Quenching Alachua's Food Deserts

URP 4273: Survey of Planning Information Systems

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Problem Statement

Develop a plan to for better access to healthy food establishments for the most disadvantaged residents of Alachua County.

Our Goals

1. Conduct a Spatial assessment of current healthy food establishments in order to locate food deserts in the county as they relate to population needs.

2. Provide recommendations for improvements and designation of areas where more healthy food establishments should be located.

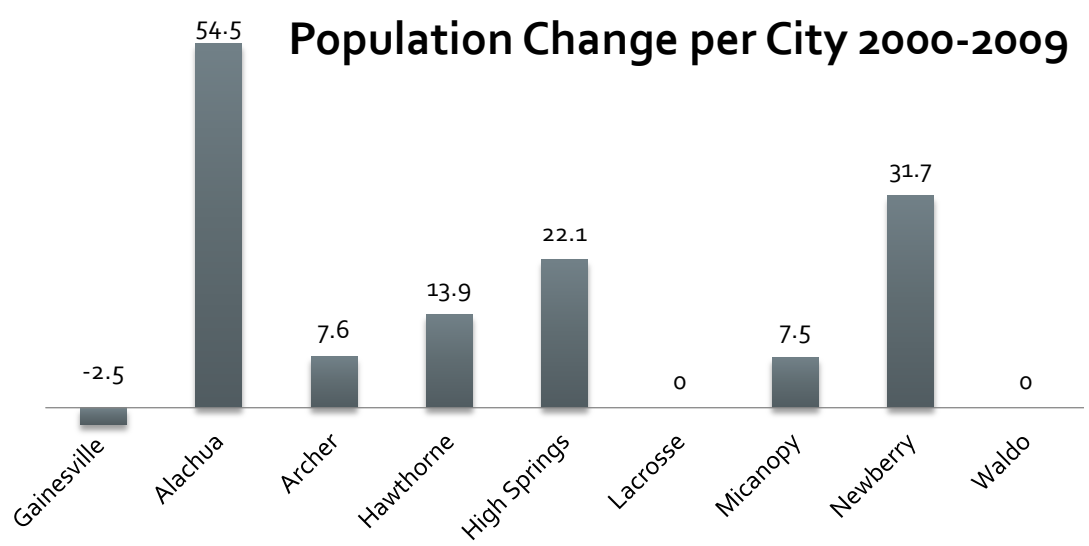
What is a FOOD DESERT?

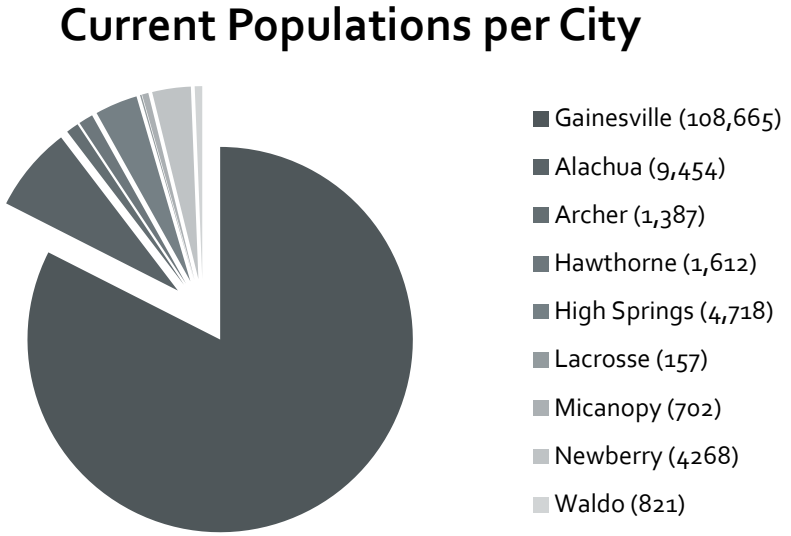
Through our research we have defined that **low access** to a healthy food establishments is defined as **more than 1 mile, or 15 minutes walking** at a normal pace from a healthy food establishment.

Scope

Alachua County

Current Population Information: Alachua County, Florida





Growth trends in Alachua County show that while Gainesville has by the the greatest population, it's residents are emigrating elsewhere.

Benefits of Healthy Foods

A diet consisting of at least five servings (2 to 3 cups) of fruits and vegetables daily decreases the risk of heart disease, stroke, obesity, diabetes and certain cancers.

Those who consume eight or more servings are 22 percent less likely to die from heart disease than those who consume three or fewer servings a day.

Fast Food vs. Healthy Food

Vs.

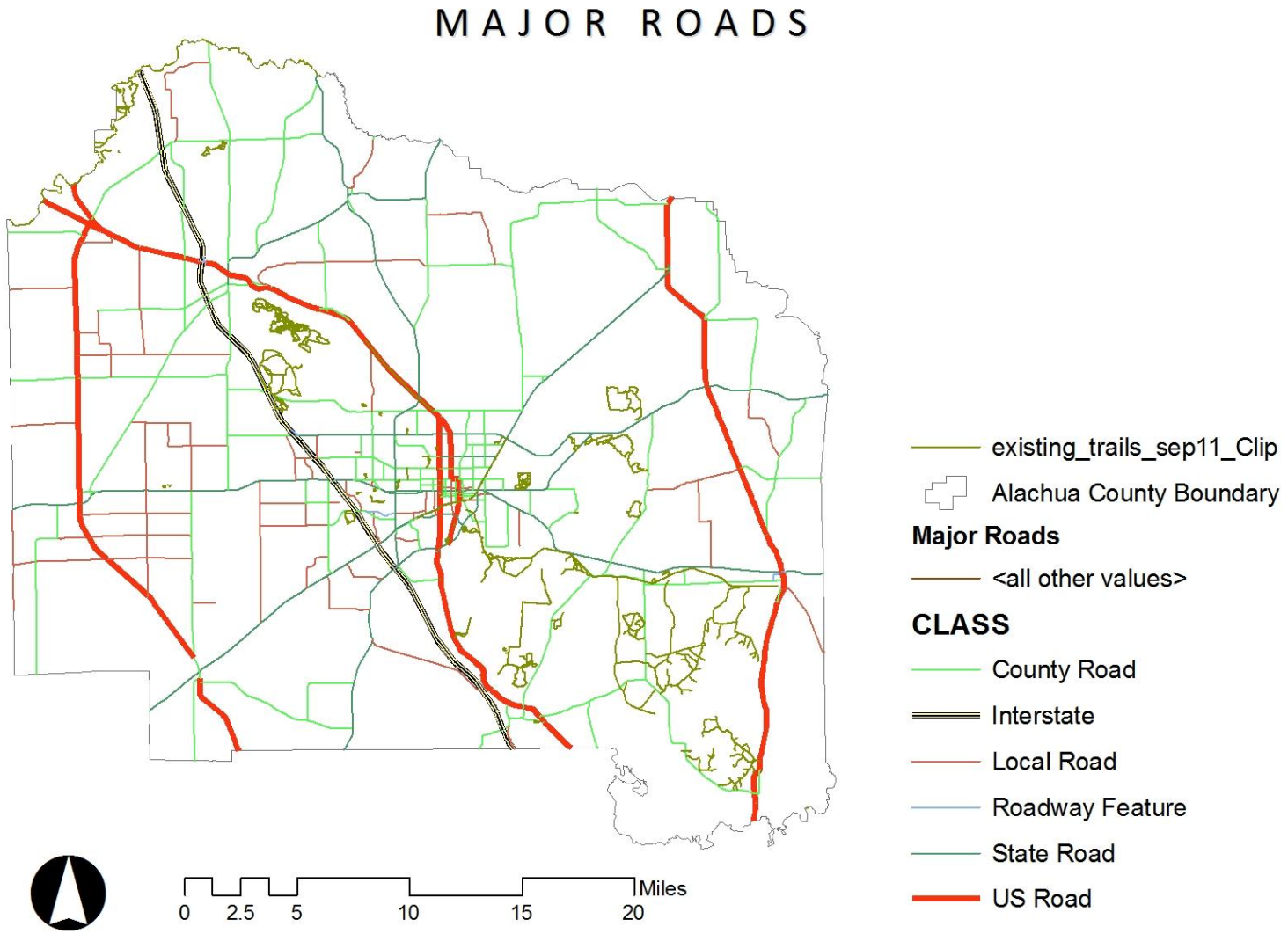
Locate Healthy Food Deserts

Criteria

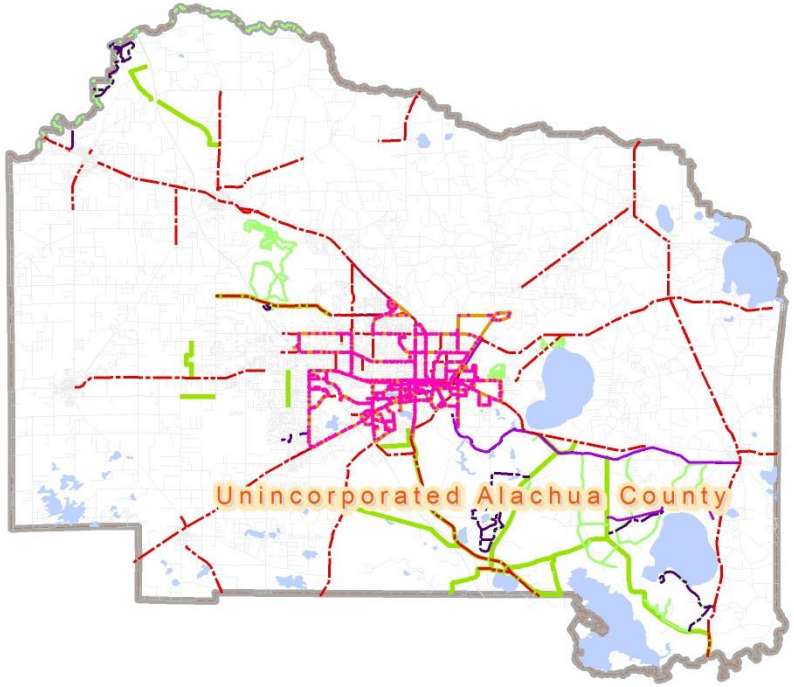
- Locate Healthy Food Establishments
- Locate low income population densities
- Locate public transportation
- Locate food assistance users
- Research appropriate walking distances
- Create an inventory of healthy food establishments
- Determine beneficial land uses

Methodology

Major Roads


MAJOR ROADS
0
2.5
5
10
15
20
Miles
existing_trails_sep11_Clip
Alachua County Boundary
Major Roads
<all other values>
CLASS
County Road
Interstate
Local Road
Roadway Feature
State Road
US Road

Transportation Networks

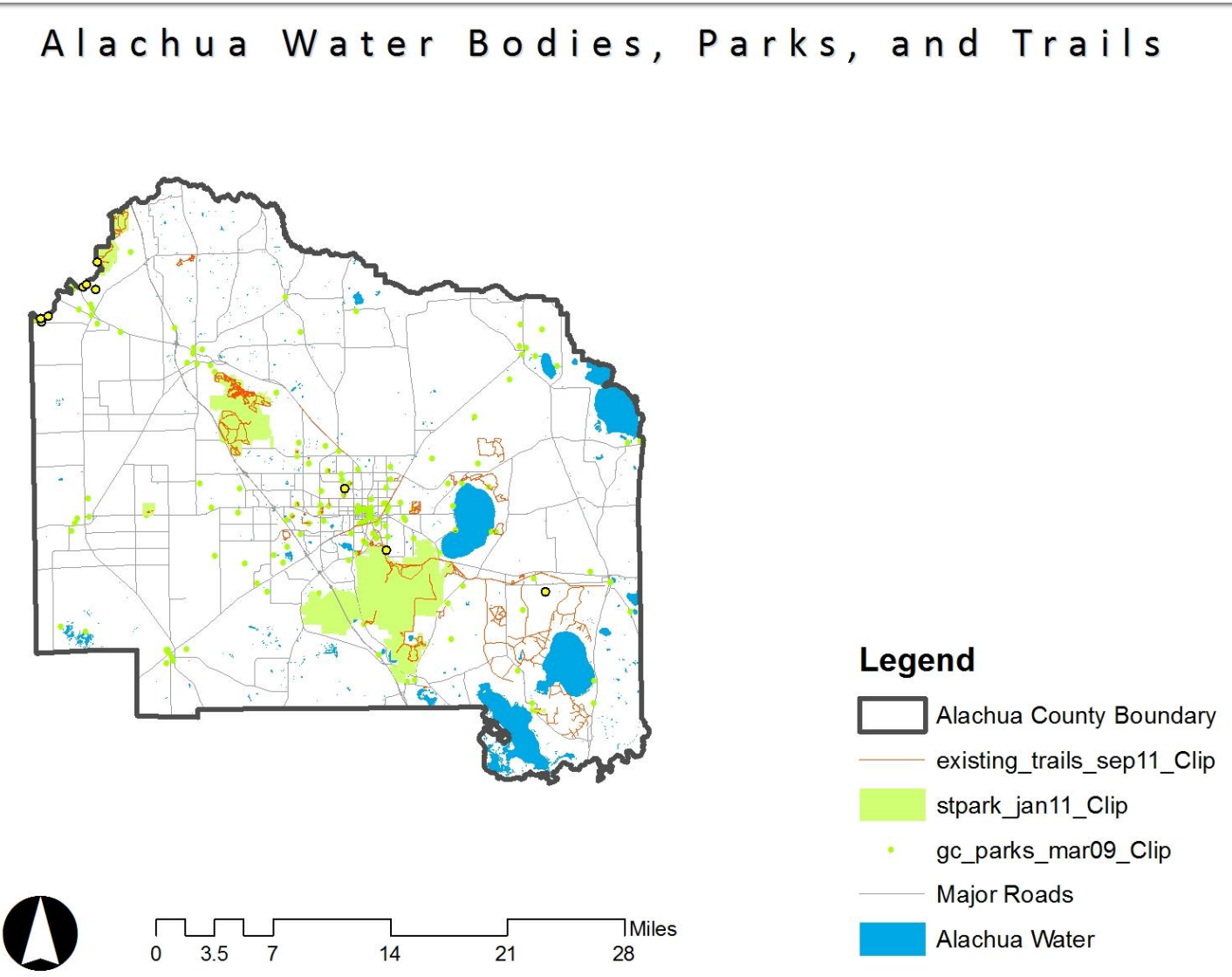


Transportation Networks

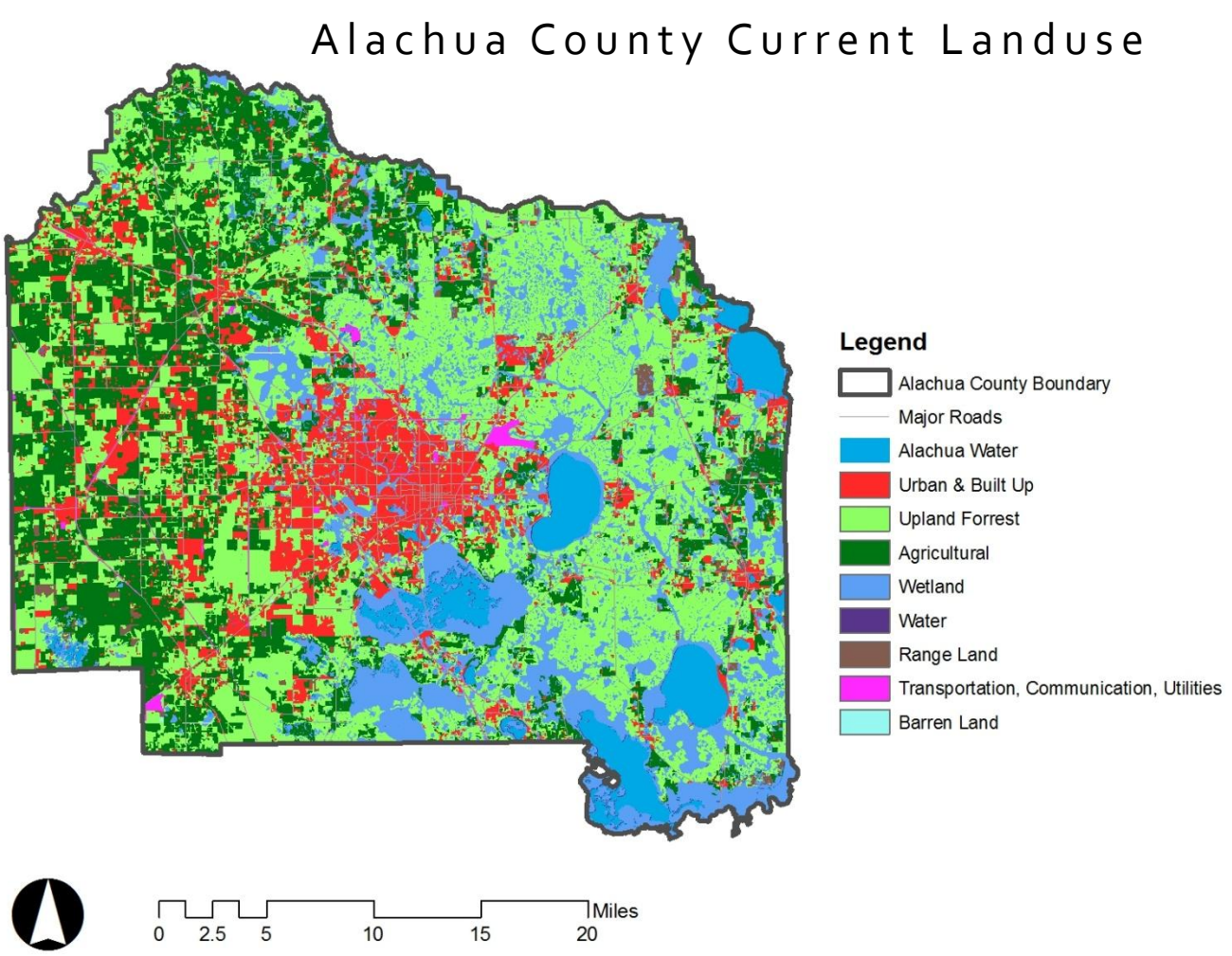
- Bus Stops
- Bus Routes
- Bike Routes
- Paved Trails
- Paved Trails (gov)
- Unpaved Trails Clipped
- Scenic Roads
- Lakes
- All Roads
- Alachua County Boundary

0 4 8 16 24 32 Miles

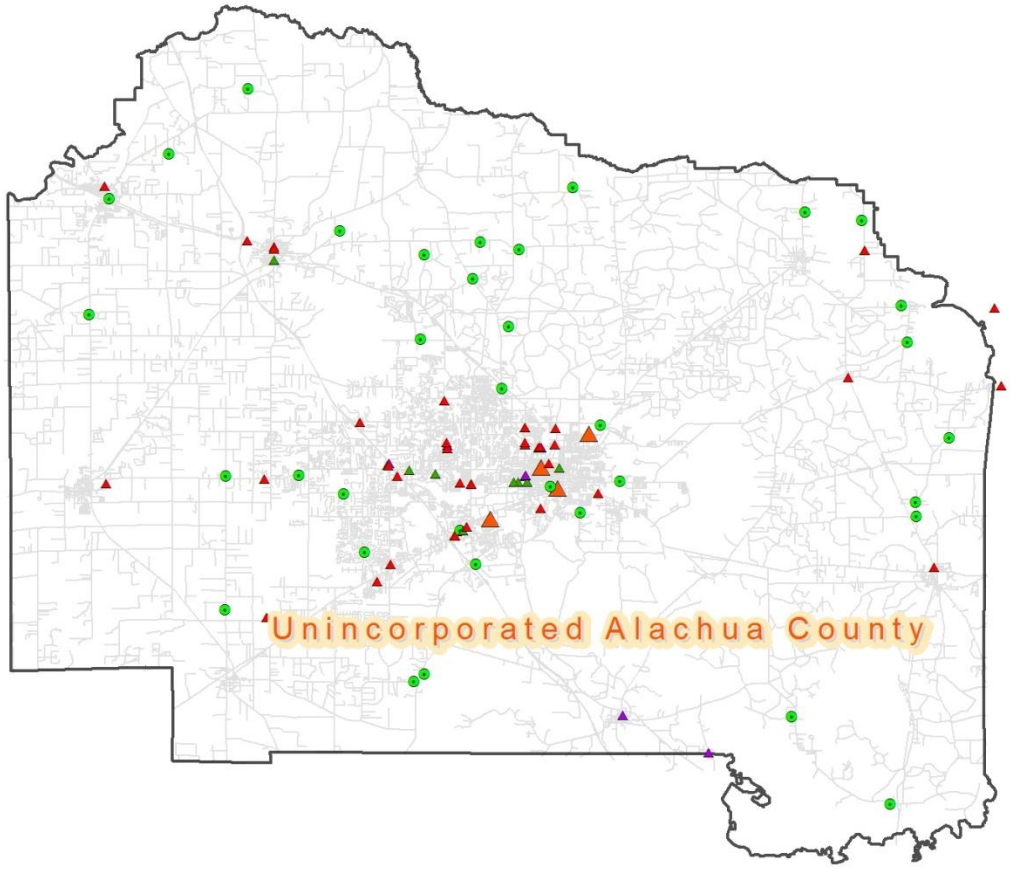
Alachua Water Bodies, Parks & Trails



Alachua Land Use



Healthy Food Establishments

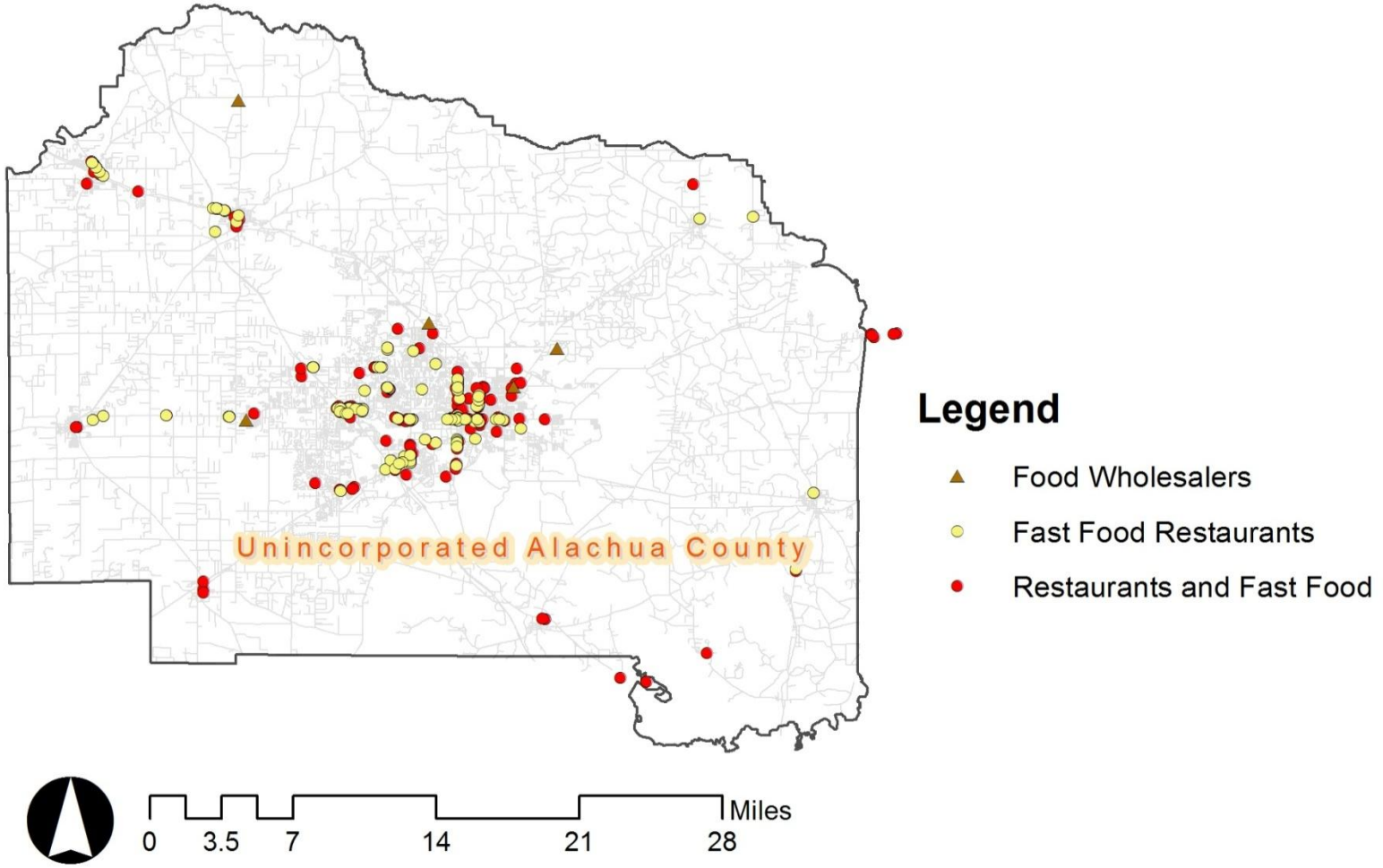


Legend

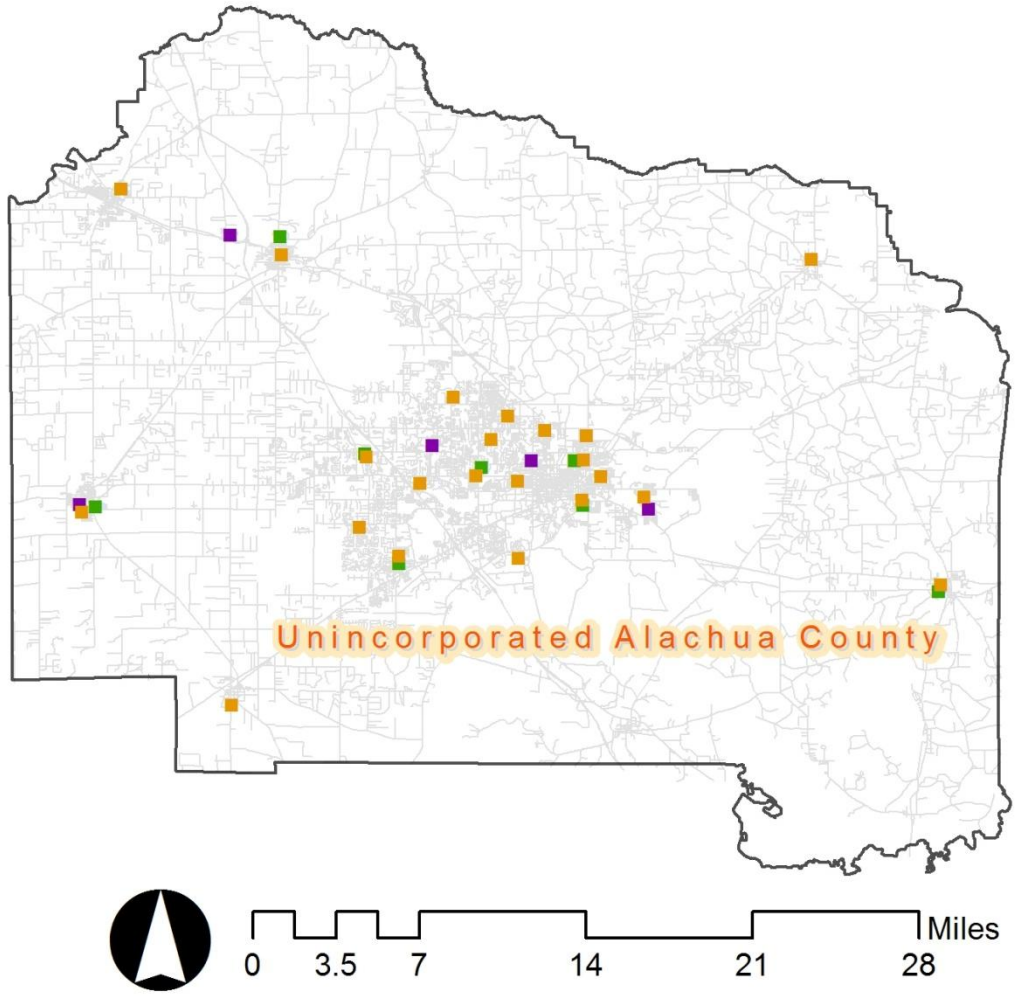
- Grocers
- Natural Food Stores
- Health Diet Food Stores
- Farmer Markets, U-Picks, Farms
- Community Gardens

0 3.5 7 14 21 28 Miles

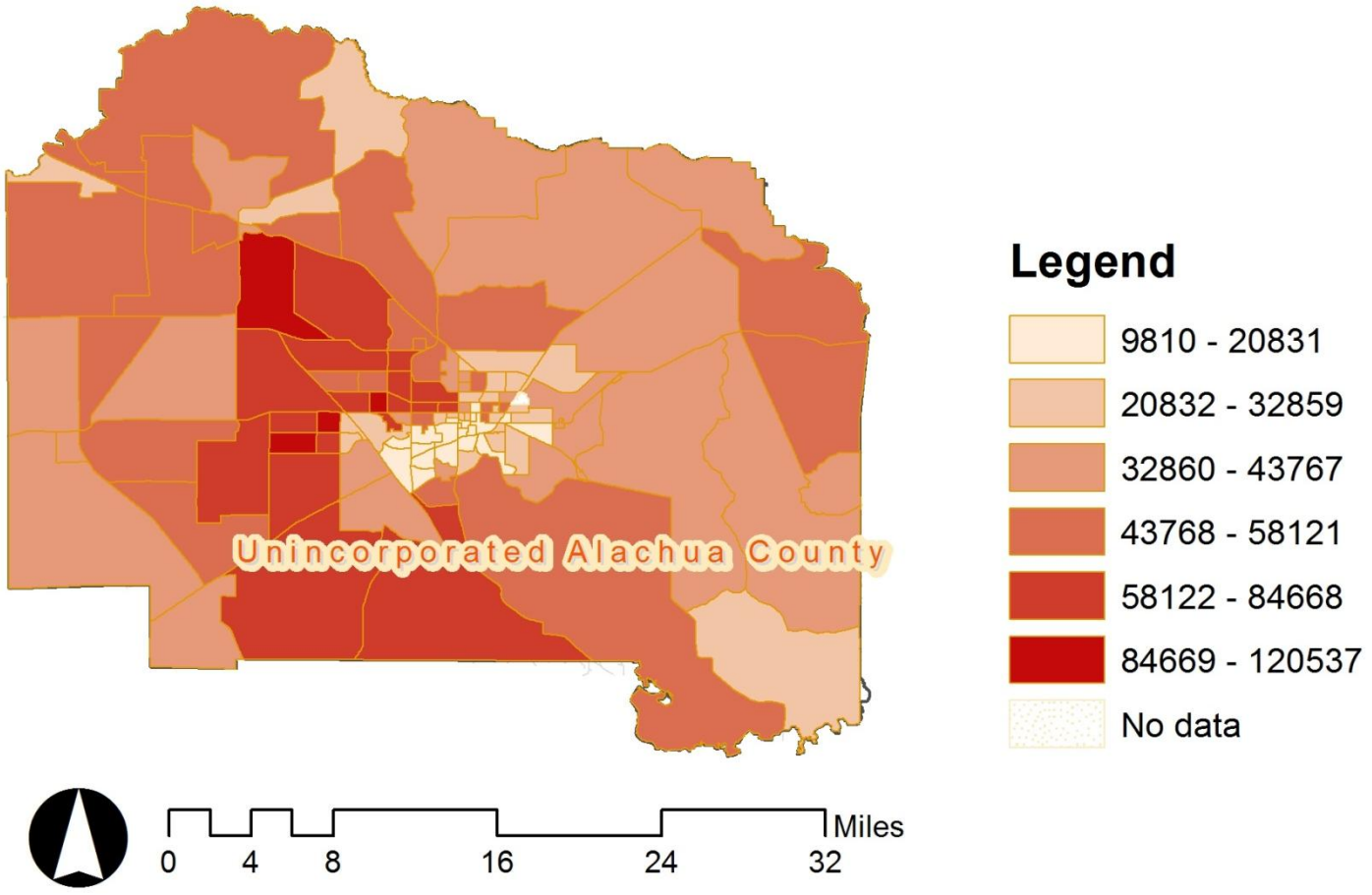
Fast Food Establishments



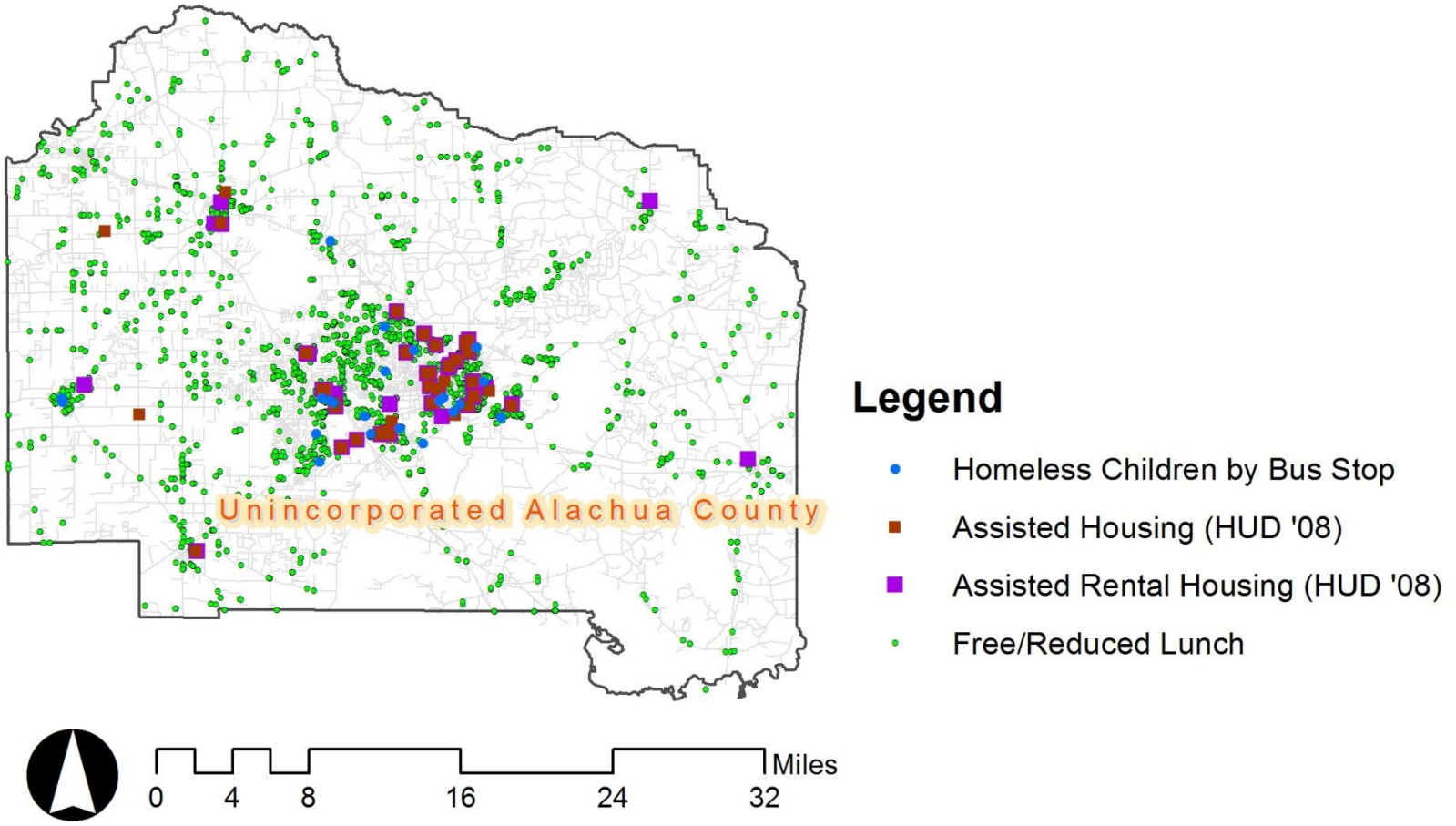
Schools


Unincorporated Alachua County
0
3.5
7
14
21
28
Miles
Legend
Elementary Schools
Middle Schools
High Schools

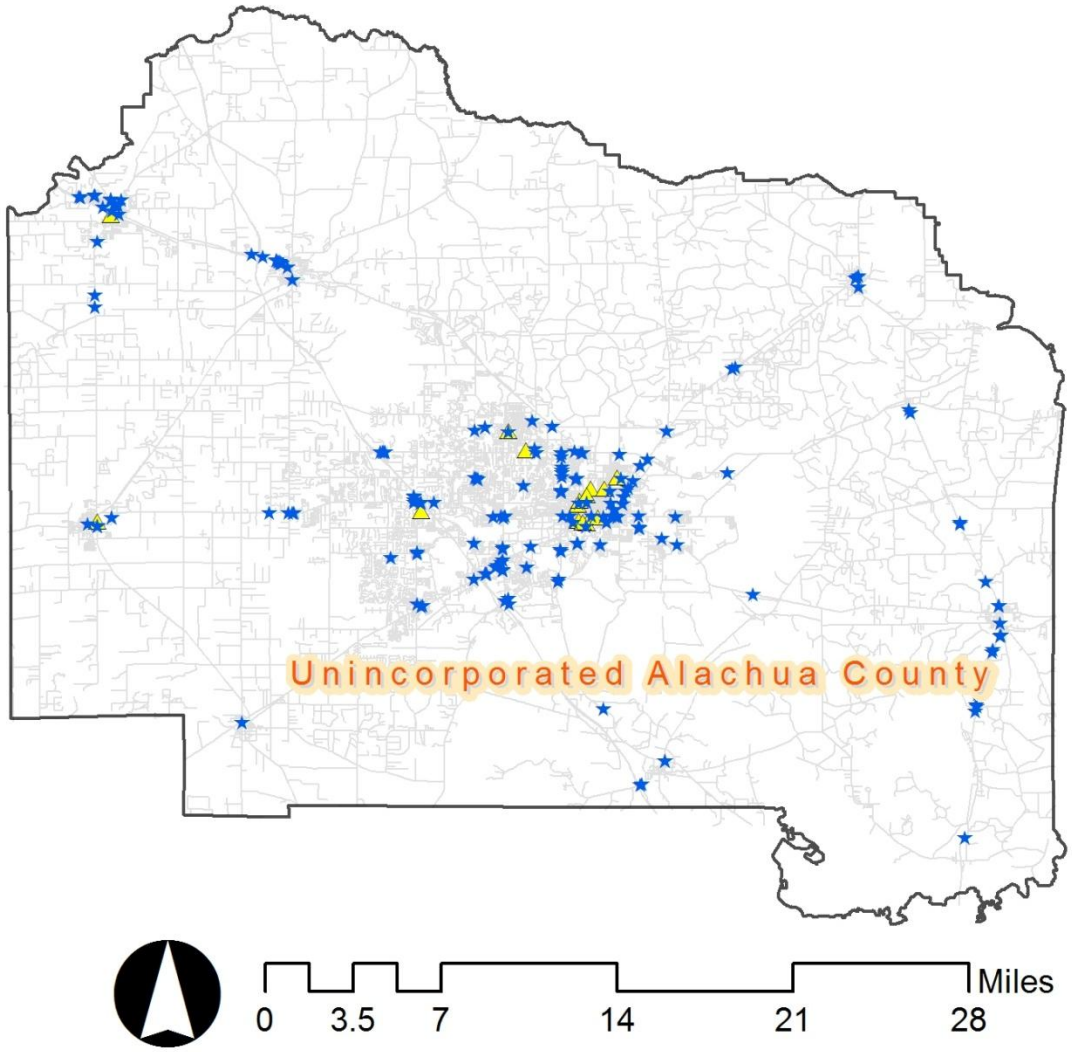
Income


Unincorporated Alachua County
Legend
9810 - 20831
20832 - 32859
32860 - 43767
43768 - 58121
58122 - 84668
84669 - 120537
No data
0
4
8
16
24
32
Miles

Low Income Users

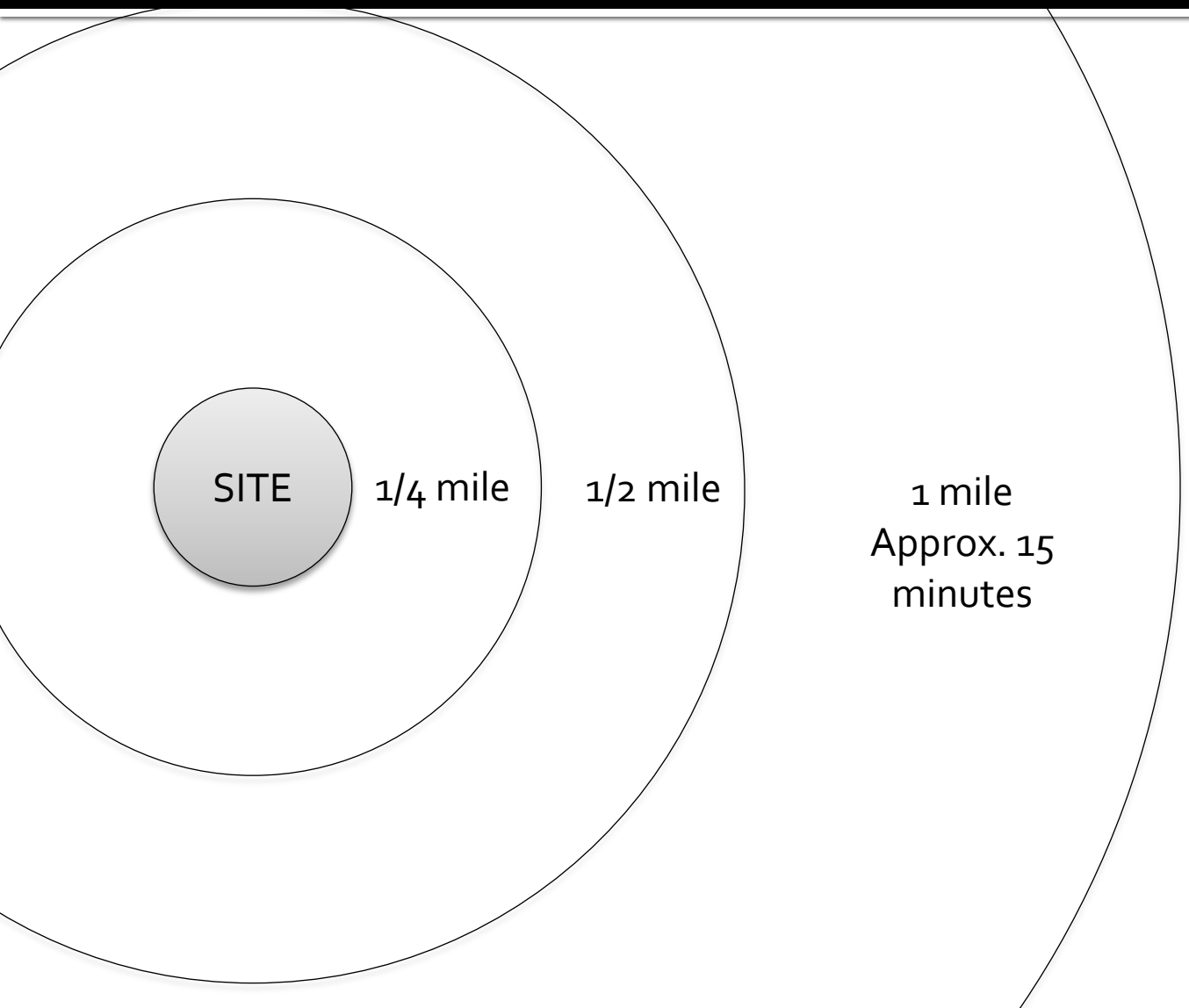


SNAP Retailer

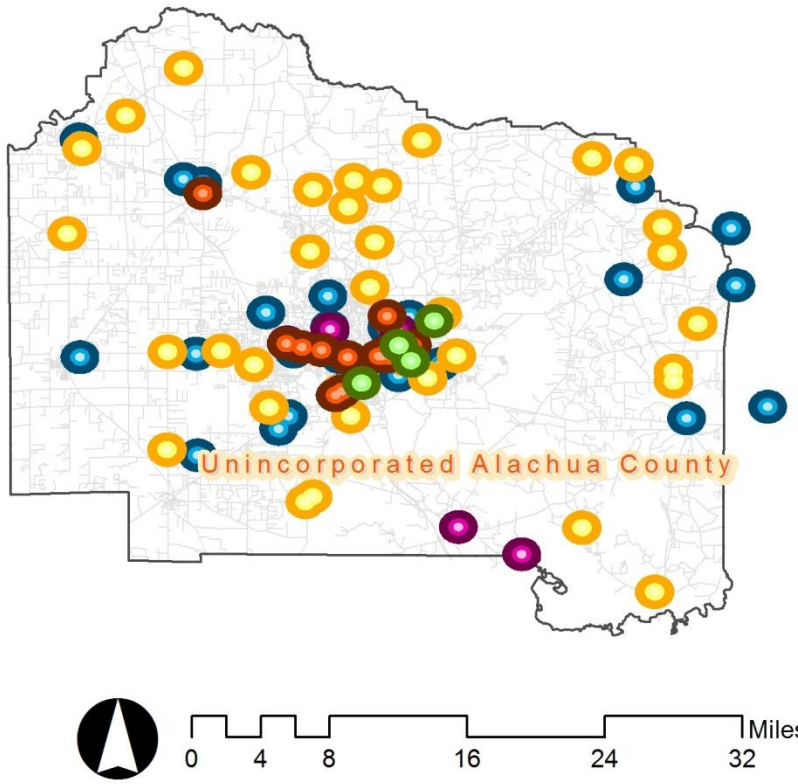


Results & Discussion

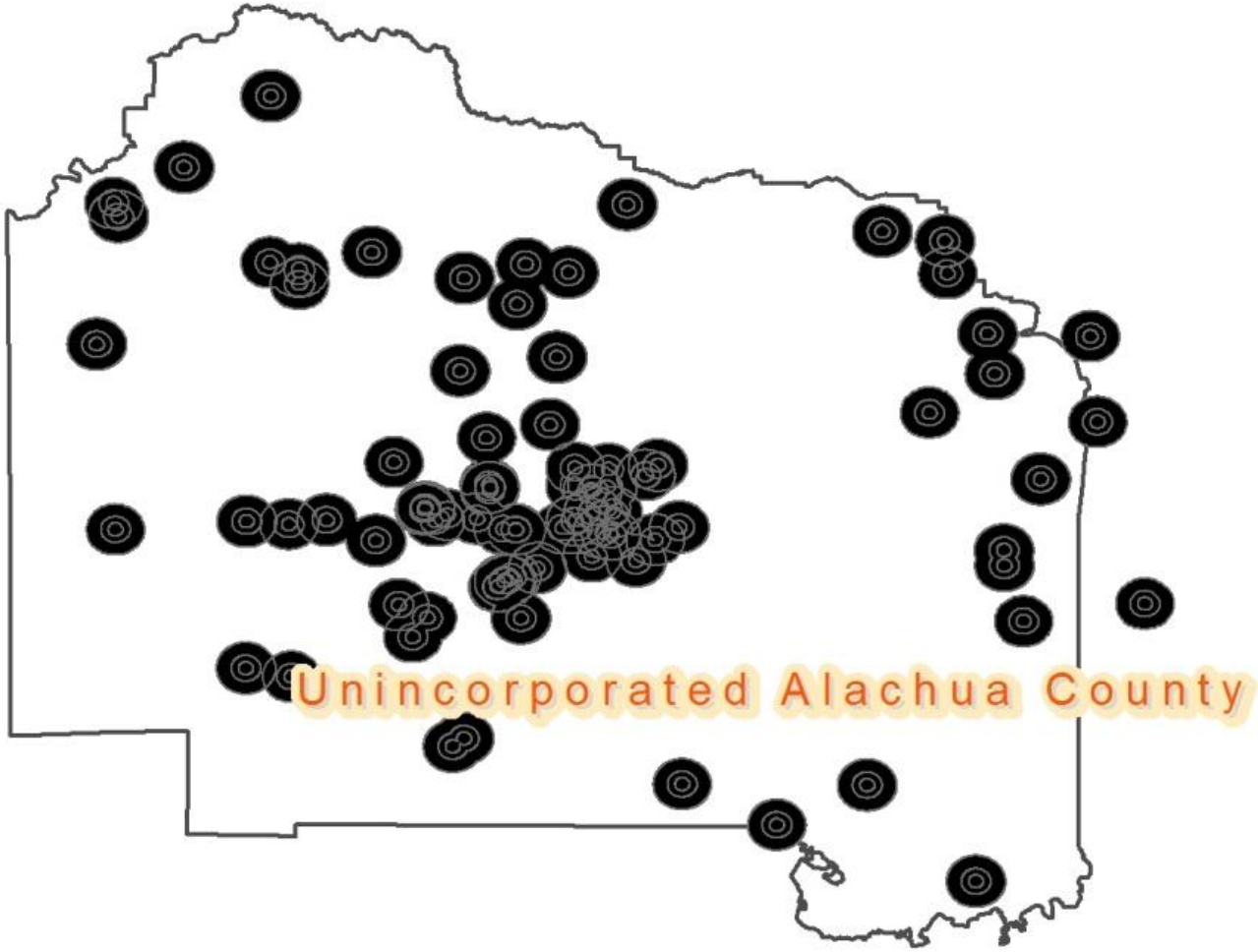
Buffer Determination



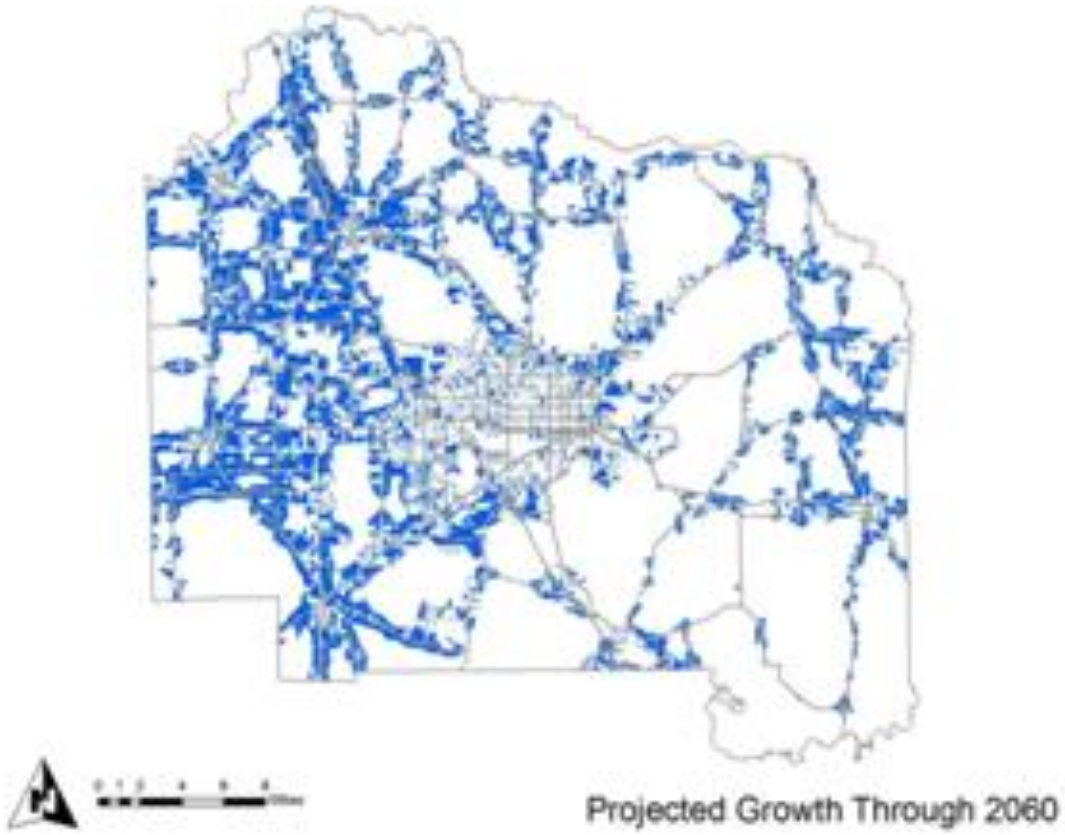
Current Healthy Food Establishments



All Healthy Food Establishments

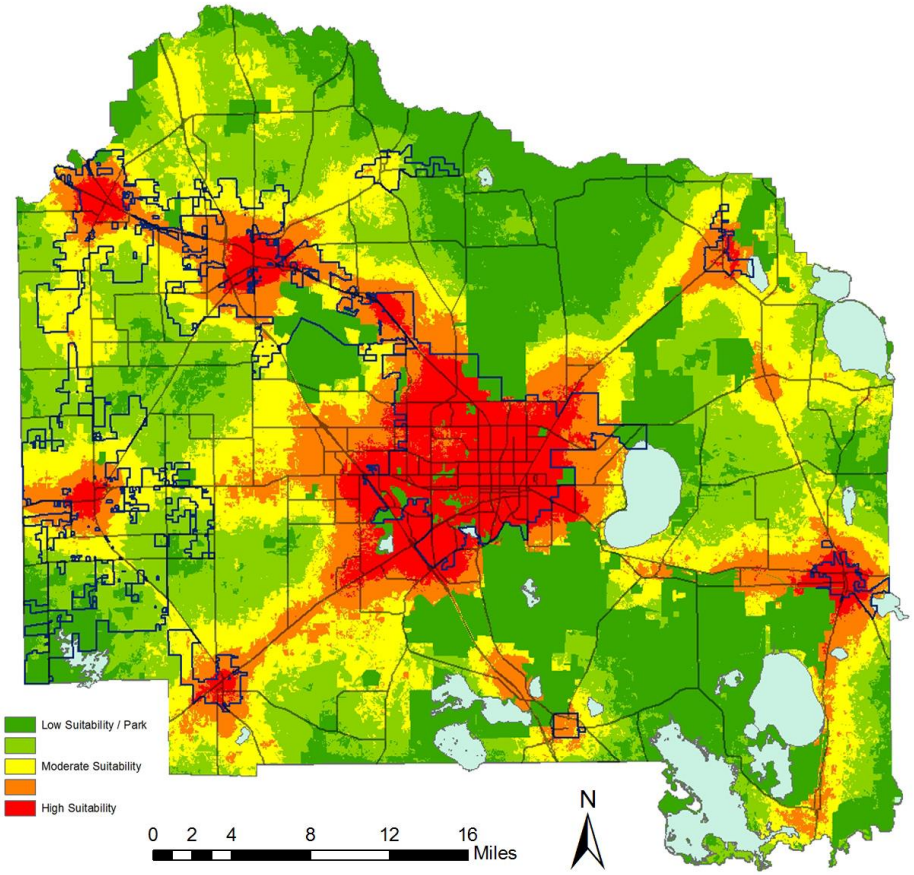


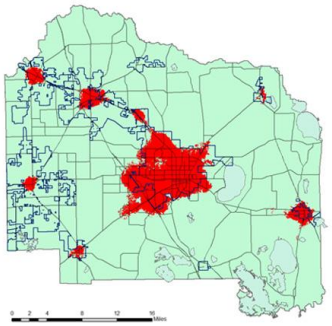
Projected Growth Through 2060

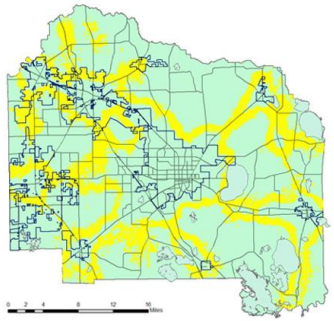


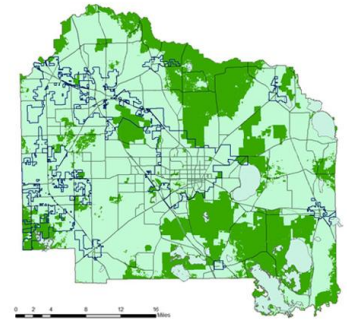
Projected Growth Through 2060

Growth Model for Optimal Development





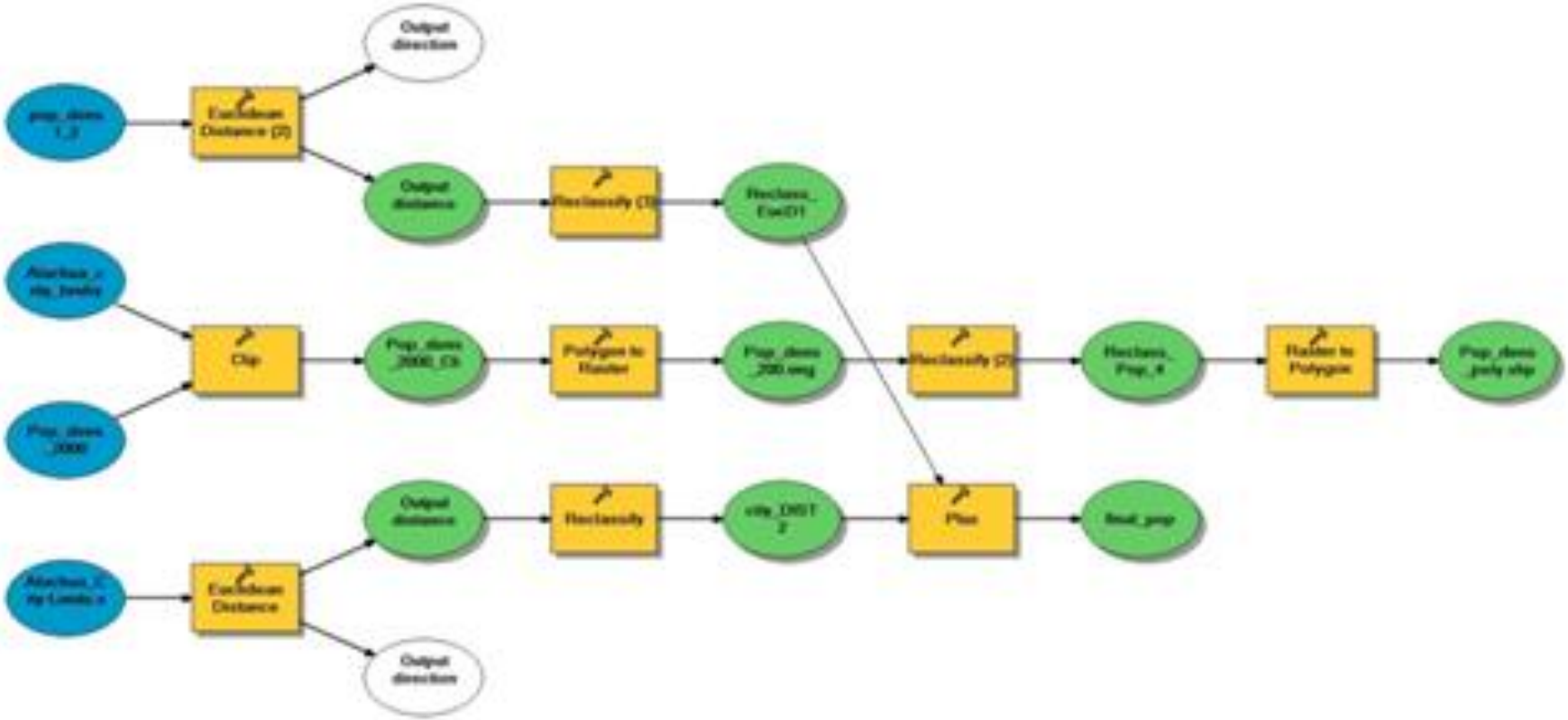




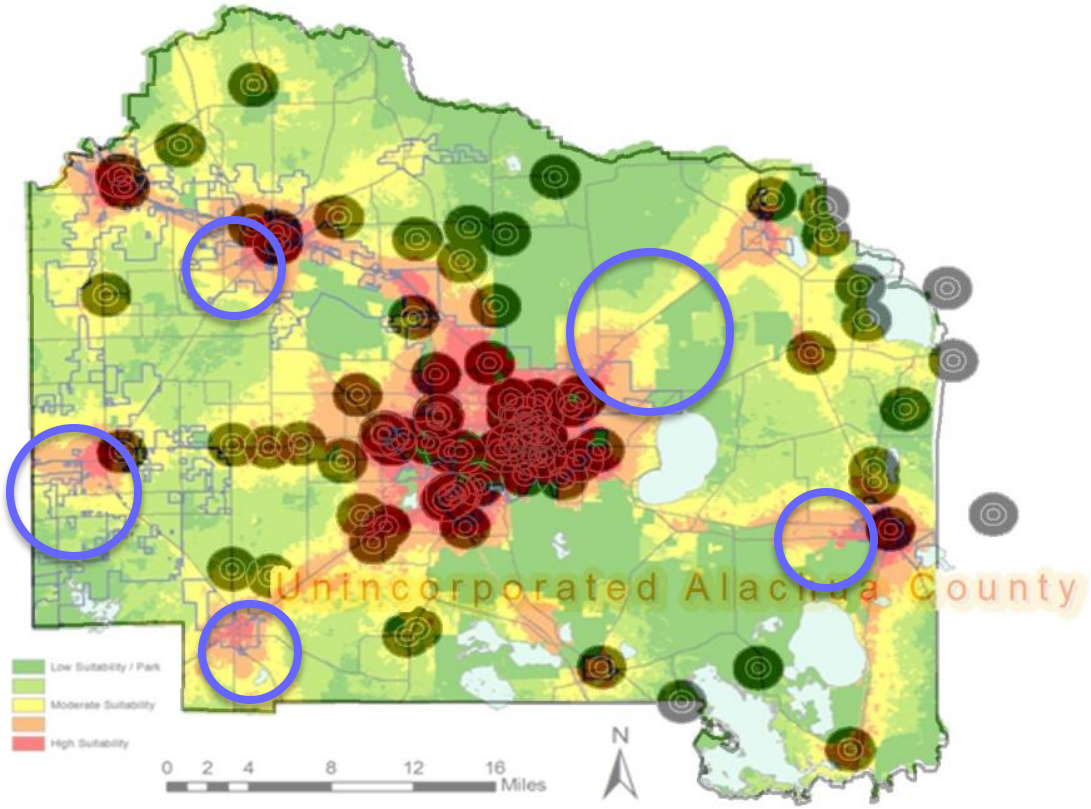
Weights

Wildlife: .1
Utilities: .3
Populations: .2
Roads: .25
Infill: .1
Rural: .05

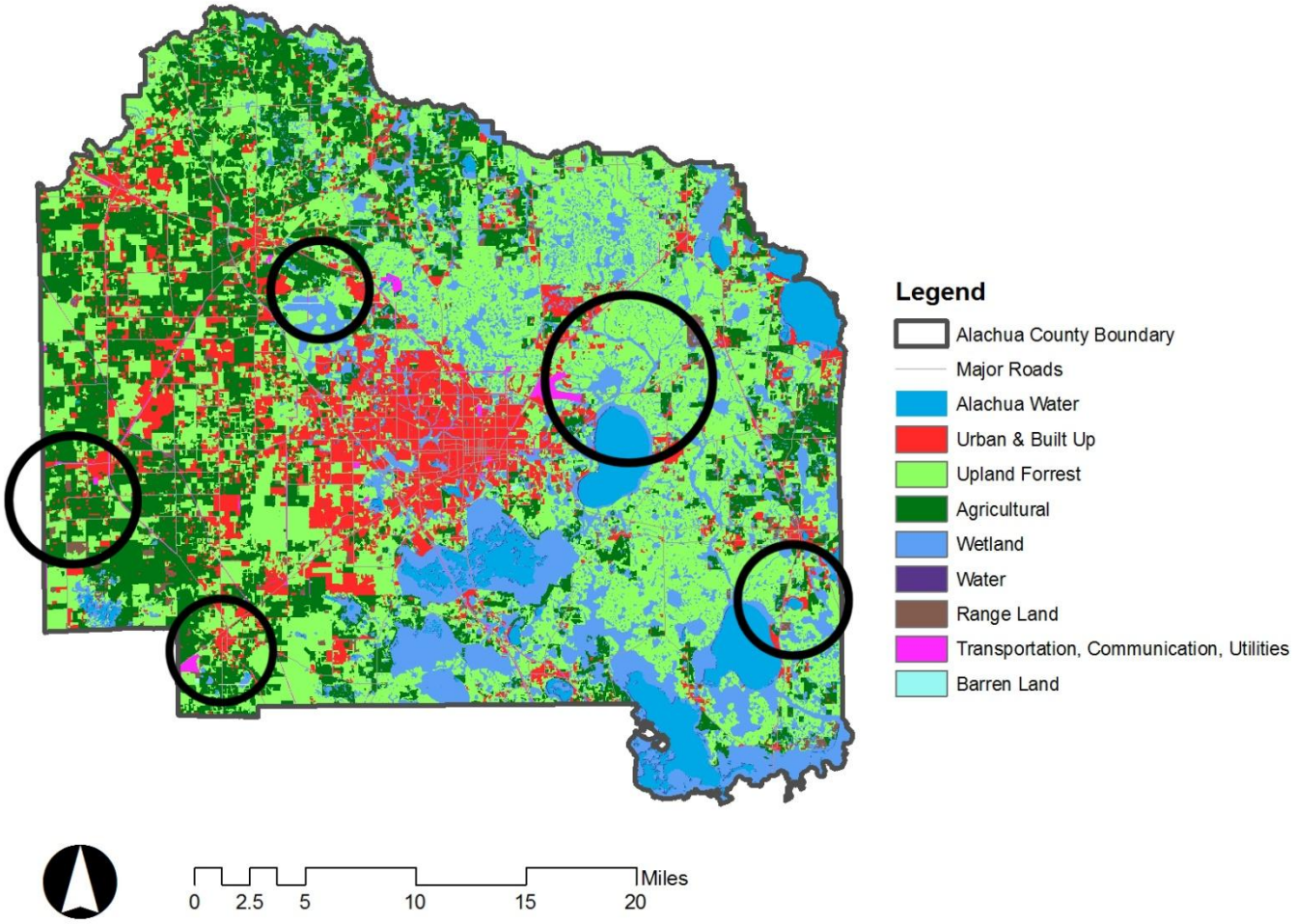
Growth Model for Optimal Development



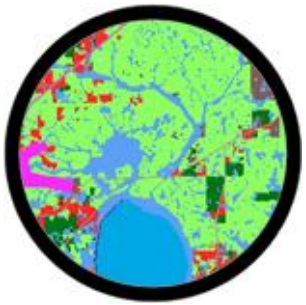
Combined HFE + Growth Model



AOI + Alachua Land Use

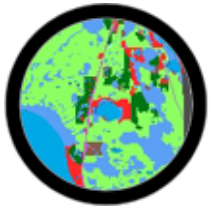


Areas of Interests Rating



1

2



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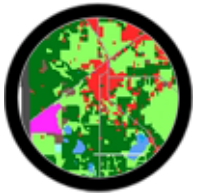

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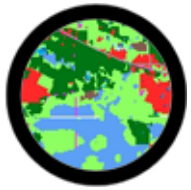
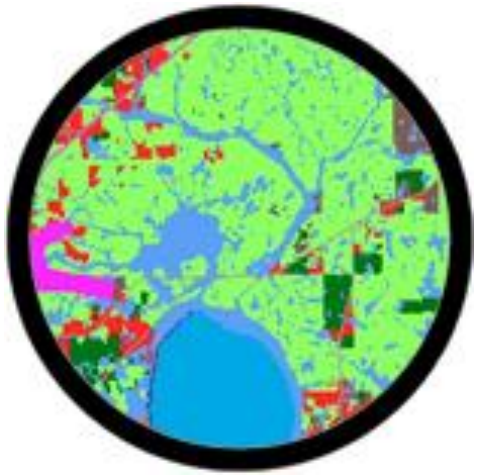


5

#1 Area of Interest



We choose number 1 based on the current population density's, Future growth models, lack of healthy food establishments, and public transit. The north east quadrant of Gainesville is predominantly compiled of low income households.

This is a model area for improvements in its healthy food establishments due to its close proximity to public transit current and future population density and of course its lack of healthy food establishments in the area.

Other Improvements

Bike Trail Greenways to Connect Smaller Areas

Improve Accessible Public Transit to less urban areas

Community Gardens for inaccessible areas