

GROUP 5
FINAL TEAM PROJECT

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**VULNERABLE
NEIGHBORHOODS OF
ALACHUA COUNTY**

OBJECTIVE

Use ArcMaps to determine vulnerable neighborhoods of Alachua county in regards to crime and incarceration of the population.

Criminal law focuses in on two theories: micro and macro. When we analyze macro theory for better resource distribution, we see that crime patterns occur at a much larger scale than just individual units of behavior. Therefore, the five indicators chosen to measure vulnerability cover a number of different examples of how resources have been distributed and how they affect crime rates on a broader scale.



OBJECTIVES

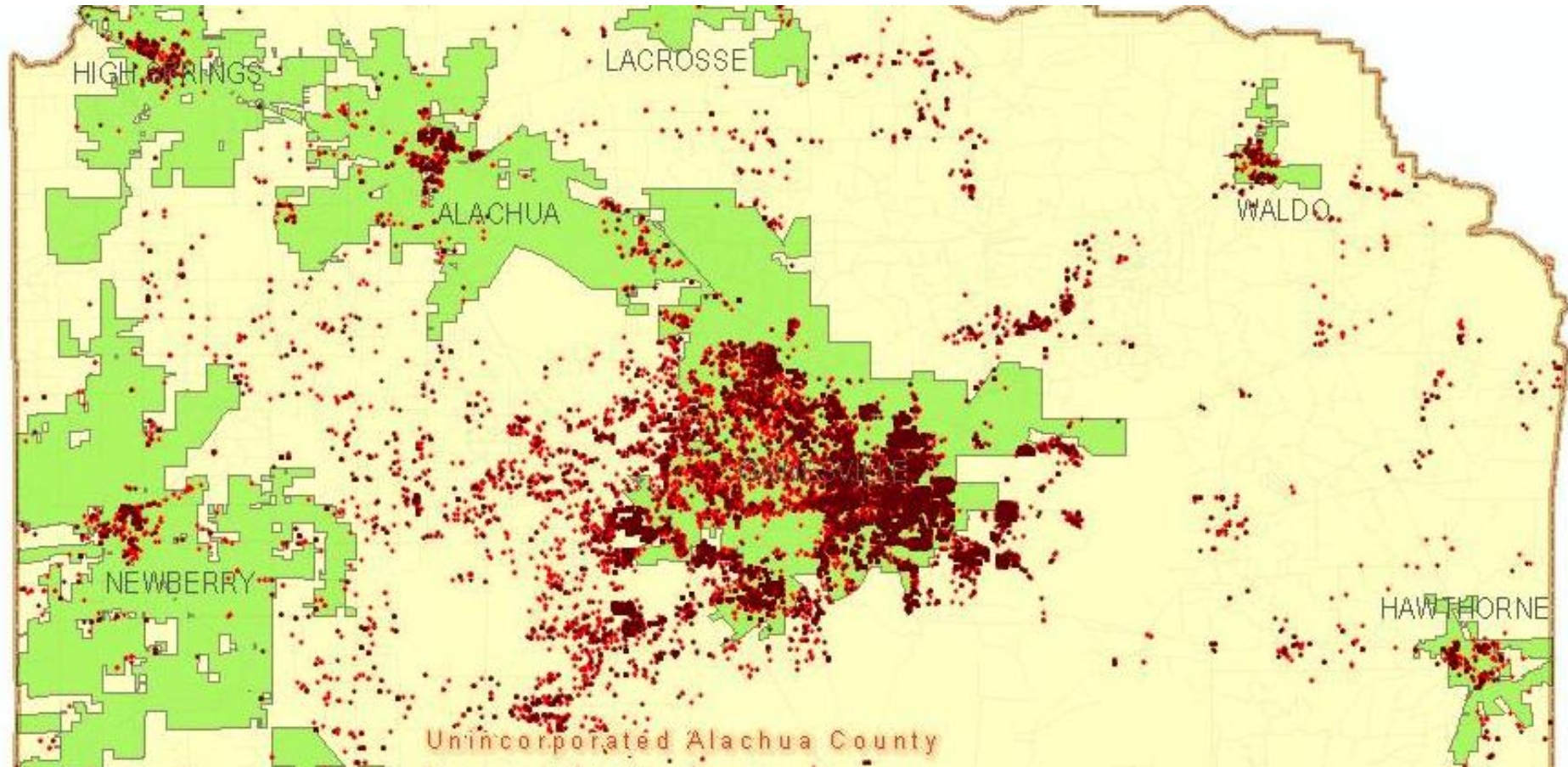
The five categories chosen depict correlation between crime and:

- 1. Education;** determining whether proximity to education has an impact on crime.
- 2 Public Food and Housing Resources;** Is the public spending serving the community and properly assisting those in need?
- 3. Population Density;** Looking for a connection between high density and crime rates.
- 4. Income Level;** Are there any peculiarities in regards to low/high income areas and crime?
- 5. Public Resource Facilities;** Is there a common theme occurring between crime and public resources?

Note: Correlation does not prove causation.

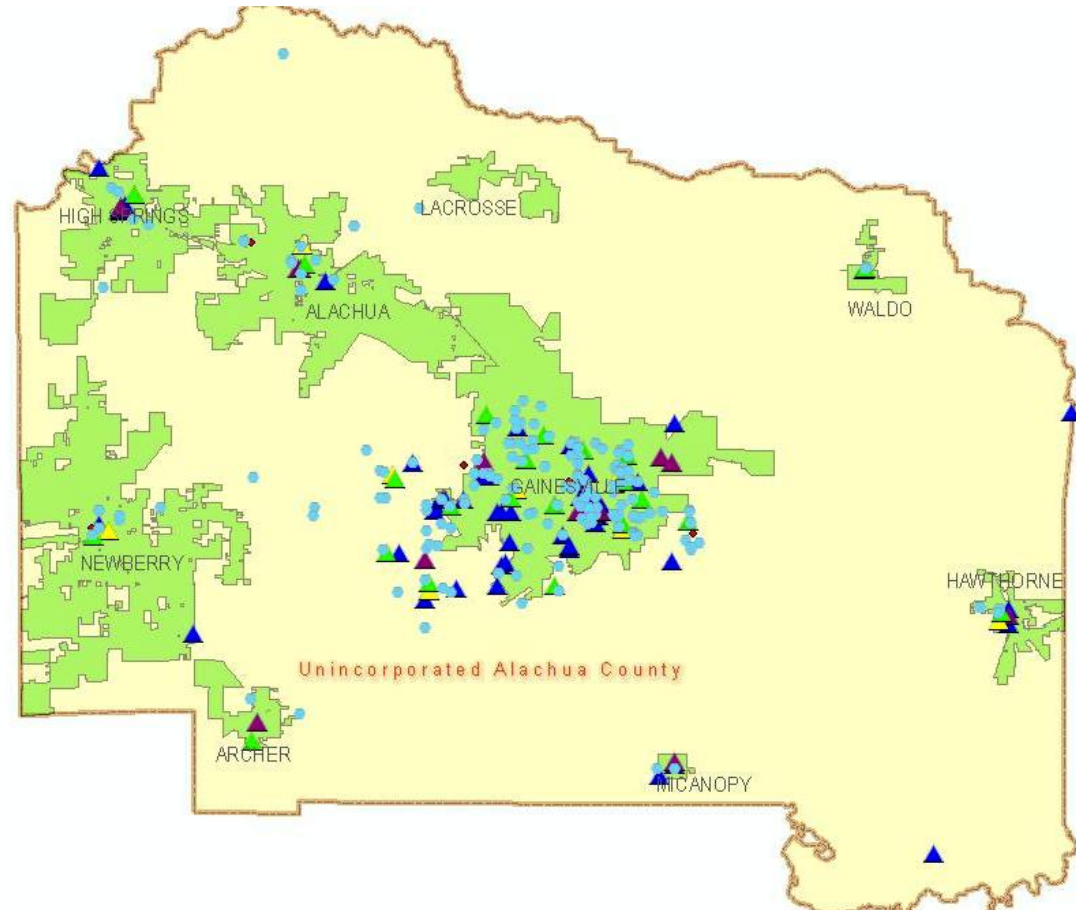


INCARCERATIONS ACROSS ALACHUA COUNTY

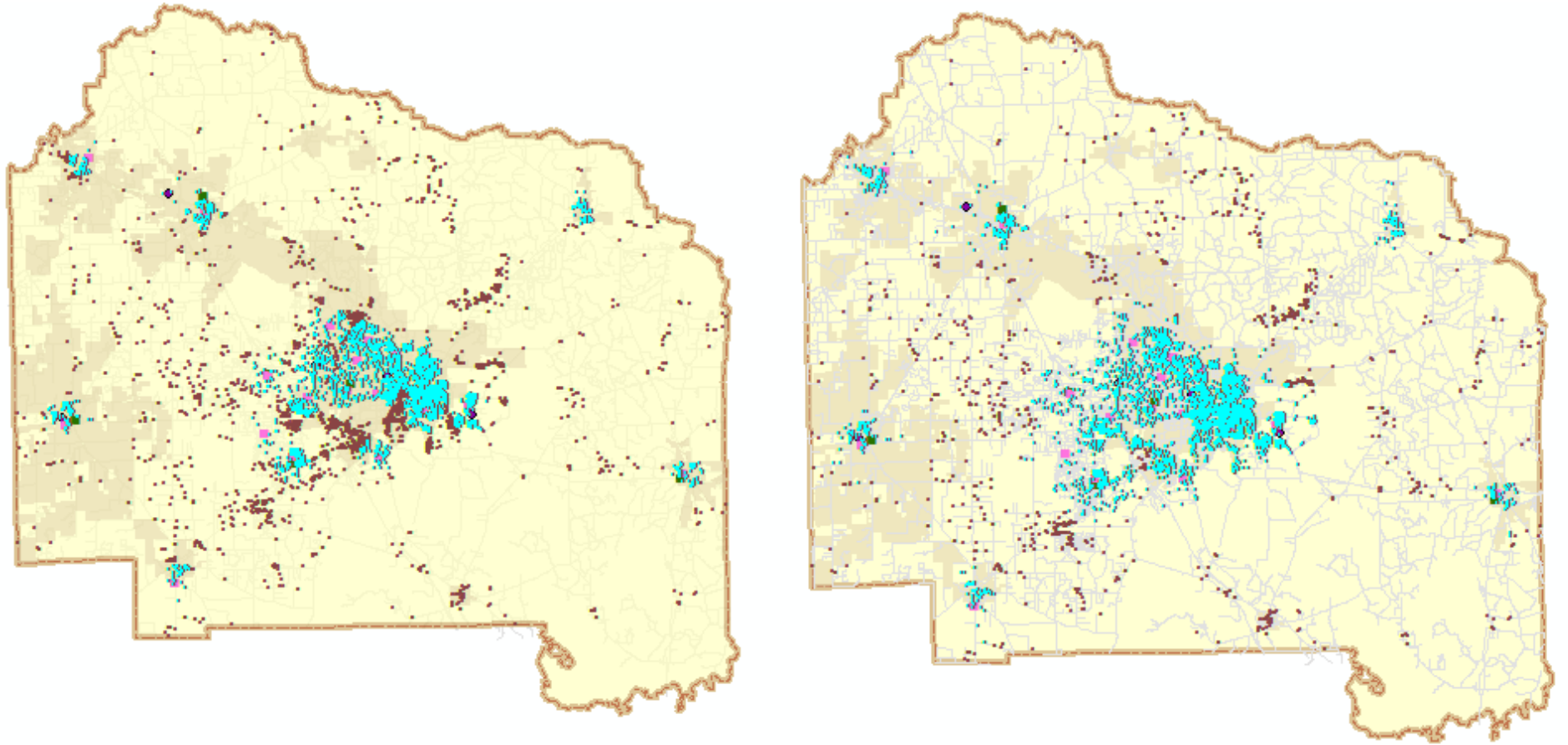


PUBLIC EDUCATION FACILITIES

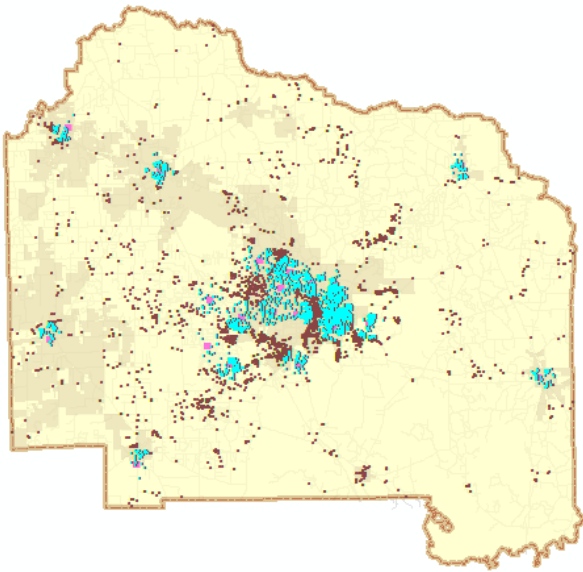
- Children
 - Homeless Children by Bus Stop
 - Homeless Children Present Residence
 - Homeless Children Previous Residence
 - Childcare Facilities
- Elementary Schools
- Middle Schools
- High Schools
 - <all other values>
- Amenities
 - Bus Stops
 - Bus Routes
 - Bike Routes
 - Libraries
- Bookstores
- Cultural Centers
- Parks and Gardens
 - A
 - B
 - C
 - D
- Youth Organizations
- Religious Centers
- Safety
 - Sex Offenders
 - Domestic Violence (2009)
 - Child Neglect and Abuse (2009)



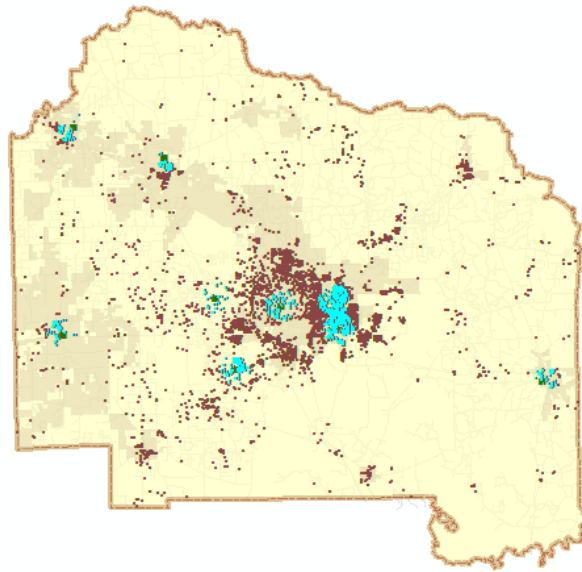
INCARCERATIONS IN 1 AND 2 MILE RADIUS FROM SCHOOLS



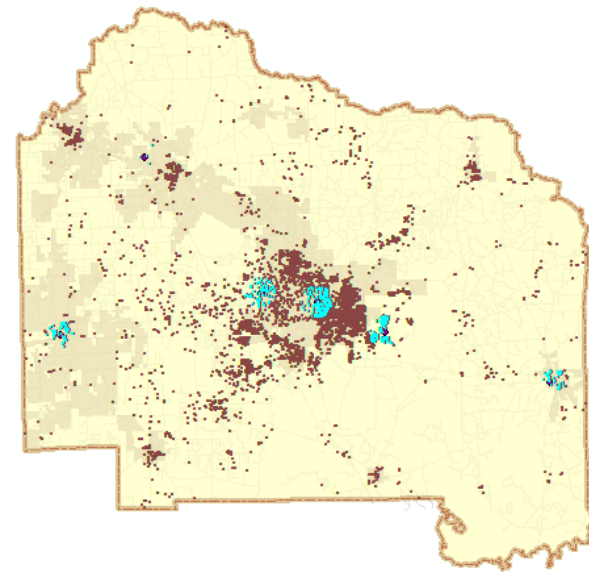
DIFFERENT SCHOOL LEVELS



Elementary School



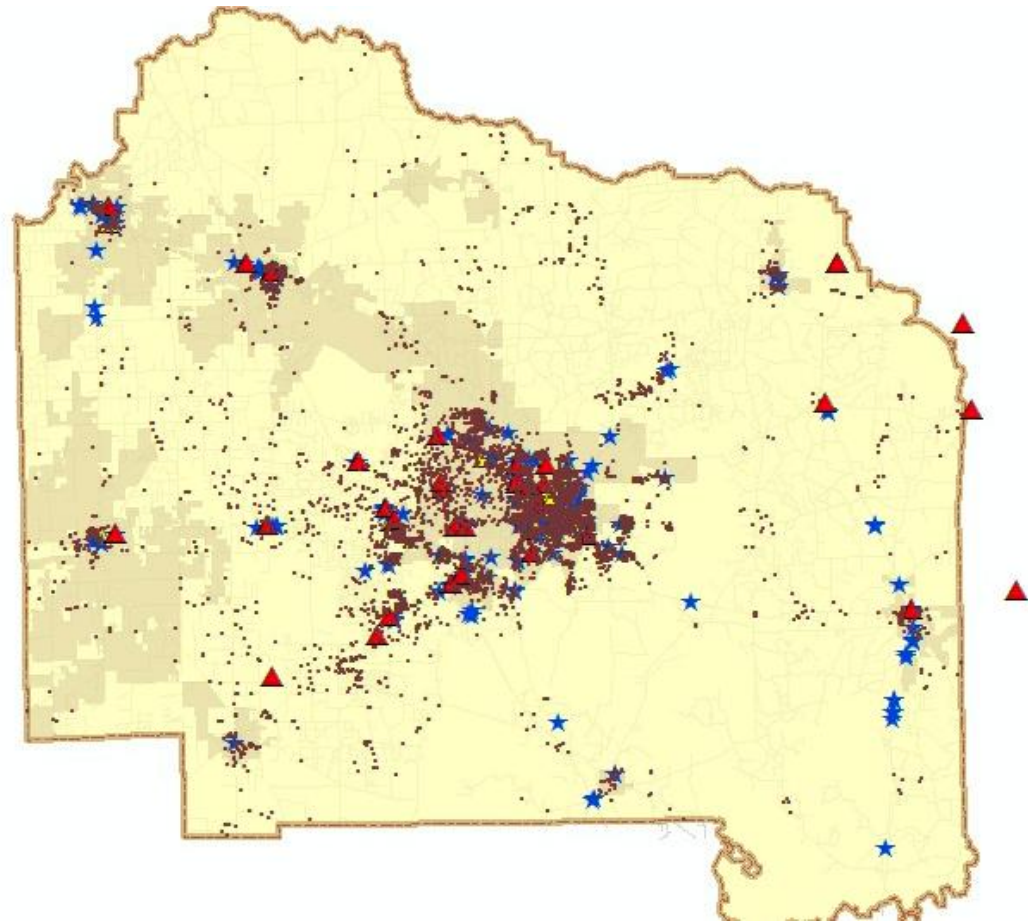
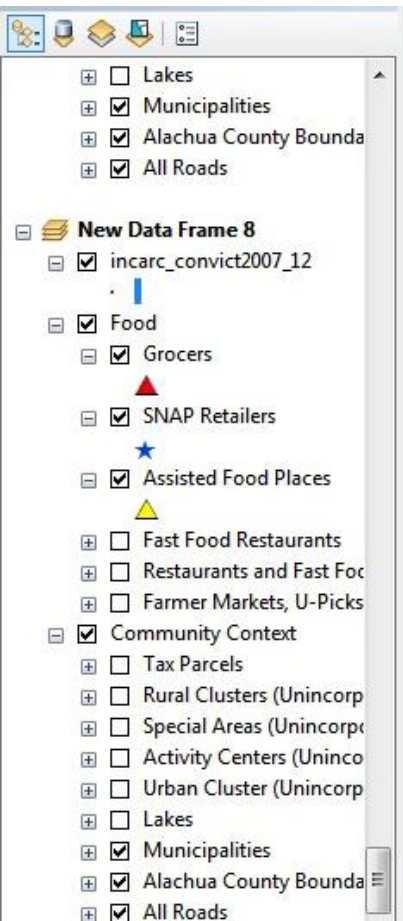
Middle School



High School

Ironically, more crime is concentrated around elementary schools than middle or high schools. This suggests that the older generation has missed out on education. Could this mean that education is having a positive influence on the younger generation?

PUBLIC FOOD ASSISTANCE



It can be suggested that the public spending invested into assisted food programs and living relieves criminals of their survival responsibilities, but does not necessarily deter them from committing crime.

PUBLIC HOUSING ASSISTANCE

- Lakes
- Municipalities
- Alachua County Bounda
- All Roads

Income Levels

- incarc_convict2007_12

Socioeconomic

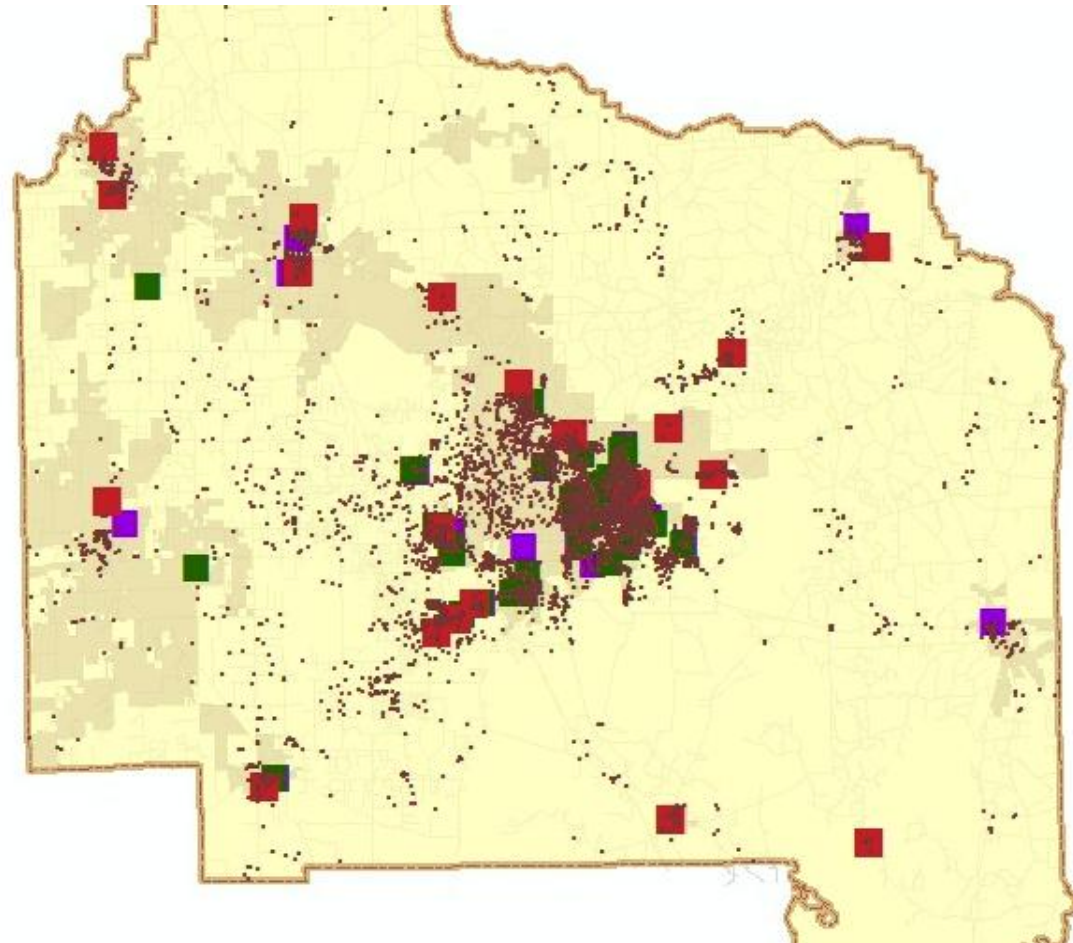
- Mobile Home Parks
- Assisted Housing (HUD
- Assisted Rental Housing

Race and Ethnicity (2009

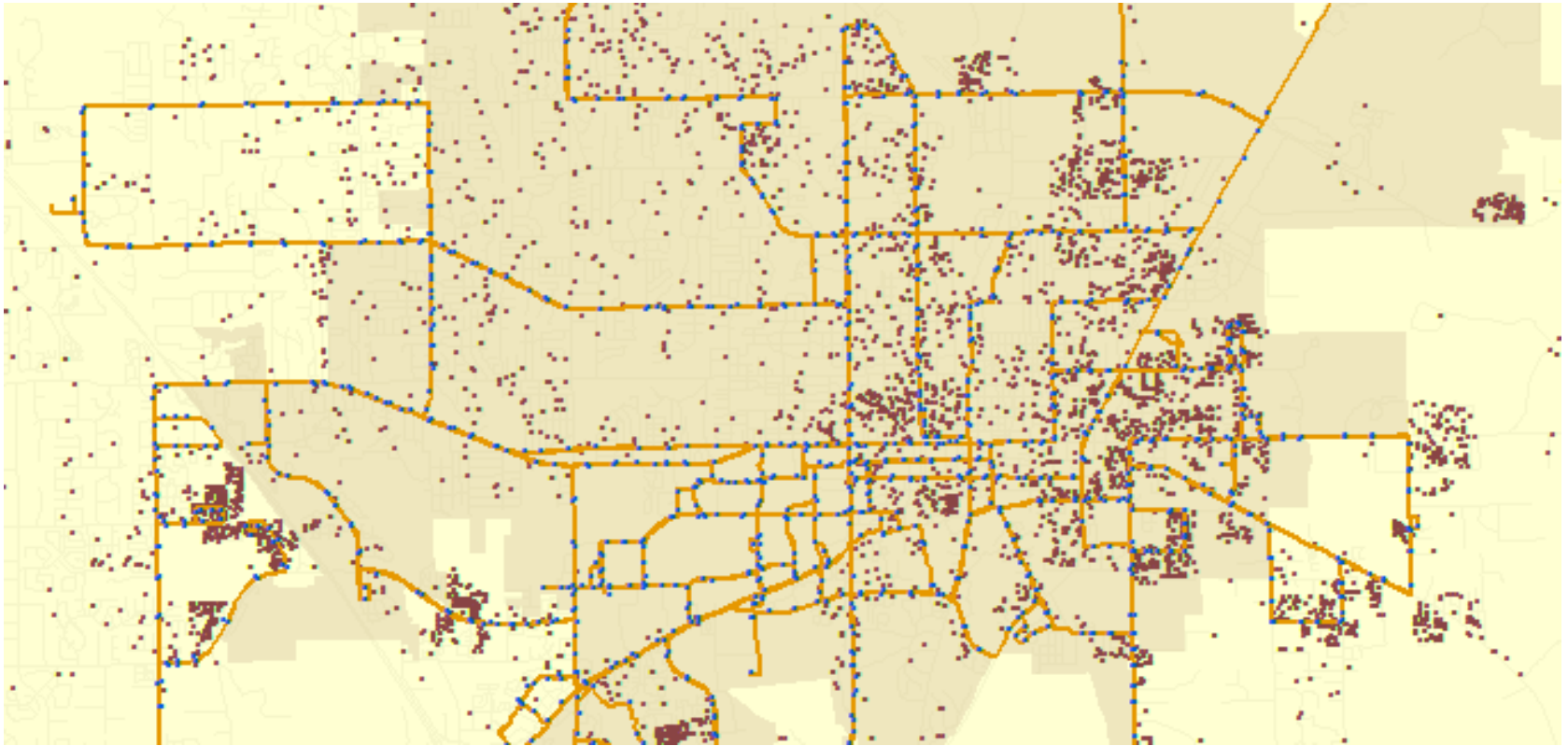
Household Net Worth by

Household Income by B

9810 - 15210
15211 - 18763
18764 - 23553
23554 - 28136
28137 - 31442
31443 - 35752
35753 - 38149
38150 - 41378
41379 - 44696



PUBLIC TRANSPORTATION



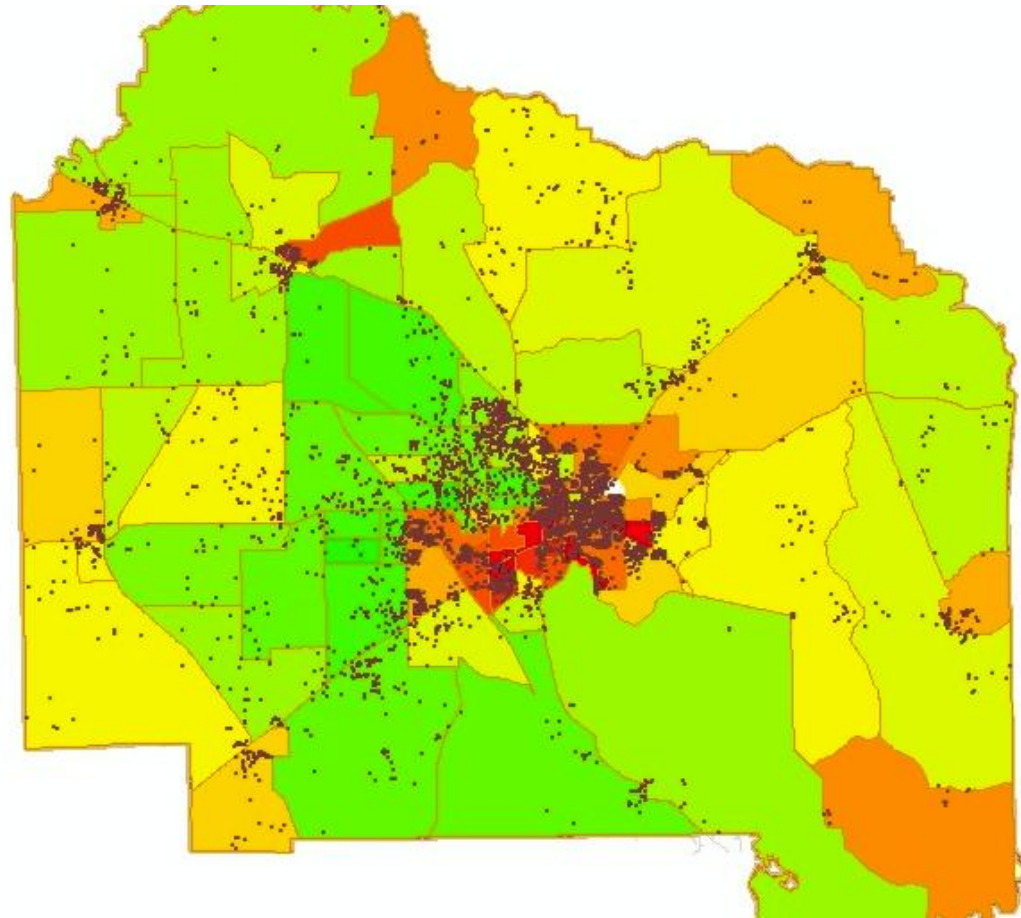
What can be said about the correlation between these major crime clusters along the bus routes of Gainesville?

What methods were used to develop this map?

INCOME LEVEL

Income Levels

- incarc_convict2007_12
- Socioeconomic
 - Mobile Home Parks
 - Assisted Housing (HUD)
 - Assisted Rental Housing
 - Race and Ethnicity (2009)
 - Household Net Worth by
 - Household Income by B
 - 9810 - 15210
 - 15211 - 18763
 - 18764 - 23553
 - 23554 - 28136
 - 28137 - 31442
 - 31443 - 35752
 - 35753 - 38149
 - 38150 - 41378
 - 41379 - 44696
 - 44697 - 48738
 - 48739 - 53132
 - 53133 - 58002
 - 58003 - 66966
 - 66967 - 93150
 - 93151 - 120537
 - No data



METHODS USED

Spatial Queries

Symbology

Layer changes and preference

Definitions

Selection by attribute

Selection by Location

Vector comparison

Cross reference

Range adjustments



FINAL STATEMENT

We have found that fluctuations in crime rates do not necessarily always associate with increased public spending regarding the 5 categories we explored.

Through different GIS methods performed in ArcMaps ,we could develop a unique understanding about the faults in public spending most evident in Gainesville. ArcGIS simplified the research and made the data clear for the viewer to interpret.

