

# Furman University's Five Mile Backyard

Dixon Dabbs

Political Science, Furman University, Greenville, SC 29613

## I. ABSTRACT

This project began with three purposes. First, to make students more aware of who lives near campus. Second, to demonstrate that while Furman University may be lacking diversity in the student community, the community around us is not lacking diversity. Third, to help Furman organizations target areas for local volunteerism. Areas where over 30 percent of the population lacks a high school diploma and areas with a Latino/Hispanic population of over 12 percent all exist within five miles or less of Furman's campus. Hopefully this project will increase awareness of all the different backgrounds near campus. Using Census Data and GIS Software, different demographic data sets are presented in a manner intended to elucidate the neighborhoods surrounding Furman. This study proves that within a short drive of campus we have serious poverty, ethnic diversity and a multitude of other diverse factors.

## II. BACKGROUND

This project was designed to facilitate a visual understanding of Furman's Backyard. In order to begin the research, the different census tracts surrounding the University were determined and data from each tract was analyzed. This was accomplished using the American Fact Finder from the U.S. Census and Neighborhood Profile, a South Carolina web compilation of Census Data. Furman often has the reputation for being a largely homogenous student body. Arguably, there is value in demonstrating the heterogeneity of the areas surrounding campus. Students should not just learn within the gates of the University. Ideally, these findings can be used to better target local service learning capabilities and the community laboratory that is available.

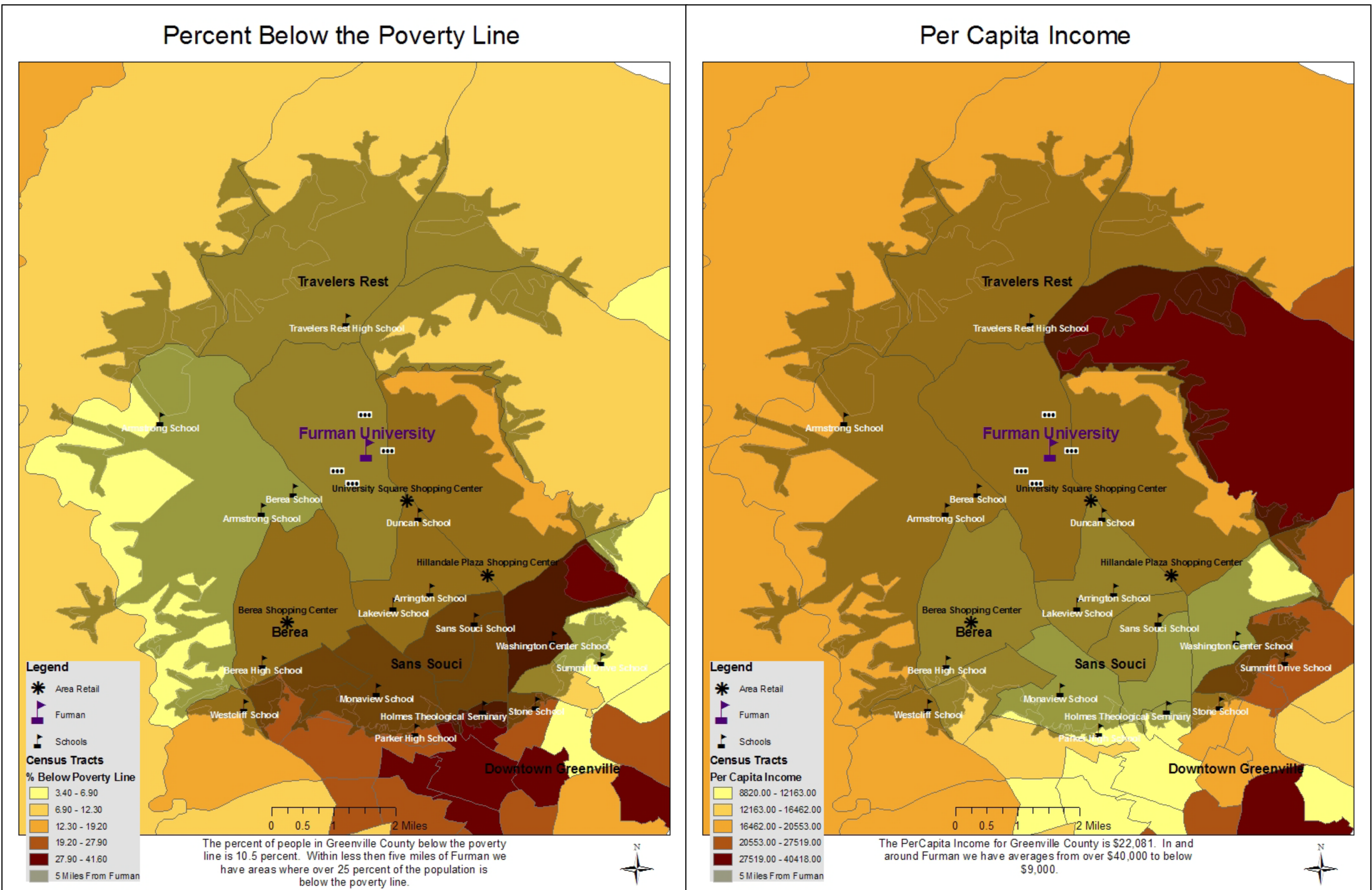
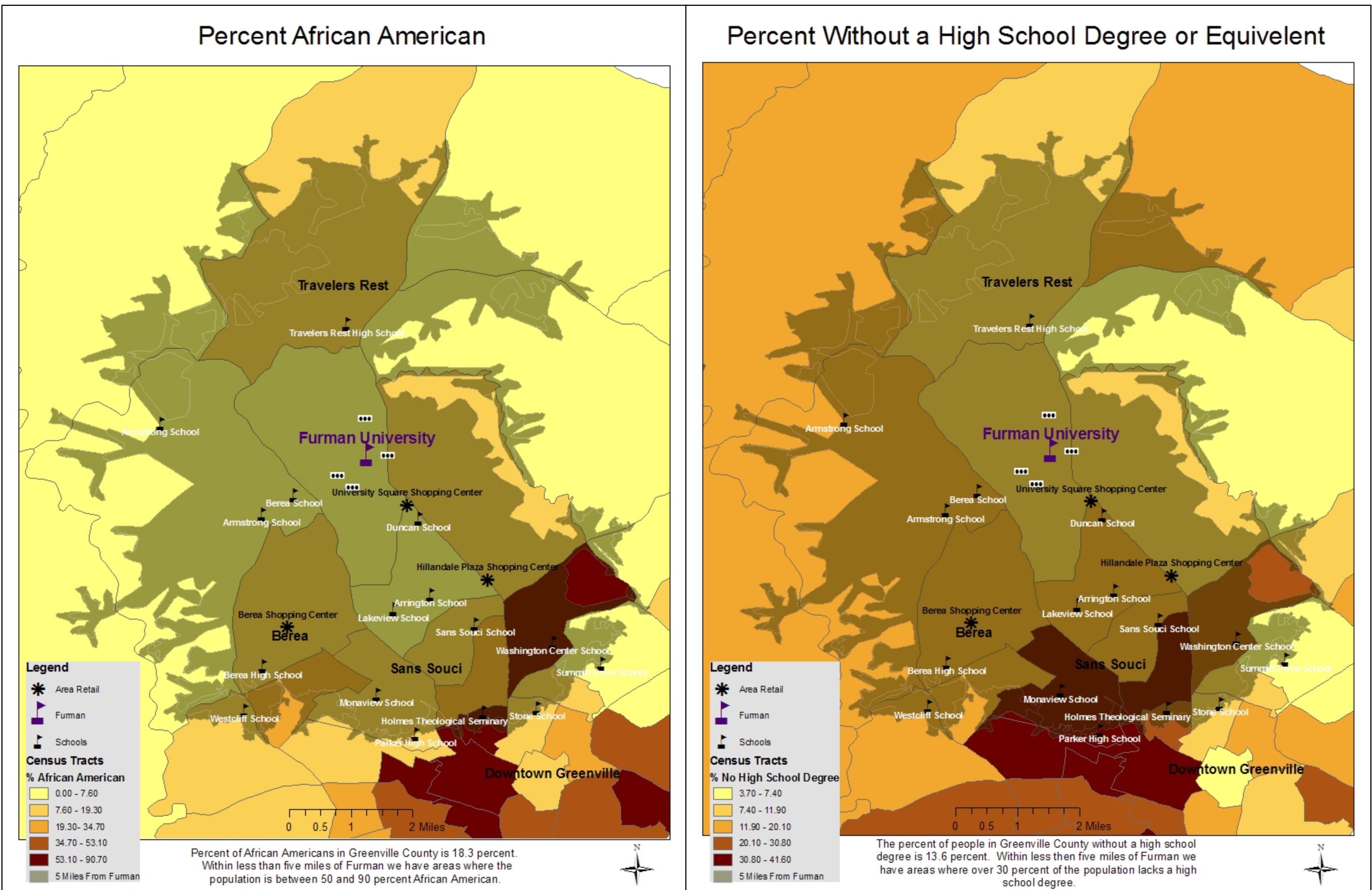
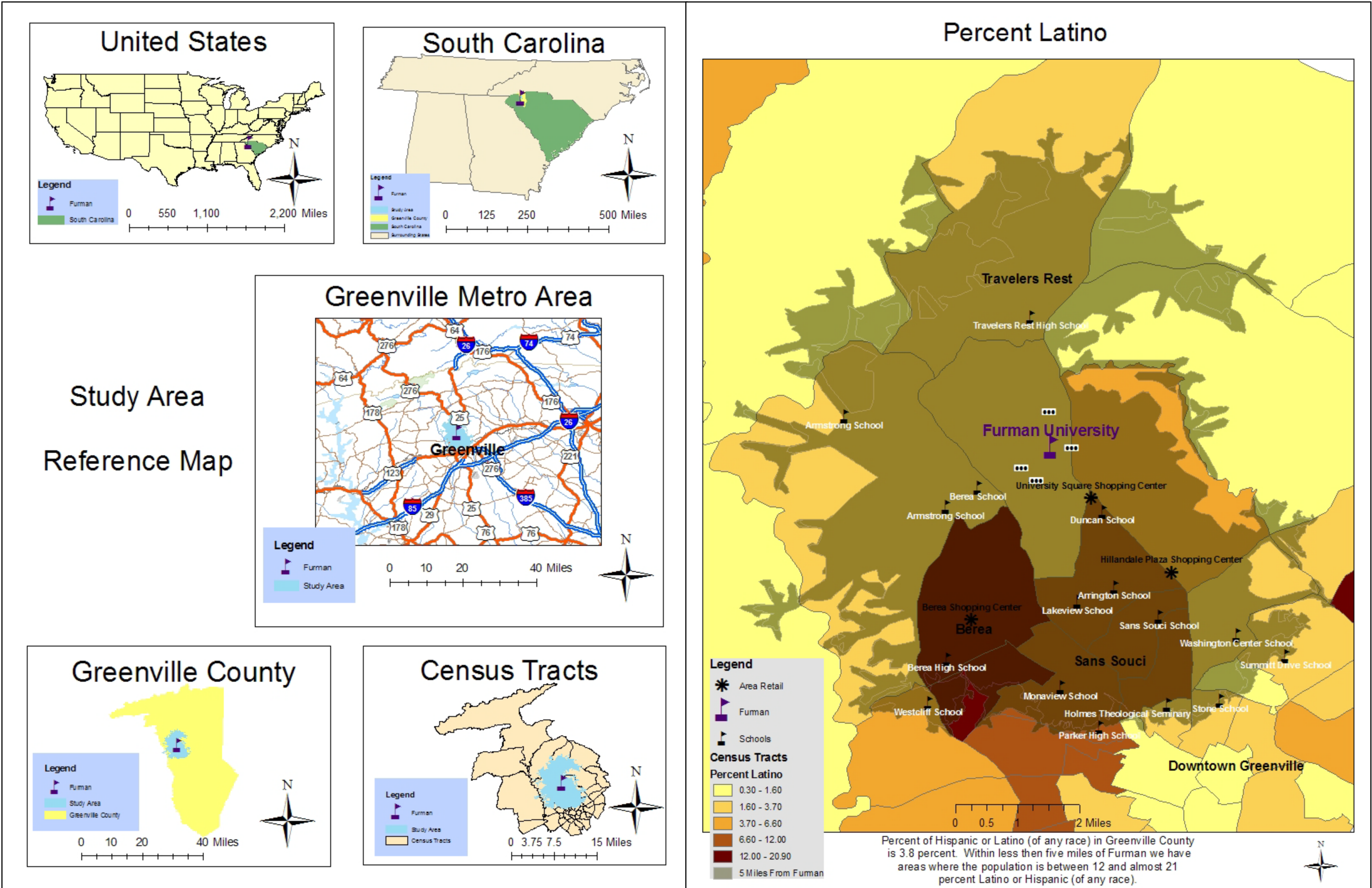
## III. METHODS

To start this project it was necessary to first determine the Census tracts under study. In order to do this all South Carolina Census tracts were imported and the Furman tract was determined. Following this step, the Spatial Analysis tool was used to determine all tracts within five miles of the Furman tract's border. Once the bordering tracts were selected a new layer was created with the imported tracts. The website, South Carolina Community Profiles (a service of the South Carolina Office of Research and Statistics), was used to find data on each tract. American Fact Finder (a U.S. Census service) was used as a reference as well. Using Excel, data was entered from the Census. Once the information was in Excel it was joined to existing attribute data for each tract in ArcMap.

Next, it was important to establish the study area. In order to do this it was necessary to establish a five mile perimeter around Furman. Although it would have been easy to simply "draw" a circle with a five mile radius from the center of campus, it was decided that this was misrepresentative of how we live in our space. We do not live in a world where people walk in straight lines. Rather we travel the world via roads. Therefore, a five mile perimeter based on road distance is more desirable rather than a circle with a five mile radius. Road distance allows for a more accurate representation of Furman's Backyard. This was accomplished by importing a StreetMap layer and using the network analysis tool. The StreepMap layer was reconfigured into a GeoDatabase for use with the Network Analyst Tool. Points were places at the location of each Furman Gate and from these points, areas within five miles of Campus were illustrated as a Service Area.

Once the study area was established, the data was represented by graduated colors on the map. This is clearly seen in the maps on the poster. With the study area established, various landmarks were added to the map using StreepMap data. Generally, pertinent locations were selected and new layers were created specifically for this project. Once all of this was accomplished the maps were generated.

## IV. RESULTS



## V. DISCUSSION

Diversity is abundant outside Furman's gates. While the school may desire more diversity inside the gates, the extremes that exist on the outside should not go unnoticed. In examining the "Percent Latino" map it is evident that there is a large Latino population within less than five miles of campus. The Berea area has a Latino population ranging from 12 to 20 percent. This is significant for a county where the average Latino population is 3.8 percent. In the "Percent African American" map it is evident that a large African American population lives close to Furman. However, African Americans are concentrated in different areas as compared to the Latino population. Nevertheless, it is significant that a predominantly Caucasian school is located in an area with significant racial and ethnic diversity.

It is also noteworthy that within five miles of the University there are neighborhoods where over 30 percent of the population lacks a high school diploma or equivalent. Compared to the average for Greenville County of 13.6 percent there is a dramatic difference. This illustrates a significant issue for the community at large. Additionally, these figures stand in stark contrast when compared to 100 percent of high school graduates living just up the road at Furman.

In studying the "Percent of the Population Below the Poverty Line" map, there are distinct concentrations. It is not surprising that the same areas with under-educated citizens also show higher signs of poverty. It is important to note that this phenomena is occurring within a five mile proximity to a selective institute of higher learning. In accordance with the under-education and poverty, the visualization of the "Per Capita Income" indicates areas of distress. The average income per capita in Greenville County is just over \$22,000.00. Within just five miles of Furman there are areas where the per capita income is less than \$12,000. \$12,000 is over \$6,000.00 less than one semester's tuition at Furman.

## VI. CONCLUSIONS

Clearly the diversity surrounding Furman is greater than the diversity within the student body. The University should be mindful of the learning tool that is a short drive from the gates. Additionally, this project will hopefully serve as a wake up call to many students who live blindly, believing that the world around them is much like themselves. If they have not seen poverty, the maps in this project offer a clear illustration of where to go. Hopefully in the future, points of service within five miles of Furman can be added to this project. This project will be passed along to Heller Service Core and Furman Forward (a new student organization). Ideally this will serve as a catalyst for students to volunteer locally.

## VII. REFERENCES

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## VIII. DATA SETS

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## IX. ACKNOWLEDGEMENTS

Thanks to Suresh Muthukrishnan.

Thanks to the other members of EES - 201