



# Aiken County Animal Shelter Data Compilation and Analysis

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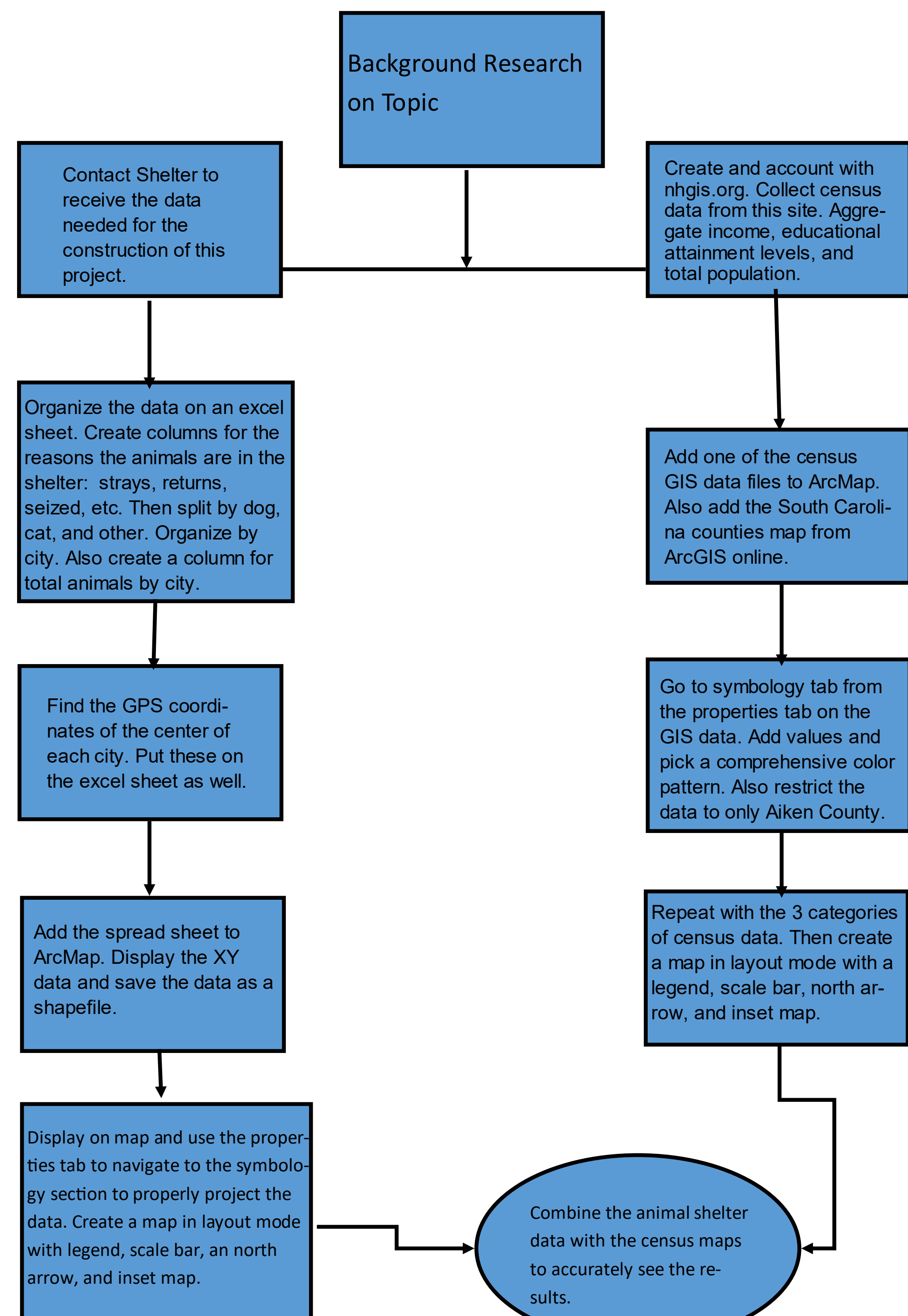
## Abstract

Stray animals are a serious problem in the United States. Animal Shelters across the nation work tirelessly to provide care and housing for these animals. It is not an easy task. In the United States alone, approximately 6.5 million companion animals enter shelters per year. Of these, about 1.5 million are euthanized (ASCPA, 2017). For this project, a close analysis was done on one animal shelter in Aiken, South Carolina. The Aiken County Animal Shelter takes in approximately 4,000-5,000 animals per year, and euthanizes around 1,000-2,000 (FOTAS, 2016). They are a kill shelter that has to care for the entire stray animal population for Aiken County, which is the size of the state of Rhode Island, and some surrounding towns. This study has been conducted to see if any conclusions can be drawn on where the most stray animals are found have any relation to the economics of the people who live there.

According to a study done on the free-ranging of urban animals, the most common reasons stray dogs are found running free are as follows: Pet releases from careless owners leaving doors open or dropping a pet off somewhere to get rid of it. Pet escapes from low fences or no fencing and other ways of escaping. Unmonitored breeding by either careless owners or stray dogs. Pets abandoned after their owners have moved. Finally, pets that have been stolen (Beck, et al, 2002).

This project aims to combine shelter data on pets that have been surrendered, found as strays, seized from unsafe owners, or returned after being adopted with economic data on the population of Aiken County. The shelter data will be combined with the data of total population, academic level reached, and aggregate income. The object of this project is to combine these attributes with the data on where the most dogs are found in order to see if economic levels influence how people care for their animals. Also, so the Aiken County Animal Shelter can allocate their resources properly.

## Methods



## Population Dispersion in Aiken County

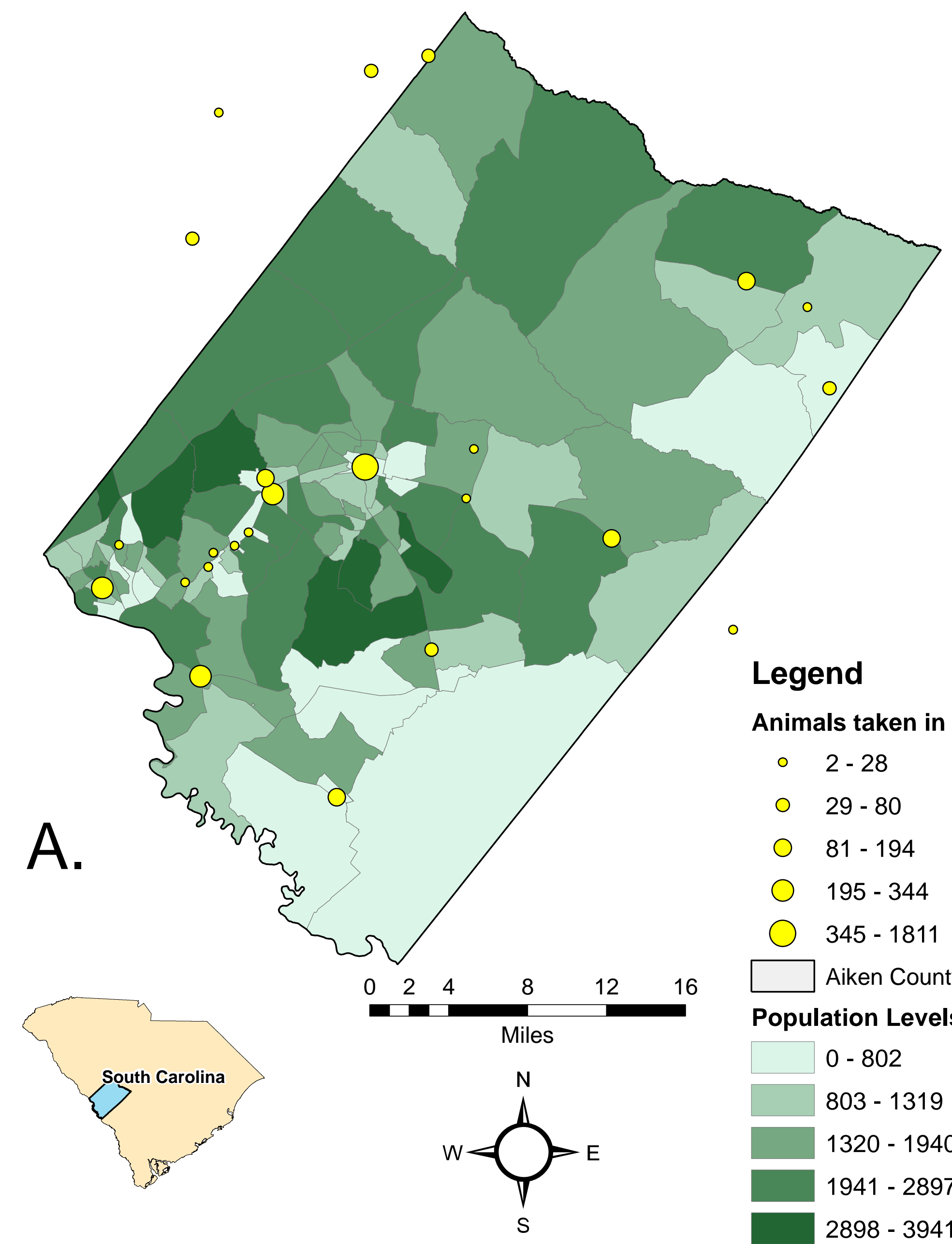


Figure A. shows the population distribution of Aiken county. The darker the green, the larger the population. The population is calculated by census block. This has been combined with the shelter data.

## Results

### Educational Attainment in Aiken County

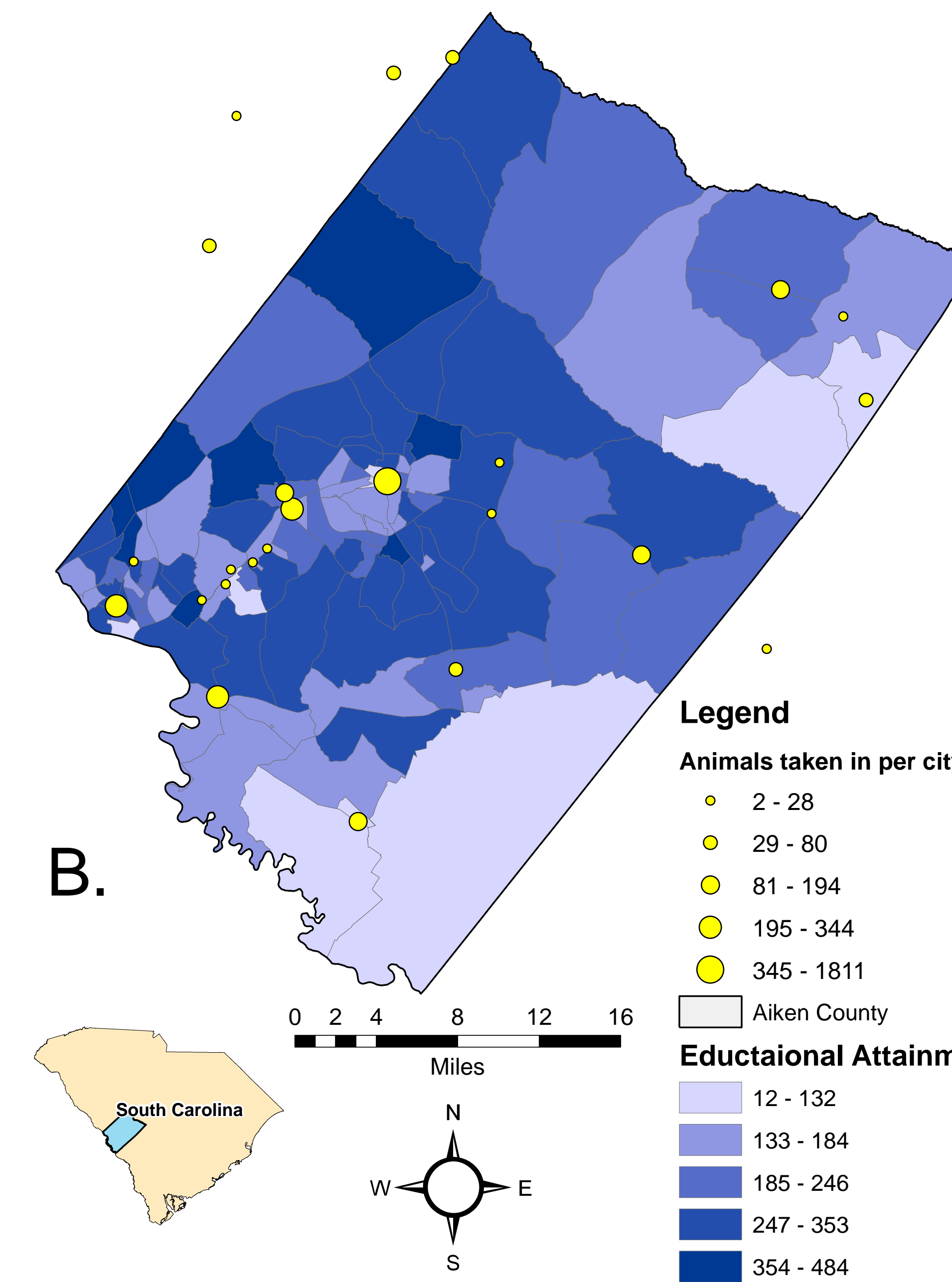


Figure B. shows educational attainment in Aiken County. This data is displayed by census block. The scale refers to the population of people 25 years and older and the higher on the scale, the higher the educational level they have attained. This has been combined with the shelter data.

### Aggregate Income in Aiken County

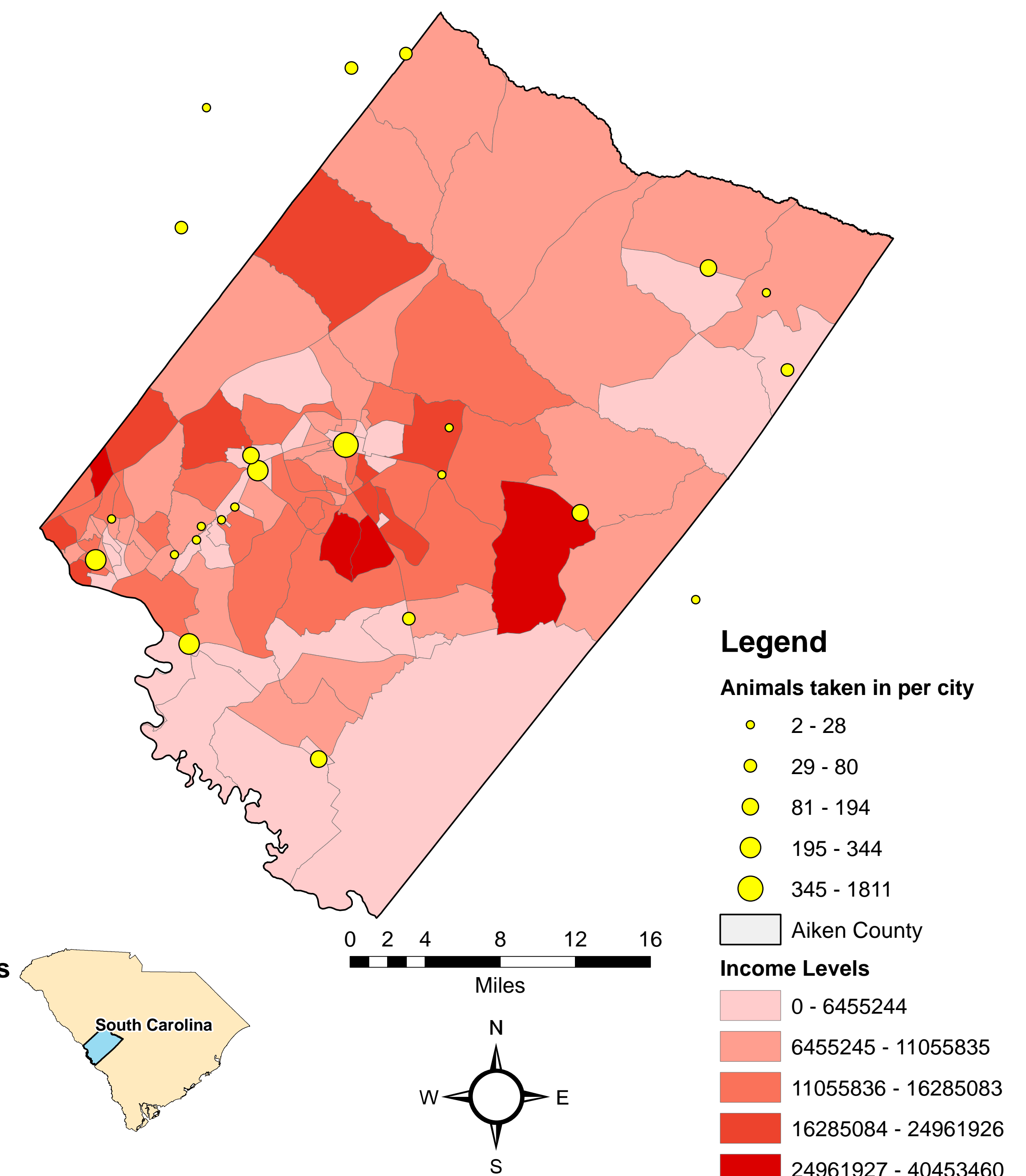


Figure C. shows the aggregate income for Aiken County. This information is displayed by census block. This refers to the aggregate income of persons 15 years and older in the year 2015. The higher on the scale, the larger the income level. This has been combined with the shelter data.

## Locations of Cities and Weighted Values

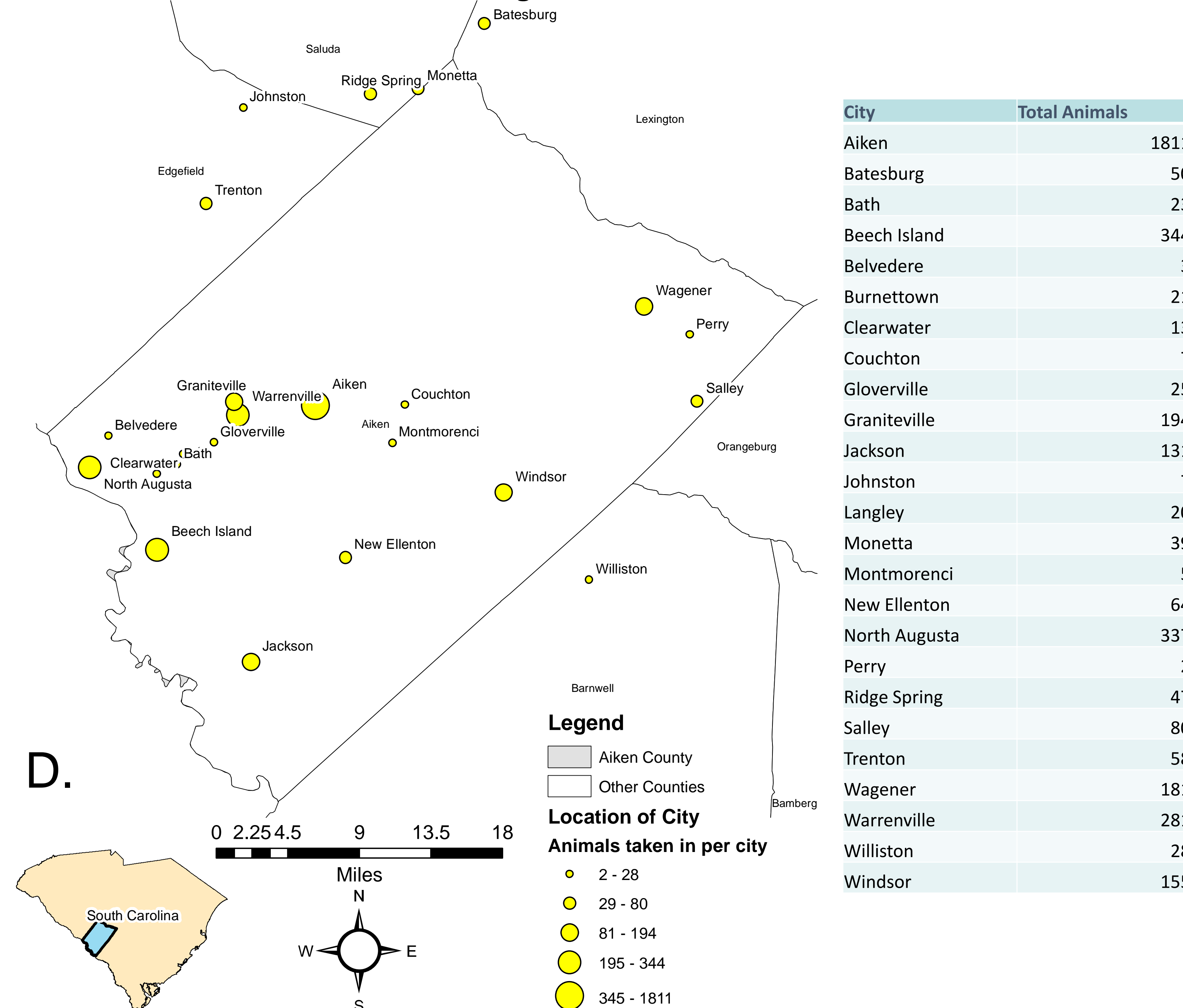


Figure D. shows the GPS centers of the cities from which the shelter rescues animals. The size of the dot that represents the city corresponds to the amount of animals that were taken from these areas in 2016.

## Conclusion

The data combination show very interesting results. In relation to the population data, the highest populations in the county tend to be in the middle and western areas. This is also where the largest amount of animals tend to be found. Therefore there is definitely a relation between population and the amount of rescued animals in the area.

In relation to the educational attainment levels, the highest levels tend to be in the upper western region of the county. The number of animals do seem to have a common trend with educational attainment levels. However, more data is needed on where the animals are exactly found to make a definite connection.

The aggregate income levels show a trend of higher income in the middle of the state. There tends to be more animals that are taken in from areas with average lower income. However, once again, more information on the exact location of the animals is needed.

The object of this project was to draw conclusions between economic data of the population of Aiken County with the data on where shelter animals are received to draw conclusions on why more animals come from certain areas and to help the people at Aiken County Animal Shelter better allocate their resources.

## References and Data Sources

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