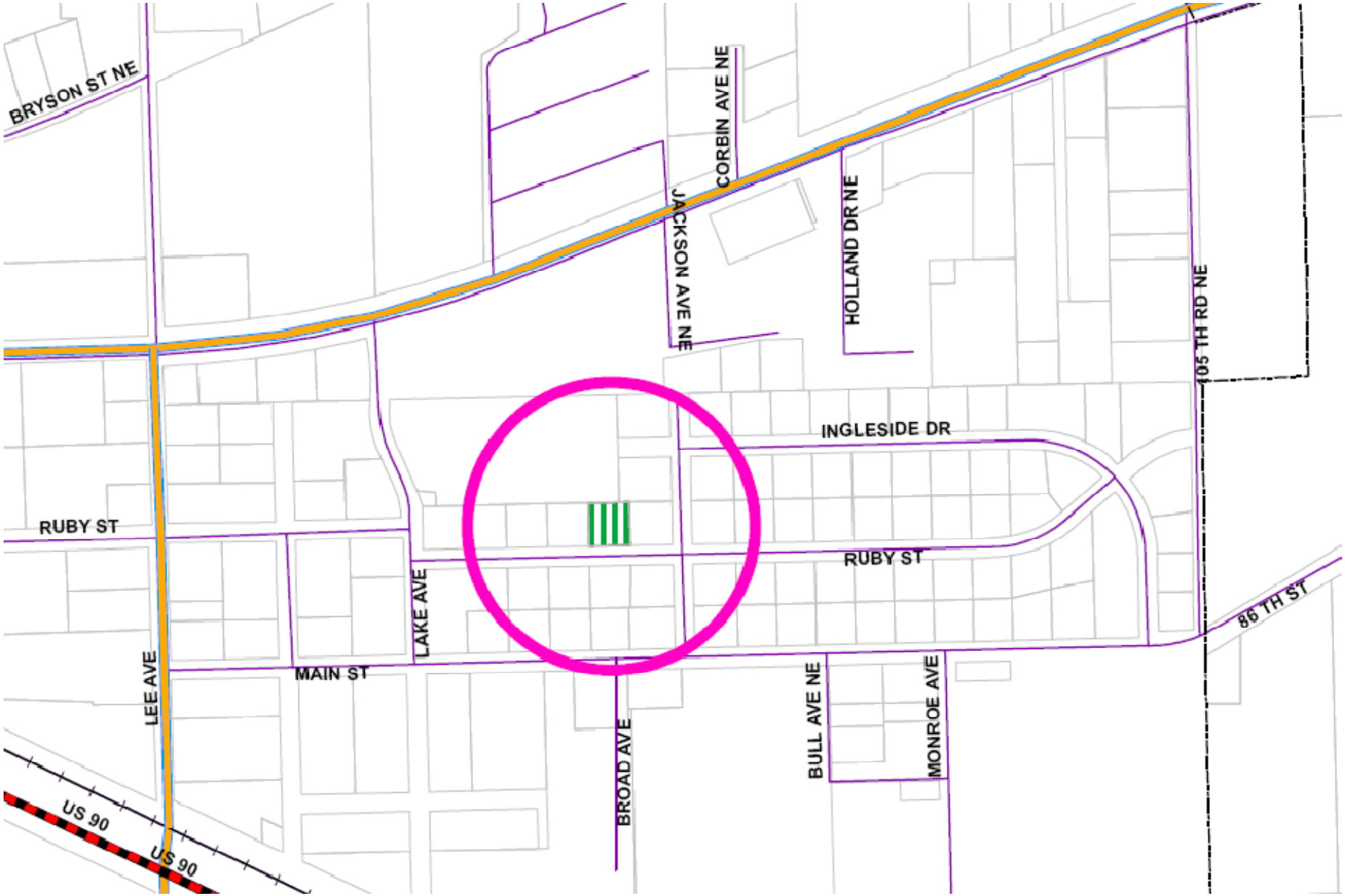
MAP – 24
Future Land Use Plan Map – Conservation Parcel (zoomed in)
2011



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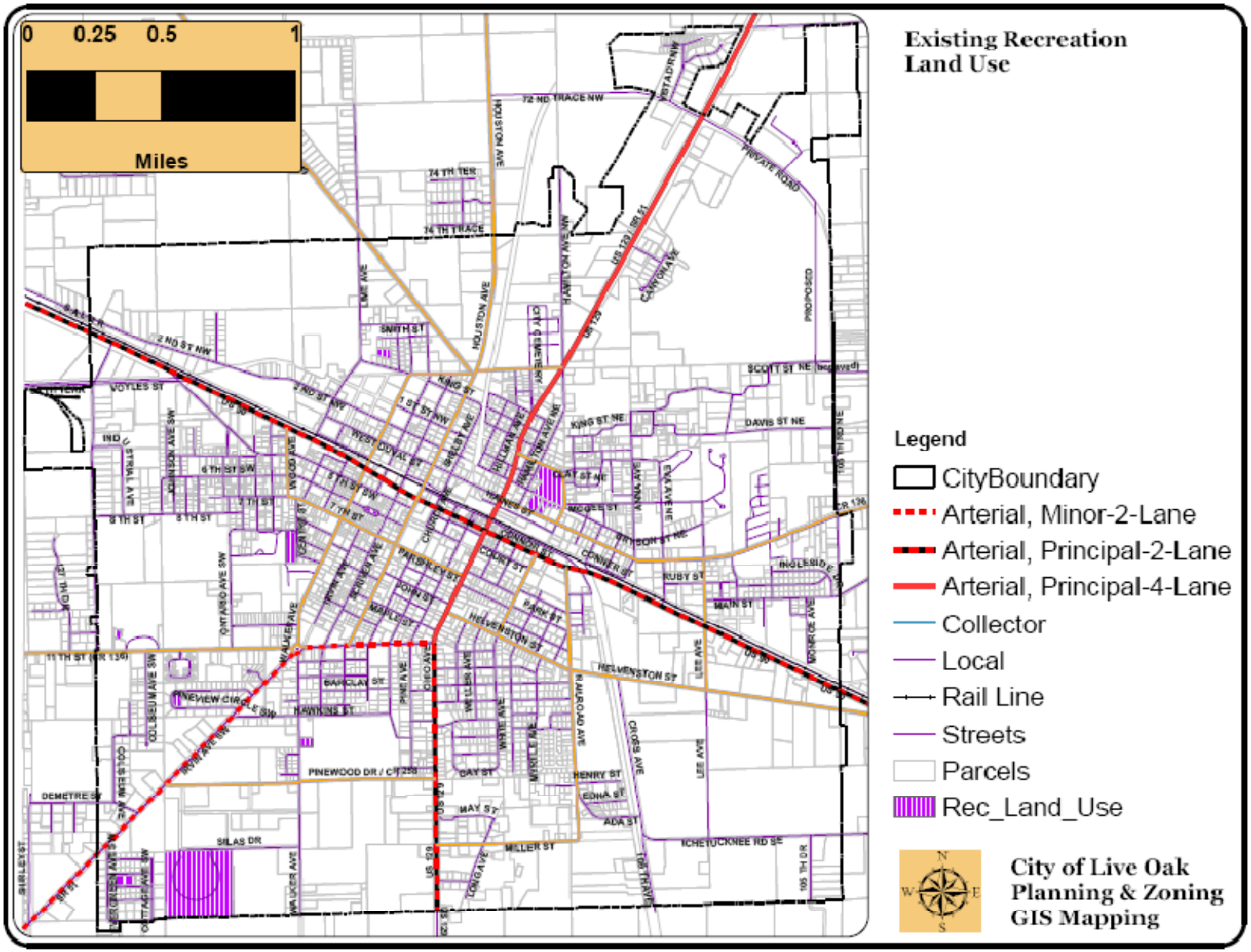
MAP – 25
Future Land Use Plan Map – Recreation and Open Space
2011



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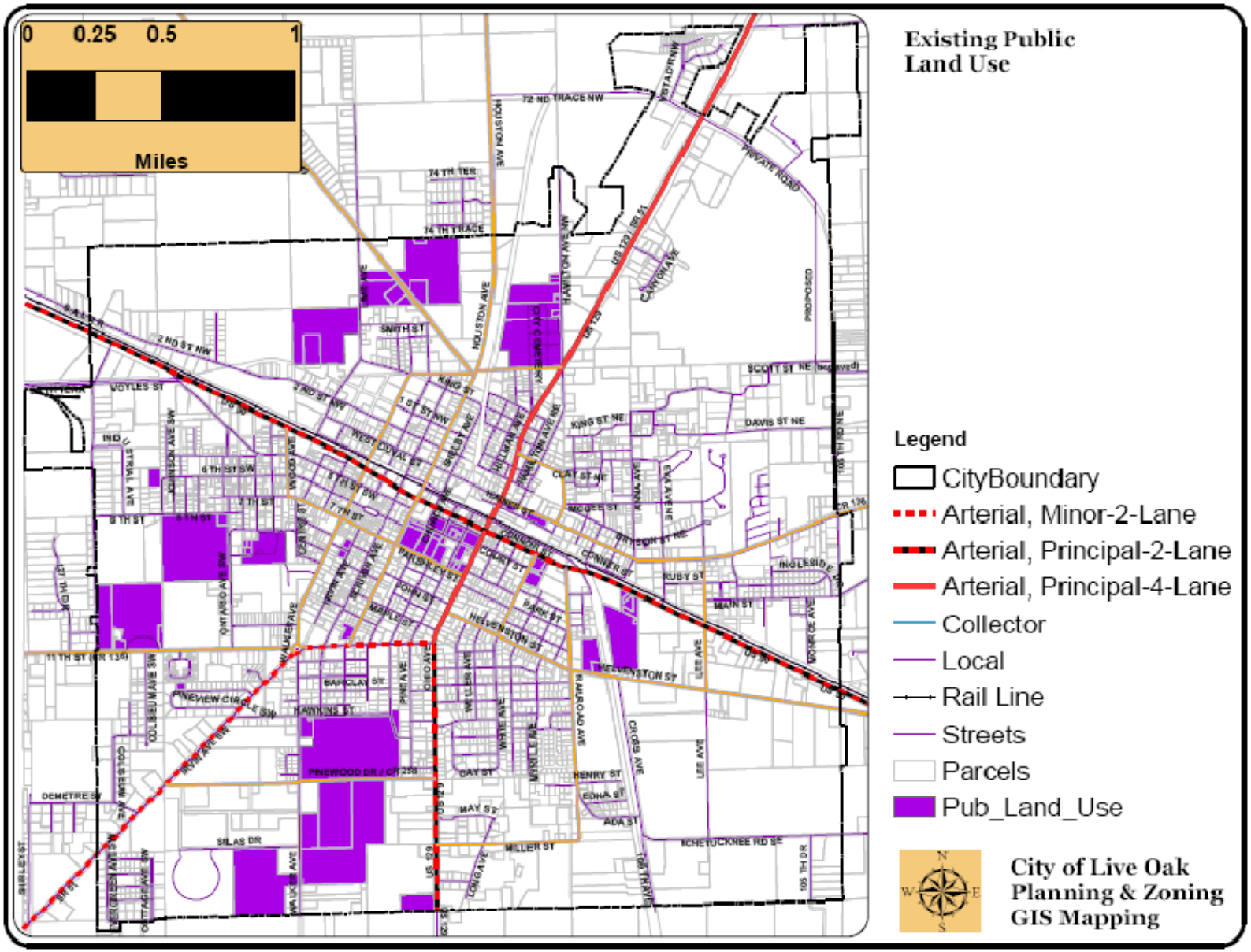
MAP – 26
Future Land Use Plan Map – Public
2011



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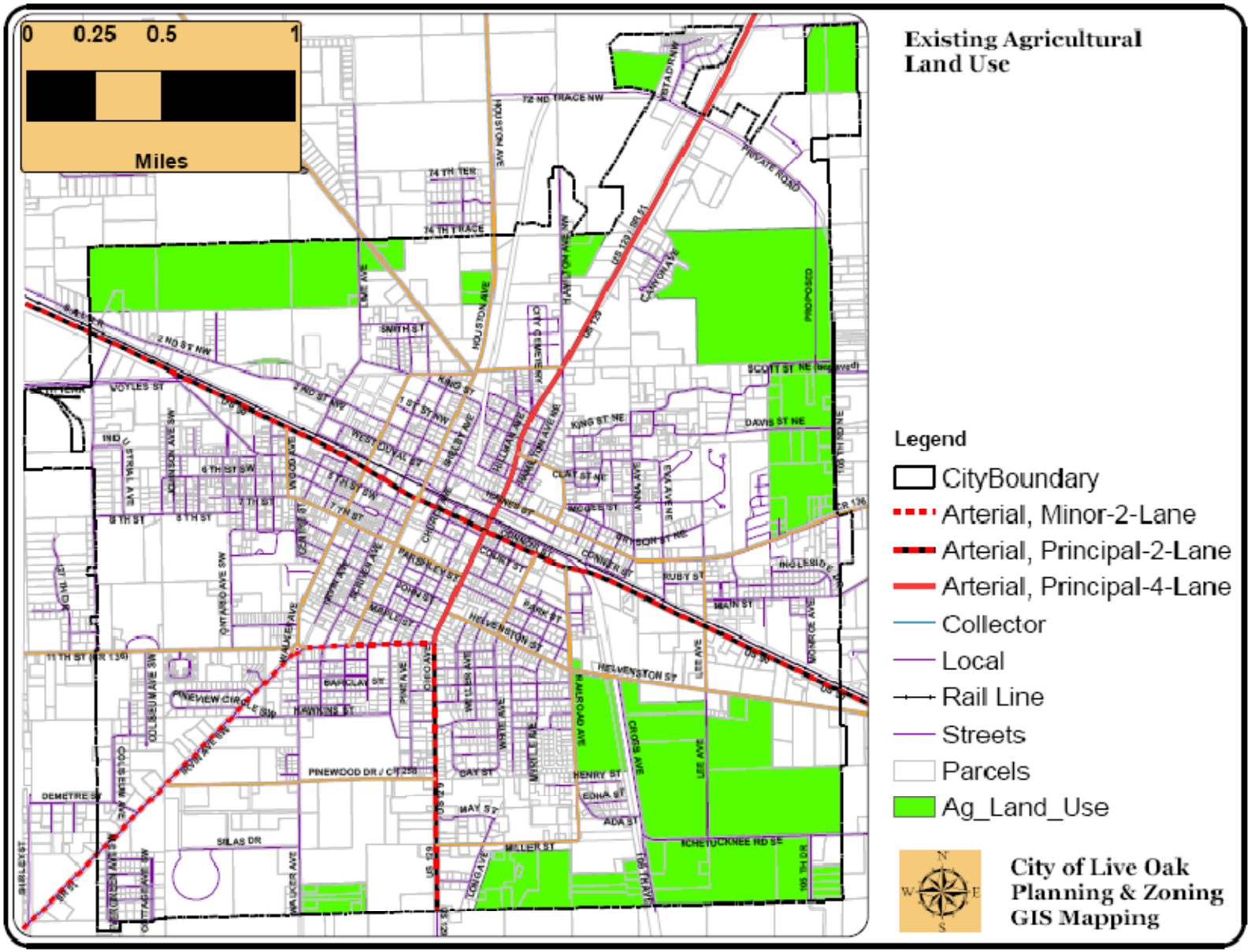
MAP – 27
Future Land Use Plan Map – Agricultural
2011



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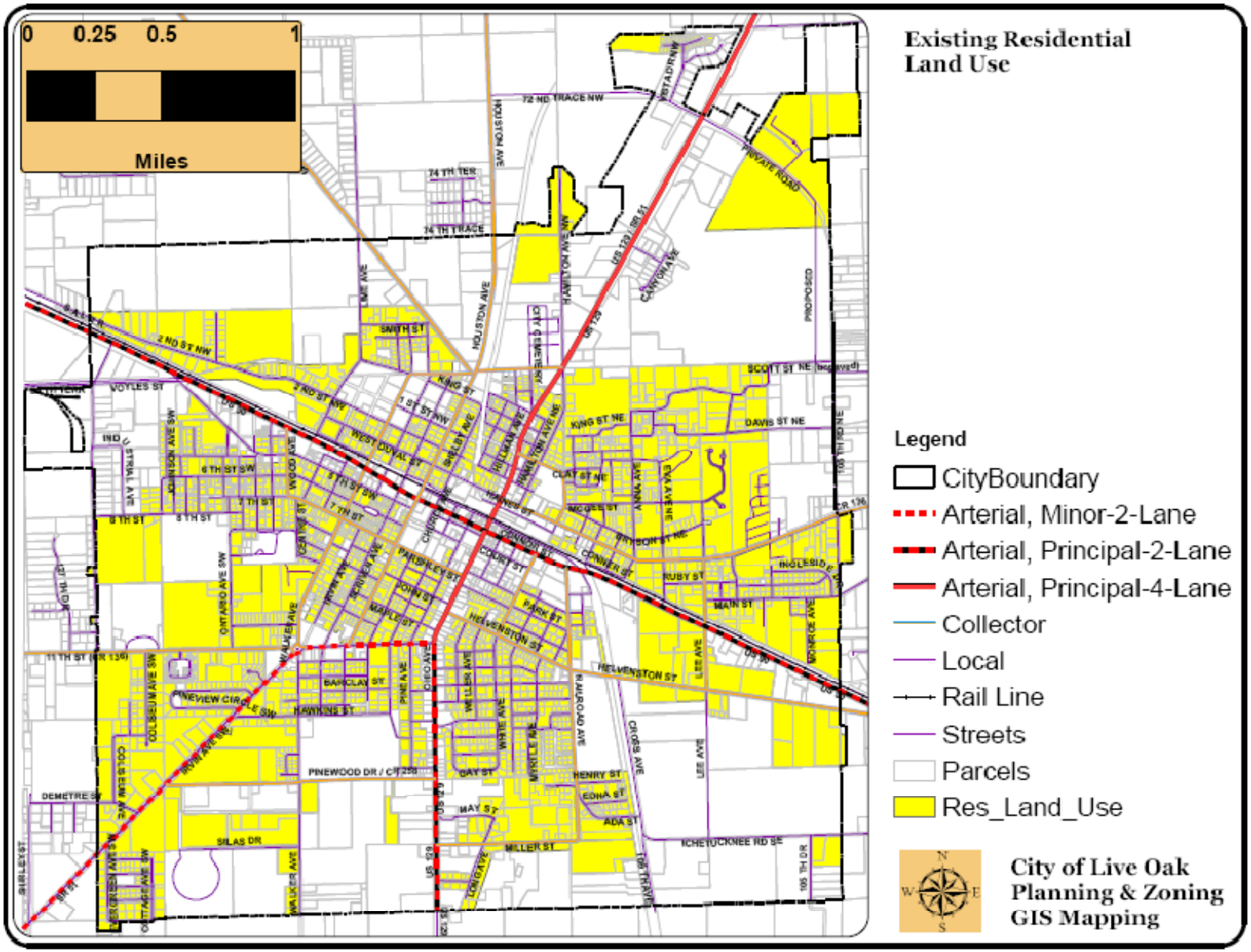
MAP – 28
Future Land Use Plan Map – Residential
2011



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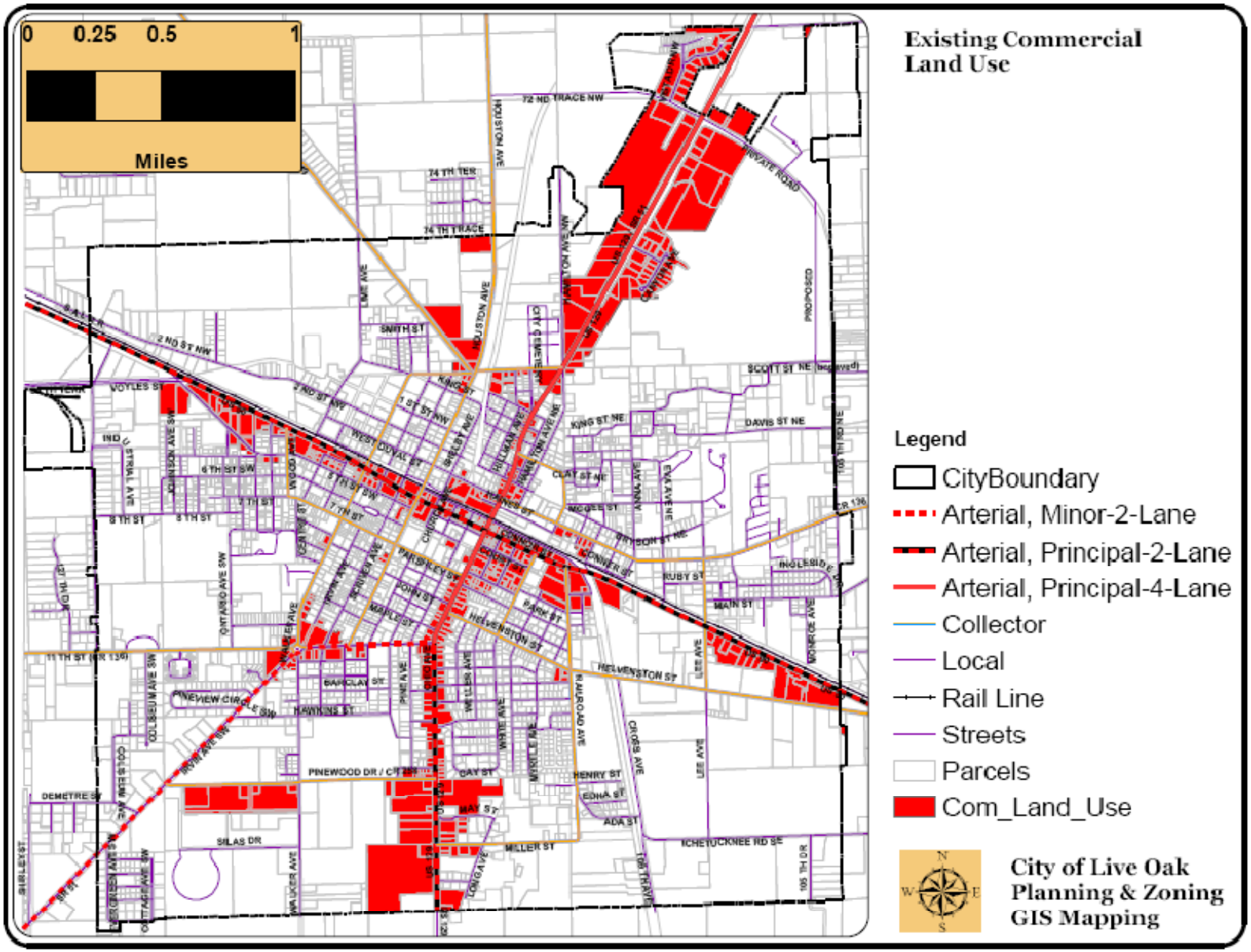
MAP – 29
Future Land Use Plan Map – Commercial
2011



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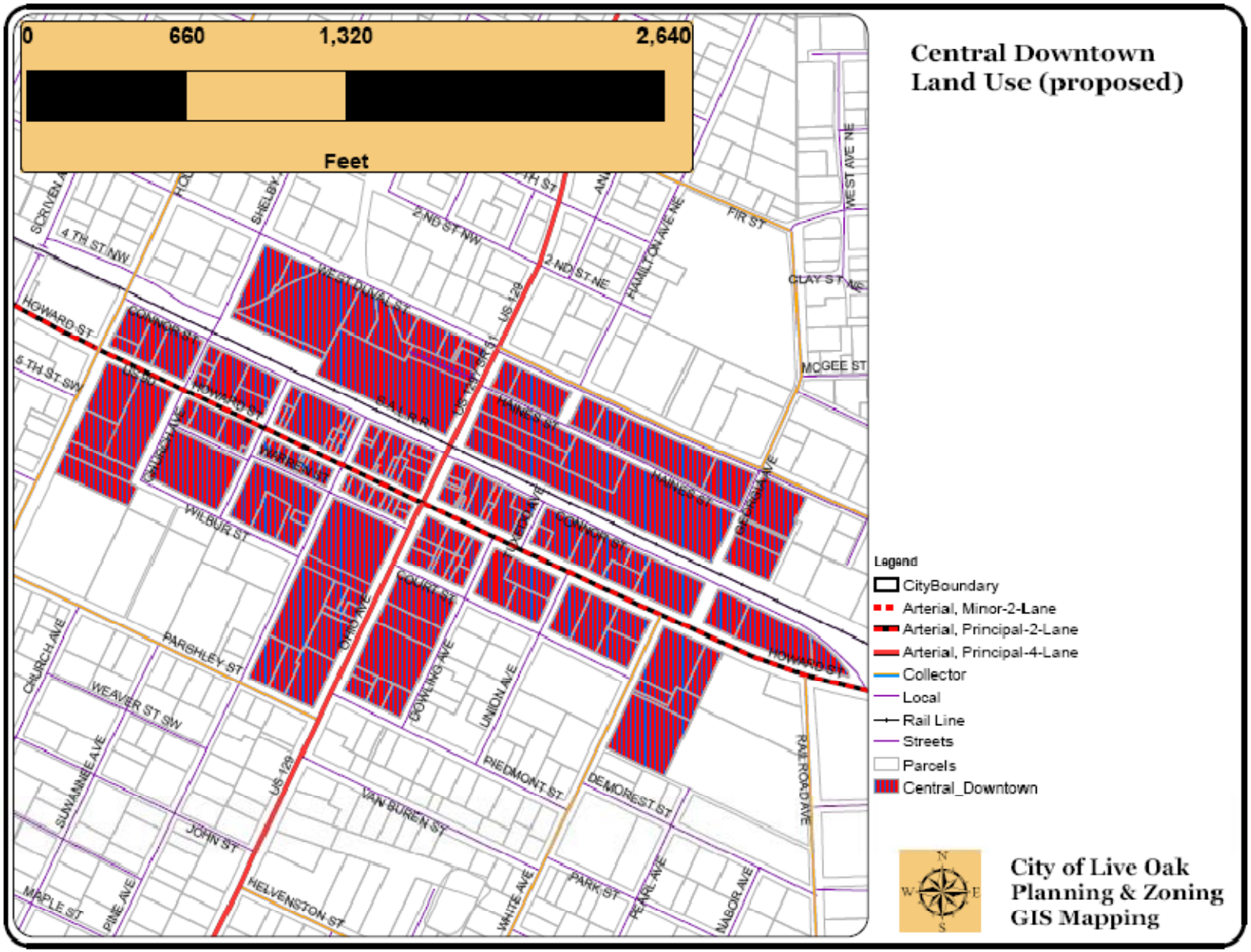
MAP – 30
Future Land Use Plan Map – Central Downtown (proposed)
2011



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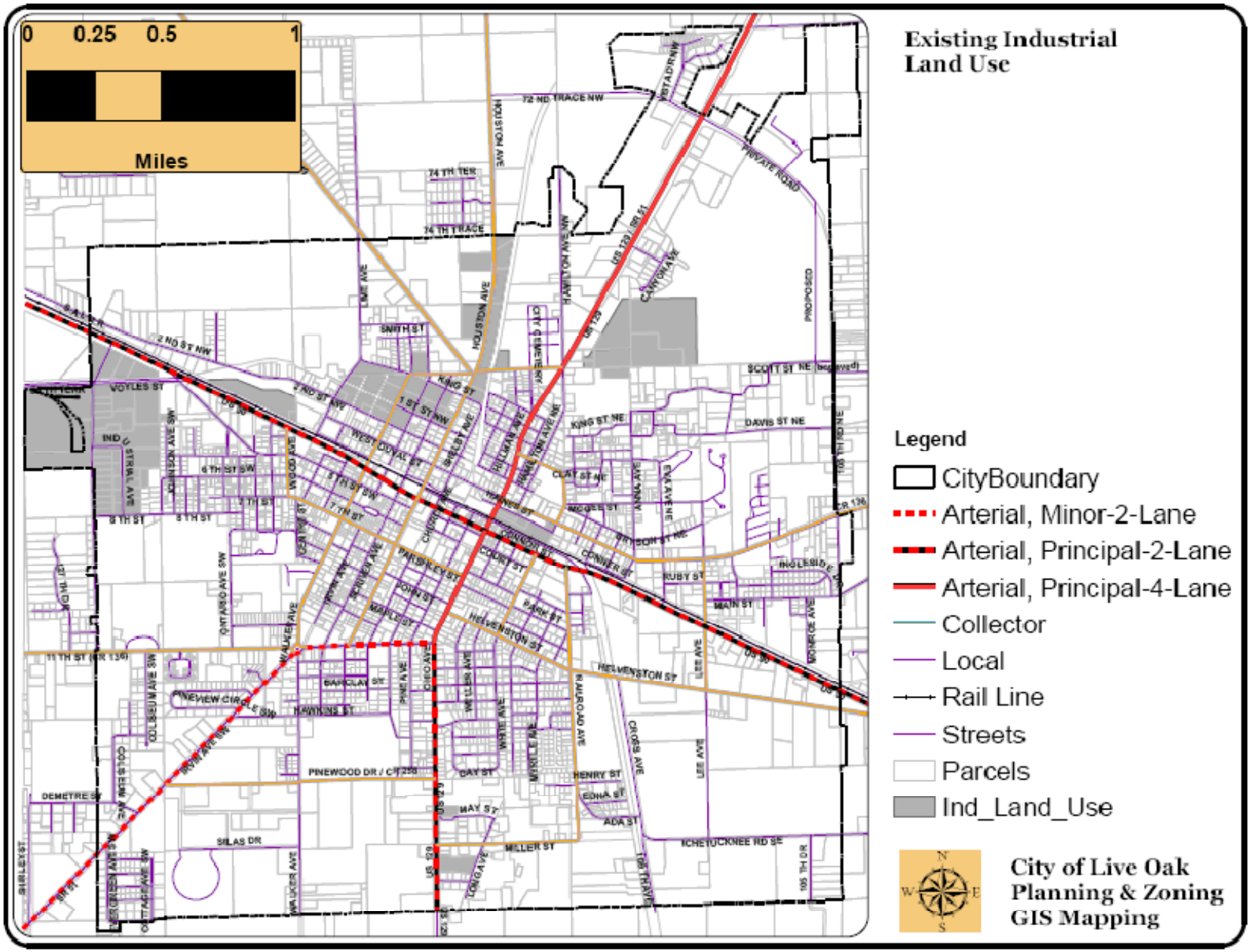
MAP – 31
Future Land Use Plan Map – Industrial
2011



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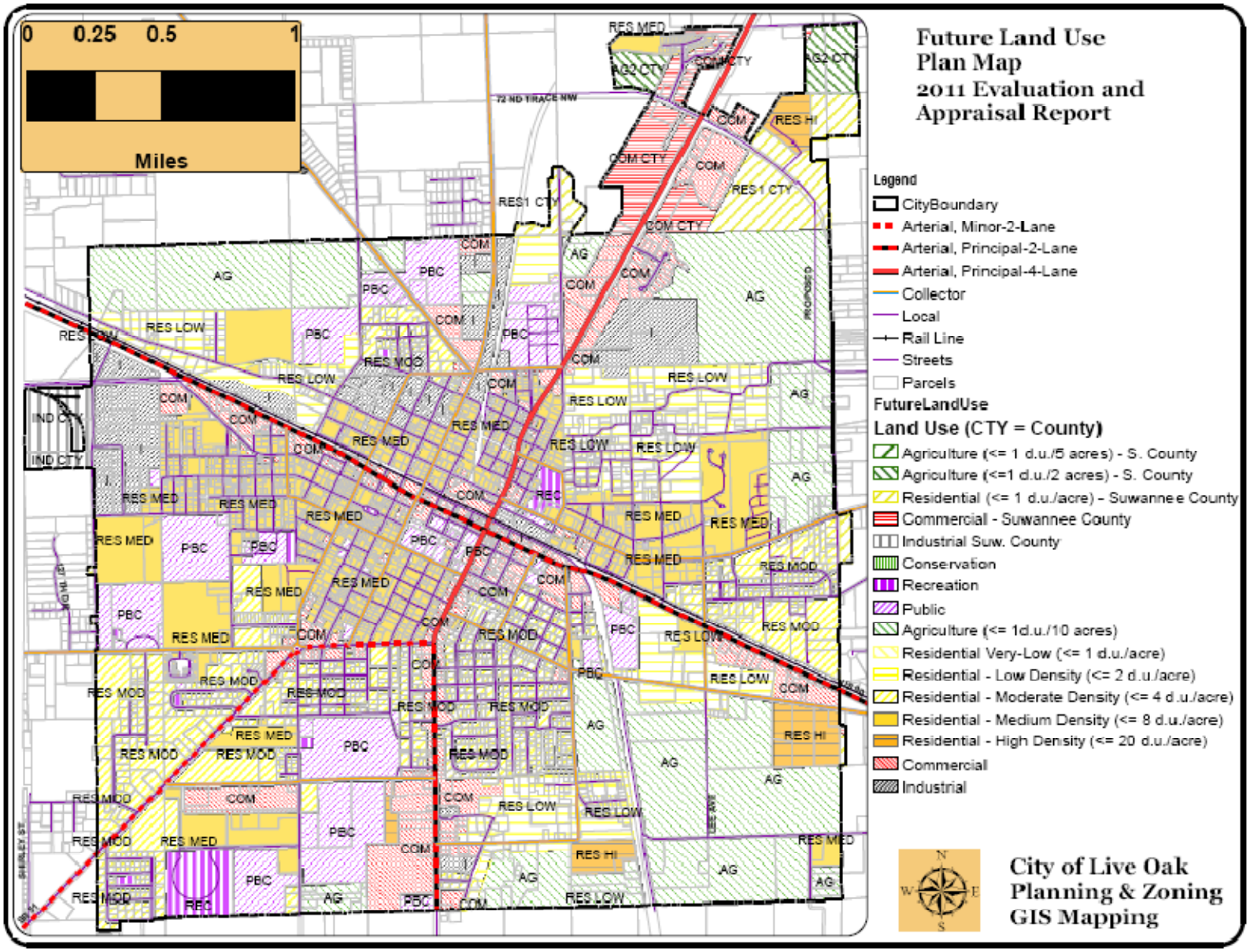
MAP – 32
Future Land Use Plan Map – Current Map
2011



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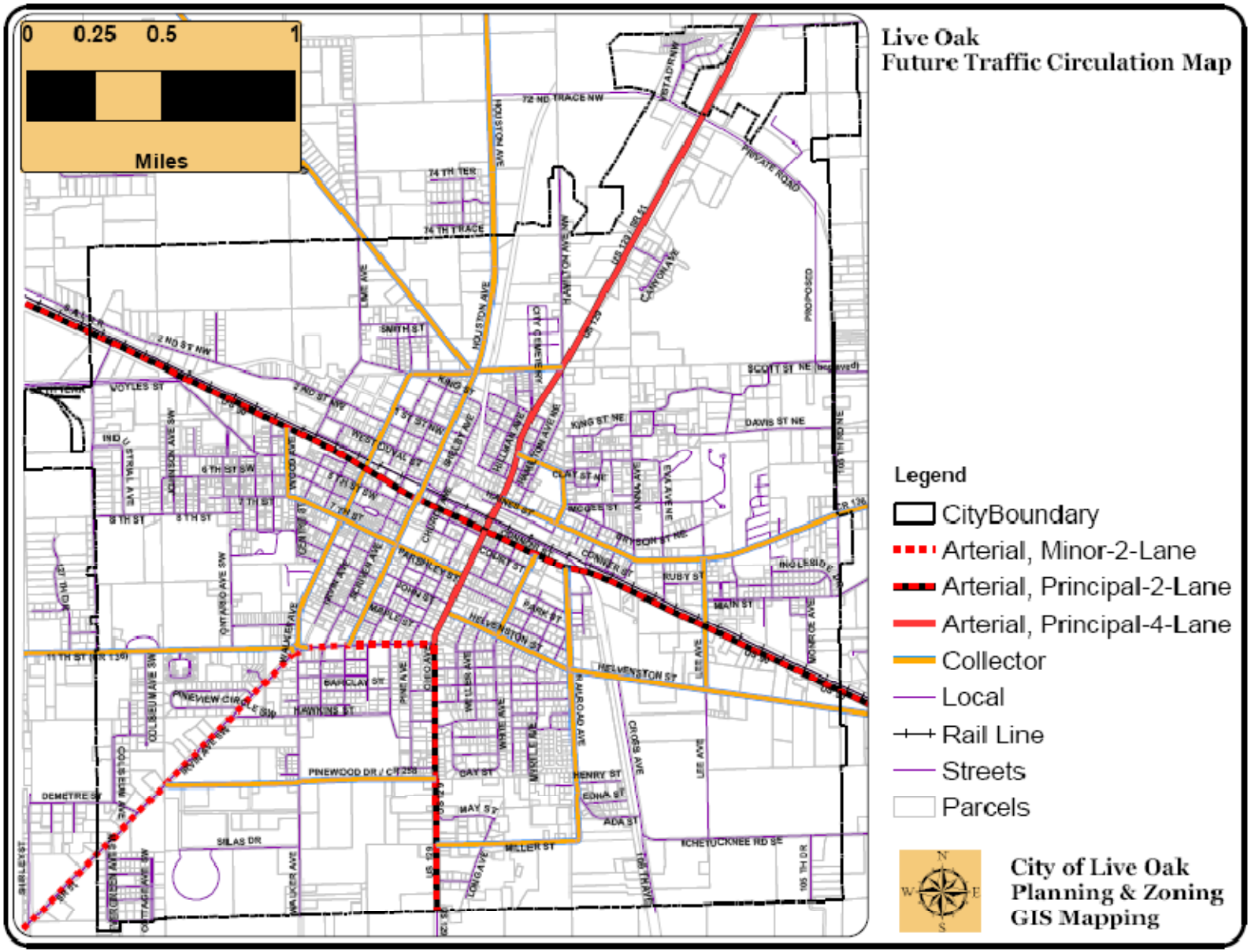
MAP – 33
Existing Traffic Circulation Map
2011



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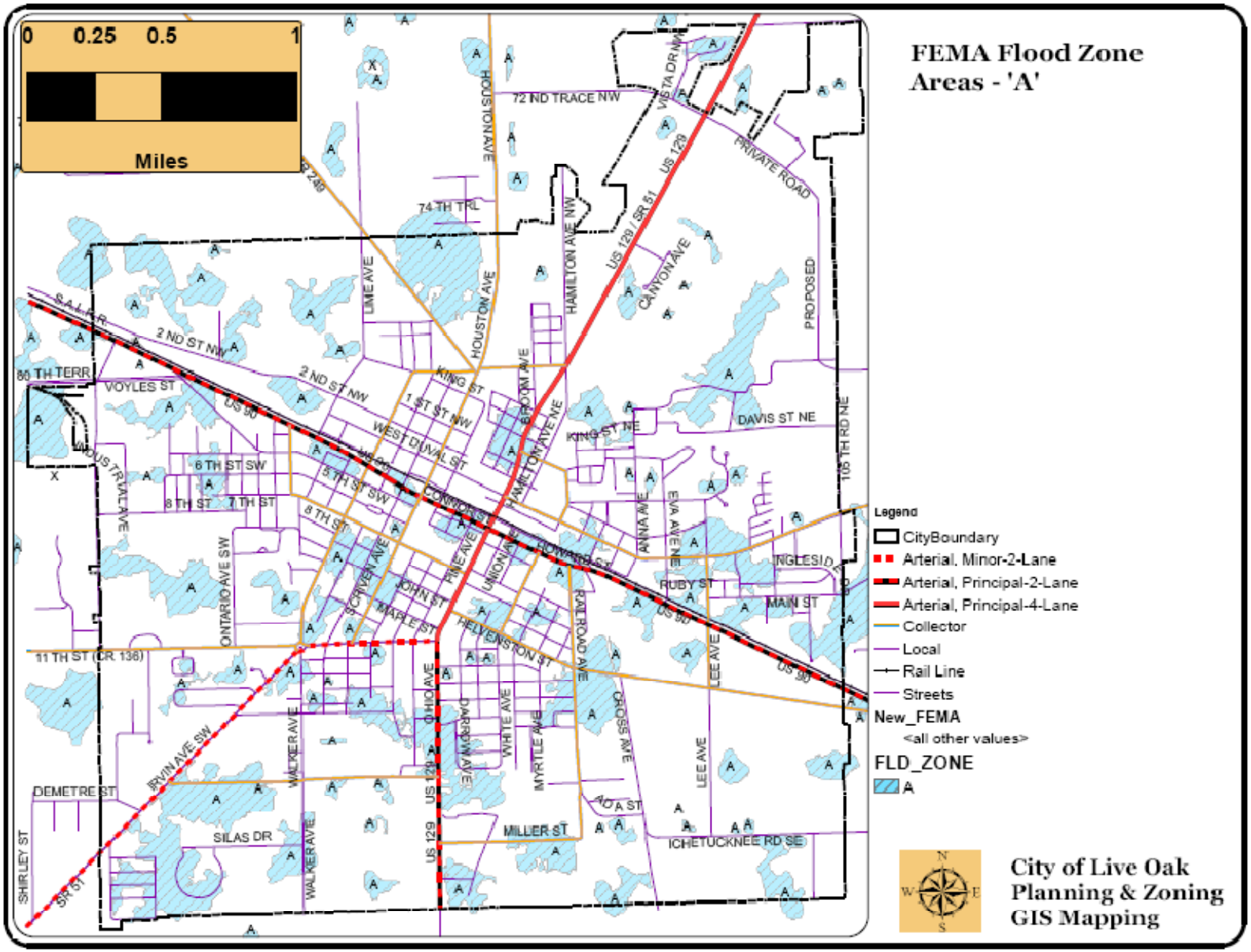
MAP – 34
FEMA Flood Zone Areas
2011



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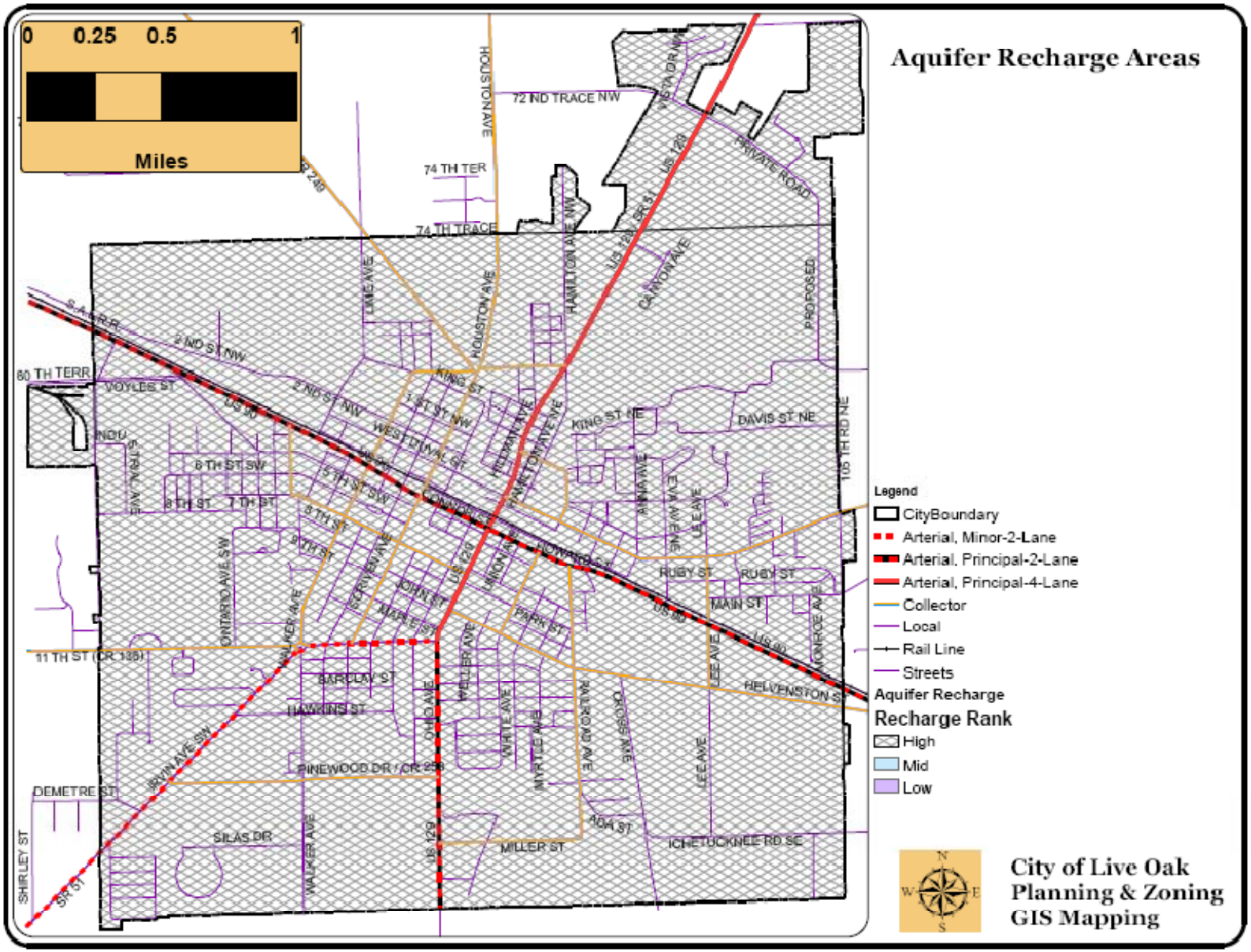
MAP – 35
Aquifer Recharge Areas
2011



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Questions or comments regarding this 2011 Evaluation and Appraisal Report of the Live Oak Comprehensive Plan should be directed to:

George Curtis

Development Manager/ Land Development Regulation Administrator

Mail	Office
City of Live Oak	City Hall Annex
101 White Ave. S.E.	416 Howard Street E
Live Oak, FL 32064	Live Oak, FL 32064
E-Mail	386.362.2276
gcurtis@cityofliveoak.org	386.330.6507 fax

City of Live Oak Planning Department Mission:

World-class service which promotes and preserves the character
and sense of place for the City;
Raising the expectation for a standard of excellence;
Meeting challenges with genuine solutions; and
Facilitating results which will serve as a model
for all to emulate and take pride in.