Mapping Poverty in Alachua County

Our main goal was to show the distribution of the population in poverty to identify who they are and what services they receive.

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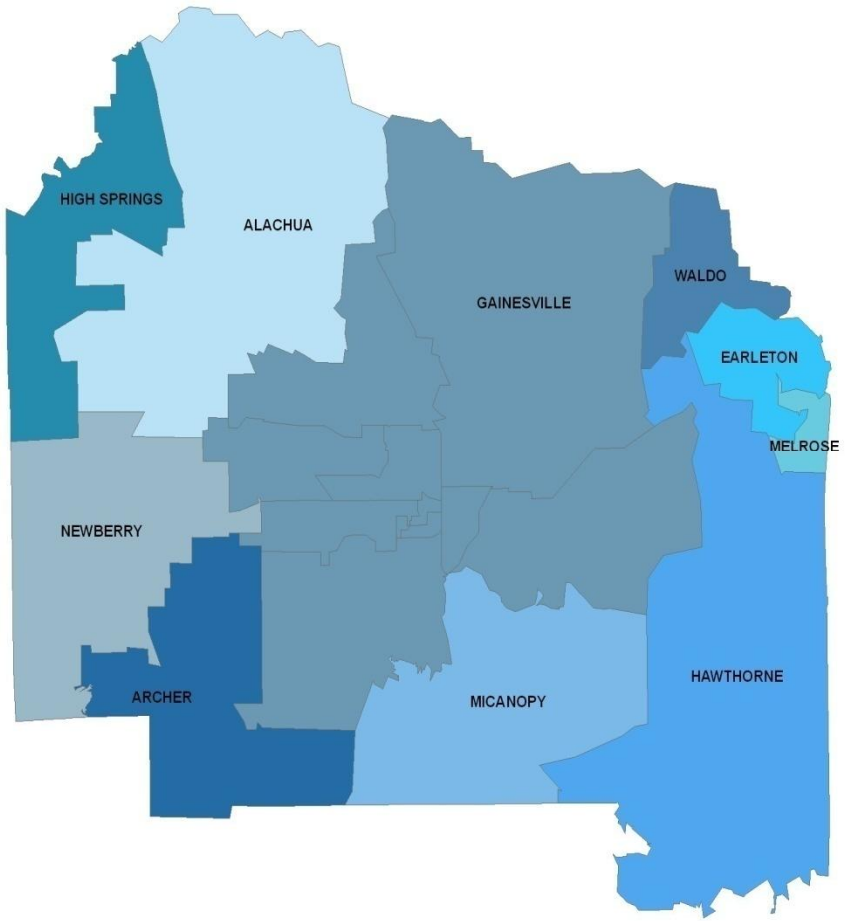
Joshua Pollock

Background

- Problem Statement:
  - To define and locate areas of poverty in Alachua County. Defining poverty is a complex task as different meanings are applied to the term and it depends on many factors.
- Justification:
  - For our purposes, poverty is first defined by poverty status of families in 1999. For example, the poverty threshold in that year for a family of four based on Federal Poverty Levels was $16,700. Poverty status was used to create a geospatial distribution of concentrated areas of families in poverty so that demographic information and accessibility to services could then be applied displayed in those areas.

Scope and Characteristics of Alachua County

- Area: 969.12 square miles; 9.8% of which is water
- Population in 2000: 217,955
- Population Density: 249.31 per square mile
- Avg. Family Size: 2.94
- Has a poverty rate of 22.8% which is higher than the state of Florida poverty rate of 12.5% (The 2000 U.S. Consensus Report)
- Home to the oldest and largest University in the State of Florida



Objectives

- To identify:
  1. Economic Indicator
  2. Socio-Demographic Indicator
  3. Vulnerability Indicator

Methodology Overview Chart

Census Block Group	• Poverty Status of Families in 1999 • Created new fields for the total number of families and families with incomes in 1999 below poverty levels.
Substandard Housing	• Identified areas containing low, medium and high levels of substandard housing • Put the substandard housing layer over the poverty layer
Lunch Aid Layer	• Determined schools receiving the lunch aide greater than or equal to 80% • Emphasize areas with lower income families
Census Block	• Race, female headed households, age, renter occupied housing, household sizes, and SHIP
Assisted Services	• Assisted Rental Housing, Assisted Food Service, Medicaid Provider, Bus Routes & Stops
Amenities	• Factors: Free, cheap, necessary, beneficial, morale

Objective 1: Economic Indicator

- To identify *where are the poor*:
  1. Determine the percent of total family population below the poverty level in 1999 based on the poverty status table.
     - Criteria:
       - Poverty Status of Families in 1999

Census Block Group

- Poverty Status of Families in 1999
- Created new fields for the total number of families and families with incomes in 1999 below poverty levels.

Substandard Housing

- Identified areas containing low, medium and high levels of substandard housing
- Put the substandard housing layer over the poverty layer

Lunch Aid Layer

- Determined schools receiving the lunch aide greater than or equal to 80%
- Emphasize areas with lower income families

Census Block

- Race, female headed households, age, renter occupied housing, household sizes, and SHIP

Assisted Services

- Assisted Rental Housing, Assisted Food Service, Medicaid Provider, Bus Routes & Stops

Amenities

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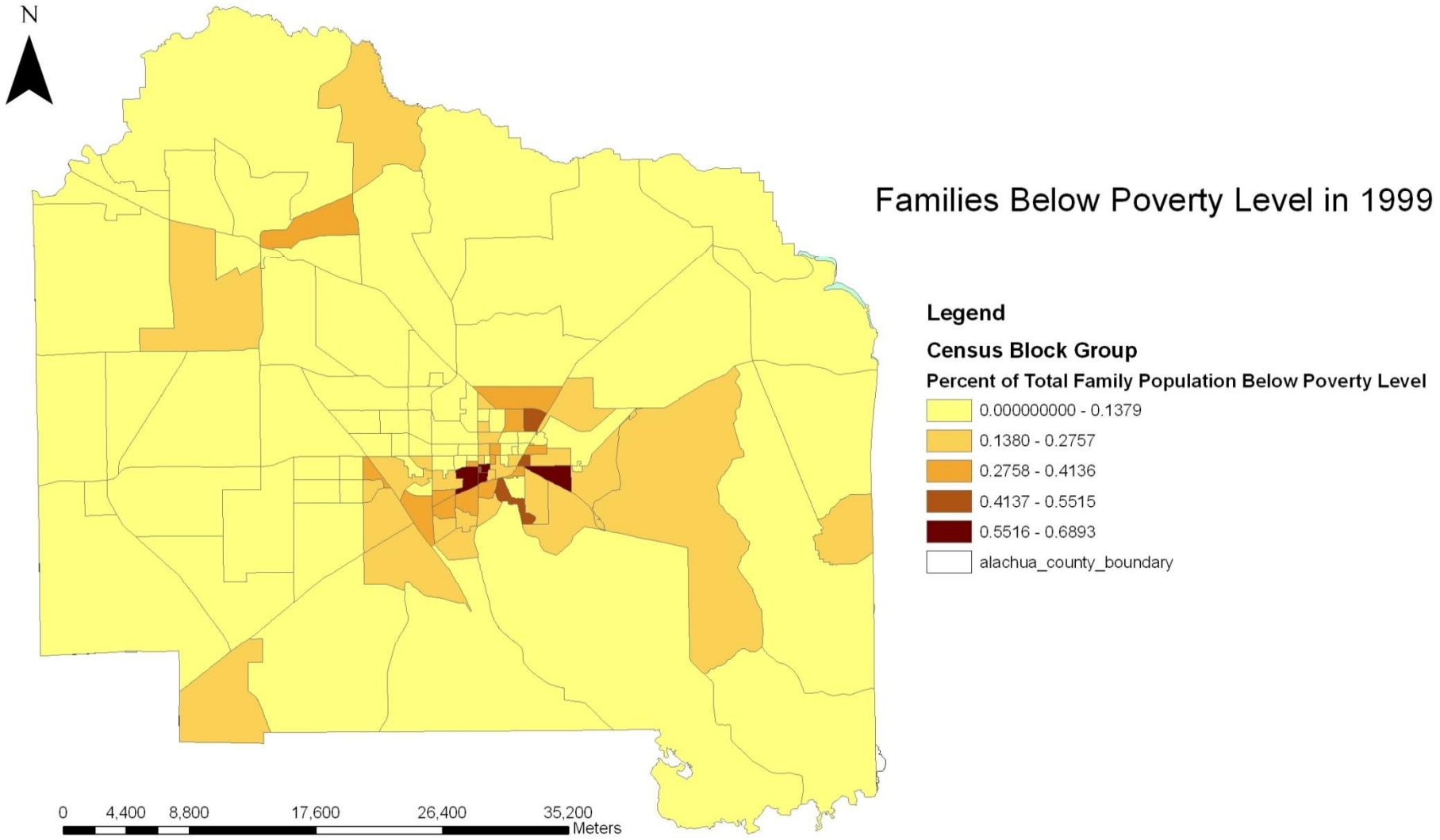
N
Families Below Poverty Level in 1999
Legend
Census Block Group
Percent of Total Family Population Below Poverty Level
0.000000000 - 0.1379
0.1380 - 0.2757
0.2758 - 0.4136
0.4137 - 0.5515
0.5516 - 0.6893
alachua_county_boundary
0
4,400
8,800
17,600
26,400
35,200
Meters

Objective 1: Economic Indicator

- To identify *where are the poor*:
  2. Determine the housing conditions of the areas with the highest concentration of poverty.
     - Criteria:
       - Substandard Housing

Census Block Group

- Poverty Status of Families in 1999
- Created new fields for the total number of families and families with incomes in 1999 below poverty levels.

Substandard Housing

- Identified areas containing low, medium and high levels of substandard housing
- Put the substandard housing layer over the poverty layer

Lunch Aid Layer

- Determined schools receiving the lunch aide greater than or equal to 80%
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Census Block

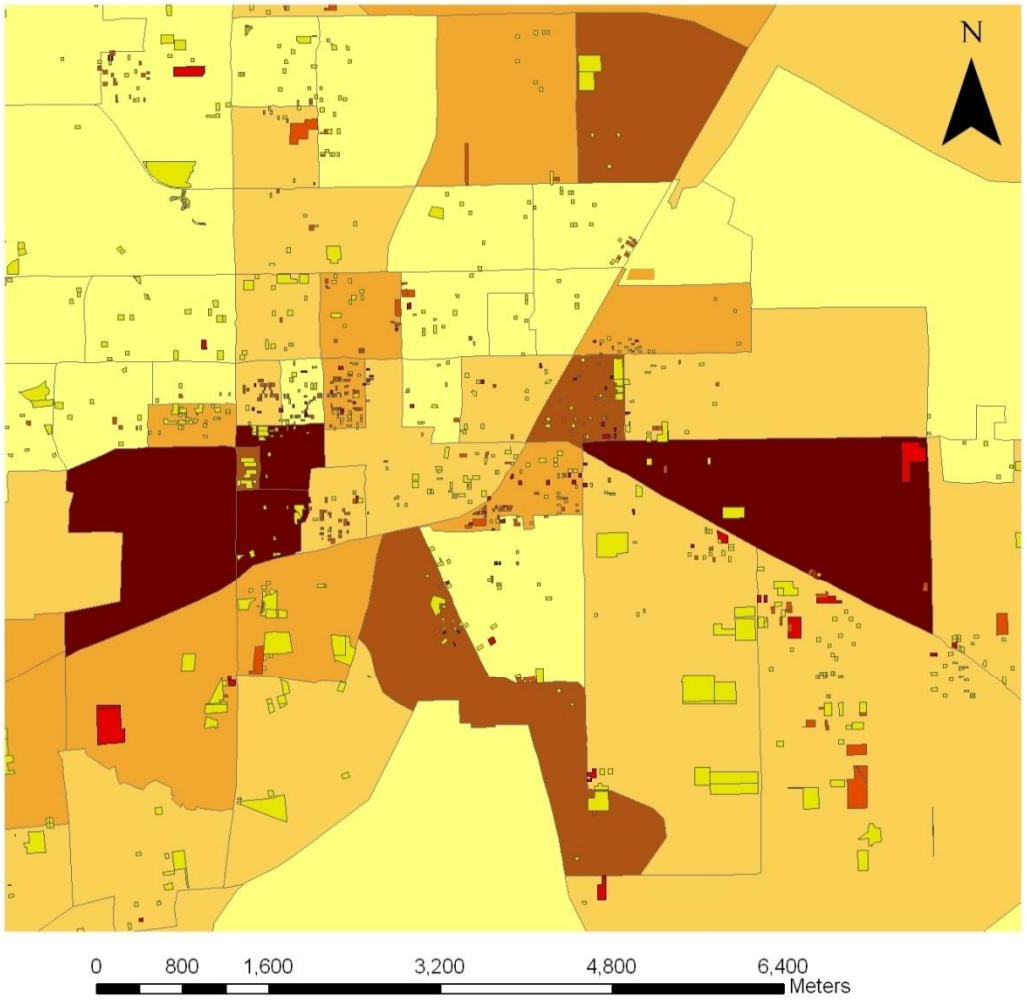
- Race, female headed households, age, renter occupied housing, household sizes, and SHIP

Assisted Services

- Assisted Rental Housing, Assisted Food Service, Medicaid Provider, Bus Routes & Stops

Amenities

- Factors: Free, cheap, necessary, beneficial, morale



Housing Conditions for Families Below Poverty Level in 1999

Legend

Census Block Group

Percent of Total Family Population Below Poverty Level

- 0.000000000 - 0.1379
- 0.1380 - 0.2757
- 0.2758 - 0.4136
- 0.4137 - 0.5515
- 0.5516 - 0.6893
- alachua_county_boundary

Housing Conditions

DESCRIPT

- Substandard Low
- Substandard Med
- Substandard High

Objective 1: Economic Indicator

- To identify *where are the poor*:
  3. Determine the schools which have the highest percentage of students that receive free and reduced lunches
     - Criteria:
       - Lunch Aid Layer

Census Block Group

- Poverty Status of Families in 1999
- Created new fields for the total number of families and families with incomes in 1999 below poverty levels.

Substandard Housing

- Identified areas containing low, medium and high levels of substandard housing
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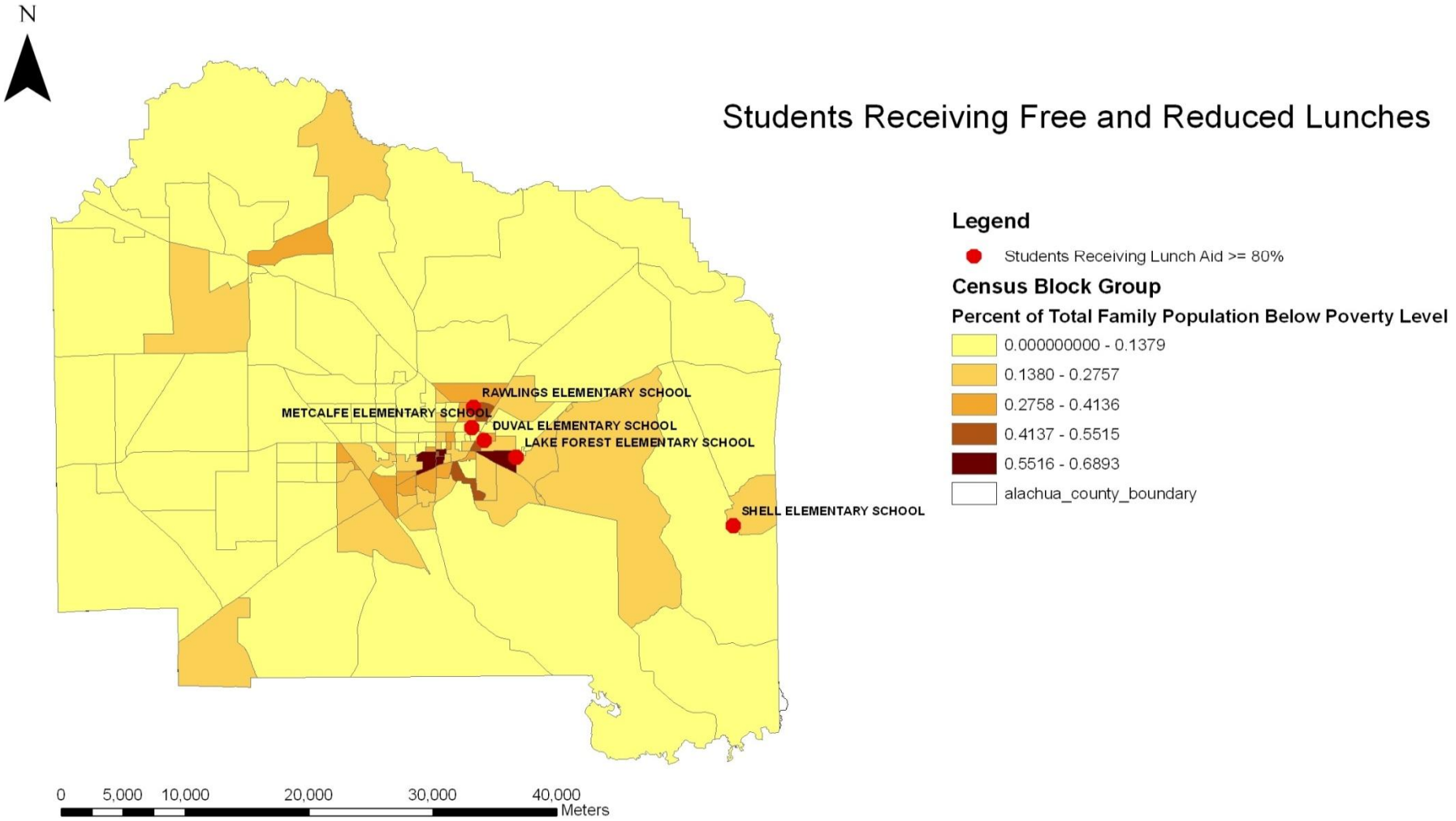
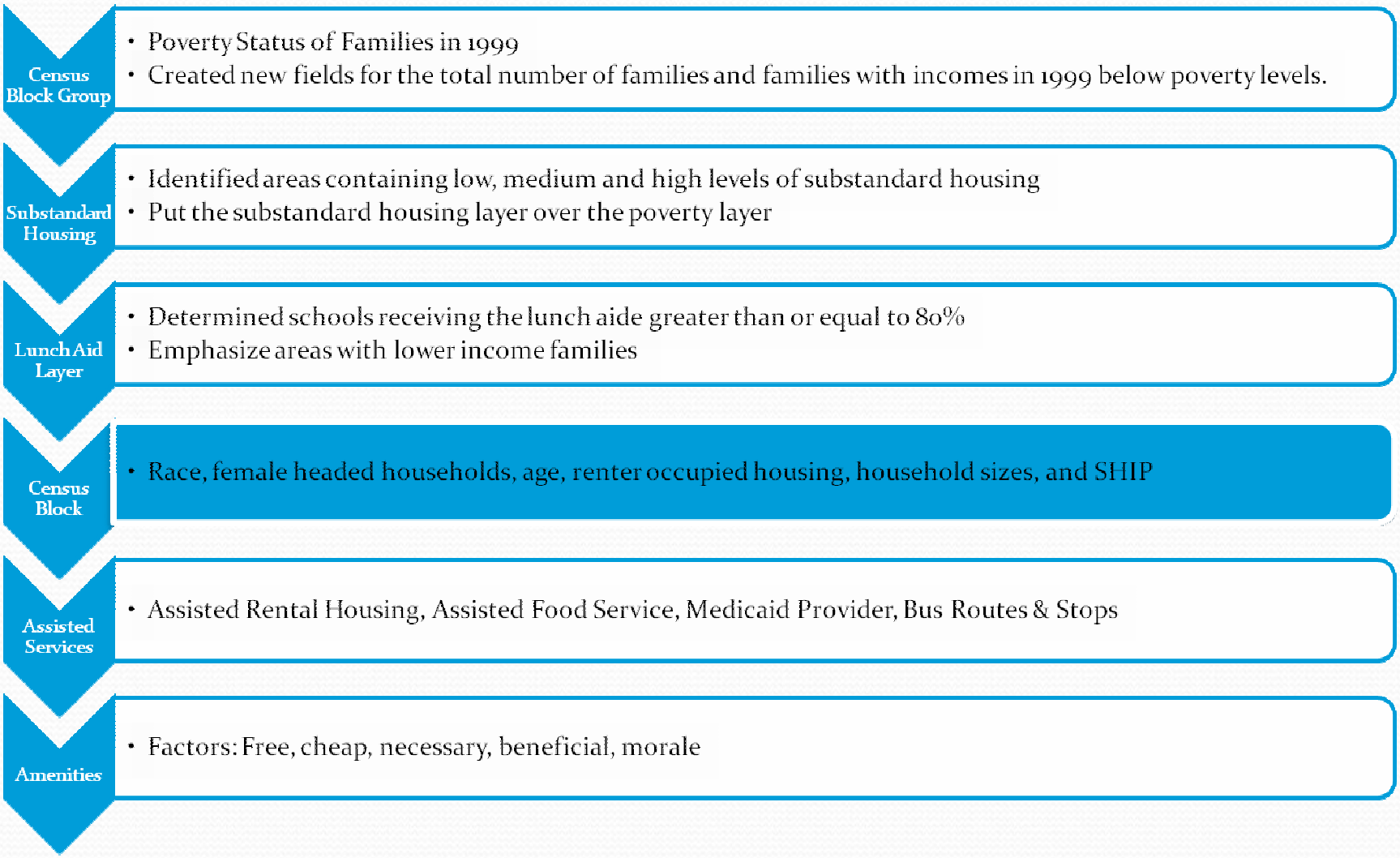

N
Students Receiving Free and Reduced Lunches
RAWLINGS ELEMENTARY SCHOOL
METCALFE ELEMENTARY SCHOOL
DUVAL ELEMENTARY SCHOOL
LAKE FOREST ELEMENTARY SCHOOL
SHELL ELEMENTARY SCHOOL
Legend
Students Receiving Lunch Aid >= 80%
Census Block Group
Percent of Total Family Population Below Poverty Level
0.000000000 - 0.1379
0.1380 - 0.2757
0.2758 - 0.4136
0.4137 - 0.5515
0.5516 - 0.6893
alachua_county_boundary
0
5,000
10,000
20,000
30,000
40,000
Meters

Objective 2: Socio-Demographic Indicator

- To identify *who are the poor*:
  1. Examine the spatial distribution of racial groups within Alachua County
  2. Examine the geographic location of groups that are commonly associated with poverty (such as the elderly and single mothers)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Amenities
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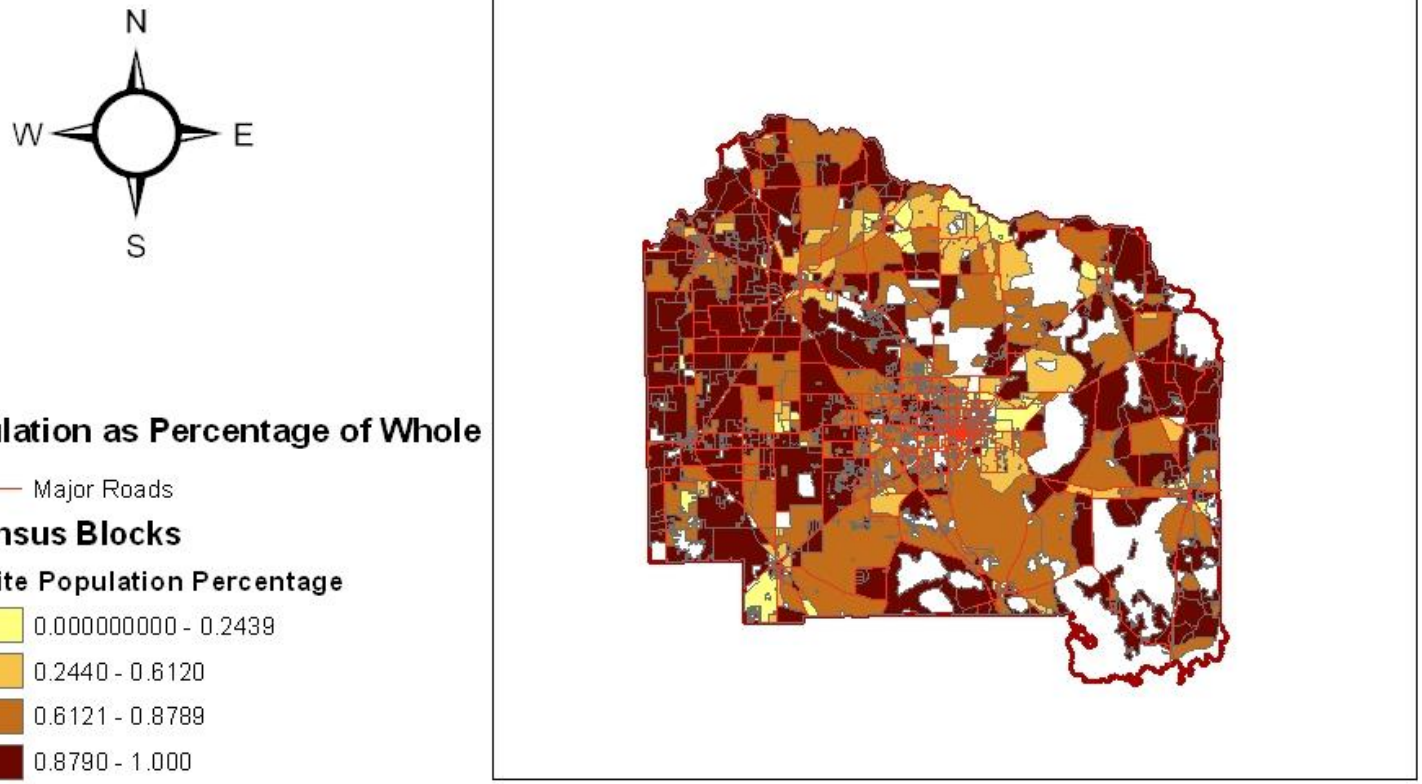
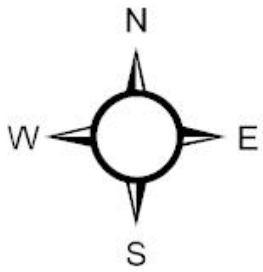
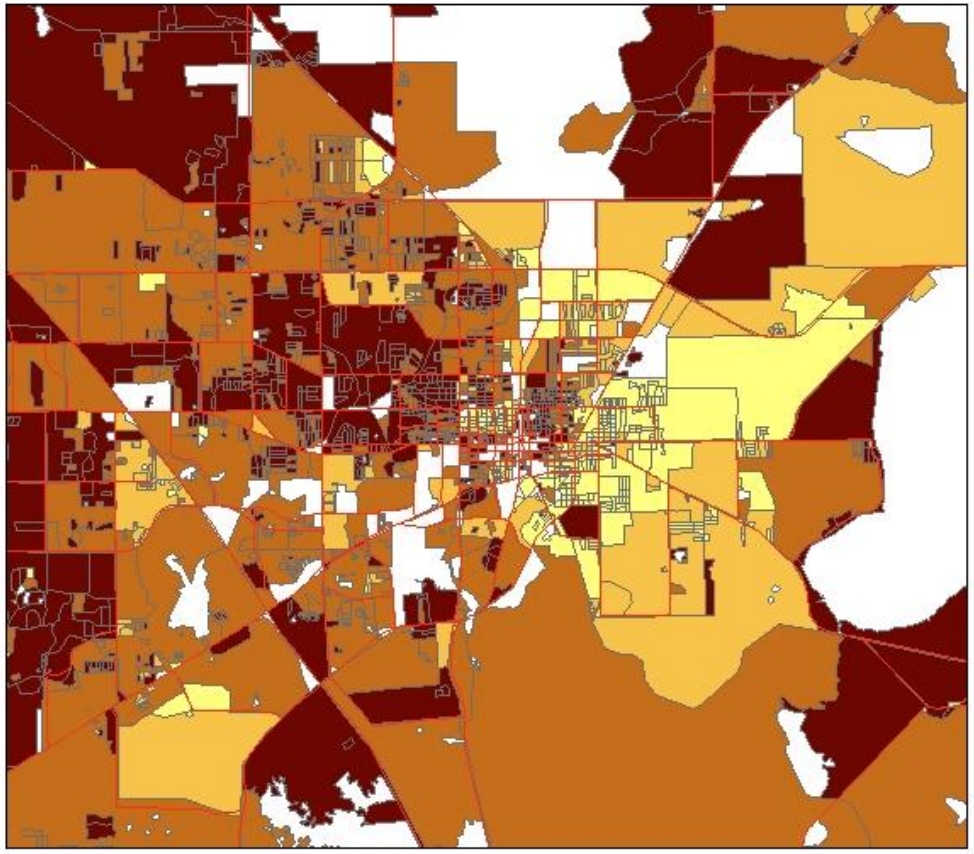
White Percentage of Population Per Census Block



White Percentage of Population Per Census Block





White Population as Percentage of Whole

Major Roads

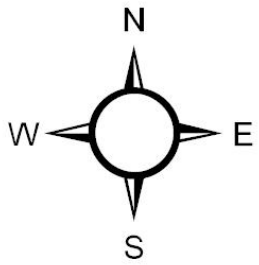
Census Blocks

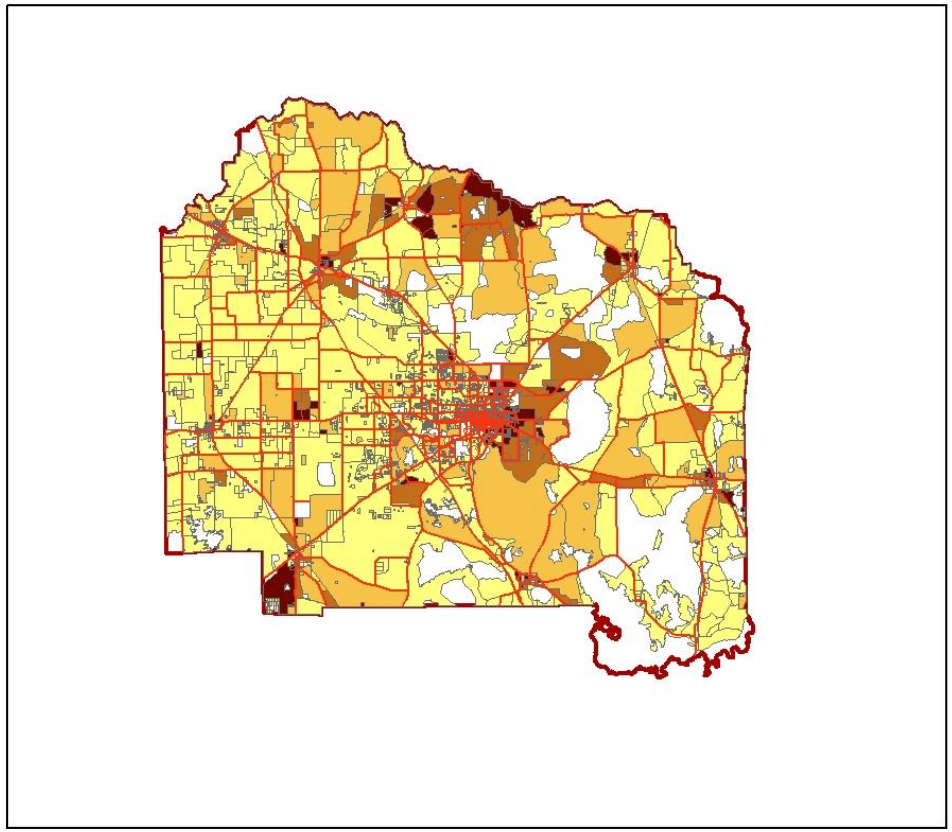
White Population Percentage

- 0.000000000 - 0.2439
- 0.2440 - 0.6120
- 0.6121 - 0.8789
- 0.8790 - 1.000

0 2,950 5,900 11,800 Meters

Black Percentage of Population Per Census Block





Black Population as Percentage of Whole

Major Roads

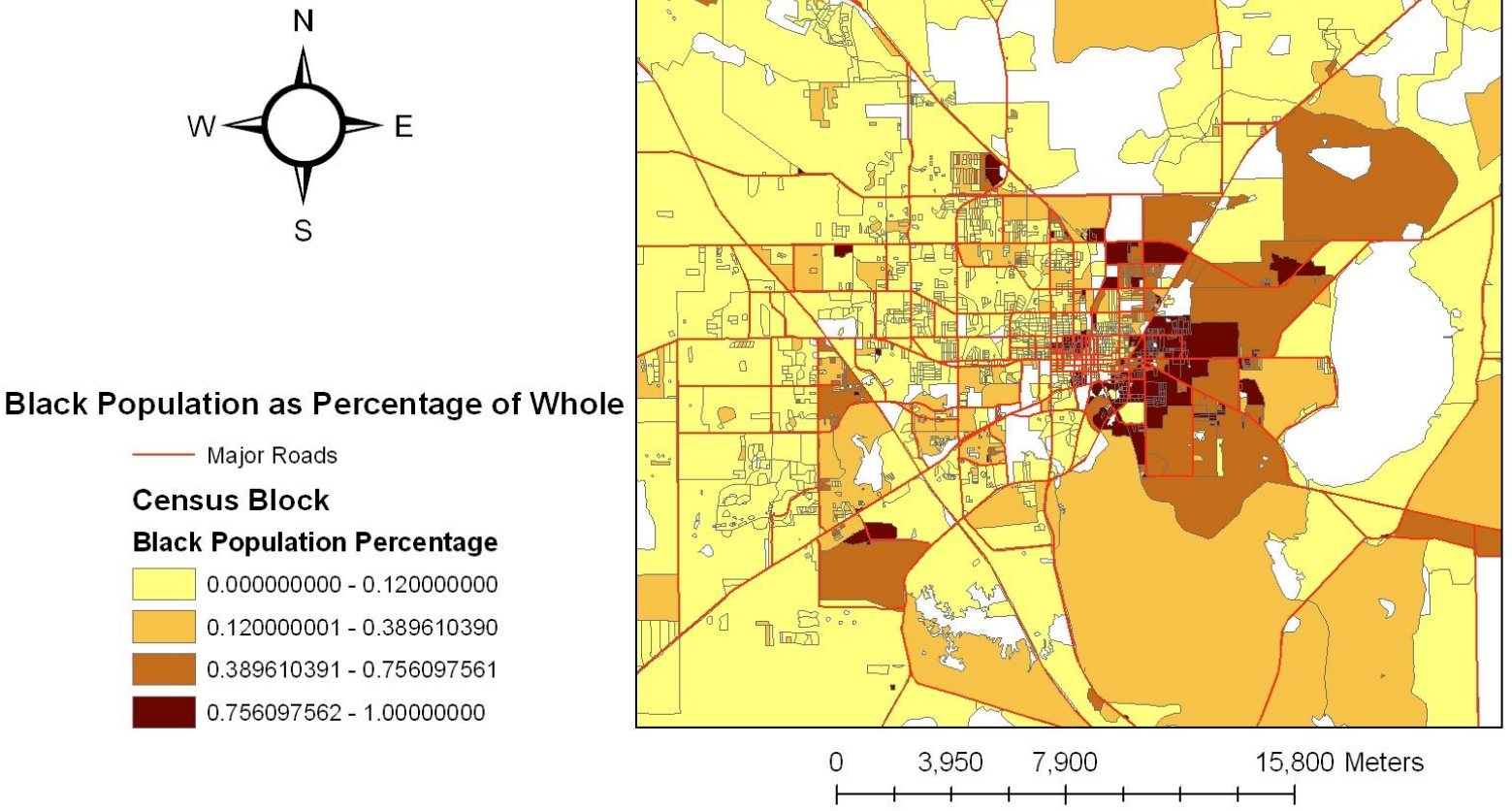
Census Blocks

Black Population Percentage

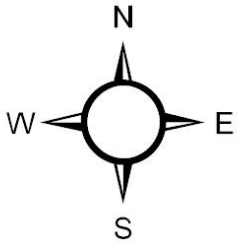
- 0.000000000 - 0.120000000
- 0.120000001 - 0.389610390
- 0.389610391 - 0.756097561
- 0.756097562 - 1.00000000

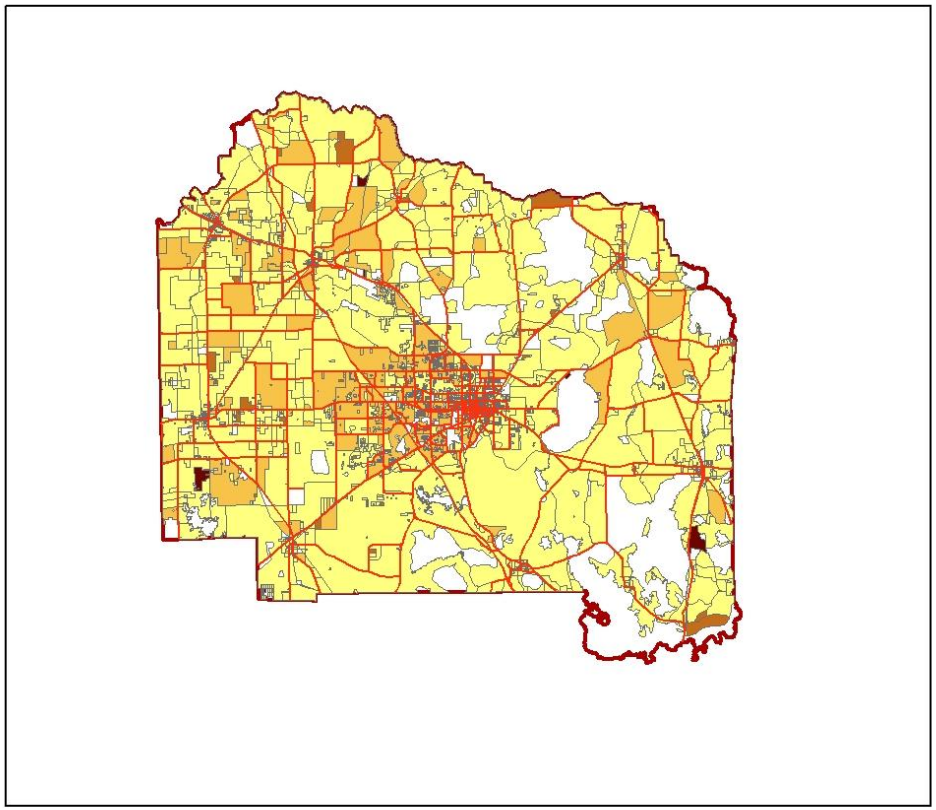
0 12,500 25,000 50,000 Meters

Black Percentage of Population Per Census Block



Hispanic Percentage of Population Per Census Block





Hispanic Population as Percentage of Whole

Major Roads

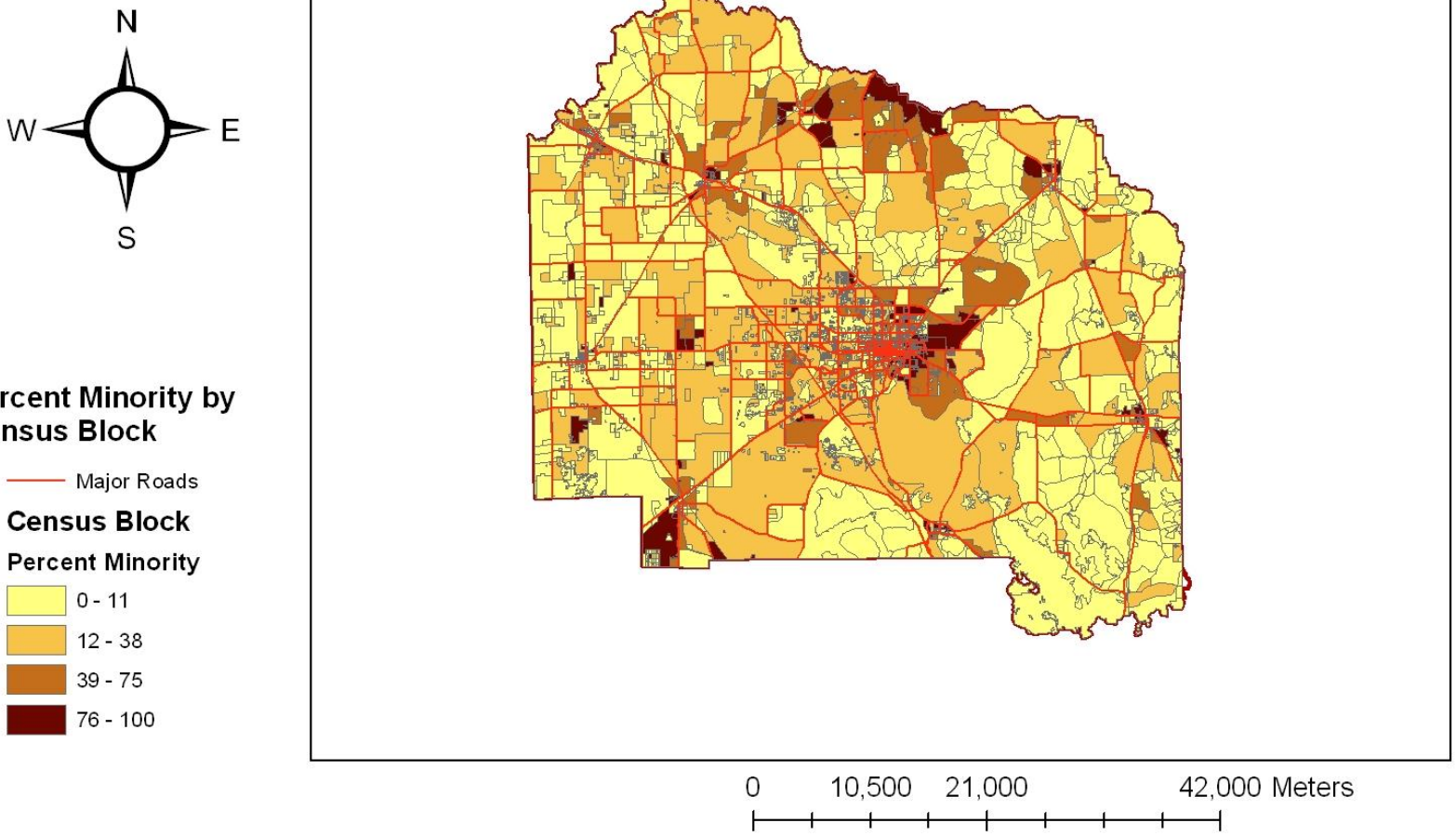
Census Block

Hispanic Population Percentage

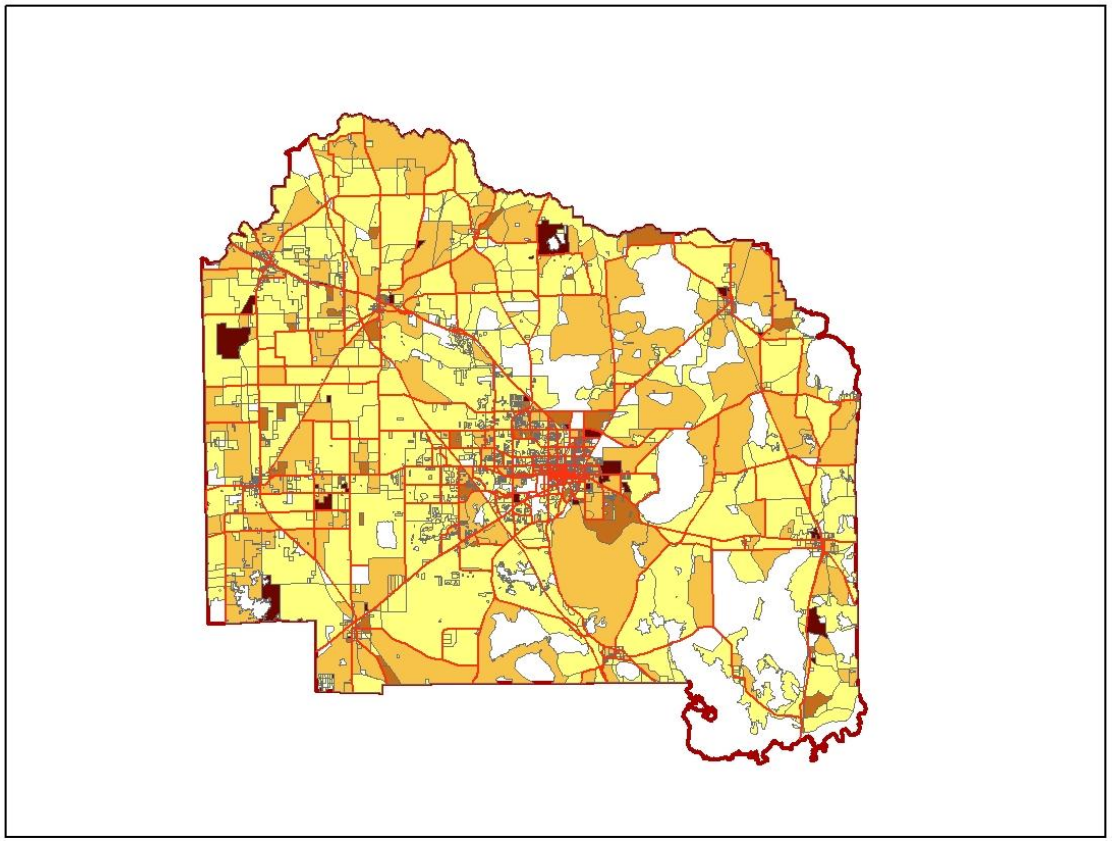
- 0.000000000 - 0.048387097
- 0.048387098 - 0.157894737
- 0.157894738 - 0.428571429
- 0.428571430 - 1.00000000

0 11,500 23,000 46,000 Meters

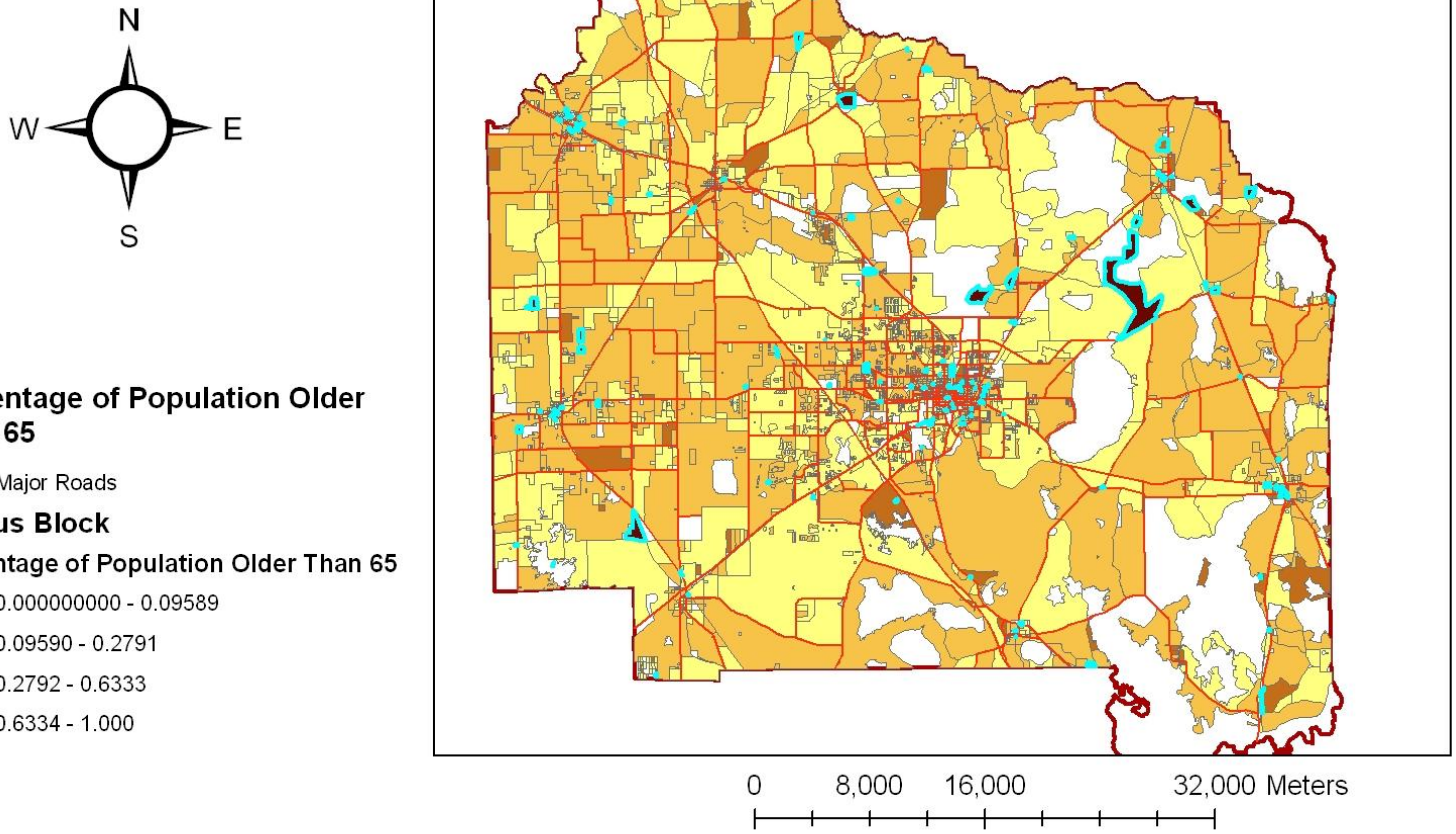
Minority Percentage of Population Per Census Block



Female-Headed Households with Children

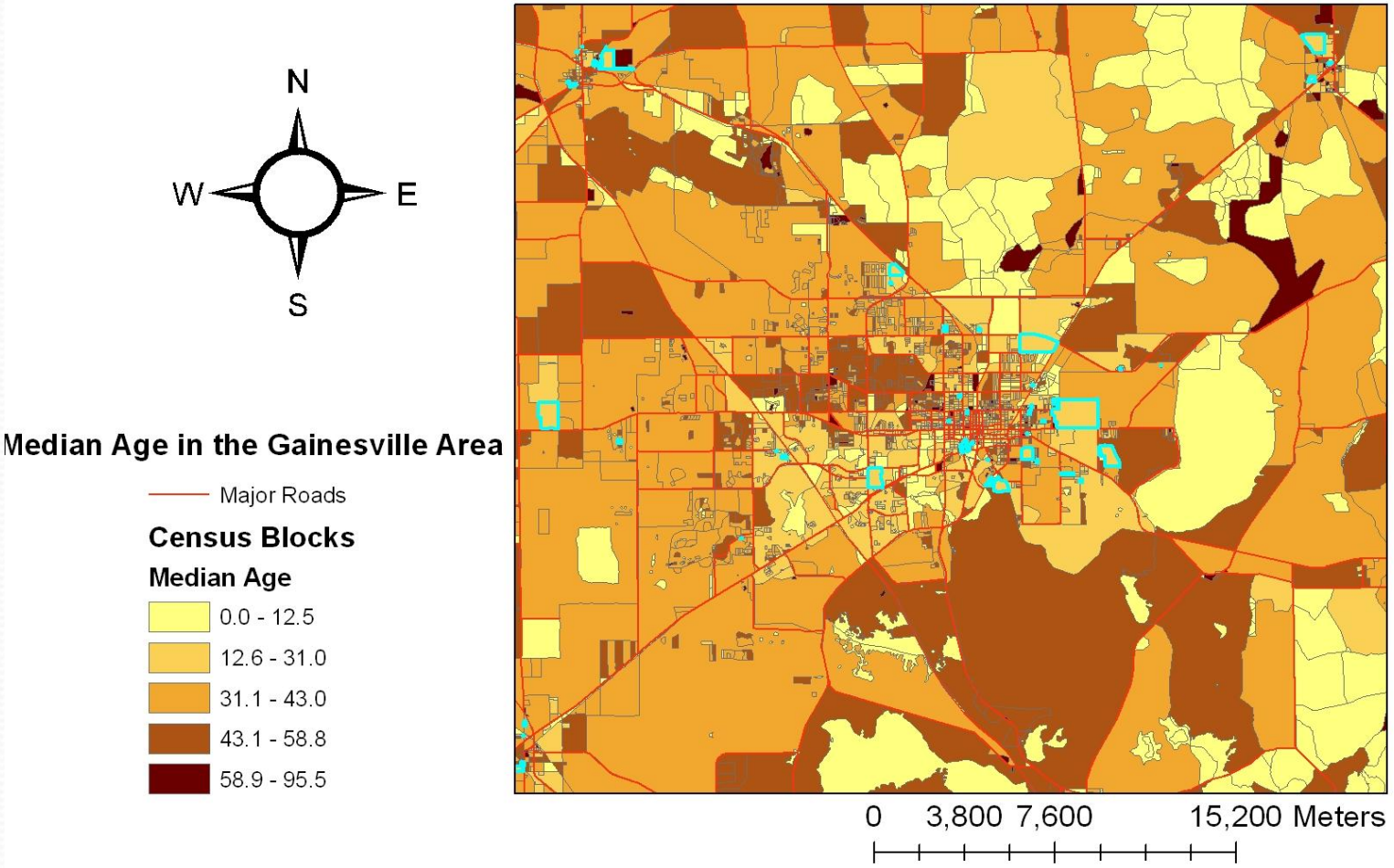


Age of Population



Census blocks highlighted by selection indicate areas in which people over the age of 65 constitute a majority of the population.

Median Age in the Gainesville Area

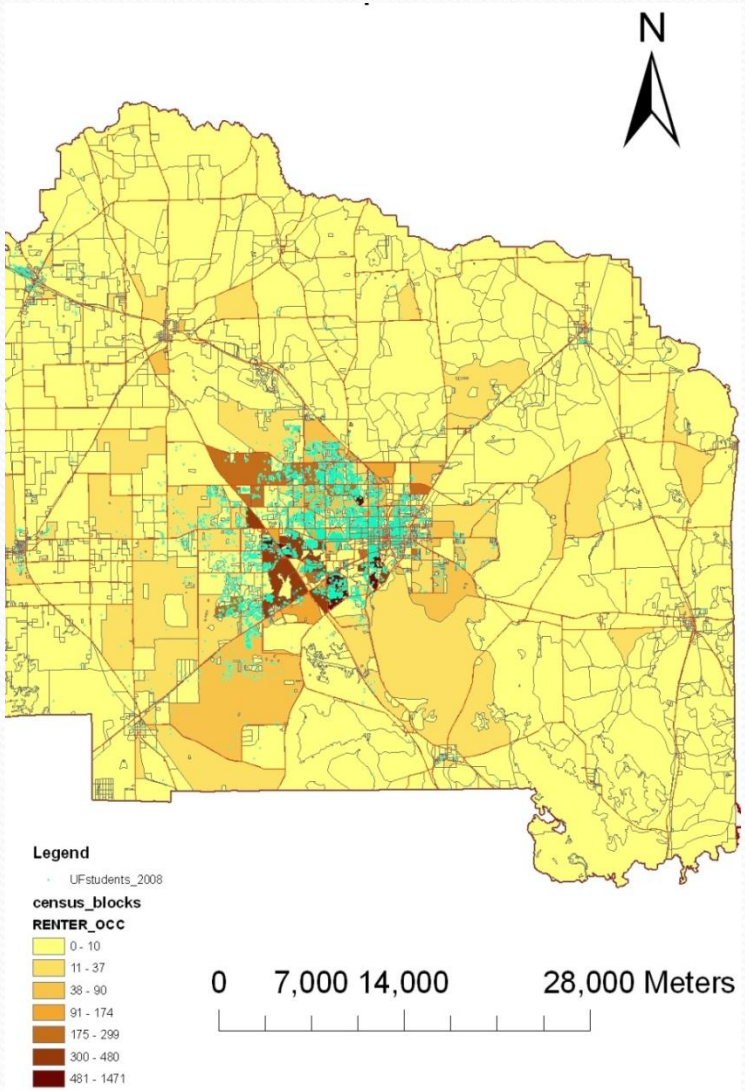


Areas selected are those in which the median age is less than or equal to 18 years of age. In short, these areas have high youth populations.

Objective 2: Socio-Demographic Indicator Continued

- To identify *who are the poor*:
  3. Determine the areas of Alachua County having the highest rates of renters in relation to the where the student population is.
  4. Examine where the highest densities households in Alachua County reside.
  5. Examine the areas most assisted by the State Housing Initiative Program (S.H.I.P)

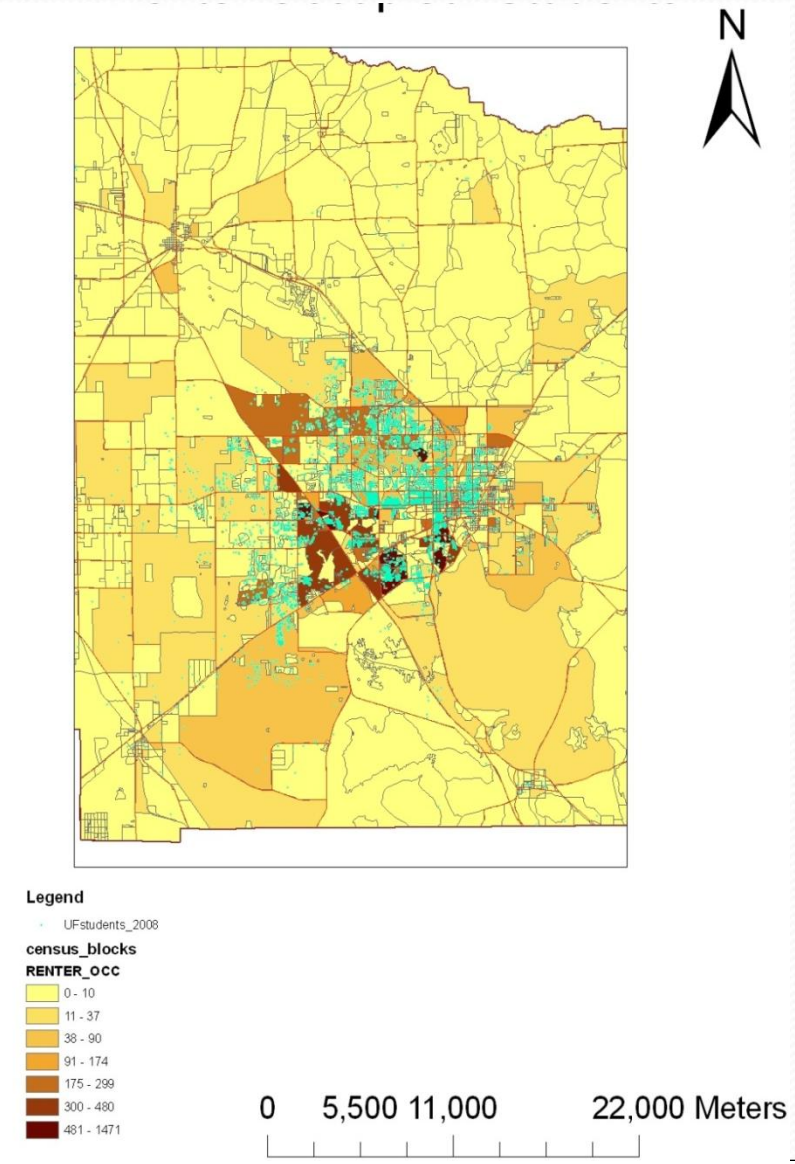
Renter Occupied vs. Students



- The large population of UF students skew renter occupied data due to an overwhelming percentage of these students being annual renters.

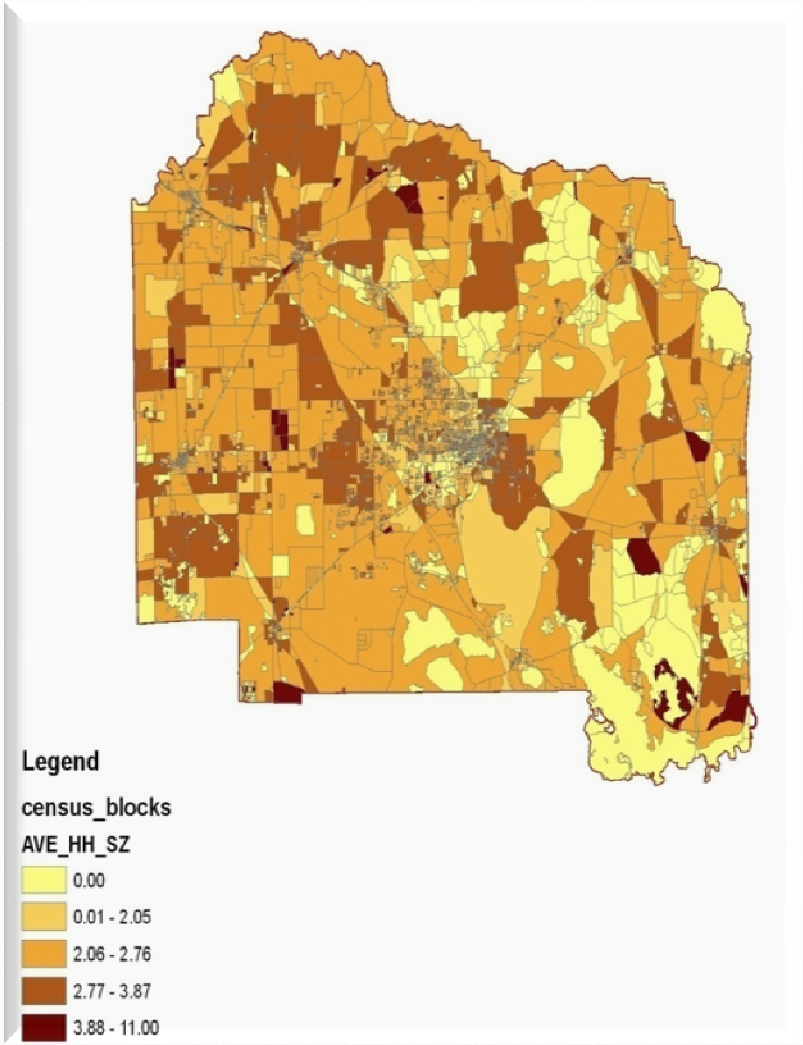
- Approximately 86% of these students meet poverty guideline requirements.

Renter Occupied vs. Students



- Approximately 24% of Alachua County population considered impoverished
- When removing students this # drops to approximately 13.9%, much close to the National Average.
- Is the UF community the source of the problem or a potential solution?
- Should students who meet poverty guidelines be included in this data?

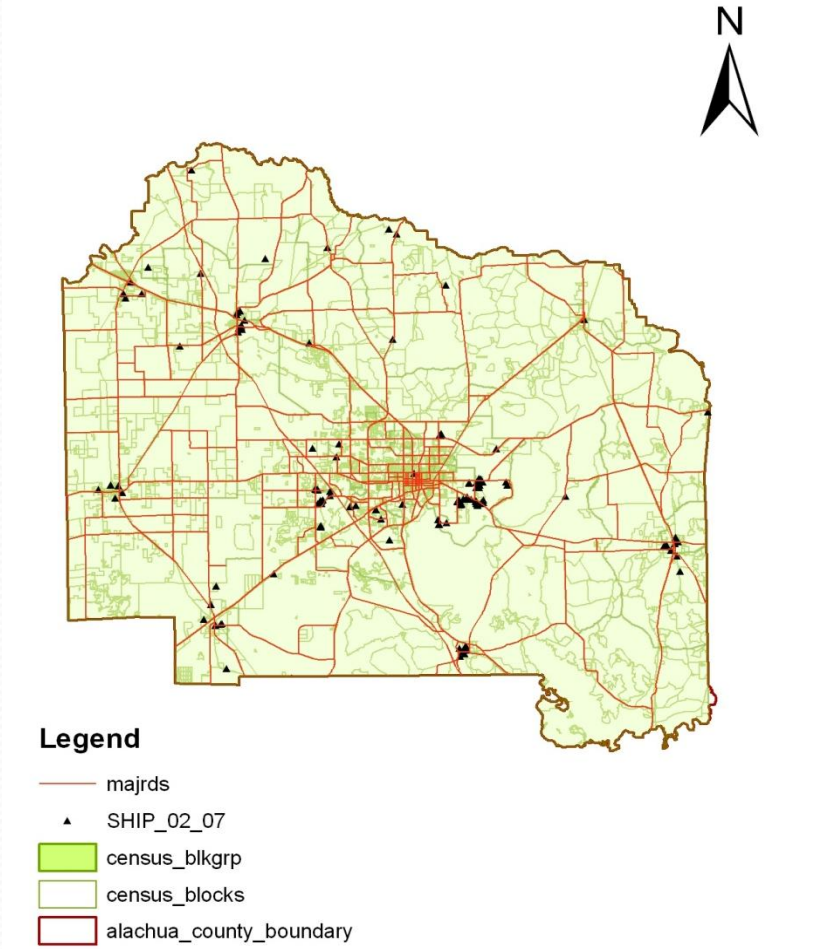
Household Size by Census Block



- Higher density family units can be seen on the outskirts of Gainesville.

- The areas of Hawthorne and East Gainesville as well as the Northwest Quadrant of Alachua County have higher densities per household (Alachua/ High Springs).

State Housing Initiative Program



•S. H. I. P. is a program through which the state of Florida channels funds to counties and municipalities across the state for the purpose of enabling increased numbers of eligible individuals and families to enjoy homeownership.

•Down Payment Assistance Program.

S.H.I.P. Income Guidelines 2009

Maximum Sales Price: $237,000.00 for both new and existing homes (annually adjusted)

Income Guidelines:

Household size	Very Low Income (30% to 50% of AMI)	Low Income (51% to 80% of AMI)	Moderate Income (81% to 120% of AMI)
1	*Up to - $19,800	$19,801 - $31,700	$31,701 - $47,520
2	* Up to - $21,800	$21,801 - $36,250	$36,251 - $54,360
3	* Up to - $25,450	$25,451 - $40,750	$40,751 - $61,080
4	*Up to - $28,300	$28,301 - $45,300	$45,301 - $67,920
5	*Up to - $30,550	$30,551 - $48,900	$48,901 - $73,320
6	*Up to - $32,850	$32,851 - $52,550	$52,551 - $78,840
7	*Up to - $35,100	$35,101 - $56,150	$56,151 - $84,240
8 or more	*Up to - $37,350	$37,351 - $59,800	$59,801 - $89,640

Maximum Assistance:

	Very Low Income	Low Income	Moderate Income
Existing Homes needing Rehabilitation	$30,000 (combination of down payment, closing costs and rehabilitation)	$25,000 (combination of down payment, closing costs and rehabilitation)	$5,000 (Down Payment and Closing Costs)
Existing Homes with No Rehabilitation Needed	$20,000 (Down Payment and Closing Costs)	$15,000 (Down Payment and Closing Costs)	$5,000 (Down Payment and Closing Costs)
New Homes (less than 1 year old)	$30,000 (Down Payment and Closing Costs)	$25,000 (Down Payment and Closing Costs)	$5,000 (Down Payment and Closing Costs)

Objective 3: Vulnerability Indicator

- To identify *what is the poor's access to services*:
  1. Determine the location of assistance services and any tax parcels that are within one mile of these services.
     - Assisted Rental Housing
     - Assisted Food Services
     - Medicaid Providers
     - Bus Routes & Stops
  2. Determine the location of assistance services in relation to where the poor are.

Census Block Group

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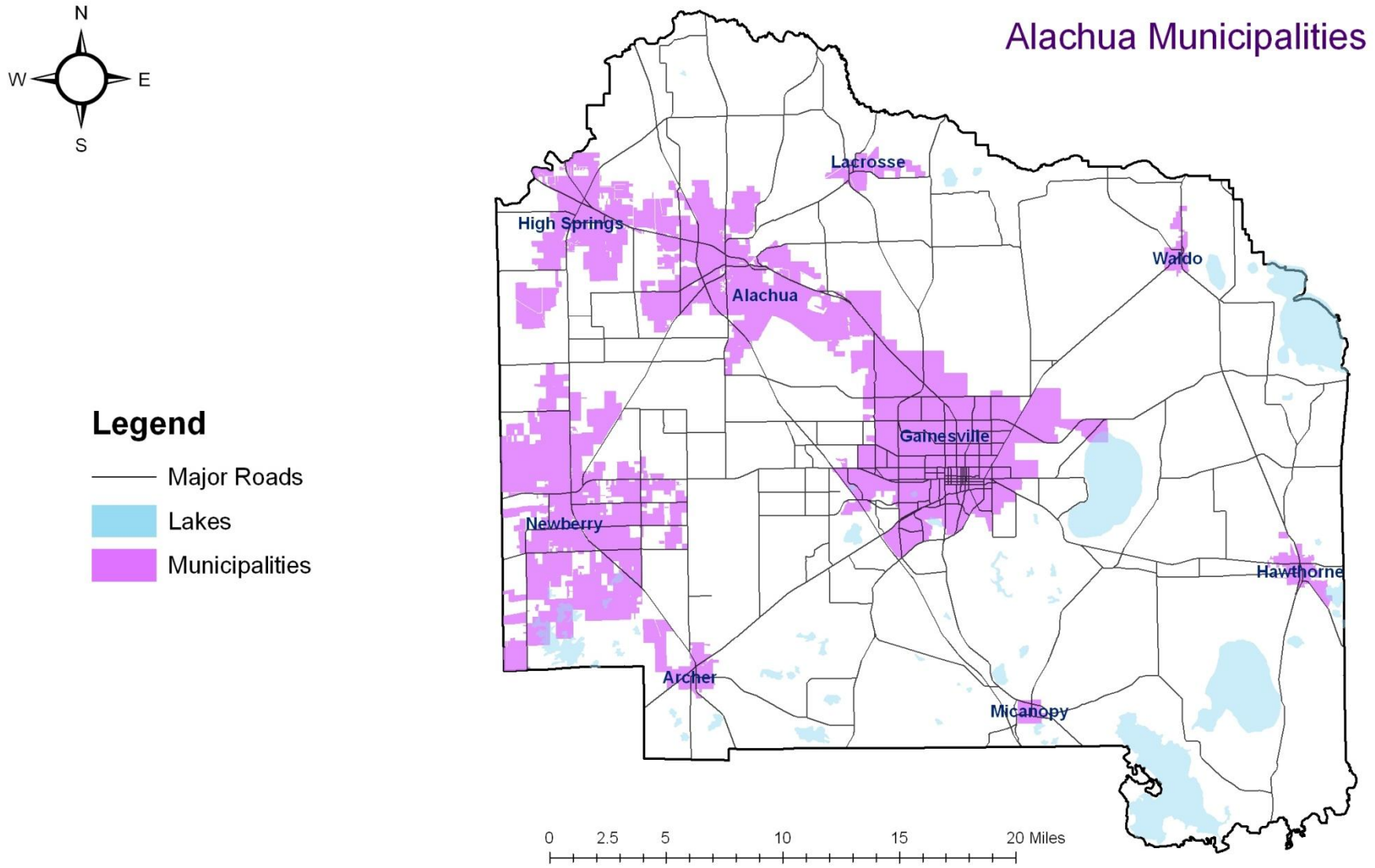
Alachua Municipalities
N
W
E
S
Legend
Major Roads
Lakes
Municipalities
Lacrosse
High Springs
Waldo
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
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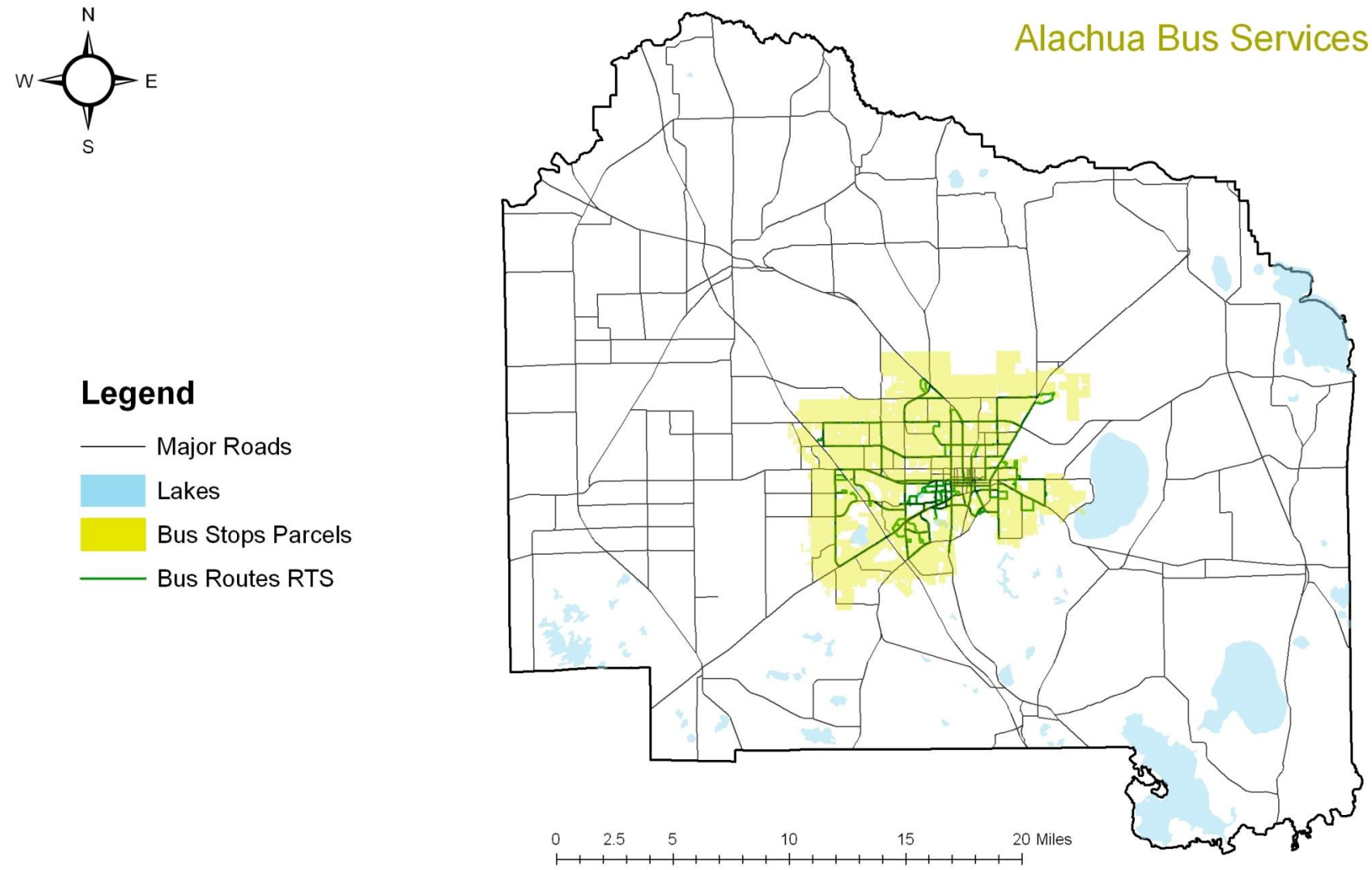
2.5
5
10
15
20 Miles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Alachua Bus Services
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Major Roads
Lakes
Bus Stops Parcels
Bus Routes RTS
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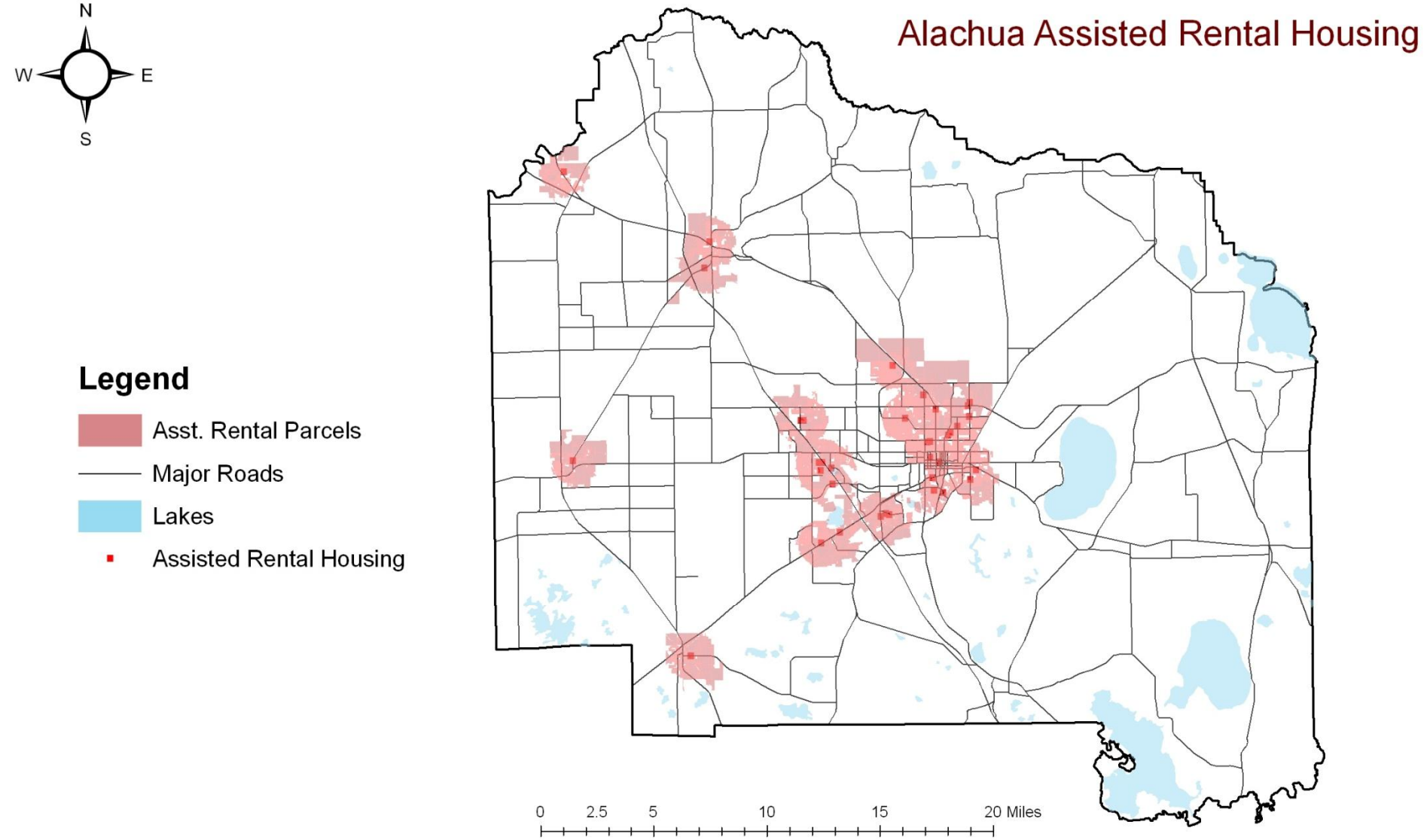
Alachua Assisted Rental Housing
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Asst. Rental Parcels
Major Roads
Lakes
Assisted Rental Housing
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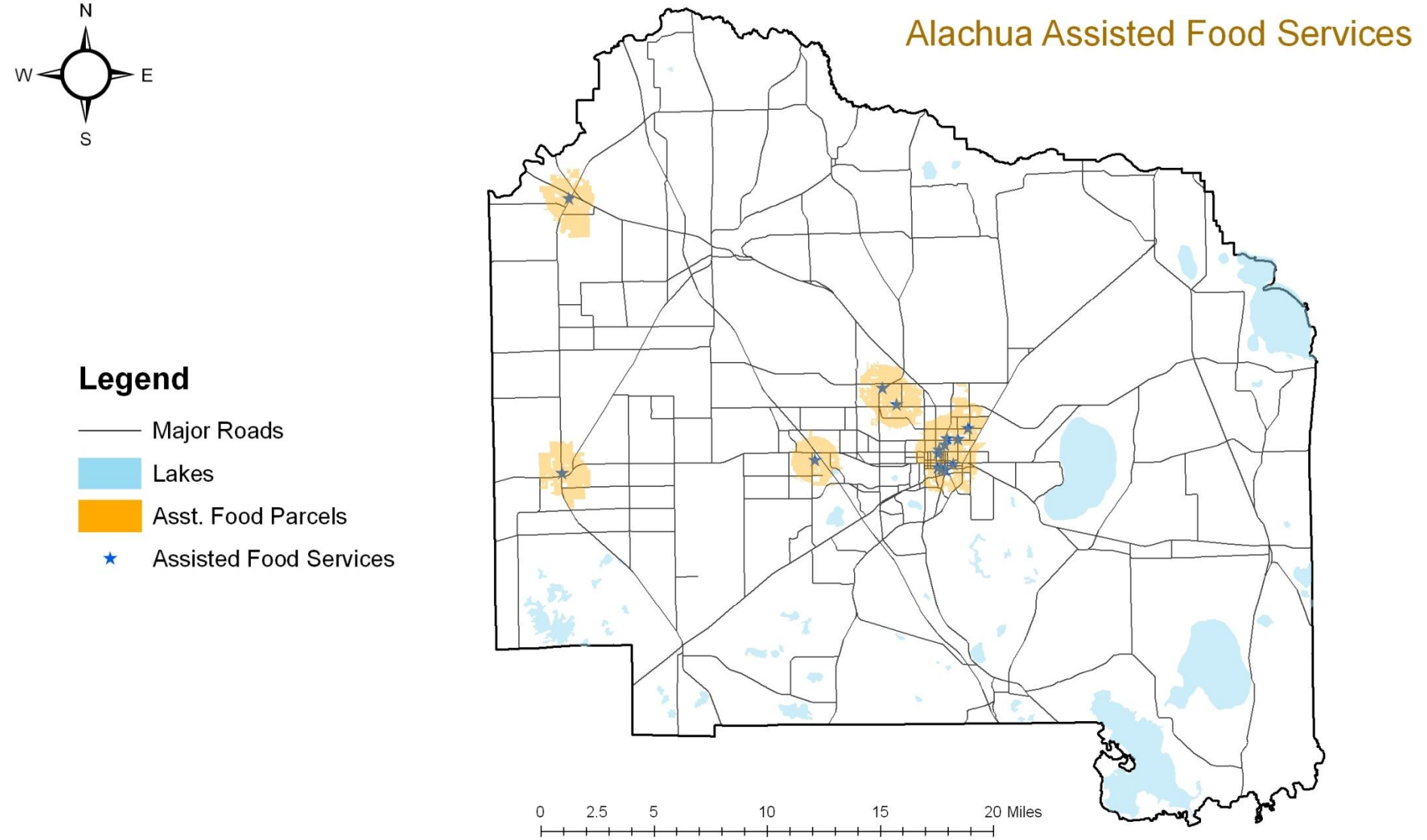
20 Miles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Alachua Assisted Food Services
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Major Roads
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Asst. Food Parcels
Assisted Food Services
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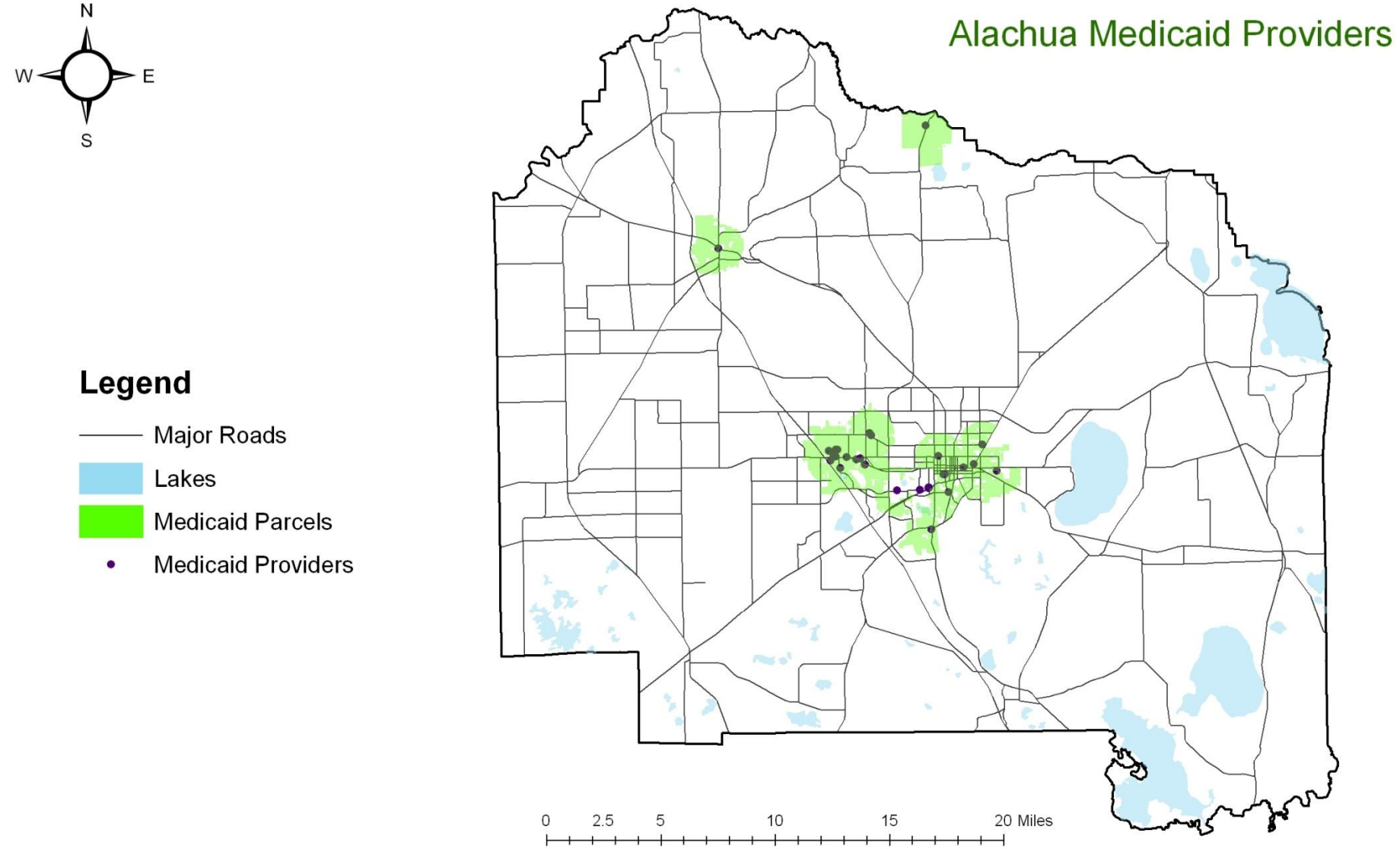
20 Miles


Alachua Medicaid Providers
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Legend
Major Roads
Lakes
Medicaid Parcels
Medicaid Providers
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2.5
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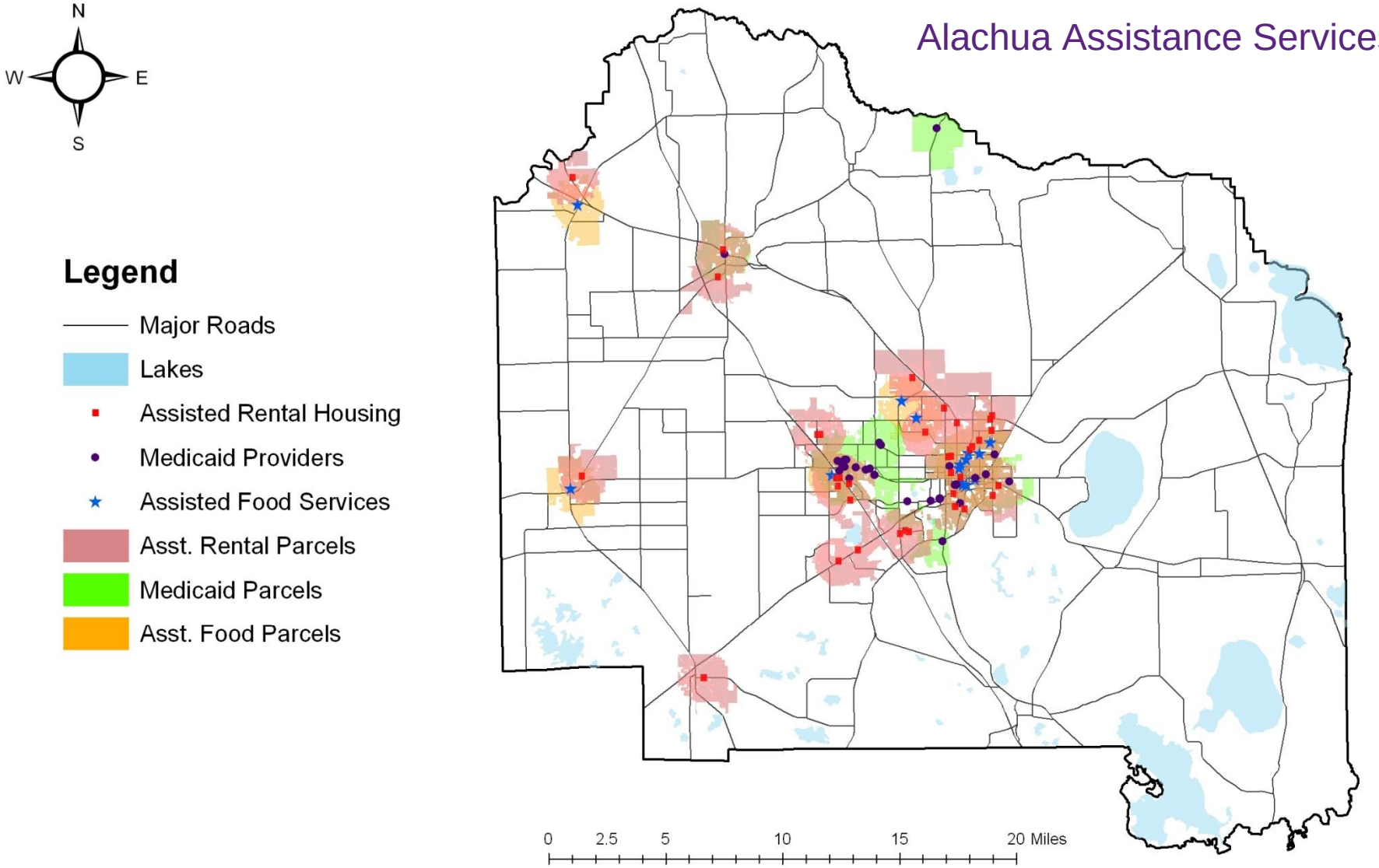
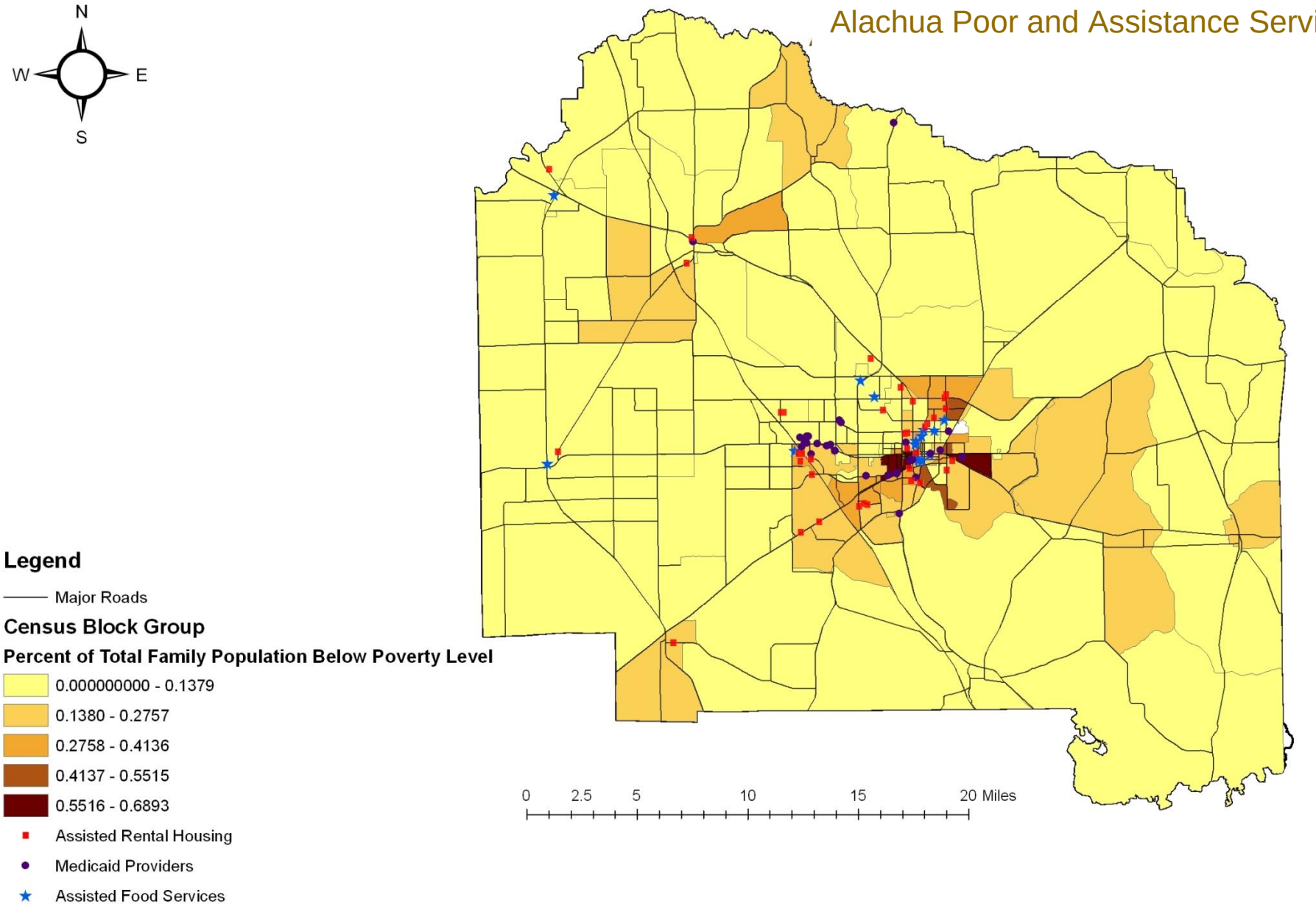
20 Miles

Alachua Assistance Services



Alachua Poor and Assistance Services



Objective 3: Vulnerability Indicator

- To identify *what is the poor's access to services*:
  3. What basic, usable amenities are available?
  4. Where are these amenities located?
  5. Can these amenities be easily accessed?
  6. Are the locations adequate?
  7. Is it possible to make these amenities more accessible?

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Assisted Services

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Amenities

- Factors: Free, cheap, necessary, beneficial, morale

Methodology continued

- Decide what to include in amenities category
  - Factors: Free, cheap, necessary, beneficial, morale
    - RTS, pools, lakes, thrift stores, religious centers, parks, trails
  - Selection: Check the attributes
    - Not all of the usable amenities are accessible
      - University libraries, apartment pools

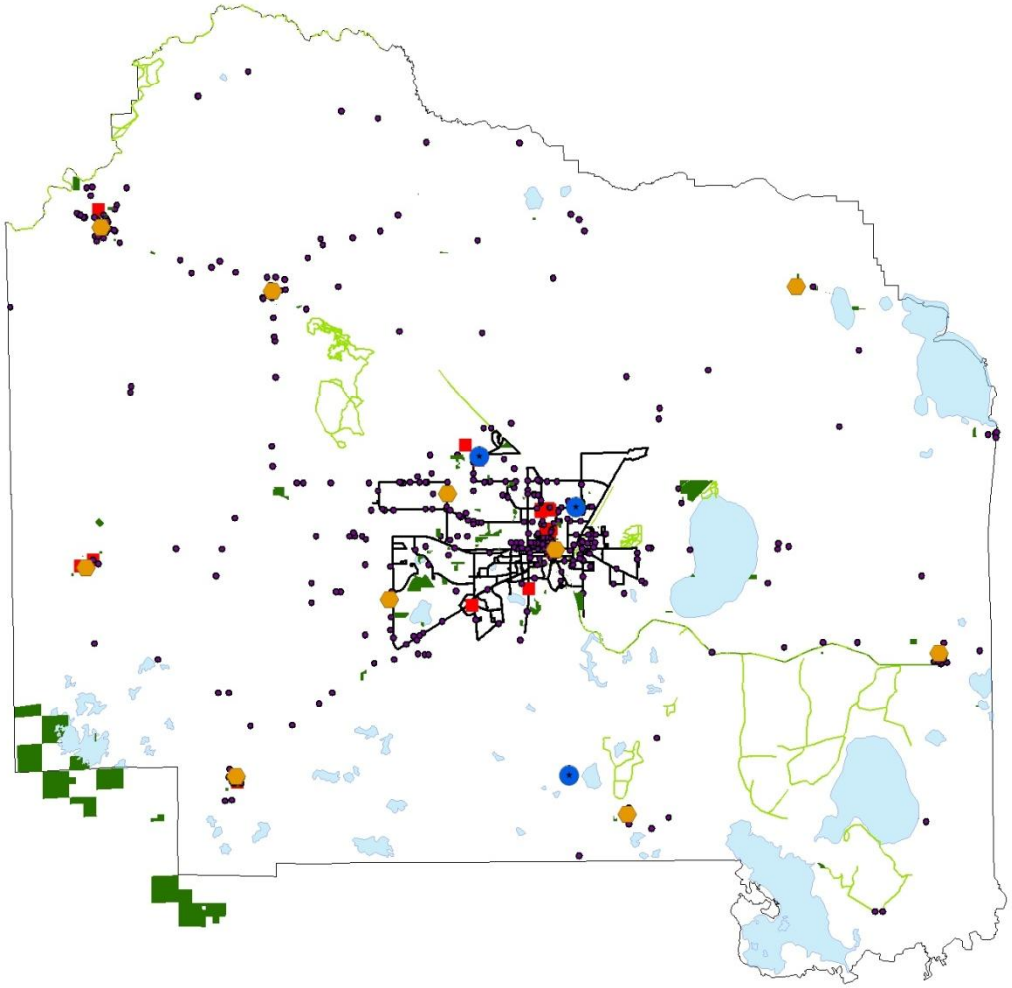
N

Legend

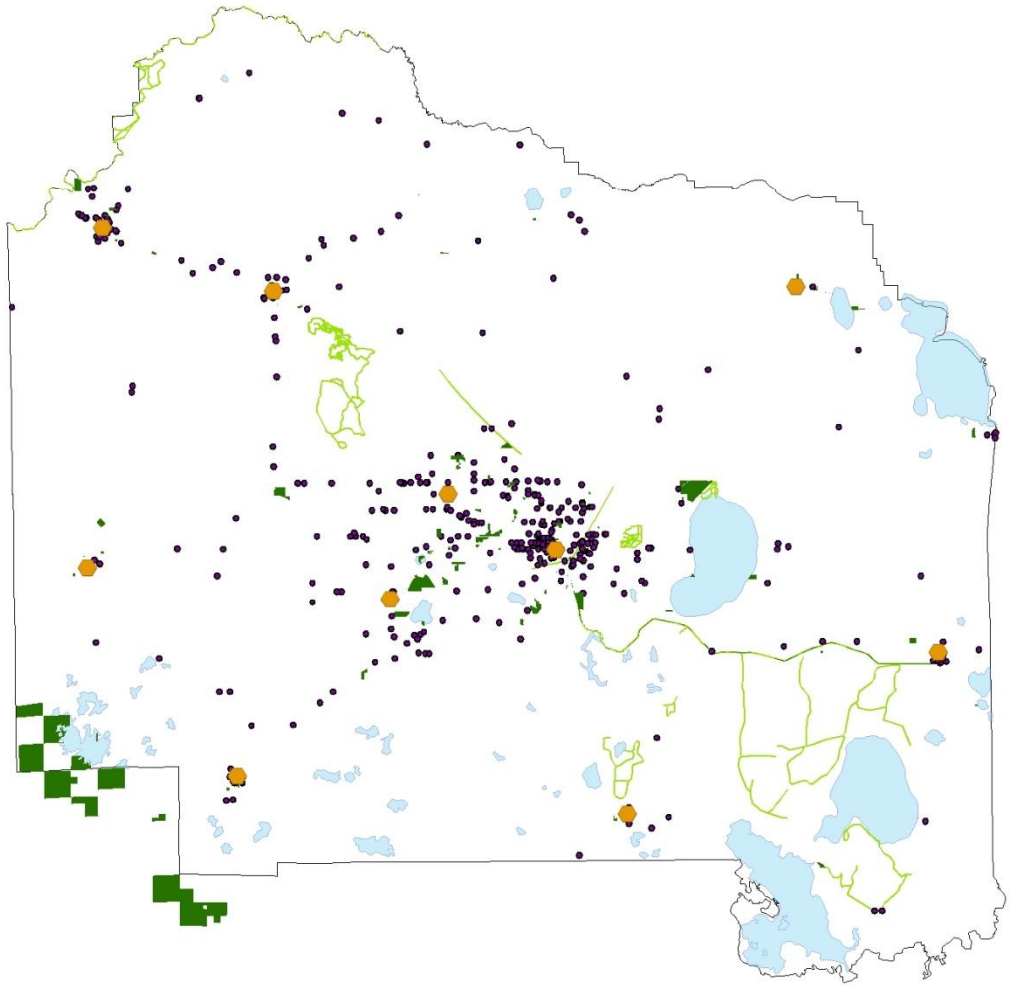
- Public Libraries
- Parks
- Swimming Pools
- ReligiousCenters
- Thrift Stores
- Bus Routes
- Alachua Trails
- Lakes

0 4600 9200 18400 27600 36800
Meters

Some Alachua County Amenities



Amenities: For Free!

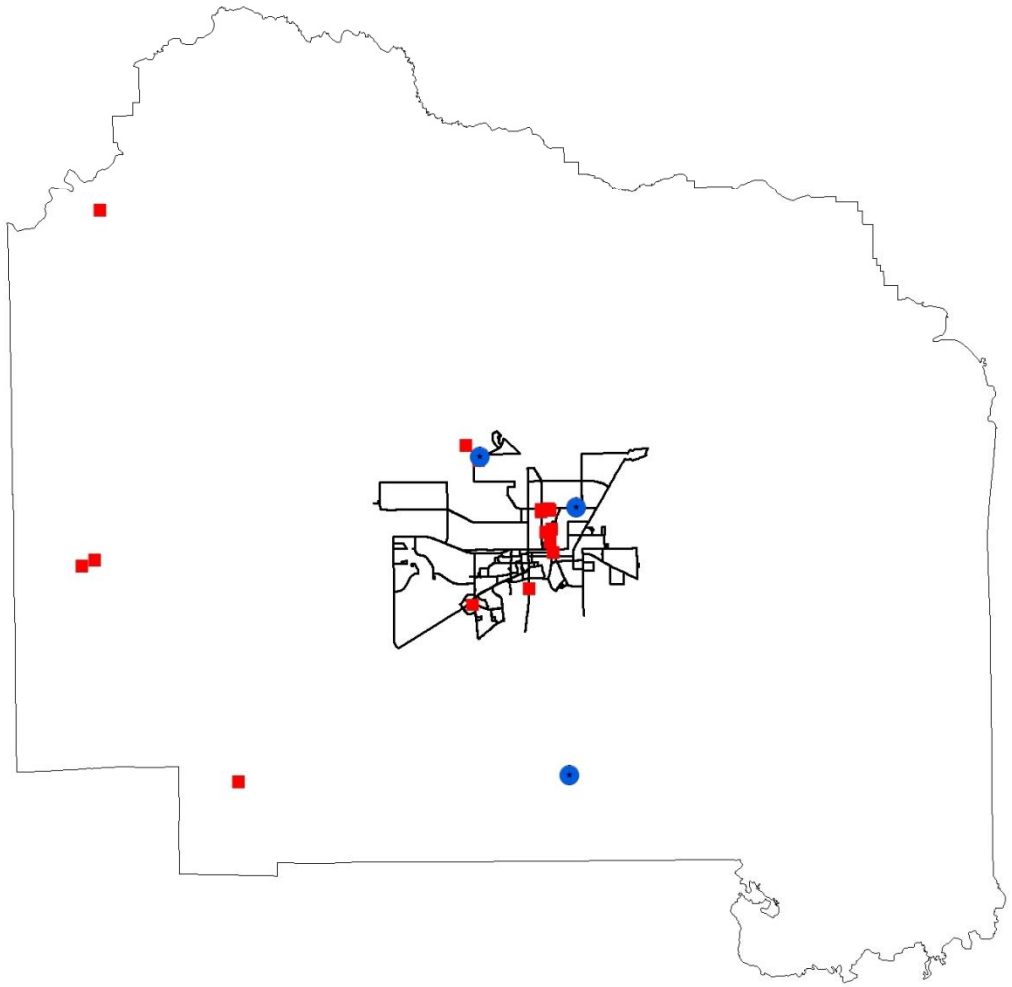


Legend

- Public Libraries
- Parks
- ReligiousCenters
- Alachua Trails
- Lakes

0 4600 9200 18400 27600 36800
Meters

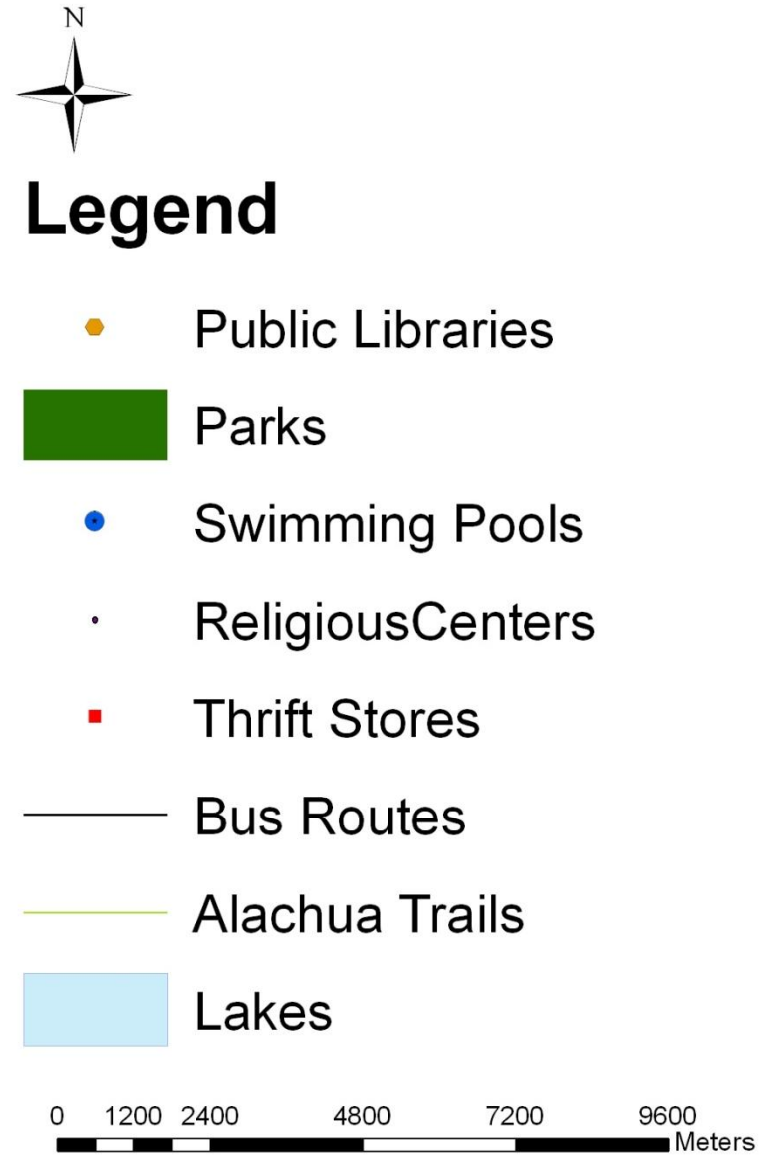
Amenities: Pretty Cheap

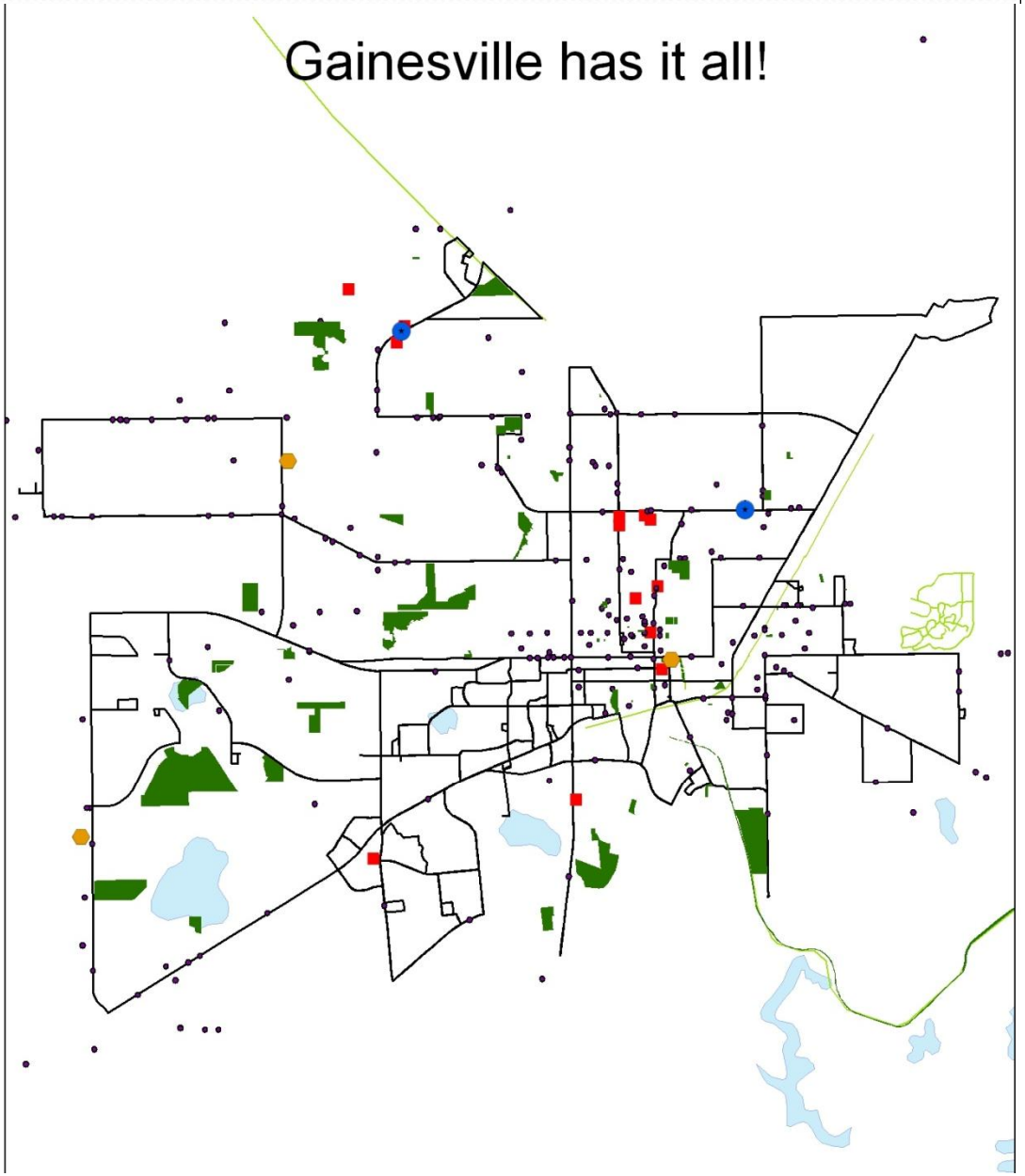


Legend

- Swimming Pools
- Thrift Stores
- Bus Routes

0 4600 9200 18400 27600 36800
Meters


N
Legend
Public Libraries
Parks
Swimming Pools
ReligiousCenters
Thrift Stores
Bus Routes
Alachua Trails
Lakes
0 1200 2400 4800 7200 9600
Meters


Gainesville has it all!

Conclusions

- The highest concentration of the poor are primarily located in East Gainesville and around the University of Florida. (Numbers around the University are skewed due to student population)
- Areas with high concentrations of poverty tend to feature higher concentrations of African-Americans (and other minorities), the elderly, single mothers, and youths.

Conclusions continued

- The poor are located in areas that have access to assisted services such as rental housing, food services, and Medicaid providers. The areas with the highest concentration of poverty have access to RTS bus routes.
- The highest density of amenities are located in Gainesville.

Questions?